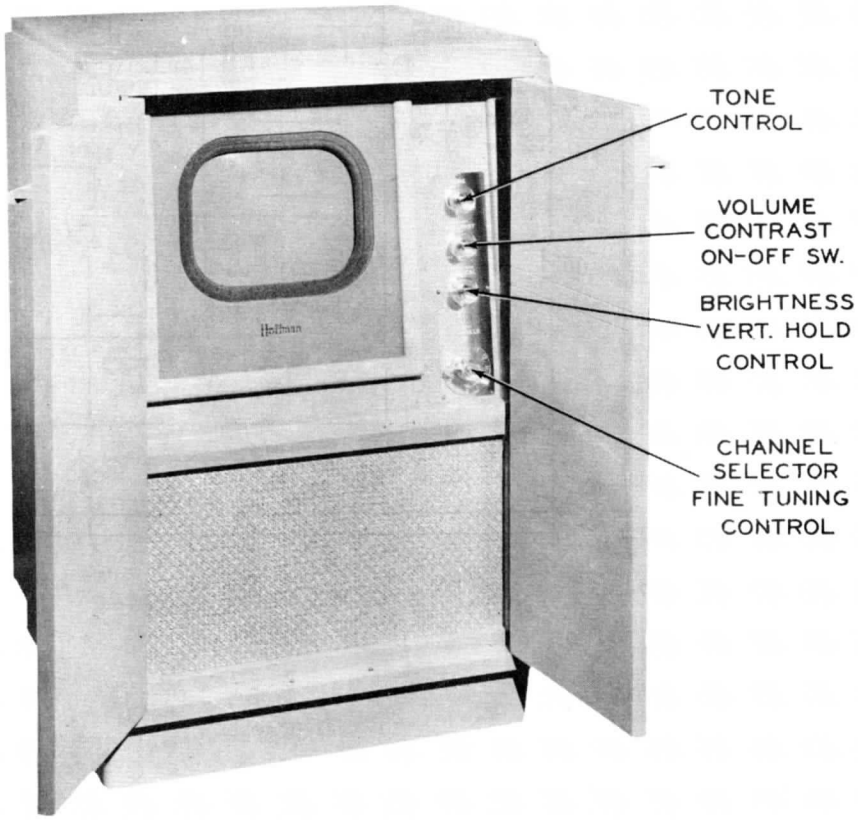
PHOTOFACT* Folder
*TRADE MARK

HOFFMAN MODELS
CT-800 CT-801, CT-900, CT-901



MODEL CT-800

TRADE NAME Hoffman Models, CT-800, CT-801, CT-900, CT-901
MANUFACTURER Hoffman Radio Corp., 3761 So. Hill St., Los Angeles, California
TYPE SET Television Receiver
TUBES Thirty

POWER SUPPLY 105-125 Volts, 60 Cycles AC RATING 2.6 Amps. @ 117 Volts
TUNING RANGE—Channels 2 through 13

INDEX

HOFFMAN MODELS
CT-800 CT-801, CT-900, CT-901

HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana

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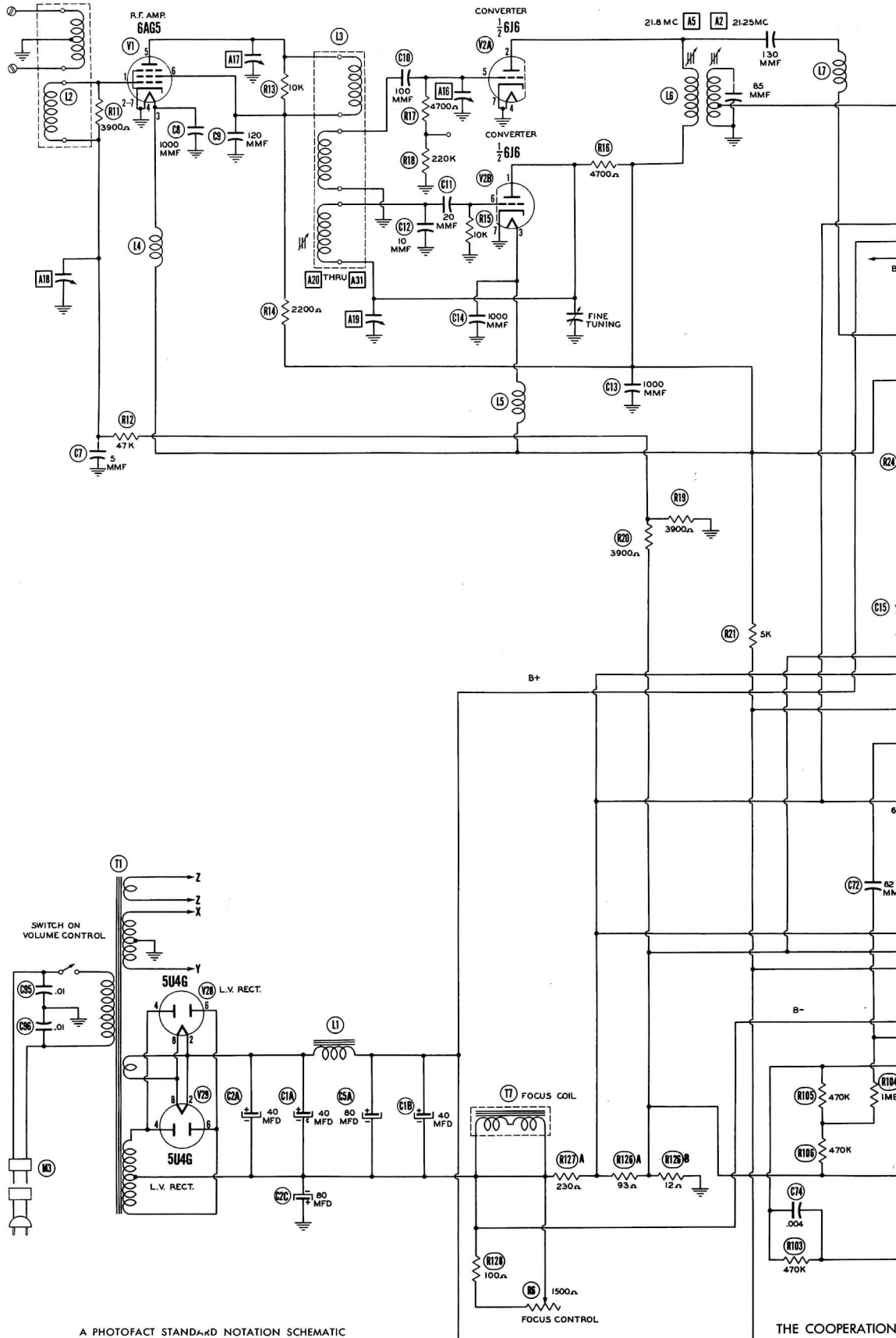
DATE 6/49 4911-11 SET #63 FOLDER 11



