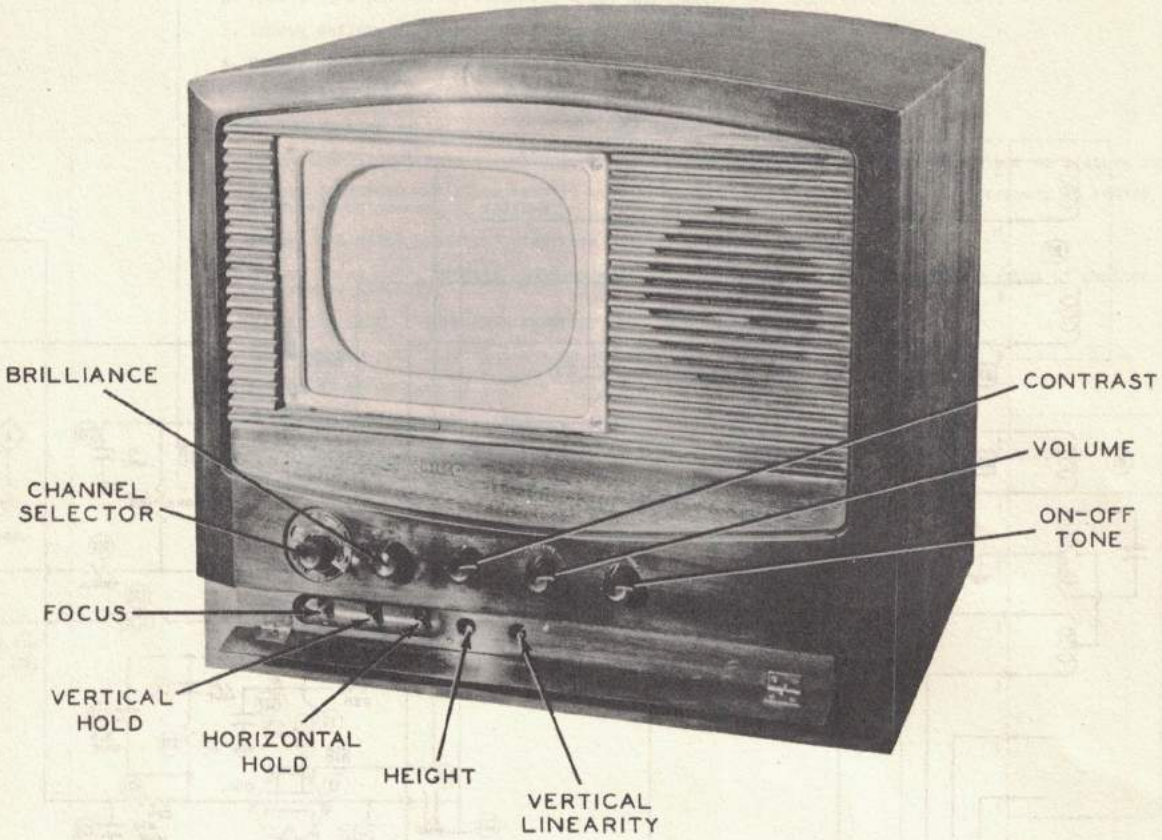

PHILCO MODEL 48-1001

TRADE NAME	Philco, Models 48-1000, 48-1000-5, 48-1001, 48-1001-5, 48-1050, 48-1050-5
MANUFACTURER	Philco Corp., Tioga & C Sts., Philadelphia, Pa.
TYPE SET	Television Receiver
TUBES	Twenty-seven
POWER SUPPLY	105-125 Volts 60 Cycle (48-1000-5, 48-1001-5, 48-1050-5)only, 50 Cycle)
TUNING RANGE--	Channels 2 through 13 RATING 2.5 Amps. @ 117 Volts AC

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PHILCO MODELS 48-1000, 48-1001, 48-1050

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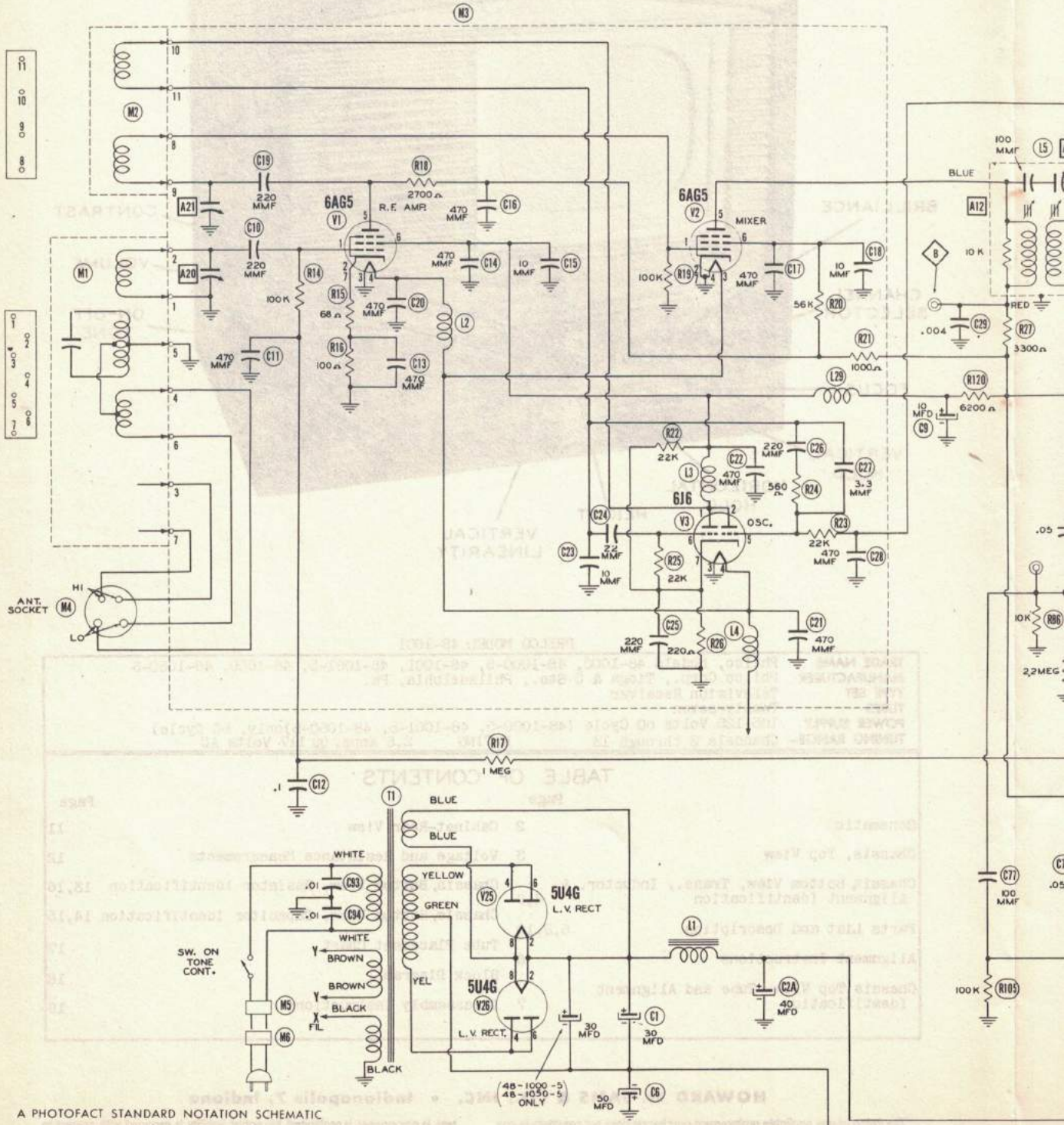
DATE 1/49-#491-17 SET #53-FOLDER #17