A PHOTOFACT STANDARD NOTATION SCHEMATIC

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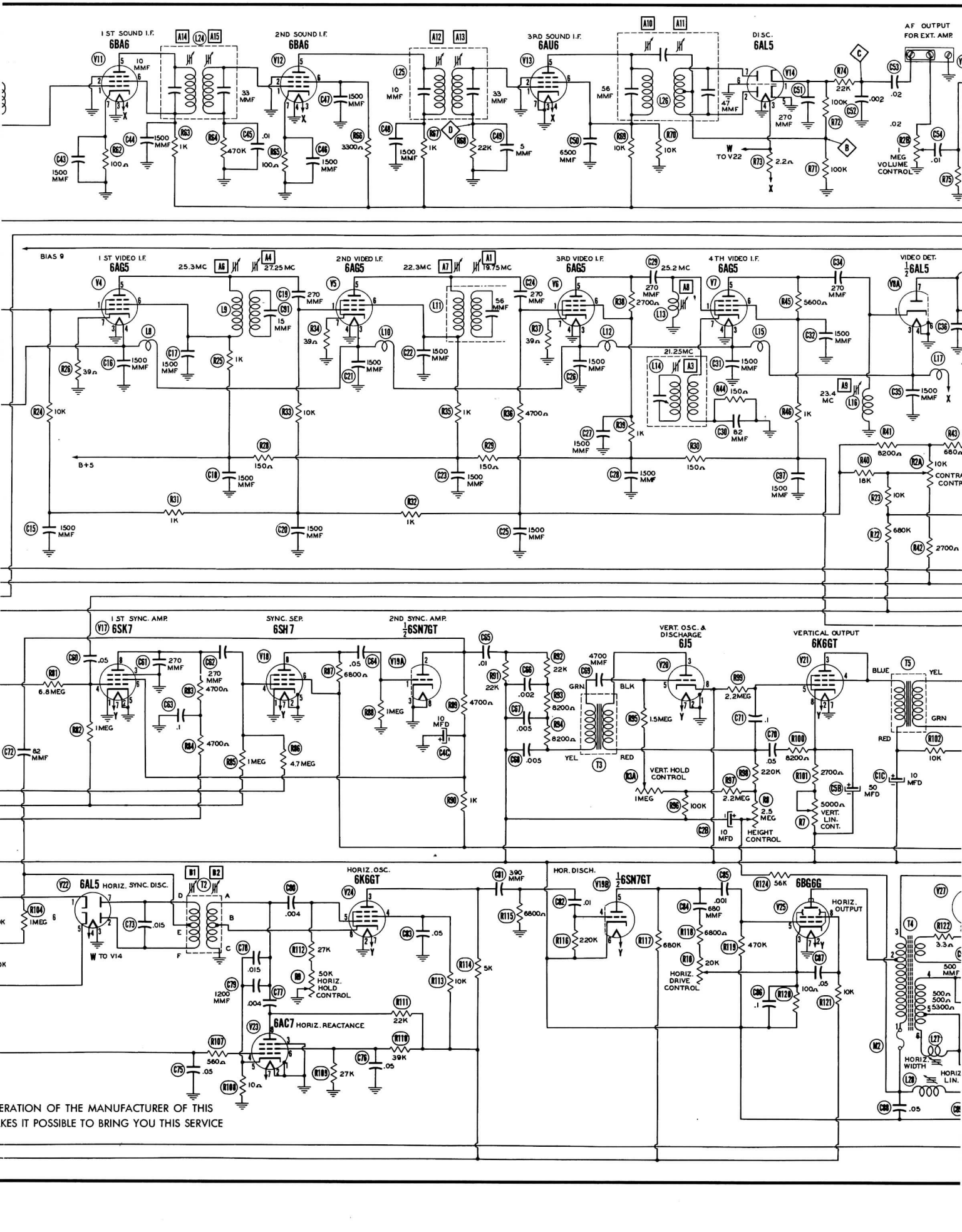

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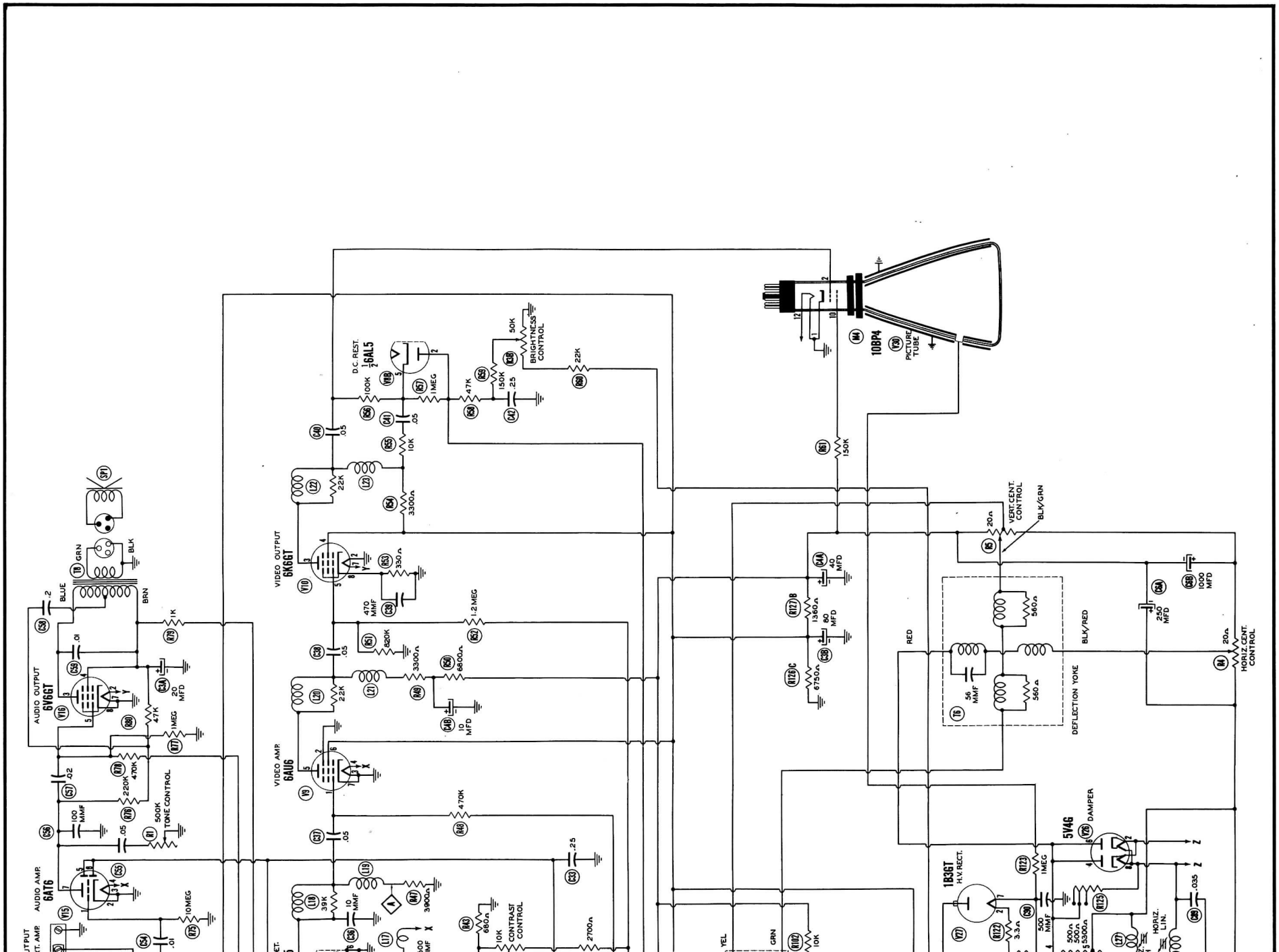