A PHOTOFACT STANDARD NOTATION SCHEMATIC

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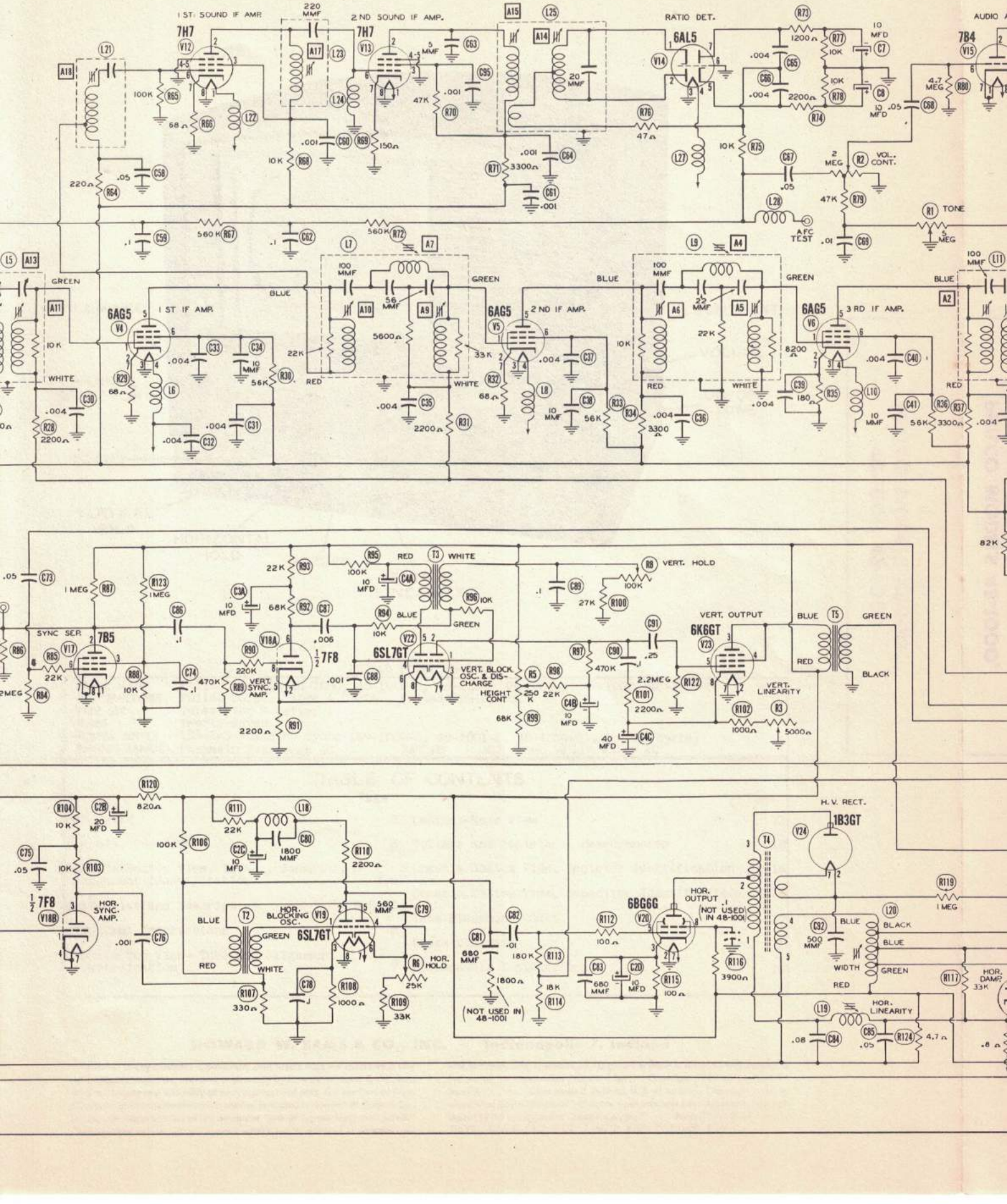
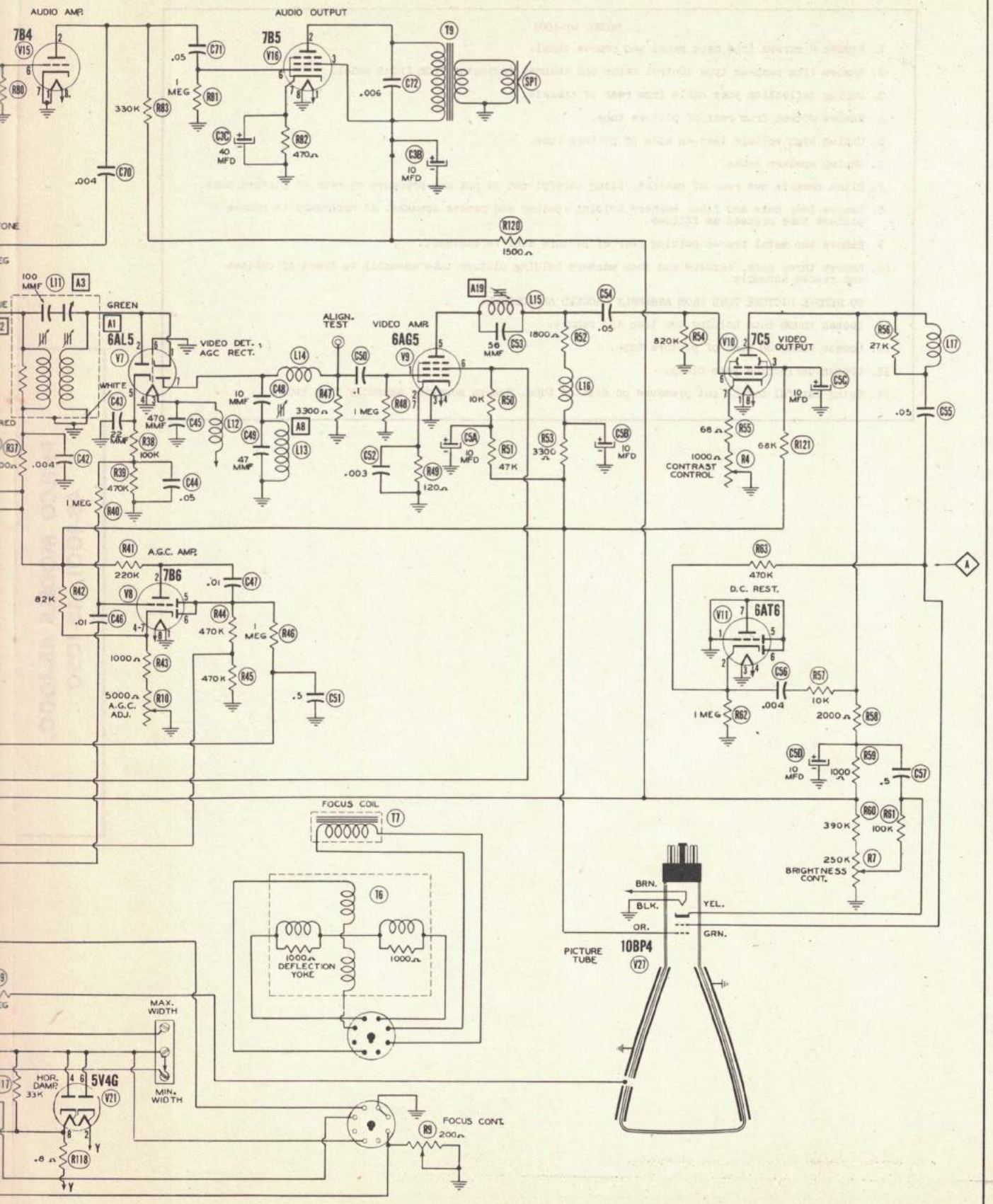
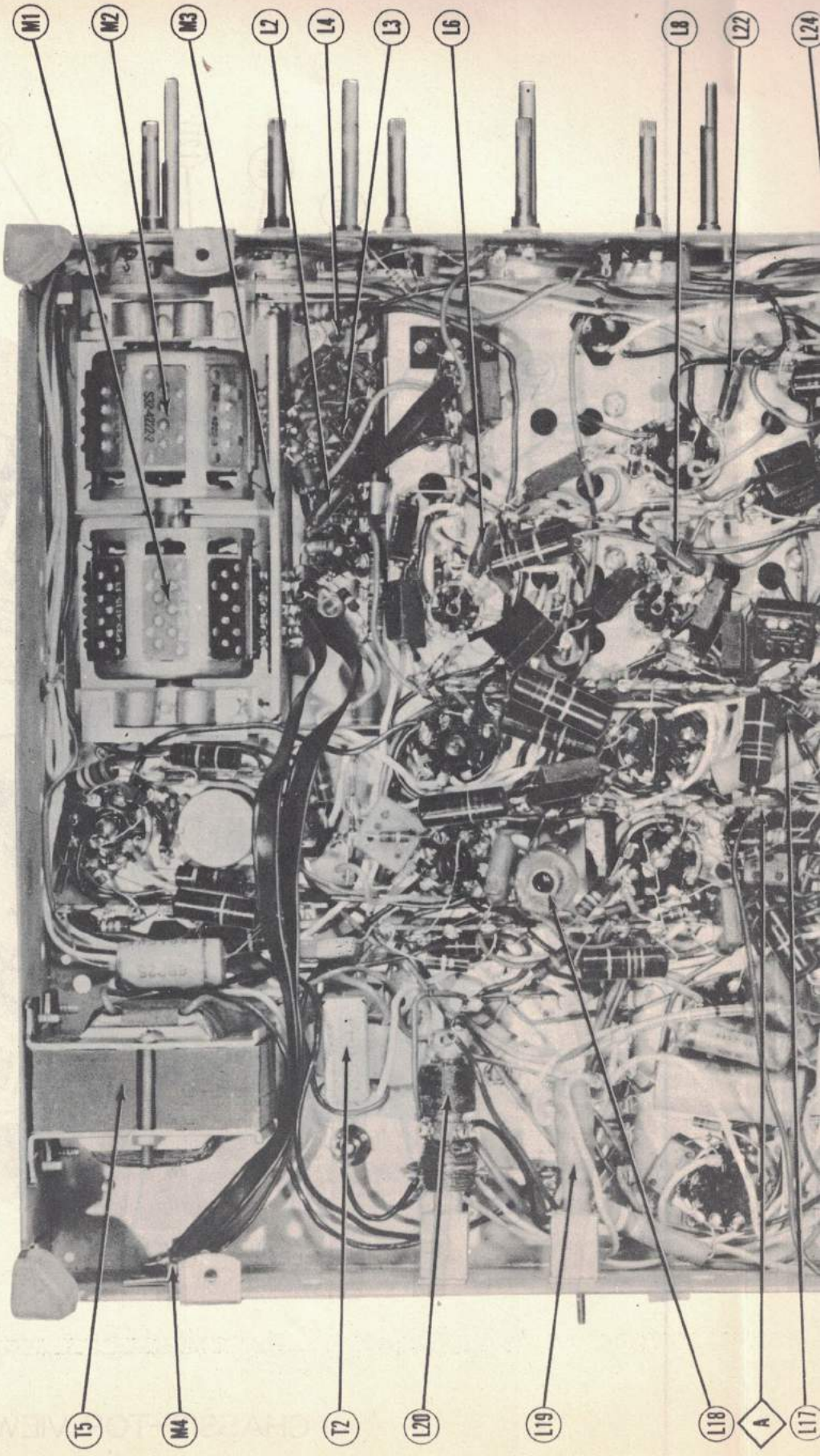

1ST SOUND IF AMP.
2ND SOUND IF AMP.
RATIO DET.
AUDIO
7H7
7H7
6AL5
7B4
6AG5
1ST IF AMP.
6AG5
2ND IF AMP.
6AG5
3RD IF AMP.
7B5
SYNC SEP.
7F8
VERT. SYNC. AMP.
6SL7GT
VERT. BLOCK OSC. & DISCHARGE
VERT. OUTPUT
6K6GT
VERT. LINEARITY
7F8
HOR. SYNC. AMP.
HOR. BLOCKING OSC.
6SL7GT
HOR. OUTPUT
6BG6G
H.V. RECT.
1B3GT
HOR. LINEARITY
WIDTH
HOR. DAMP
VOL. CONT.
TONE
AFC TEST
HOR. HOLD
VERT. HOLD
HEIGHT CONT
(NOT USED IN 48-100)
(NOT USED IN 48-100)


AUDIO AMP.
7B4
AUDIO OUTPUT
7B5
VIDEO DET., AGC RECT.
6AL5
ALIGN. TEST
VIDEO AMP.
6AG5
7C5 VIDEO OUTPUT
A.G.C. AMP.
7B6
D.C. REST.
6AT6
HOR. DAMP.
5V4G
FOCUS COIL
DEFLECTION YOKE
PICTURE TUBE
10BP4
CONTRAST CONTROL
BRIGHTNESS CONT.
FOCUS CONT.
MAX. WIDTH
MIN. WIDTH
GREEN
WHITE
BRN.
BLK.
YEL.
OR.
GRN.

CHASSIS–TOP VIEW


M1
M2
M3
L2
L4
L3
L6
L8
L22
L24
T5
M4
T2
L20
L19
L18
A
L17

PHILCO MODELS 48-1000, 48-1001, 48-1050

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA: PHILCO PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amp.	6AG5	6AG5	7BD	
V2	Mixer	6AG5	6AG5	7BD	
V3	Oscillator	6J6	6J6	7B4	
V4	1st V. IF Amp.	6AG5	6AG5	7BD	
V5	2nd V. IF Amp.	6AG5	6AG5	7BD	
V6	3rd V. IF Amp.	6AG5	6AG5	7BD	
V7	Video Det. AGC Rectifier	6AL5	6AL5	6BT	
V8	AGC Amp.	7B6	7B6	8W	
V9	Video Amp.	6AG5	6AG5	7BD	
V10	Video Output	7C5	7C5	6AA	
V11	DC Restorer	6AT6	6AT6	7B1	
V12	1st Audio IF Amp.	7H7	7H7	8V	
V13	2nd " " "	7H7	7H7	8V	
V14	Ratio Det.	6AL5	6AL5	6BT	
V15	Audio Amp.	7B4	7B4	5AC	
V16	Audio Output	7B5	7B5	6AE	
V17	Sync. Sep.	7B5	7B5	6AE	
V18	Sync. Amp.	7F8	7F8	8BW	
V19	Horizontal Osc.	6SL7GT	6SL7GT	8BD	
V20	Hor. Output	6BG6G	6BG6G	5BT	
V21	Hor. Damping	5V4G	5V4G	5L	
V22	Vert. Osc. & Discharge	6SL7GT	6SL7GT	8BD	
V23	Vert. Output	6K6GT	6K6GT	7S	
V24	H.V. Rect.	1B3GT	1B3GT	3C	
V25	L.V. Rect.	5U4G	5U4G	5T	
V26	L.V. Rect.	5U4G	5U4G	5T	
V27	Picture Tube	10BP4	10BP4		

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.	RATING: VOLT	REPLACEMENT DATA: PHILCO PART No.	REPLACEMENT DATA: AEROVOX PART No.	REPLACEMENT DATA: CORNELL-DUBILIER PART No.	REPLACEMENT DATA: SOLAR PART No.	REPLACEMENT DATA: SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1	30	475	30-2568-19		UP6A292		D13297	Filter
C2A	40	475	30-2570-8		UP9D8262		D13298	◓ Filter
B	20	475						▲ "
C	10	475						■ RF"Bypass
D	10	25						* Hor. Out. Cath.
C3A	10	450	30-2570-16	AF22J	UP5C879-1		D13312	■ Vert. Sync. Amp. Plate
B	10	450		PRS50-50				▲ Audio Out. Decoup.
C	40	50						Audio Out. Cath.
C4A	10	450	30-2570-16	AF22J	UP5C879-1		D13312	■ Vert. Sweep Decoup.
B	10	450		PRS50-50				▲ " " "
C	40	450						Vert. Out. Cath.
C5A	10	475	30-2570-10		UP7D825-1		D13299	◓ V. Amp. Screen Decoup.
B	10	475						■ V. Amp. Plate Decoup.
C	10	475						▲ V. Out. Screen Byp.
D	10	475						V. Out. Plate Decoup.
C6	50	50	30-2417-2	PRS50-50	BR505	M-50-50	TA-550	Bias Filter
C7	10	50	30-2417-3	PRS50-10	BR105	M-10-50	TA-510	Stabilizing Cap.
C8	10	50	30-2417-3	PRS50-10	BR105	M-10-50	TA-510	" "
C9	10	450	30-2417-6	PRS450-10	BR1045	M-10-450	UT-12	RF Bypass
C10	220		62122001001	1468-00025	5W5T25	M0.5-325	1FM-325	RF Coupling -Cer.
C11	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	AGC Filter "
C12	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	" "
C13	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	RF Cath. "
C14	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	RF Screen Bypass "
C15	10		62010009001					" " " "
C16	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	RF Decoup. "
C17	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	Mixer Screen Byp. "
C18	10		62010009001					" " " "