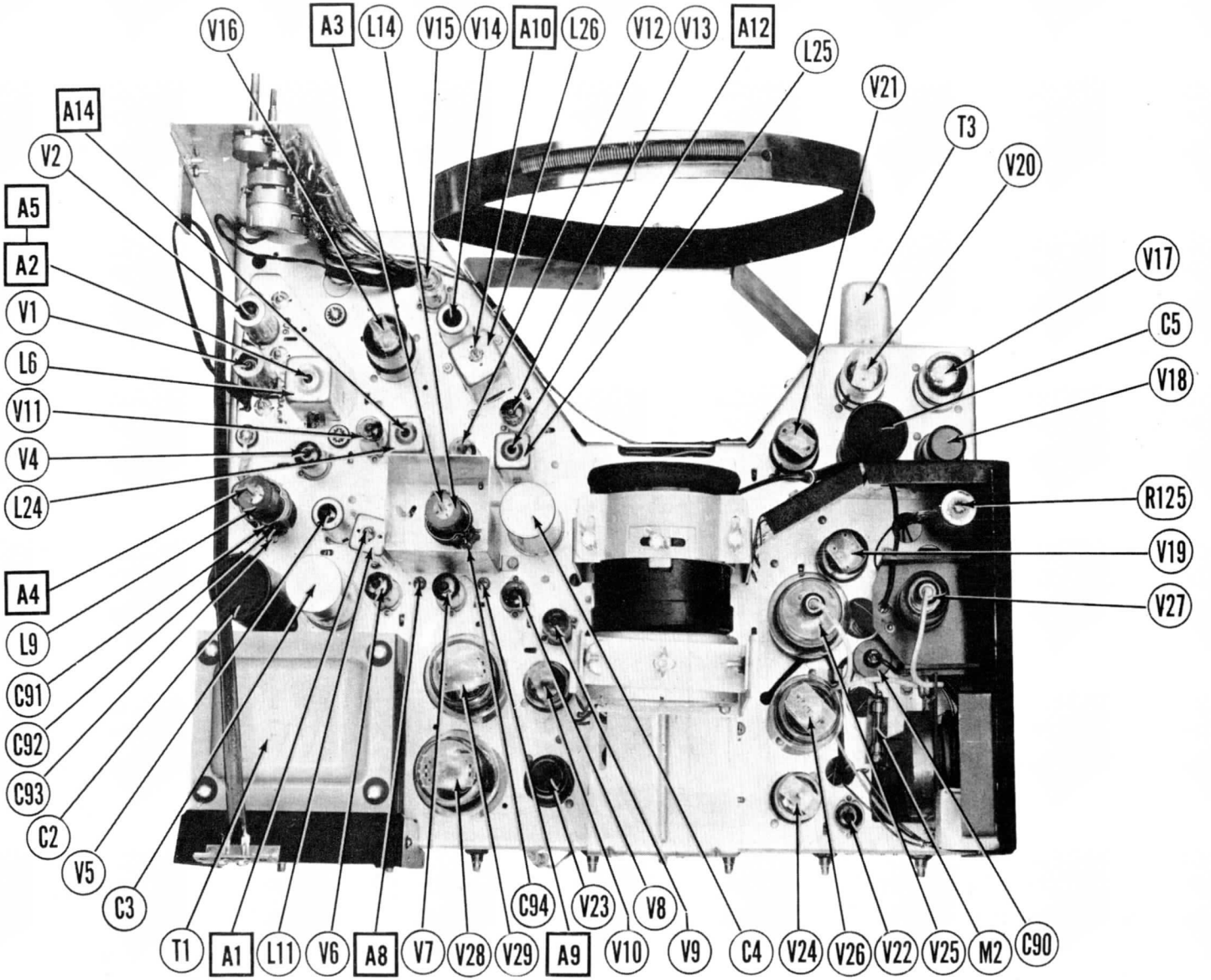
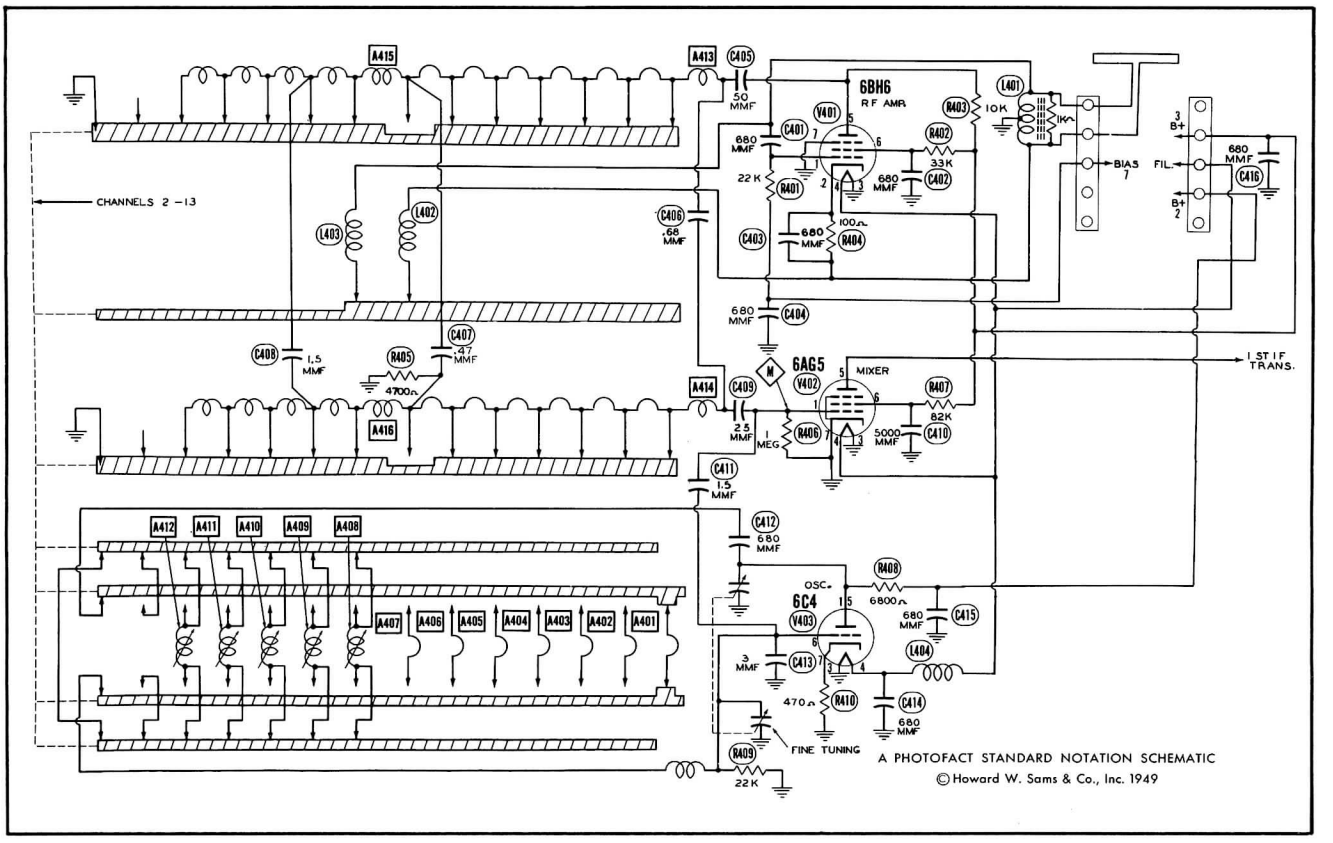
HOFFMAN MODELS
CT-800 CT-801, CT-900, CT-901





CHASSIS TOP VIEW



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

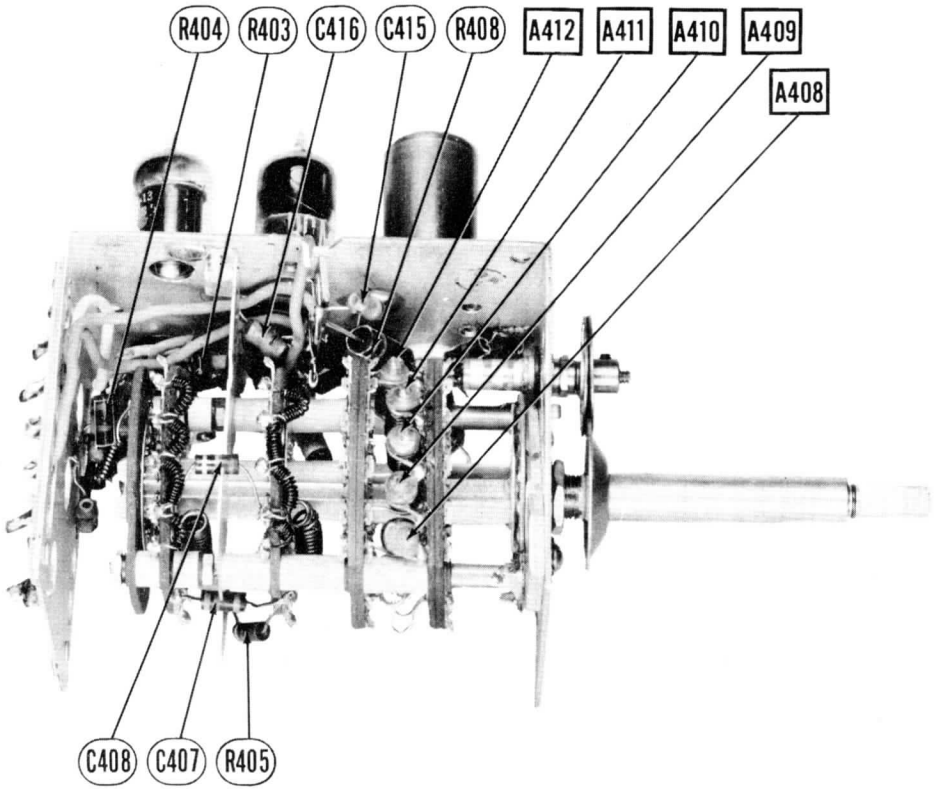
ITEM No.	RATING: RESISTANCE	RATING: WATTS	IDENTIFICATION
R401	22KΩ	½	RF Grid
R402	33KΩ	½	RF Screen
R403	10KΩ	1	RF Plate
R404	100Ω	½	RF Cathode
R405	4700Ω	½	Mixer Coil Shunt
R406	1 Meg.	½	Mixer Grid
R407	82KΩ	½	Mixer Screen
R408	6800Ω	1	Osc. Plate
R409	22KΩ	½	Osc. Grid
R410	470Ω	½	Osc. Cathode

CAPACITORS

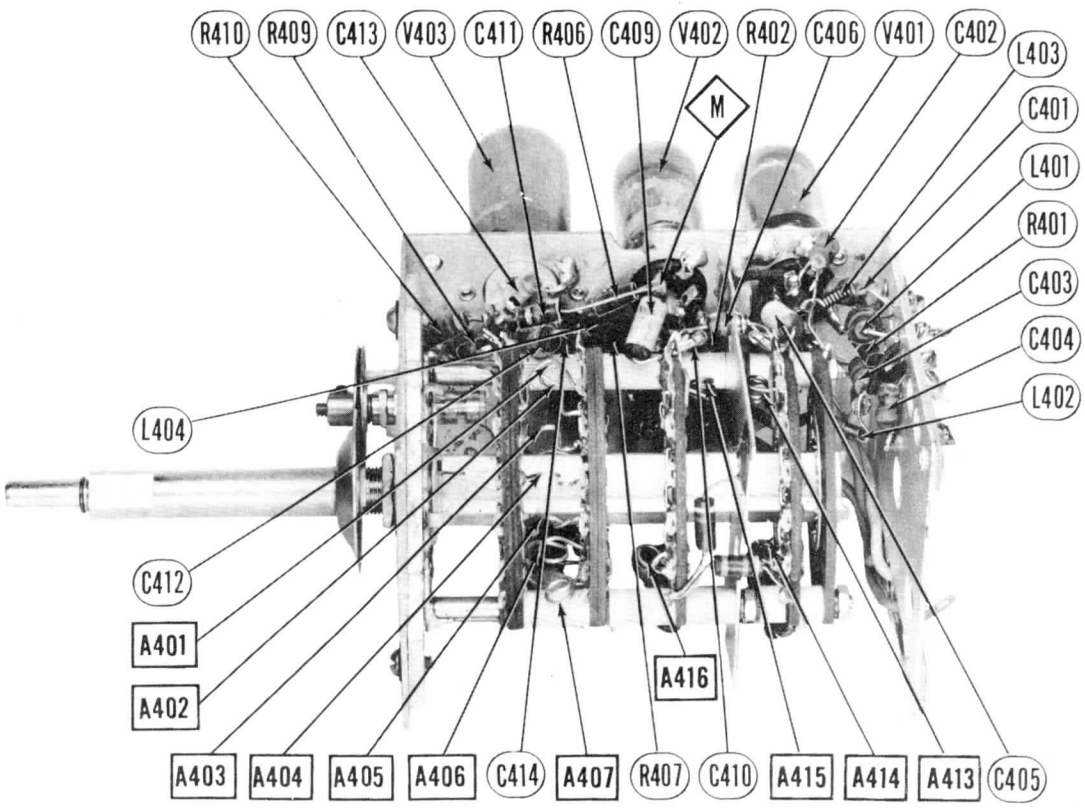
ITEM No.	RATING: CAP.	RATING: VOLT	IDENTIFICATION
C401	680		RF Coupling
C402	680		RF Screen Bypass
C403	680		RF Cathode Bypass
C404	680		Bias Filter
C405	50		RF Coupling
C406	.68		RF Coupling
C407	.47		RF Coupling
C408	1.5		RF Coupling
C409	25		RF Coupling
C410	5000		Mixer Screen Bypass
C411	1.5		Osc.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