CONTROLS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: PHILCO PART No.	REPLACEMENT DATA: CLAROSTAT PART No.	REPLACEMENT DATA: IRC PART No.	REPLACEMENT DATA:	NOTES
R1	5 Meg.	½	33-5538-9				Tone Control & On-Off Switch
R2A	2 Meg.	½	33-5535-9	T-116	D18-139X		Volume Control-Tapped @ 1 Meg.
B	Shaft			Not Req.	A		Attach to R2A per instructions
R3	5000Ω	2	33-5546-3	43-5000	W-5000		Vertical Linearity Control
R4	1000Ω	2	33-5456-6	43-1000	W-1000		Contrast Control
R5A	250KΩ	½	33-5539-13	M-55-S	D11-130		Height Control
B	Shaft			Not Req.	A		Attach to R5A per instructions
R6A	25KΩ	½	33-5539-28	M-40-S	D11-120		Horizontal Hold Control
B	Shaft			Not Req.	A		Attach to R6A per instructions
R7A	250KΩ	½	33-5539-17	M-55-S	D11-130		Brightness Control
B	Shaft			Not Req.	A		Attach to R7A per instructions
R8A	100KΩ	½	33-5539-15	M-49-S	D11-128		Vertical Hold Control
B	Shaft			Not Req.	A		Attach to R8A per instructions
R9	200Ω	4	33-5547-2				Focus Control
R10A	5000Ω	½	33-5539-16	M-19-S	D11-114		AGC Control
B	Shaft			Not Req.	A		Attach to R10A per instructions
R11	50Ω		33-5546-4				Beam Bender-See Note 1
R12	10KΩ		33-5546-8				Horizontal Linearity #2-See Note 2
R13	10KΩ		33-5546-8				Horizontal Linearity #3-See Note 2

Note 1-Not used in all models. When used, beam bender control is placed in parallel with beam bender.
Note 2-Not used in models using 33KΩ damping resistor (R117).

RESISTORS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: PHILCO PART No.	REPLACEMENT DATA: IRC PART No.	IDENTIFICATION CODES: All Resistors ±10% Tolerance Unless Otherwise Stated		
R14	100KΩ	½	66-4108540	BTS-100K	Br.-Blk.-Yl.	RF Amp. Grid	±20%
R15	68Ω	½	66-0688340		Blue-Gray-Blk.	RF Amp. Cathode	
R16	100Ω	½	66-1108340		Br.-Blk.-Br.	RF Amp. Cathode	
R17	1 Meg.	½	66-5108340	BTS-1 Meg.	Br.-Blk.-Grn.	AGC Network	±20%
R18	2700Ω	½	66-2278340	BTS-2700	Red-Vi.-Red	RF Amp. Plate	
R19	100KΩ	½	66-4108540	BTS-100K	Br.-Blk.-Yl.	Mixer Grid	±20%
R20	56KΩ	½	66-3568340	BTS-56K	Grn.-Blue-Or.	Mixer Screen	
R21	1000Ω	½	66-2108540	BTS-1000	Br.-Blk.-Red	Decoupling	±20%
R22	22KΩ	1	66-3224340	BTA-22K	Red-Red-Or.	Voltage Divider	
R23	22KΩ	½	66-3228540	BTS-22K	Red-Red-Or.	AFC Network	±20%
R24	560Ω	½	66-1568340	BTS-560Ω	Grn.-Blue-Br.	Osc. Control Tube Grid	
R25	22KΩ	½	66-3228540	BTS-22K	Red-Red-Or.	Osc. Grid	±20%
R26	220Ω	½	66-1228340		Red-Red-Br.	Osc. Cathode	
R27	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	Mixer Plate Decoupling	
R28	22000Ω	½	66-2223340	BTS-2200	Red-Red-Red	AGC Network	±20%
R29	68Ω	½	66-0683340		Blue-Gray-Blk.	1st Video IF Amp. Cathode	
R30	56KΩ	½	66-3563340	BTS-56K	Grn.-Blue-Or.	1st Video IF Amp. Screen	
R31	2200Ω	½	66-2223340	BTS-2200	Red-Red-Red	AGC Network	±20%
R32	68Ω	½	66-0683340		Blue-Gray-Blk.	2nd Video IF Amp. Cath.	
R33	56KΩ	½	66-3563340	BTS-56K	Grn.-Blue-Or.	2nd Video IF Amp. Screen	
R34	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	2nd Video IF Amp. Decoup.	±20%
R35	180Ω	½	66-1183340		Br.-Gray-Br.	3rd Video IF Amp. Cathode	
R36	56KΩ	½	66-3563340	BTS-56K	Grn.-Blue-Or.	3rd Video IF Amp. Screen	
R37	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	3rd Video IF Amp. Decoupling	±20%
R38	100KΩ	½	66-4103340	BTS-100K	Br.-Blk.-Yl.	AGC Diode Load	±20%
R39	470KΩ	½	66-4473340	BTS-470K	Yl.-Vi.-Yl.	" " "	±20%
R40	1 Meg.	½	66-5103340	BTS-1 Meg.	Br.-Blk.-Grn.	AGC Amp. Grid	±20%
R41	220KΩ	½	66-4223340	BTS-220K	Red-Red-Yl.	AGC Amp. Plate	±20%
R42	82KΩ	2	66-3824340	BT-2-82K	Gray-Red-Or.	Voltage Divider	
R43	1000Ω	½	66-2103340	BTS-1000	Br.-Blk.-Red	AGC Amp. Cathode	±20%
R44	470KΩ	½	66-4473340	BTS-470K	Yl.-Vi.-Yl.	AGC Network	±20%
R45	470KΩ	½	66-4473340	BTS-470K	Yl.-Vi.-Yl.	" "	±20%
R46	1 Meg.	½	66-5103340	BTS-1 Meg.	Br.-Blk.-Grn.	" "	±20%
R47	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	Diode Load	
R48	1 Meg.	½	66-5103340	BTS-1 Meg.	Br.-Blk.-Grn.	Video Amp. Grid	±20%
R49	120Ω	½	66-1123340		Br.-Red-Br.	Video Amp. Cathode	
R50	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Video Amp. Screen	
R51	47KΩ	½	66-3473340	BTS-47K	Yl.-Vi.-Or.	Video Amp. Screen Decoup.	
R52	1800Ω	½	66-2183340	BTS-1800	Br.-Gray-Red	Video Amp. Plate	±5%
R53	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	Video Amp. Plate	±20%
R54	820KΩ	½	66-4823340	BTS-820K	Gray-Red-Yl.	Video Output Grid	
R55	68Ω	½	66-0683340		Blue-Gray-Blk.	Video Output Cathode	
R56	27KΩ	½	66-3273340	BTS-27K	Red-Vi.-Or.	Video Output Plate	

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

VIDEO IF ALIGNMENT

High voltage may be disabled during the alignment procedure by removing the horizontal oscillator (V19). All signal generator leads must be shielded. The unshielded termination of the lead must be as short as possible and the shield should be connected to the receiver chassis at the closest possible point to the hot lead. The signal generator lead should be terminated with a shunt resistor equal to the output impedance of the generator.

The speaker and deflection yoke must be connected at all times when the receiver is in operation. If the yoke is not used, both sweep generator tubes (V19 and V22) must be removed. If the speaker is not used, the audio output tube (V16) must be removed.

Thesignal generator output must be kept low enough at all times to prevent overload. Use insulated alignment screwdriver for adjustments.

The receiver should be allowed to warm up for at least 20 minutes before alignment is attempted.

When used with the sweep signal generator, the marker oscillator should be connected through a small capacitor, about 10 MMFD. When used alone, couple direct.

When connecting signal generator to mixer grid, the shield grounding will be critical. Try adding additional grounds until no change in pattern is noted.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1	5000MMF	Pin #1 (grid) of 6AG5 (V6).	25MC 8MC sweep	27.1MC (Unmodulated)	Any	High side to "align test" jack through 10K ohms. Low side to chassis	A1,A2	Set A3 fully counterclockwise for narrow peak pattern. Adjust A1 and A2 for maximum amplitude with marker at peak of curve. See Fig. 1.
2	5000MMF	"	"	23.1MC (Unmodulated)	"	"	A3	Adjust for pattern approx. Fig. 2. Slight readjustment of A1 & A2 may be necessary.
3	5000MMF	Pin #1 (grid) of 6AG5 (V5).	Not used	23.1MC (Modulated 400 ∿	"	"	A4	Adjust for minimum amplitude. Increase output of marker gen. for more accurate indication.
4	5000MMF	"	25MC 8MC sweep	23.7MC & 26.6MC (Unmodulated)	"	"	A5,A6	Adjust for pattern approximating Fig. 3. A5 should be adjusted at 26.6MC and A6 at 23.75MC.
5	5000MMF	Pin #1 (grid) of 6AG5 (V4).	Not used	22.1MC (Modulated)400∿	"	"	A7,A8	Adjust for minimum amplitude.
6	5000MMF	"	25MC 8MC sweep	See Fig. 4	"	"	A9,A10	Adjust for pattern approximating Fig. 4.
7	5000MMF	Pin #1 (grid) of Mixer (V2)	"	See Fig. 5	"	"	A11,A12 A13	Adjust for pattern approximating Fig. 5. A13 controls band width. Slight readjustments of A5, A6, A9 and A10 may be made if necessary.

SOUND IF ALIGNMENT

A20 and A21 are factory preset to compensate for different wiring capacitances. Readjustment should never be necessary unless tubes or component parts in the tuner changed. If it does become necessary to adjust these trimmers they should be adjusted at the highest frequency channel normally used. Connect an oscilloscope to Point Ⓑ through a detector probe and isolating capacitor. With a sweep signal generator adjusted to sweep through the desired channel, adjust A20 and A21 for symmetrical response through the channel.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8	5000MMF	Pin #6 (grid) of 7H7 (V13).	22.1MC 2MC sweep	22.1MC (Unmodulated)	Any	High side thru 10KΩ resistor to "AFC test" jack. Low side to chassis.		Crossover should be at 22.1MC. Move marker to 21.8MC for lower peak and to 22.4MC for upper peak. Be sure pattern is such that frequencies below 22.1MC give negative output. If discriminator is properly aligned as shown in Fig. 6, Steps 9 and 10 may be omitted
9	5000MMF	"	"	"	"	"	A14	Adjust for corssover at 22.1MC.
10	5000MMF	"	"	21.8MC & 22.4MC	"	"	A15, A16	Adjust for symmetrical peaks at 21.8MC and 22.4MC. If output does not go negative at frequencies below 22.1MC turn A16 clockwise until negative peak is at 21.8MC. A16 is not found in all models.
11	5000MMF	Pin #6 (grid) of 7H7 (V12).	"		"	"	A17	Adjust for maximum amplitude with symmetrical peaks.
12	5000MMF	Pin #1 (grid) of 6AG5 (V4).	"		"	"	A18	
13	5000MMF	Pin #1 (grid) of Mixer (V3).	"	22.1MC	"	"	A17,A18	If discriminator peaks are unequal, A17 and A18 may be readjusted slightly to equalize the peaks.
14	DIRECT	Pin #1 (grid) of 6AG5(V9).		4.5MC (Unmodulated)	"	High side to Point Ⓐ. Low side to chassis	A19	Adjust for minimum. If wide band scope is not available, VTVM with AC probe may be used.

OSC. ADJUSTMENT

With the channel selector switch set to the desired channel, remove the knob and insert a screwdriver through the hole to reach the oscillator adjustment. Adjust for best sound, or preferably for zero voltage at the AFC test jack.

AGC ADJUSTMENT

With a calibrated oscilloscope connected to the "align test" jack, and a signal being received, adjust the AGC control for a 2 volt peak-to-peak signal on the scope.

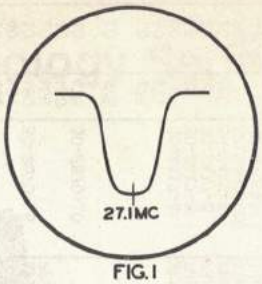


FIG. 1

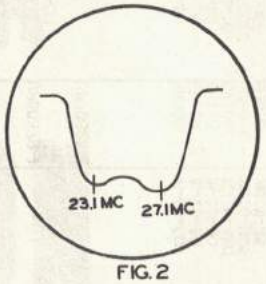


FIG. 2

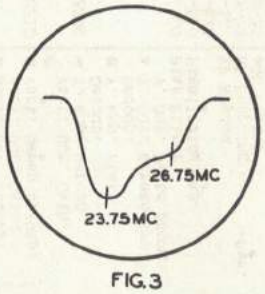


FIG. 3

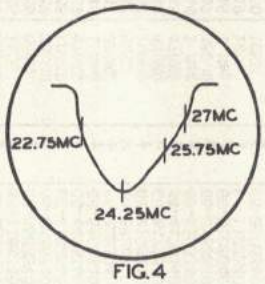


FIG. 4

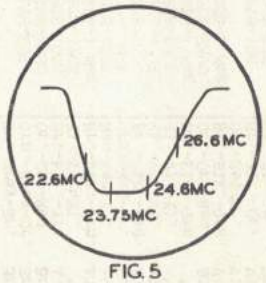


FIG. 5

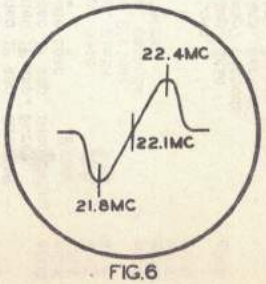


FIG. 6

CHASSIS TOP VIEW–TUBE AND ALIGNMENT IDENTIFICATION

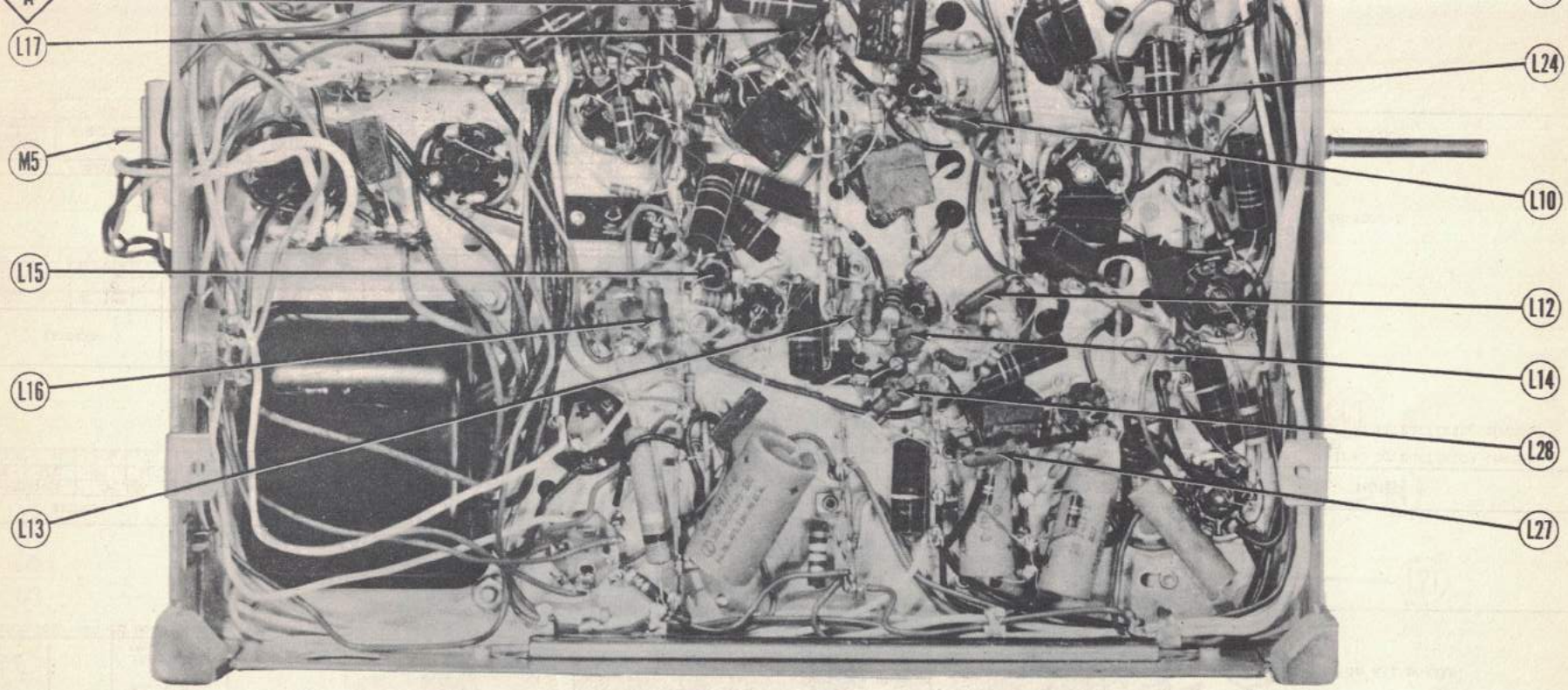
C19	220		62122001001	1468-00025	5W5T25	M0.5-325	1FM-325	RF Coupling	"
C20	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	RF Fil..Byp.	"
C21	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	Osc. Fil. Byp.	"
C22	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	Osc. Plate Decoup.	"
C23	10		62010009001					Osc. Grid Filter	"
C24	22		62022009001			M0.5-25	1FM-425	Osc. Coupling	"
C25	220		62122001001	1468-00025	5W5T25	M0.5-325	1FM-325	Osc. Cath. Byp.	"
C26	220		62122001001	1468-00025	5W5T25	M0.5-325	1FM-325	Phase Shifter	"
C27	3.3		30-1221					Freq. Comp.	"
C28	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	AFC Filter	"
C29	4000	500	45-3502	1467-004	1D5D4		1FM-24	Mixer Plate Decoup.	
C30	4000	500	45-3502	1467-004	1D5D4		1FM-24	AGC Filter	
C31	4000	500	45-3502	1467-004	1D5D4		1FM-24	RF Bypass	
C32	4000	500	45-3502	1467-004	1D5D4		1FM-24	1st V. IF Fil. Byp.	"
C33	4000	500	45-3502	1467-004	1D5D4		1FM-24	1st V. IF Screen Byp.	"
C34	10		62010009001					" " " " "	"
C35	4000	500	45-3502	1467-004	1D5D4		1FM-24	AFC Filter	
C36	4000	500	45-3502	1467-004	1D5D4		1FM-24	2nd V. IF Plate Decoup.	
C37	4000	500	45-3502	1467-004	1D5D4		1FM-24	2nd V. IF Screen Byp.	"
C38	10		62010009001					" " " " "	"
C39	4000	500	45-3502	1467-004	1D5D4		1FM-24	3rd V. IF Cath. Byp.	
C40	4000	500	45-3502	1467-004	1D5D4		1FM-24	3rd V. IF Screen Byp.	
C41	10		62010009001					3rd V. IF Screen Byp."	
C42	4000	500	45-3502	1467-004	1D5D4		1FM-24	3rd V. IF Plate Decoup.	
C43	22		62022009001			M0.5-25		AGC Filter -Cer.	
C44	.05	200	61-0122	484-05	DT4S5	ST-4-05	TM-15	" "	"
C45	470		62147001001	1468-0005	5W5T5	M0.5-35	1FM-35	Fil. Bypass	"
C46	.01	400	61-0120	484-01	DT4S1	ST-4-01	TM-11	Sweep Coupling	
C47	.01	400	61-0120	484-01	DT4S1	ST-4-01	TM-11	AGC Coupling	
C48	10		62010009001					IF Coupling	"
C49	47							Fixed Trimmer	"
C50	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	Video Coupling	
C51	.5	200	61-0133	484-.5	DT4P5	ST-2-5	TC-5	AGC Filter	
C52	3000	500	61-0109	1467-003	1W5D3		1FM-23	Video Amp. Cath. Byp.	
C53	56		62056409001					Fixed Trimmer -Cer.	
C54	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	Video Coupling	
C55	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	" "	
C56	4000	500	61-0179	1467-004	1D5D4		1FM-24	DC Res. Coupling	
C57	.5	400	45-3500-4	484-.5	DT4P5	ST-4-.5	TC-5	Pic. Tube Cath.Coup.	
C58	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	1st V. IF Plate Decoup.	
C59	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	AFC Filter	
C60	.001	600	45-3500-5	684-001	DT6D1	ST-6-001	TM-21	1st IF Decoup.	
C61	.001	600	45-3500-5	684-001	DT6D1	ST-6-001	TM-21	RF Bypass	
C62	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	AFC Filter	
C63	5		30-1224-5					Fixed Trimmer*	
C64	.001	600	45-3500-5	684-001	DT6D1	ST-6-001	TM-21	2nd IF Decoup.	
C65	4000	500	45-3502	1467-004	1D5D4		1FM-24	Diode Load Cap.	
C66	4000	500	45-3502	1467-004	1D5D4		1FM-24	" " "	
C67	.05	200	61-0122	484-05	DT4S5	ST-4-05	TM-15	Audio Coupling	
C68	.05	200	61-0122	484-05	DT4S5	ST-4-05	TM-15	" "	
C69	.01	400	61-0120	484-01	DT4S1	ST-4-01	TM-11	Tone Compensation	
C70	4000	500	45-3502	1467-004	1D5D4		1FM-24	" "	
C71	.05	200	61-0122	484-05	DT4S5	ST-4-05	TM-15	Audio Coupling	
C72	.006	1000	61-0105	1084-006				Output Plate Bypass	
C73	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	Sync. Coupling	
C74	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	Sync. Screen Byp.	
C75	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	Hor. Sync. Plate Decoup.	
C76	1000	500	6020105401	1468-001	5W5T1	MW.5-21	1FM-21	Hor. Sync. Coupling	
C77	100	500	6010105407	1468-0001	5W5T1	MO.5-31	1FM-31	Sync. Coupling	
C78	.1	200	61-0113	484-.1	DT4P1	ST-4-1	TM-1	Hor. Osc. Cath. Byp.	
C79	560	500	6010515307					Cath. Coupling	
C80	1800							Fixed Trimmer	
C81	680	500	6010685401					Hor. Discharge	
C82	.01	400	61-0120	484-01	DT4S1	ST-4-01	TM-11	Hor. Coupling	
C83	680		6010685401					Hor. Out. Cath. Byp.	
C84	.08	400	45-3501					Damping Filter	
C85	.05	400	61-0122	484-05	DT4S5	ST-4-05	TM-15	" "	
C86	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	Vert. Coupling	
C87	6000	500	45-3500-7	1467-006	1D5D6			" "	
C88	1000	500	45-3500-5	1468-001	5W5T1	MW.5-21	1FM-21	Integrating Network	
C89	.1	200	61-0113	484-.1	DT4P1	ST-2-1	TM-1	Vert. Osc. Grid	
C90	.1	400	61-0113	484-.1	DT4P1	ST-4-1	TM-1	Vert. Discharge	
C91	.1	400	61-0113	484-.1	DT4P1	ST-4-1	TM-1	Vert. Coupling#	
C92	500	10000	30-1229					H.V. Filter T.O.	
C93	.01	500	30-1226-1	684-01	DT6S1	ST-6-01	TM-11	Line Filter	
C94	.01	500	30-1226-1	684-01	DT6S1	ST-6-01	TM-11	" "	
C95	.001	600	45-3500-5	684-001	DT6D1	ST-6-001	TM-21	2nd IF Screen Byp.	

*Not used in all models.
#Code 121 uses .25 MFD in this application.