COILS

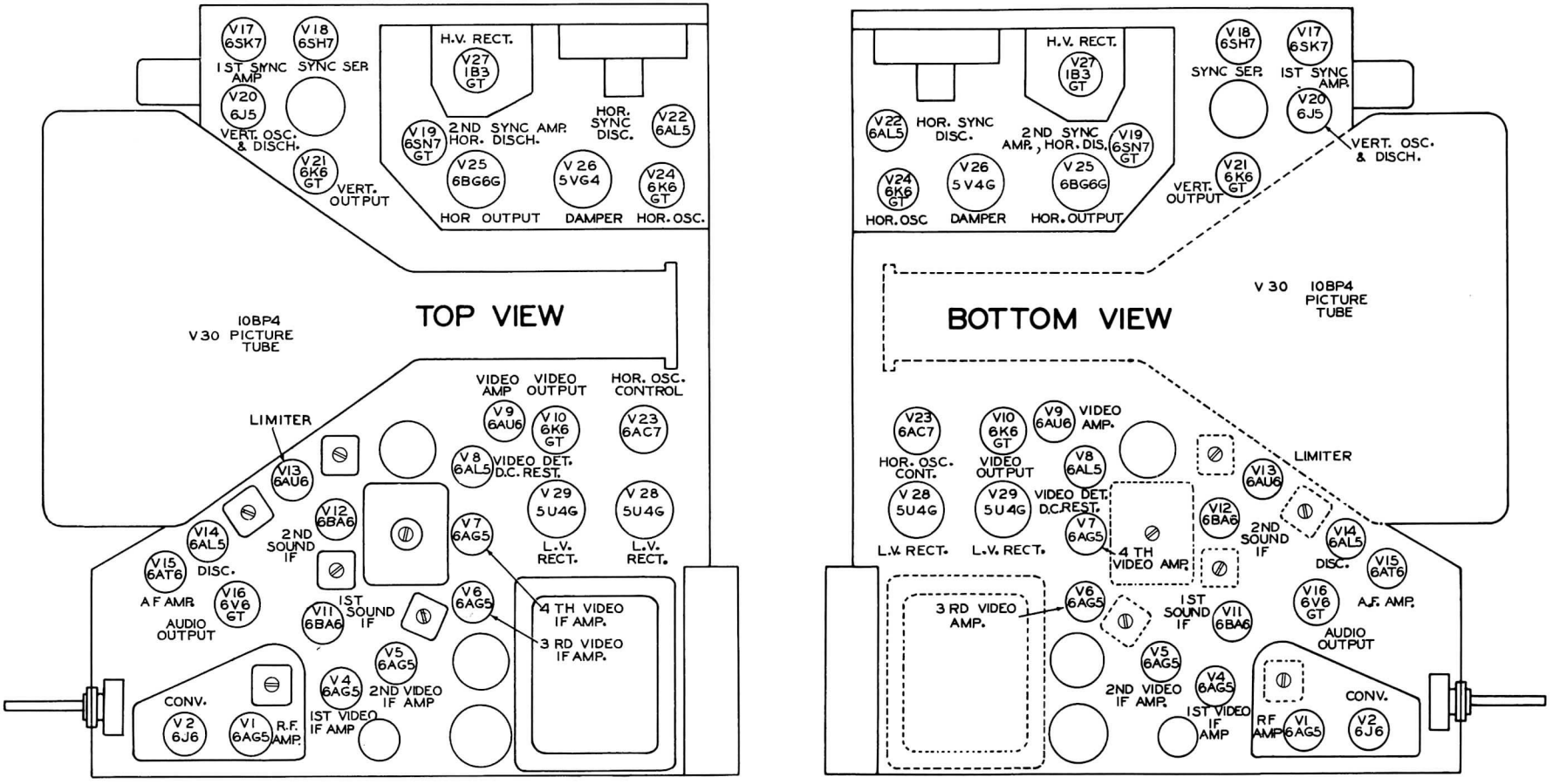
ITEM No.	USE	DC RES.: PRI.	DC RES.: SEC.	
L401	Ant. Input	0Ω		Wound on powdered iron core & 1000Ω resistor
L402	Ant. Input High Band	0Ω		
L403	Ant. Input High Band	0Ω		
L404	Fil. Choke	0Ω		