R57	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Video Isolation	±20%
R58	2000Ω	5	33-1335-74	AB-2000		Video Amp. Plate	
R59	1000Ω	2	66-2105340	BT-2-1000	Br.-Blk.-Red	Video Amp. Plate	
R60	390KΩ	1	66-4393340	BTA-390K	Or.-Wh.-Yl.	Voltage Divider	
R61	100KΩ	½	66-4103340	BTS-100K	Br.-Blk.-Yl.	Picture Tube Cathode	±20%
R62	1 Meg.	½	66-5103340	BTS-1 Meg.	Br.-Blk.-Grn.	Diode Load	±20%
R63	470KΩ	½	66-4473340	BTS-470K	Yl.-Vi.-Yl.	Picture Tube Grid	±20%
R64	220Ω	½	66-1223340		Red-Red-Br.	Decoupling	
R65	100KΩ	½	66-4103540	BTS-100K	Br.-Blk.-Yl.	1st Sound IF Grid	±20%
R66	68Ω	½	66-0683340		Blue-Gray-Blk.	1st Sound IF Cathode	
R67	560KΩ	½	66-4563340	BTS-560K	Grn.-Blue-Yl.	AFC Network	
R68	10KΩ	2	66-3103540	BT-2-10K	Br.-Blk.-Or.	Voltage Dropping-See Note 1	
R69	150Ω	1	66-1153340		Br.-Grn.-Br.	2nd Sound IF Amp. Cathode	
R70	47KΩ	½	66-3474340	BTA-47K	Yl.-Vi.-Or.	2nd Sound IF Amp. Screen	
R71	3300Ω	½	66-2333340	BTS-3300	Or.-Or.-Red	2nd Sound IF Amp. Decoupling	
R72	560KΩ	½	66-4563340	BTS-560K	Grn.-Blue-Yl.	AFC Network	
R73	1200Ω	½	66-2123340	BTS-1200	Br.-Red-Red	Balancing-See Notes 2 & 6	±5%
R74	2200Ω	½	66-2223340	BTS-2200	Red-Red-Red	" See Note 6	±5%
R75	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	De-emphasis-See Note 6	±20%
R76	47Ω	½	66-0473340		Yl.-Vi.-Blk.	Balancing	
R77	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Diode Load-See Note 3	
R78	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	" " " "	
R79	47KΩ	½	66-3473340	BTS-47K	Yl.-Vi.-Or.	Tone Compensation	±20%
R80	4.7 Meg.	½	66-5473340	BTS-4.7 Meg.	Yl.-Vi.-Grn.	AF Amp. Grid	±20%
R81	1 Meg.	½	66-5103340	BTS-1 Meg.	Br.-Blk.-Grn.	Audio Output Grid	±20%
R82	470Ω	2	66-1475340	BT-2-470	Yl.-Vi.-Br.	Audio Output Cathode	
R83	330KΩ	½	66-4333340	BTS-330K	Or.-Or.-Yl.	Audio Amp. Plate	±20%
R84	2.2 Meg.	½	66-5223340	BTS-2.2 Meg.	Red-Red-Grn.	Sync. Sep. Grid	±20%
R85	22KΩ	½	66-3223340	BTS-22K	Red-Red-Or.	Grid Current Limiting	±20%
R86	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Voltage Divider	
R87	1 Meg.	1	66-5104340	BTA-1 Meg.	Br.-Blk.-Grn.	Sync. Sep. Plate Load	
R88	10KΩ	1	66-3104340	BTA-10K	Br.-Blk.-Or.	Voltage Divider	
R89	470KΩ	½	66-4473340	BTS-470K	Yl.-Vi.-Yl.	Vert. Sync. Amp. Grid	±20%
R90	220KΩ	½	66-4223340	BTS-220K	Red-Red-Yl.	Grid Current Limiting	±20%
R91	2200Ω	½	66-2223340	BTS-2200	Red-Red-Red	Vert. Sync. Amp. Cathode	±5%
R92	68KΩ	1	66-3684340	BTA-68K	Blue-Gray-Or.	Vert. Sync. Amp. Plate-See Note 4	
R93	22KΩ	½	66-3223340	BTS-22K	Red-Red-Or.	Vert. Sync. Amp. Plate	±20%
R94	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Vert. Block Osc. Grid	±20%
R95	100KΩ	½	66-4103340	BTS-100K	Br.-Blk.-Yl.	Vert. Block. Osc. Plate Decoup.	±20%
R96	10KΩ	½	66-3103340	BTS-10K	Br.-Blk.-Or.	Vert. Block. Osc. Grid	±20%
R97	470KΩ	1	66-4474340	BTA-470K	Yl.-Vi.-Yl.	Vert. Block. Osc. Plate	±20%
R98	22KΩ	½	66-3223340	BTS-22K	Red-Red-Or.	Vert. Block. Osc. Plate Decoup.	±20%
R99	68KΩ	½	66-3683340	BTS-68K	Blue-Gray-Or.	Voltage Divider	
R100	27KΩ	½	66-3273340	BTS-27K	Red-Vi.-Or.	" "	
R101	2200Ω	½	66-2223340	BTS-2200	Red-Red-Red	Peaking	±20%
R102	1000Ω	1	66-2104340	BTA-1000	Br.-Blk.-Red	Vert. Output Cathode	
R103	10KΩ	1	66-3104340	BTA-10K	Br.-Blk.-Or.	Horiz. Sync. Amp. Plate	±20%
R104	10KΩ	1	66-3104340	BTA-10K	Br.-Blk.-Or.	" " " "	±20%
R105	100KΩ	½	66-4103340	BTS-100K	Br.-Blk.-Yl.	Hor. Sync. Amp. Grid	±20%
R106	100KΩ	1	66-4104340	BTA-100K	Br.-Blk.-Yl.	Hor. Block. Osc. Plate-Note 5	±5%
R107	330Ω	½	66-1333340		Or.-Or.-Br.	Hor. Block. Osc. Grid	±5%
R108	1000Ω	½	66-2103340	BTS-1000	Br.-Blk.-Red	Hor. Block. Osc. Cathode	
R109	33KΩ	½	66-3333340	BTS-33K	Or.-Or.-Or.	Hor. Block. Osc. Cathode	±5%
R110	2200Ω	½	66-2223340	BTS-2200	Red-Red-Red	Hor. Block. Osc. Plate	±5%
R111	22KΩ	½	66-3223340	BTS-22K	Red-Red-Or.	" " " " -Note 6	±20%
R112	100Ω	½	66-1103340		Br.-Blk.-Br.	Grid Current Limiting	±20%
R113	180KΩ	½	66-4183340	BTS-180K	Br.-Gray-Yl.	Hor. Output Grid	
R114	18KΩ	½	66-3183340	BTS-18K	Br.-Gray-Or.	" "	
R115	100Ω	2	66-1105340		Br.-Blk.-Br.	Hor. Output Cathode	
R116	3900Ω	2	66-2395340	BT-2-3900	Or.-Wh.-Red	Hor. Output Screen	
R117	33KΩ	2		BT-2-33K	Or.-Or.-Or.	Damping-See Note 7	
R118	.8Ω	½	33-1334-1			Hor. Damping Filament	
R119	1 Meg.	1	66-5104340	BTA-1 Meg.	Br.-Blk.-Grn.	High Voltage Filter	±20%
R120	8520Ω		33-3435-5			Low Voltage Filter Network -Note 8	
R121	68KΩ	½	66-3683340	BTS-68K	Blue-Gray-Or.	Video Output Screen	
R122	2.2 Meg.	½	66-5223340	BTS-2.2 Meg.	Red-Red-Grn.	Video Output Grid	
R123	1 Meg.	½	66-5104340	BTS-1 Meg.	Br.-Blue-Grn.	Sync. Sep. Screen	
R124	4.7Ω	1	66-9473340		Yl.-Vi.-Gold	Hor. Centering	

Note 1-Some models use two 22KΩ resistors in parallel in this application.
Note 2-Some models use 3300Ω in this application.
Note 3-Some models use 27KΩ in this application.
Note 4-Some models use 82KΩ in this application.
Note 5-Some models use 150KΩ in this application.
Note 6-Not used in all models.
Note 7-Models using R12 & R13 linearity controls use either 3500Ω and 2000Ω resistors in series or 6200Ω in this application.
Note 8-Tapped at 1500Ω and 2320Ω.

PARTS LIST CONTINUED ON PAGE 10



CHASSIS BOTTOM VIEW–TRANS INDUCTOR AND ALIGNMENT

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	PHILCO PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.
T1	2.5 Amp @ 117V AC	310 MA. @ 630V AC	3.5 Amp. @ 6.3V AC	6 Amp. @ 5V AC	32-8303			
				SEC. 4 2 Amp. @ 5V AC				
T1B					32-8344†			

†Used in Models 48-1000-5, 48-1001-5, 48-1050-5.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING DC RESISTANCE PRI.	RATING DC RESISTANCE SEC.	REPLACEMENT DATA PHILCO PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.	NOTES
T2	5.5Ω	40Ω	32-8307	A-8110		A-3002	Hor. Block. Osc. Trans.
T3	360Ω	195Ω	32-8304	A-8111	TV-24A88	A-3000	Vert. Block. Osc. Trans
T4	300Ω tapped @ 42Ω	SEC. 1 2.5Ω SEC. 2 0Ω	32-8331				Hor. Output Trans.
T5	700Ω	10Ω	32-8306	A-8115	TV-24S86	A-3035	Vert. Output Trans.
T6A	30Ω		32-9604				Vert. Deflection Yoke
B	9Ω						Hor. Deflection Yoke
T7	120Ω		76-2622-1				Focus Coil
T8			76-2623				Beam Bender-See Note

NOTE-Some models use PM Beam Bender. When T8 is used it is placed in series with the focus coil.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING IMPEDANCE PRI.	IMPEDANCE SEC.	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA PHILCO PART No.	STANCOR PART No.	THORDAR'N PART No.	MERIT PART No.	INSTALLATION NOTES
T9	7800Ω	3.2Ω	520Ω	.7Ω	32-8244-1	A-3878	T22847	A-2931	

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA PHILCO PART No.	JENSEN PART No.	QUAM PART No.	INSTALLATION NOTES
	FIELD	VC IMP.				
SP1	PM	3.2Ω	36-1613-2	ST-109	6A21	
	CONE DIA.	VC DIA.				
SP2	6"	3/4"				

FILTER CHOKE

ITEM No.	RATINGS TOTAL DIRECT CURRENT	RATINGS D. C. RESISTANCE	RATINGS INDUCTANCE (0 CURRENT 1000 ~)	REPLACEMENT DATA PHILCO PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.	INSTALLATION NOTES
L1	310MA	100Ω	3.4 Henries	32-8308			C-3183	

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA PHILCO PART No.	MEISSNER PART No.	NOTES
L2	Fil. Choke	0Ω		32-4112-4		
L3	Osc. Plate	0Ω		32-4112-2		
L4	Fil. Choke	0Ω		32-4112-4		
L5	1st IF	.4Ω	.2Ω	32-4093		
L6	Fil. Choke	0Ω		32-4112-3		
L7	2nd Video IF	.4Ω	.2Ω	32-4213		Includes co-channel sound trap
L8	Fil. Choke	0Ω		32-4112-3		
L9	3rd Video IF	.4Ω	.2Ω	32-4213-1		Includes adjacent channel sound trap
L10	Fil. Choke	0Ω		32-4112-3		
L11	4th Video IF	.4Ω	.2Ω	32-4093-1		
L12	Fil. Choke	0Ω		32-4112-3		
L13	Sound Trap	0Ω		32-4218		
L14	Video Peak.	4.6Ω		32-4143		
L15	4.5MC Trap	1Ω		32-4155		
L16	Peaking	2Ω		32-4143-1		
L17	"	3Ω		32-4143-2		
L18	Hor. Stabilizing	240Ω		32-4256		
L19	Hor. Linearity	18Ω		32-4211		
L20	Width	2.5Ω	195Ω	32-4163-2		
L21	2nd Sound IF	0Ω		32-4100		
L22	Fil. Choke	0Ω		32-4112-3		
L23	3rd Sound IF	0Ω		32-4099		
L24	IF Grid	2Ω		32-4143-1		
L25	Det. Trans.	0Ω	0Ω	32-4214		
L26	Det. Balancing	2Ω		32-4143-1		Not used in all models.
L27	Fil. Choke	0Ω		32-4112-3		
L28	AFC Test Isolation	2Ω		32-4143-1		
L29	RF Choke	0Ω				

MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M1	Antenna and RF Coil Assembly	32-4115	Indicate channel desired by suffixing channel number i.e. 32-4115-3.
M2	Osc. & Mixer Coil Assy.	32-4122	Indicate channel desired by suffixing channel number i.e. 32-4122-3.
M3	Tuner Assembly	76-3109	
M4	Antenna Receptacle	27-6214-1	
M5	Interlock Plug-Male	54-4426-2	
M6	" " -Female	27-6217	
M7	P.M. Beam Bender	76-3913	
A20	RF Amp. Grid Trimmer	31-6493	
A21	Mixer Grid Trimmer	31-6493	
	Power Cord	L2183	
	Oscillator Contact Panel	76-2678	
	Antenna Contact Panel	76-2664	
	Shaft and Drum	76-3110	
	Cabinet	10672A	Model 48-1000
	"	10672B	Model 48-1000-5
	"	10694	Models 48-1050 and 48-1050-5
	"	10708	Model 48-1001
	Knob	54-4376	
	Selector Knob & Spring	76-2953FCP	
	Station Tab Kit	40-6948	
	Picture Tube Window	54-7340	Models 48-1000 and 48-1000-5
	" " "	54-7340-1	Models 48-1050 and 48-1050-5
	" " "	54-7596	Model 48-1001

CABINET–REAR VIEW

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Cap
1	6AG5	-.2VDC	1VDC	0V.	6.4VAC	260VDC	135VDC	1VDC	-	-
2	6AG5	-4.5VDC	0V.	6.4VAC	0V.	250VDC	145VDC	0V.	-	-
3	6J6	115VDC	115VDC	0V.	6.4VAC	-1.2VDC	4VDC	4.4VDC	-	-
4	6AG5	-.2VDC	.6VDC	0V.	6.4VAC	255VDC	115VDC	.6VDC	-	-
5	6AG5	-.2VDC	.6VDC	0V.	6.4VAC	230VDC	125VDC	.6VDC	-	-
6	6AG5	0V.	1.7VDC	0V.	6.4VAC	230VDC	130VDC	1.7VDC	-	-
7	6AL5	0V.	0V.	6.4VAC	0V.	.5VDC	0V.	-.2VDC	-	-
8	7B6	0V.	240VDC	.1VDC	3.2VDC 17VDC	-.1VDC	-.1VDC	3.2VDC 17VDC	6.4VAC	-
9	6AG5	0V.	1.1VDC	0V.	6.4VAC	215VDC	130VDC	1.1VDC	-	-
10	7C5	0V.	245VDC	115VDC	0V.	0V.	0V.	2.4VDC	6.4VAC	-
11	6AT6	0V.	.8VDC	0V.	6.4VAC	0V.	0V.	0V.	-	-
12	7H7	6.4VAC	115VDC	115VDC	0V.	0V.	0V.	1VDC	0V.	-
13	7H7	6.4VAC	225VDC	125VDC	0V.	0V.	0V.	1.7VDC	0V.	-
14	6AL5	0V.	0V.	0V.	6.4VAC	.3VDC	0V.	-.3VDC	-	-
15	7B4	0V.	100VDC	0V.	0V.	0V.	-.6VDC	0V.	6.4VAC	-
16	7B5	6.4VAC	270VDC	280VDC	0V.	0V.	0V.	17.5VDC	0V.	-
17	7B5	6.4VAC	2.5VDC	3.4VDC	0V.	340VDC	-.6VDC	0V.	0V.	-
18	7F8	-.3VDC	6.4VAC	120VDC	0V.	4.5VDC	175VDC	0V.	0V.	-
19	6SL7GT	-.4VDC	255VDC	5.1VDC	0V.	185VDC	60VDC 85VDC	6.4VAC	0V.	-
20	6BG6G	0V.	0V.	7.5VDC	0V.	-14VDC	0V.	6.4VAC	295VDC	**
21	5V4G	0V.	390VDC	0V.	335VDC	0V.	335VDC	0V.	390VDC	-
22	6SL7GT	-22VDC	30VDC 140VDC	0V.	-22VDC	315VDC	4.5VDC	6.4VAC	0V.	-
23	6K6GT	0V.	6.4VAC	330VDC	330VDC	0V.	0V.	0V.	27VDC 55VDC	-
24	1B3GT	**DO NOT MEASURE.								
25	5U4G	0V.	360VDC	0V.	330VAC	0V.	330VAC	0V.	360VDC	-
26	5U4G	0V.	360VDC	0V.	330VAC	0V.	330VAC	0V.	360VDC	-
27	10BP4	0V.	.3VDC	Pin 10 250VDC	Pin 11 15VDC	Pin 12 6.4VAC				

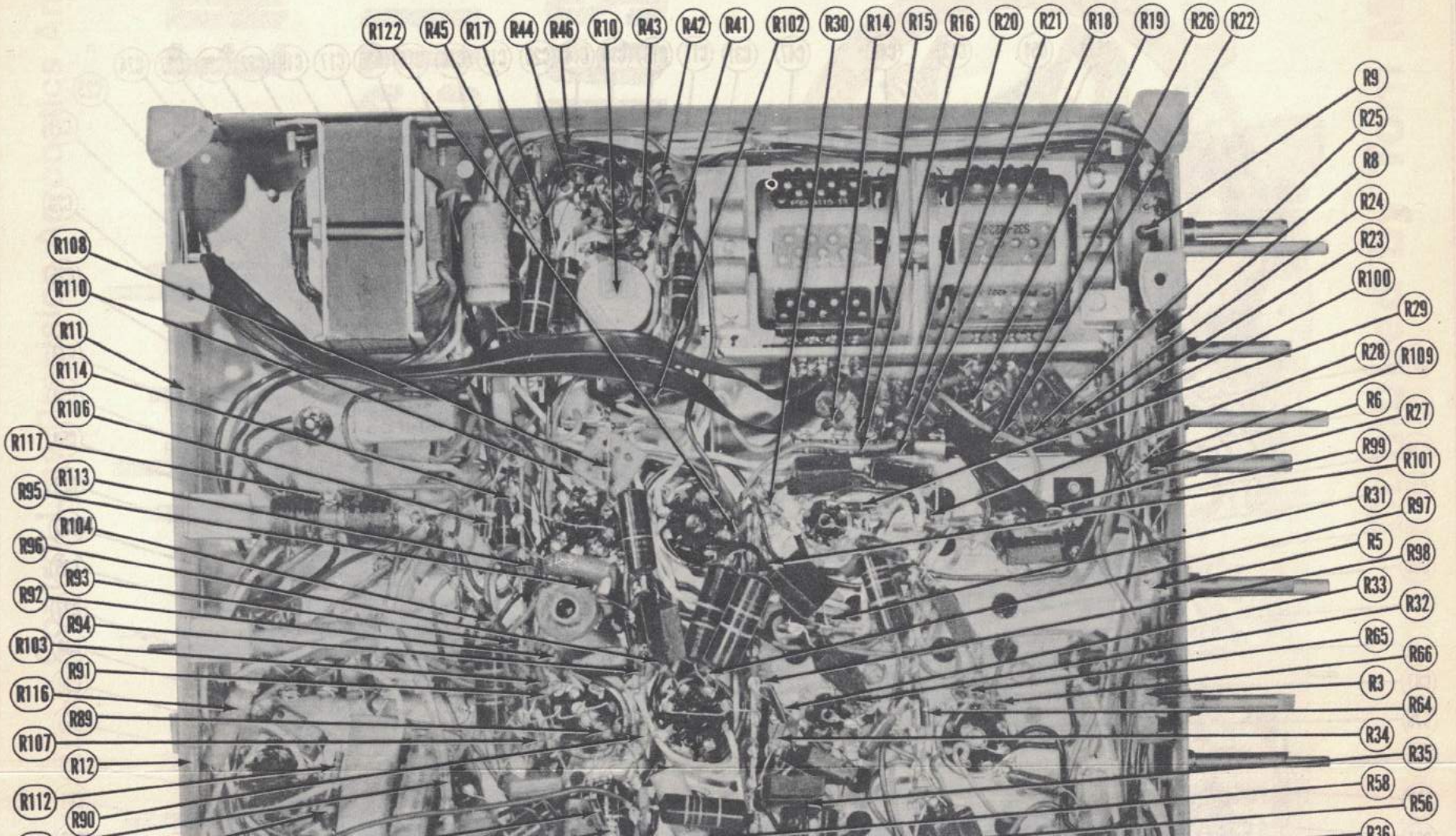
**DO NOT MEASURE.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Cap
1	6AG5	1.6 Meg.	170Ω	0Ω	.1Ω	4600Ω	6500Ω*	170Ω	-	-
2	6AG5	100KΩ	0Ω	.1Ω	0Ω	4700Ω*	65KΩ*	0Ω	-	-
3	6J6	6500Ω*	6500Ω*	0Ω	.1Ω	INF.	22KΩ	220Ω	-	-
4	6AG5	2 Meg.	68Ω	0Ω	.1Ω	1100Ω*	62KΩ*	68Ω	-	-
5	6AG5	2 Meg.	68Ω	0Ω	.1Ω	4600Ω*	62KΩ*	68Ω	-	-
6	6AG5	.2Ω	180Ω	0Ω	.1Ω	4600Ω*	62KΩ*	180Ω	-	-
7	6AL5	.2Ω	.2Ω	.1Ω	0Ω	570KΩ	INF.	3300Ω	-	-
8	7B6	0Ω	220KΩ*	1.5 Meg.	1000Ω 6000Ω	1 Meg.	1 Meg.	1000Ω 6000Ω	.1Ω	-
9	6AG5	1 Meg.	120Ω	0Ω	.1Ω	6500Ω*	60KΩ*	120Ω	-	-
10	7C5	0Ω	3000Ω*	70KΩ*	INF.	INF.	820KΩ	68Ω *	.1Ω	-
11	6AT6	0Ω	1 Meg.	0Ω	.1Ω	0Ω	0Ω	0Ω	-	-
12	7H7	.1Ω	11KΩ*	11KΩ*	0Ω	0Ω	10ΩKΩ	68Ω	0Ω	-
13	7H7	.1Ω	4000Ω*	50KΩ*	0Ω	0Ω	2Ω	150Ω	0Ω	-
14	6AL5	INF.	INF.	0Ω	.1Ω	10KΩ	INF.	10KΩ	-	-
15	7B4	0Ω	330KΩ*	INF..	INF.	INF.	4.7 Meg.	0Ω	.1Ω	-
16	7B5	.1Ω	2000Ω*	1600Ω*	INF.	INF.	1 Meg.	470Ω	0Ω	-
17	7B5	.1Ω	10KΩ	10KΩ	INF.	90Ω*	2.2 Meg.	0Ω	0Ω	-
18	7F8	100KΩ	.1Ω	20KΩ*	0Ω	2200Ω	100KΩ*	0Ω	700KΩ	-
19	6SL7GT	330Ω	25KΩ*	1000Ω	0Ω	100KΩ*	33KΩ 60KΩ	.1Ω	0Ω	-
20	6BG6G	INF.	0Ω	100Ω	INF.	200KΩ	INF.	.1Ω	3900Ω*	33KΩ*
21	5V4G	INF.	33KΩ*	INF.	90Ω*	INF.	90Ω*	INF.	33KΩ*	-
22	6SL7GT	40KΩ 1400KΩ	480KΩ	0Ω	40KΩ 140KΩ	100KΩ*	2200Ω	.1Ω	0Ω	-
23	6K6GT	INF.	.1Ω	700Ω*	700Ω*	2.2 Meg.	INF.	0Ω	1000Ω 6000Ω	-
24	1B3GT	INF.	INF.	INF.	INF.	INF.	INF.	INF.	INF.	36KΩ*
25	5U4G	INF.	18KΩ	INF.	46Ω	INF.	46Ω	INF.	18KΩ	-
26	5U4G	INF.	18KΩ	INF.	27Ω	INF.	27Ω	INF.	18KΩ	-
27	10BP4	0Ω	1.5 Meg.	Pin 10 900Ω*	Pin 11 100KΩ	Pin 12 .1Ω				

*MEASURED FROM PIN 8 OF V25.

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms.
2. Socket connections are shown as bottom views.
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 maximum.
6. Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.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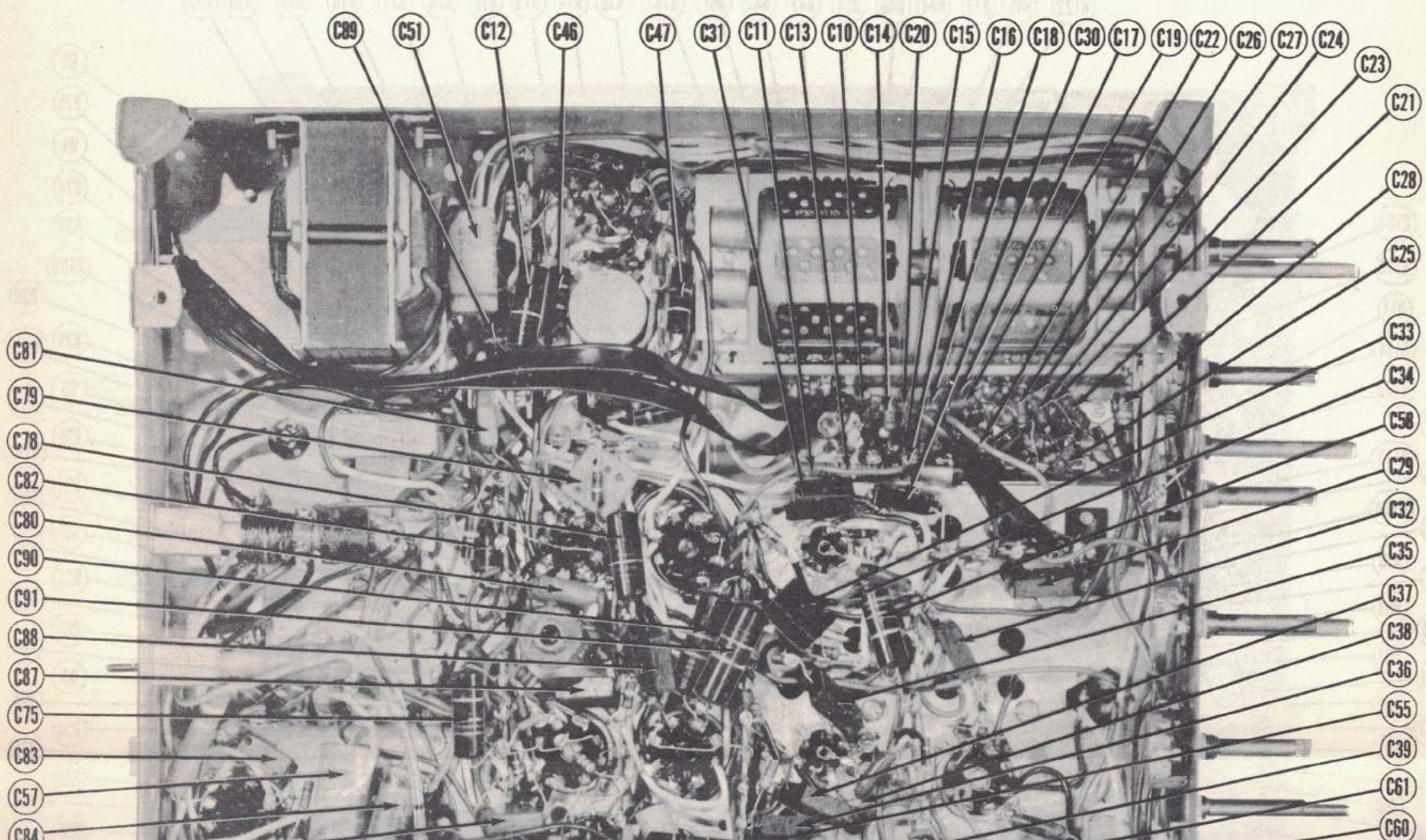
R90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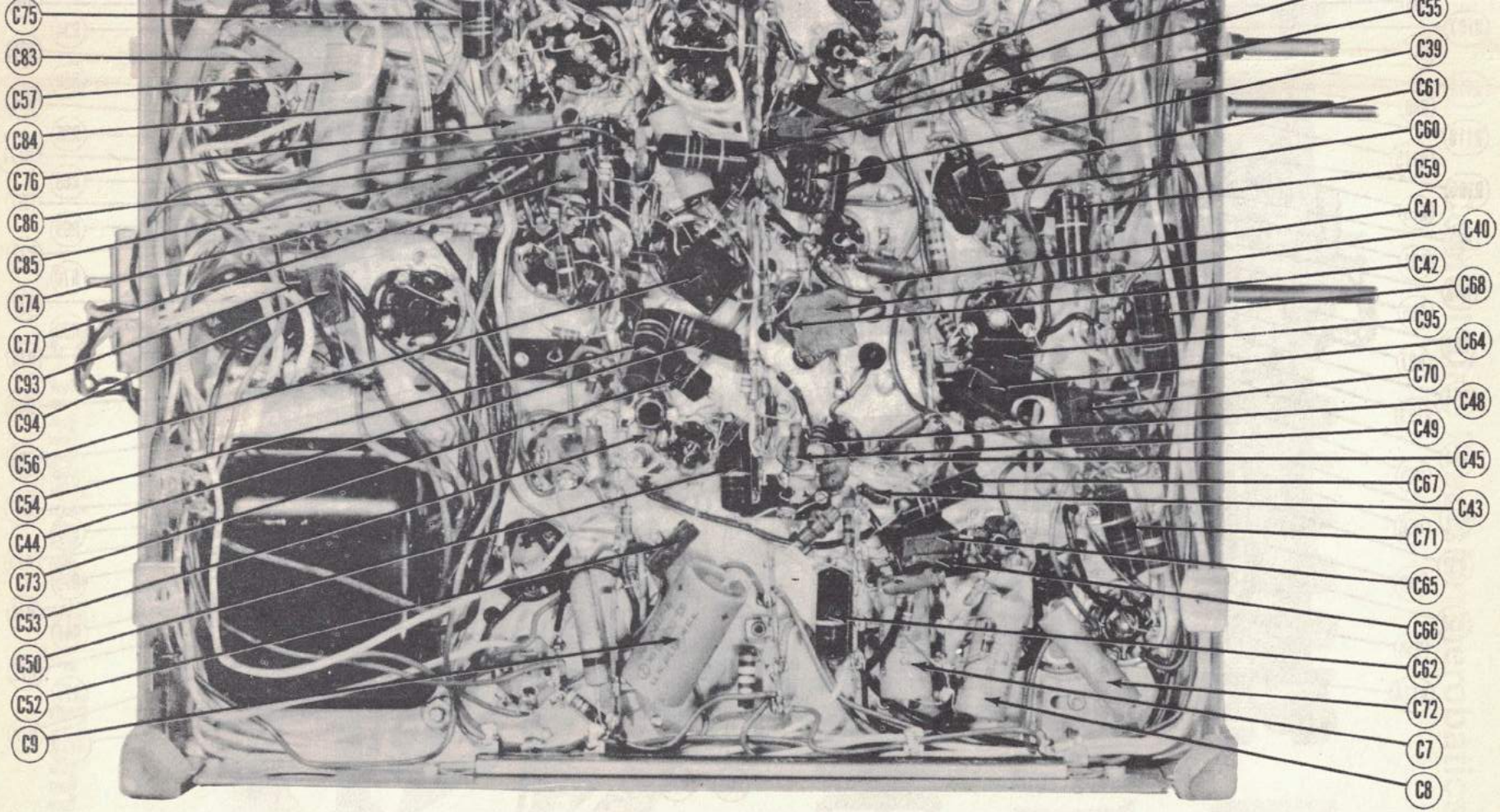
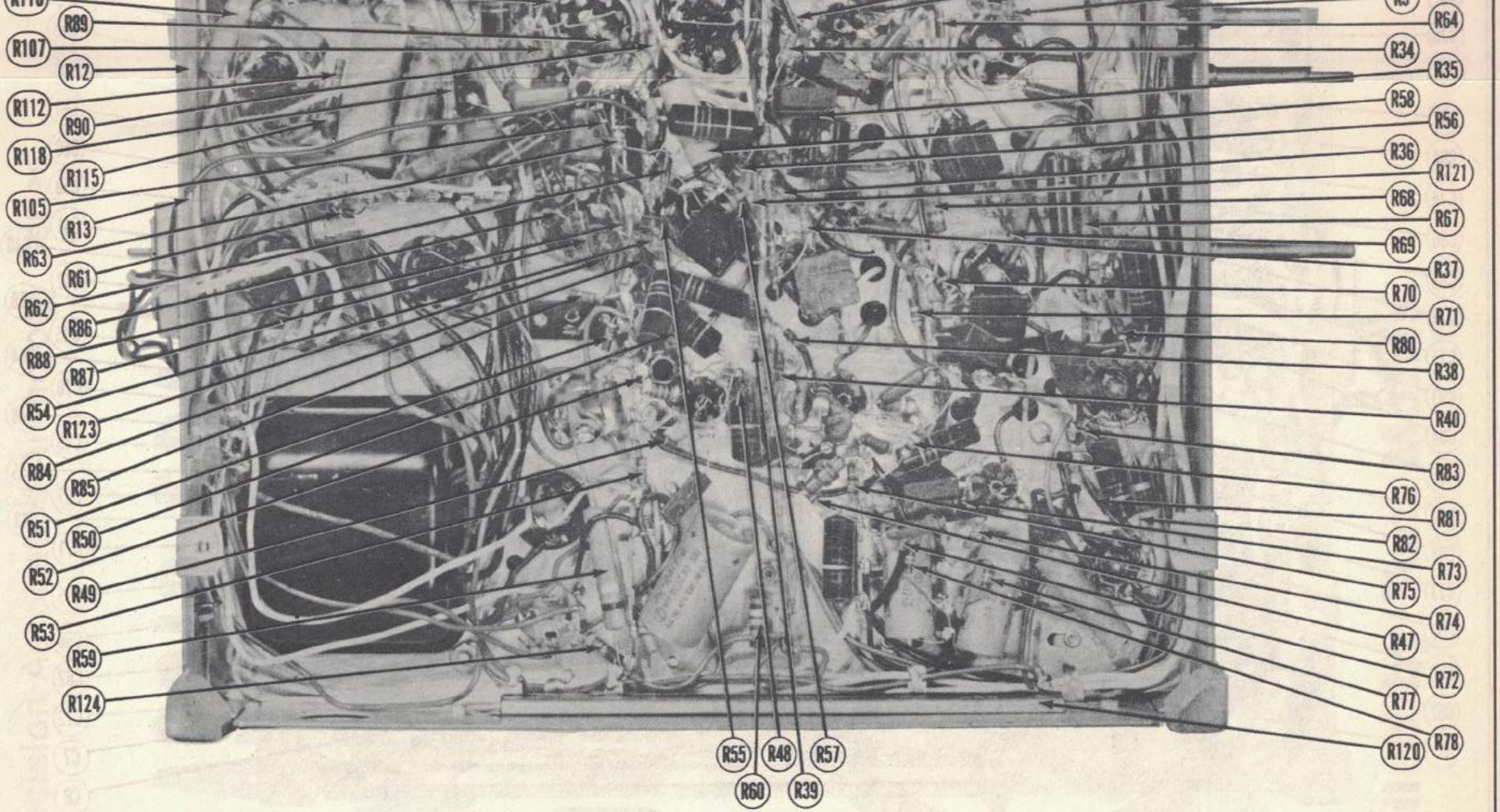
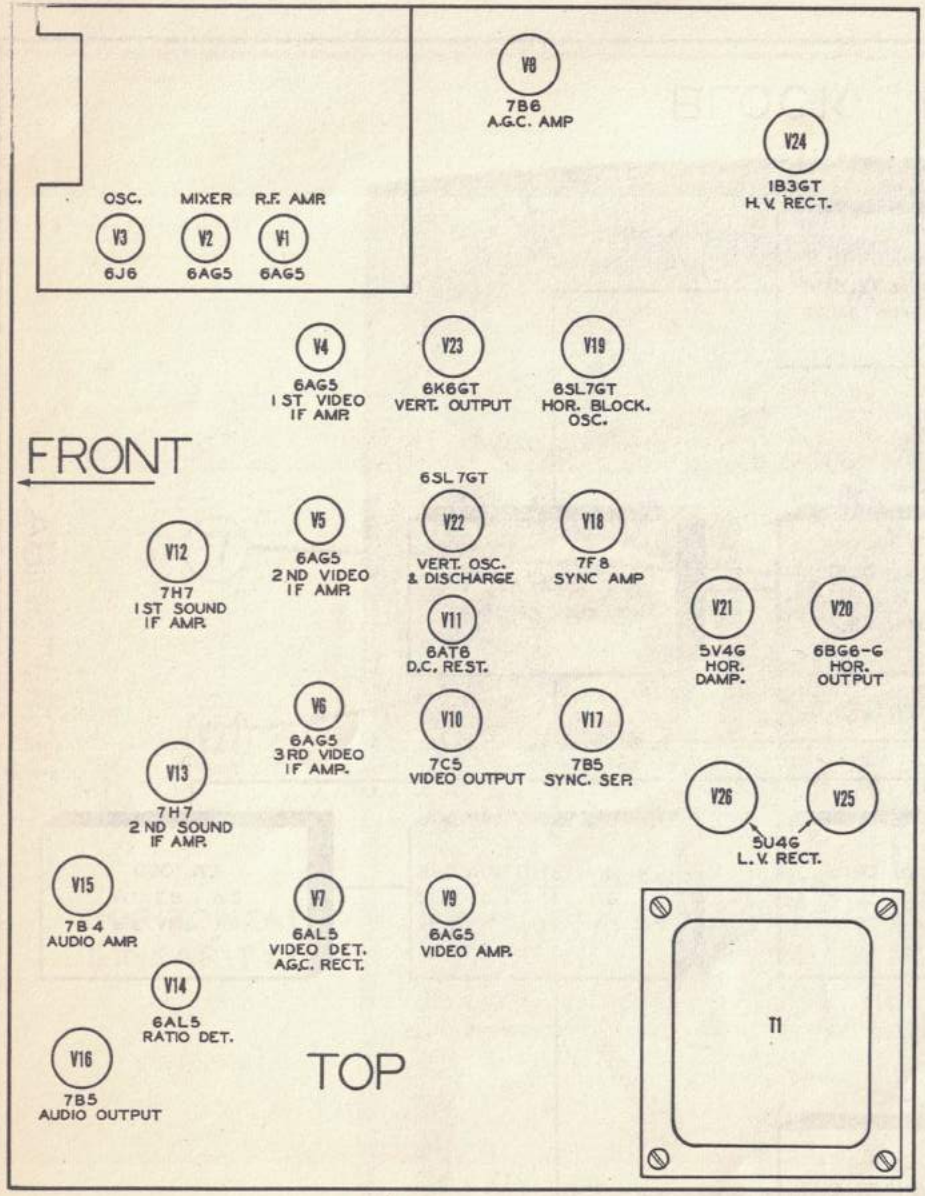
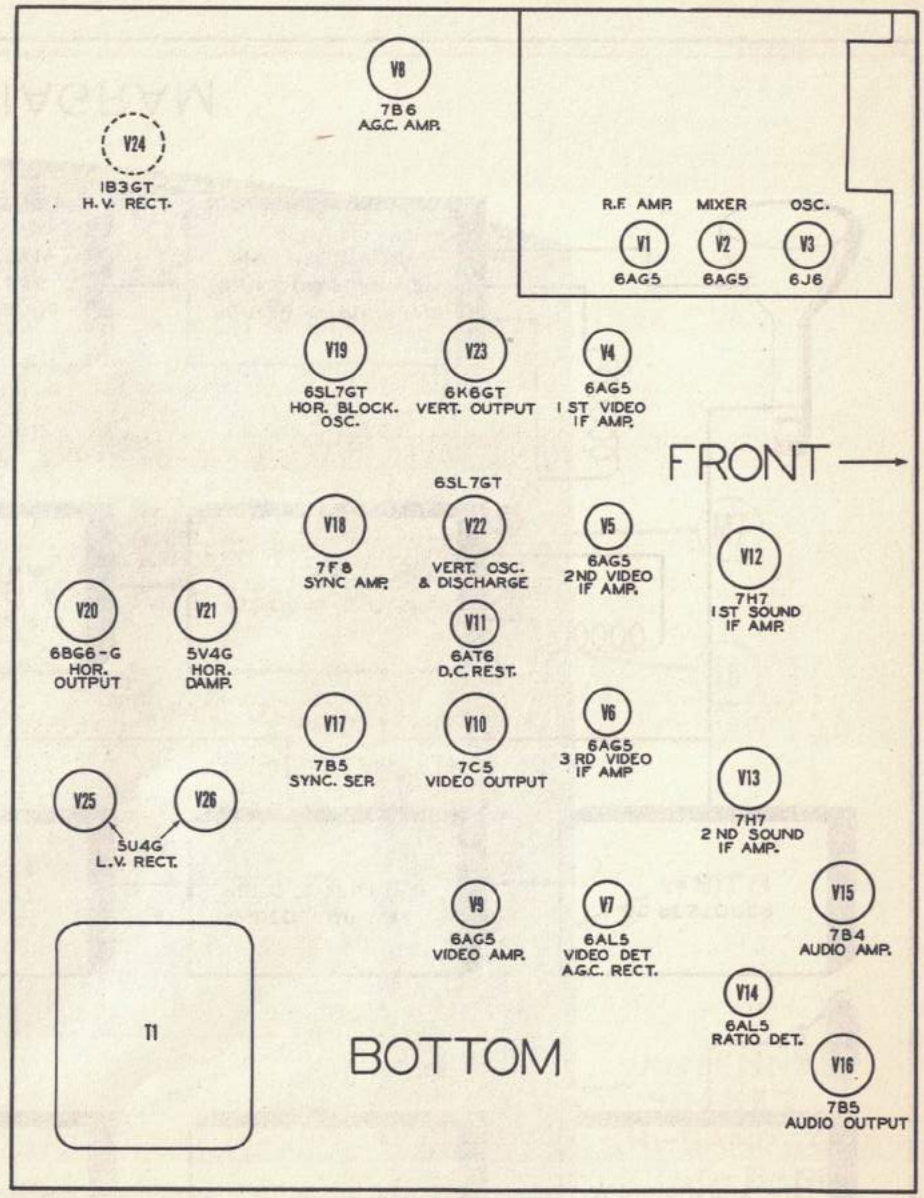