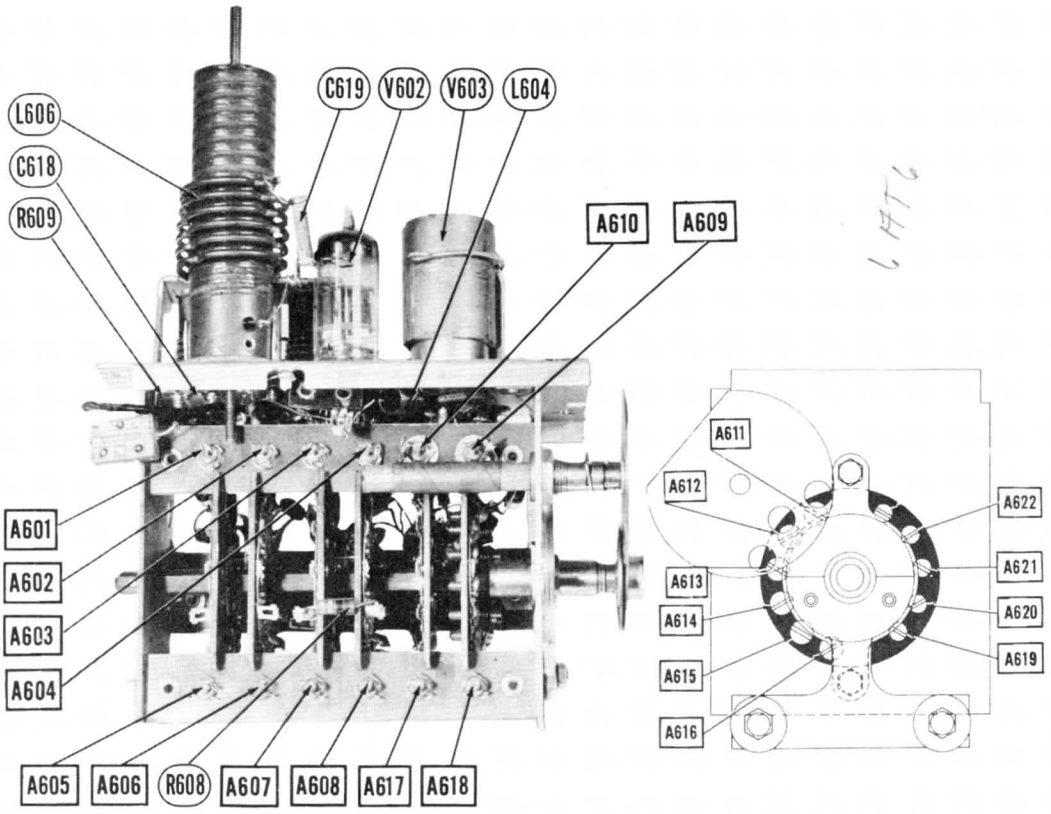
RF TUNER-LEFT SIDE



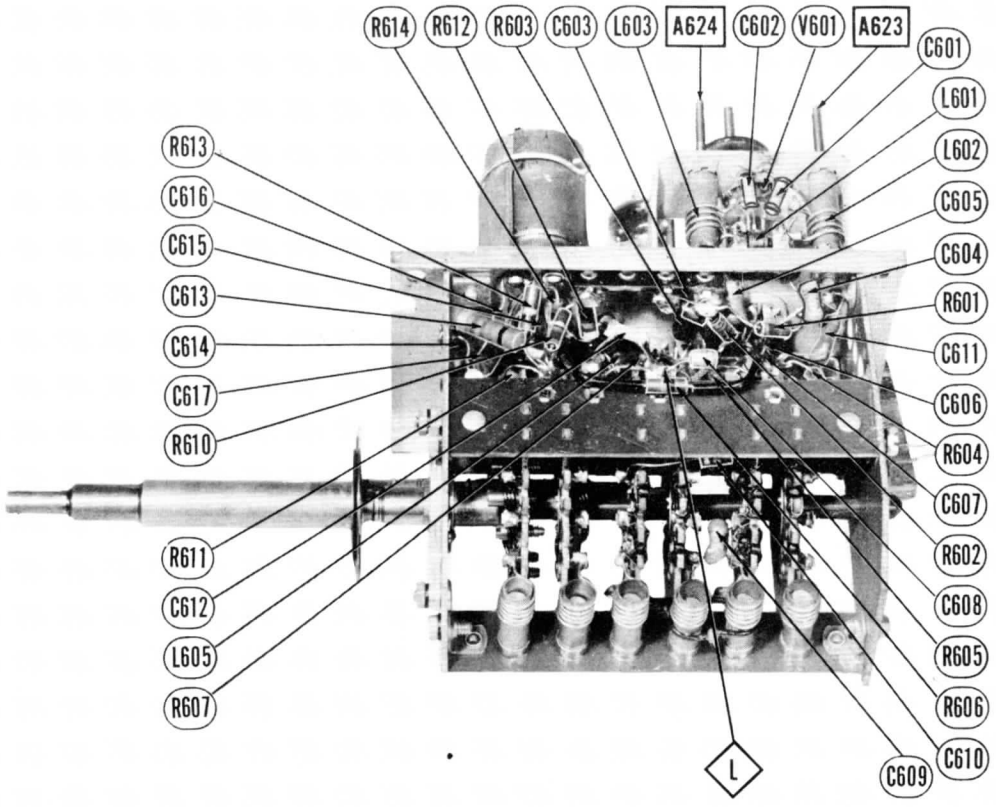
RF TUNER-RIGHT SIDE



TUBE PLACEMENT CHART



RF TUNER-LEFT SIDE



RF TUNER-RIGHT SIDE

PRE-ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

If alignment is performed with picture tube removed, remove V24 from its socket to disable the high voltage supply.

The oscillator tube (V3) should be removed when performing IF Adjustments. Use insulated alignment screwdriver for adjusting.

VIDEO IF ALIGNMENT

If receiver is badly misaligned making it impossible to get sufficent reading on VTVM with the signal being fed to the antenna terminals, signal may be fed to the mixer grid. This point is accessible in the different tuners as follows. STANDARD COILS Point J
RCA Point L
SARKES TARZIAN Loop a few turns of wire around the mixer tube.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1				9	DC Probe to junctions of R40 and R41. Common to chassis.		Set contrast control to give a -3 volt reading. Leave at this setting during entire IF Alignment procedure.
2	Direct	To ant. terminals. (See prealignment notes)	19.75MC	9	DC Probe to point (A) Common to chassis.	A1	Adjust for minimum deflection.
3	Direct	"	21.25MC	9	"	A2	" " " "
4	Direct	"	21.25MC	9	"	A3	" " " "
5	Direct	"	27.25MC	9	"	A4	Adjust for minimum deflection. Those models having 3 fixed trimmers across this trap winding should be adjusted for minimum at 21.25MC.
6	Direct	"	21.8MC	9	"	A5	Adjust for maximum deflection
7	Direct	"	25.3MC	9	"	A6	" " " "
8	Direct	"	22.3MC	9	"	A7	" " " "
9	Direct	"	25.2MC	9	"	A8	" " " "
10	Direct	"	23.4MC	9	"	A9	Adjust for maximum deflection. If A7 required adjustment in Step 8 repeat Step 2. If FM signal generator is not avaiable continue with Step 12.

OVERALL VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the signal generator to the horizontal amplifier in the scope for horizontal deflection.

The insertion of the sweep generator signal will vary with the type tuner used. Determine which tuner is being used and inject the signal as follows: STANDARD COIL TUNER: Remove the oscillator mixer coil strip for any channel and turn the channel selector switch to that channel. Connect the high side of the generator to point J and the low side to chassis. RCA TUNER: Remove the RF Amp. mixer and oscillator tubes and use the dummy mixer tube as shown in figure 6. SARKES TARZIAN: Remove the oscillator, RF Amp., and mixer tubes and use dummy mixer tube as shown in Fig. 7.