CHASSIS BOTTOM VIEW–CAPACITOR IDENTIFICATION



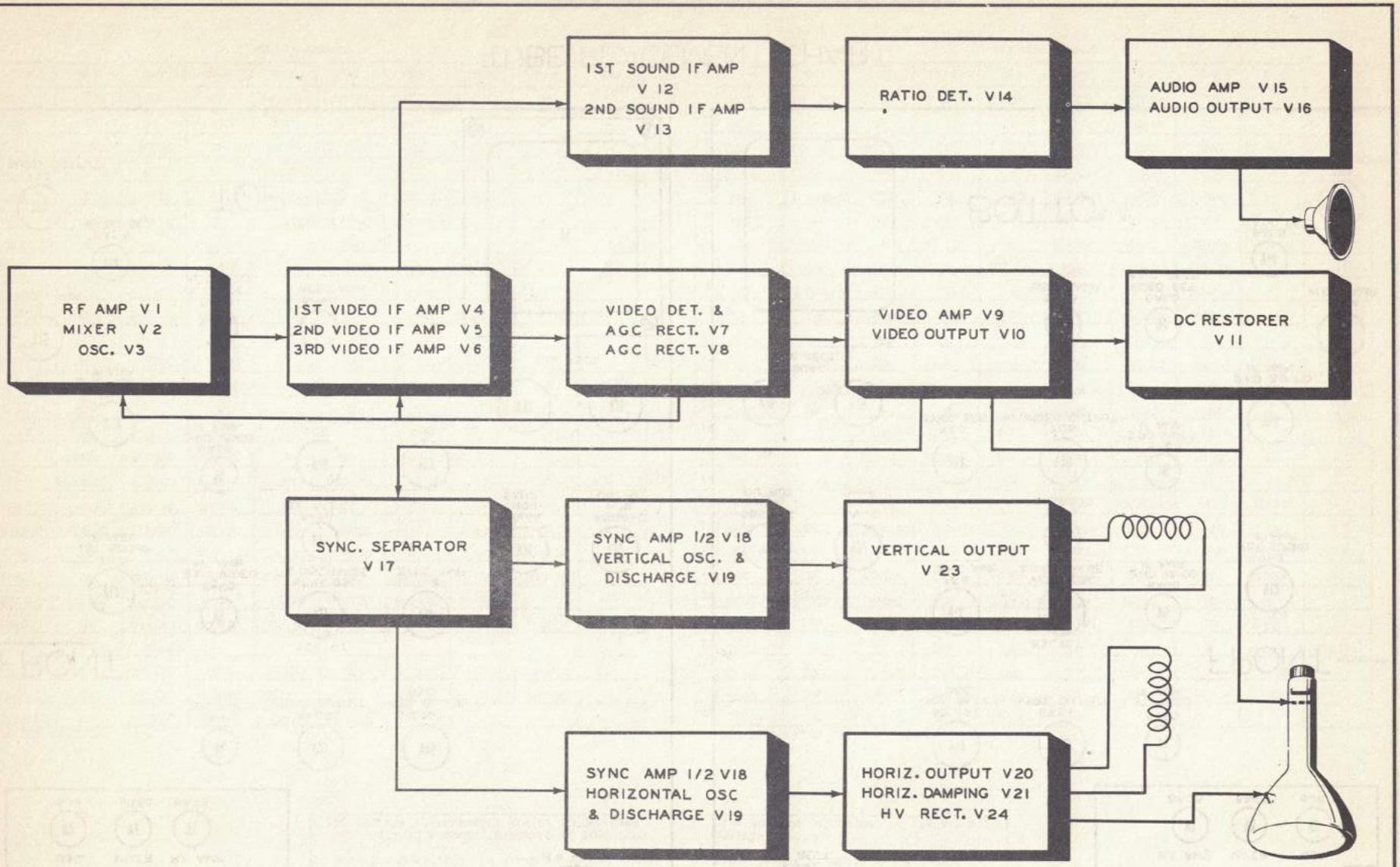
CHASSIS BOTTOM VIEW - RESISTOR IDENTIFICATION





TUBE PLACEMENT CHART

PHILCO MODELS 48-1000, 48-1001, 48-1050



BLOCK DIAGRAM

DISASSEMBLY INSTRUCTIONS

MODEL 48-1001

1. Remove 8 screws from back panel and remove panel.
2. Remove five push-on type control knobs and channel indicator from front panel.
3. Unplug deflection yoke cable from rear of chassis.
4. Remove socket from rear of picture tube.
5. Unplug high voltage lead on side of picture tube.
6. Unplug speaker cable.
7. Slide chassis out rear of cabinet, being careful not to put any pressure on rear of picture tube.
8. Remove four nuts and fiber washers holding speaker and remove speaker. If necessary to remove picture tube proceed as follows.
9. Remove two metal braces holding rear of picture tube to cabinet.
10. Remove three nuts, washers and lock washers holding picture tube assembly to front of cabinet and remove assembly.

TO REMOVE PICTURE TUBE FROM ASSEMBLY PROCEED AS FOLLOWS.

11. Loosen thumb nuts holding ion trap and remove.
12. Loosen clamp on face of picture tube.
13. Loosen deflection yoke clamp.
14. Being careful not to put pressure on neck of tube. Remove mounting assembly from tube.