The waveforms shown may be inverted depending on the number of amplifying stages in the vertical amplifier in the scope being used.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11	5000MMF	See instructions above	24MC (10MC Sweep)	See Fig. 4.	9	Vert. Amp. to Point (A) Ground to chassis.	A5,A6, A7,A8 A9	Make slight adjustments necessary to obtain response curve per Fig.4. If considerable adjustment is required the traps must be realigned.

SOUND IF ALIGNMENT USING VTVM

Do not remove the shield covering the discriminator tube socket during step 12. Fashion hook on 1 Megohm resistor and make connection to Point B through alignment hole in shield.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
12	5000MMF	High side to pin #1 of 3rd Sound IF (V13). Low side to chassis.	21.25MC	9	DC Probe to Point (B) in series with 1 Meg. Common to chassis.	A10	Detune A11. Adjust A10 for maximum deflection.
13	5000MMF	"	"	9	DC Probe to point (C) Common to chassis.	A11	Adjust for zero reading. A positive or negative reading is obtained on either side of correct setting.
14	5000MMF	High side to pin #1 of 2nd Sound IF (V12). Low side to chassis.	"	9	DC Probe to point (D) Common to chassis.	A12,A13	Adjust for maximum deflection.
15	5000MMF	High side to pin #1 (Grid) of 6BA6 (V1) Low side to chassis.	"	9	"	A14,A15	" " " "

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12	5000MMF	High side to pin #1 of 3rd Sound IF (V13). Low side to chassis.	21.25MC (600KC Sweep)	21.25MC	9	Vertical amp. to Point (C) Ground to chassis.	A10,A11	Adjust for maximum aplitude of peaks and straightness of diagonal line with marker at center of line as per Fig. 1.
13	5000MMF	High side to pin #1 of 2nd Sound IF (V12). Low side to chassis.	"	"	9	Vert. Amp. to point (D) in series with 33KΩ. Ground to chassis	A12,A13	Adjust for maximum amplitude and symmetry per Fig. 2.
14	5000MMF	High side to pin #1 (Grid) of 6BA6 (V11). Low side to chassis.	"	"	9	"	A14,A15	Adjust for maximum amplitude and symmetry per Fig. 3. Continue with Step 16.

FIG.

FIG

FIG.

FIG

FIG

ALIGNMENT INSTRUCTIONS

LLY BEFORE ATTEMPTING ALIGNMENT

oved, remove V24 from its socket to disable

performing IF Adjustments. Use insulated

IGNMENT

et sufficent reading on VTVM with the signal being fed to This point is accessible in the different tuners as

he mixer tube.

	ADJUST	REMARKS
R4C mon		Set contrast control to give a -3 volt reading. Leave at this setting during entire IF Alignment procedure.
point	A1	Adjust for minimum deflection.
	A2	" " " "
	A3	" " " "
	A4	Adjust for minimum deflection. Those models having 3 fixed trimmers across this trap winding should be adjusted for minimum at 21.25MC.
	A5	Adjust for maximum deflection
	A6	" " " "
	A7	" " " "
	A8	" " " "
	A9	Adjust for maximum deflection. If A7 required adjustment in Step 8 repeat Step 2. If FM signal generator is not avaiable continue with Step 12.

NMENT

nerator to the horizontal amplifier in the scope for

h the type tuner used. Determine which tuner is being Remove the oscillator mixer coil strip for any channel ct the high side of the generator to point J and the low scillator tubes and use the dummy mixer tube as shown p., and mixer tubes and use dummy mixer tube as shown in·

er of amplifying stages in the vertical amplifier in the

CONNECT SCOPE	ADJUST	REMARKS
rt. Amp. to int (A) Ground chassis.	A5,A6, A7,A8 A9	Make slight adjustments necessary to obtain response curve per Fig.4. If considerable adjustment is required the traps must be realigned.

TVM

ocket during step 12. Fashion hook on 1 Megohm resistor eld.

	ADJUST	REMARKS
oint ith to	A10	Detune A11. Adjust A10 for maximum deflection.
oint chas-	A11	Adjust for zero reading. A positive or negative reading is obtained on either side of correct setting.
oint has-	A12,A13	Adjust for maximum deflection.
	A14,A15	" " " "

G FM SIGNAL GENERATOR AND OSCILLOSCOPE

CONNECT SCOPE	ADJUST	REMARKS
tical amp. to nt (C) Ground chassis.	A10,A11	Adjust for maximum aplitude of peaks and straightness of diagonal line with marker at center of line as per Fig. 1.
t. Amp. to nt (D) in ies with 33KΩ. und to chassis	A12,A13	Adjust for maximum amplitude and symmetry per Fig. 2.
"	A14,A15	Adjust for maximum amplitude and symmetry per Fig. 3. Continue with Step 16.

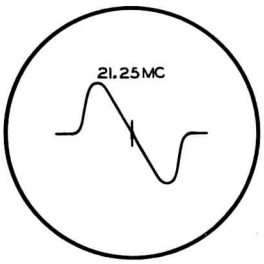


FIG. 1

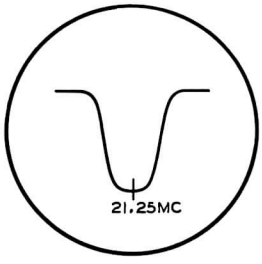


FIG. 2

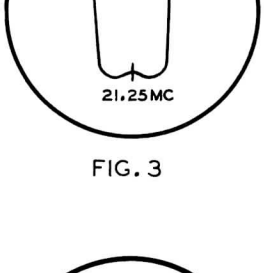


FIG. 3

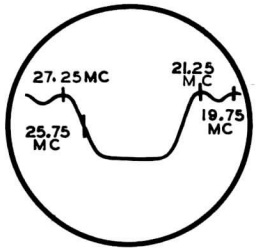


FIG. 4

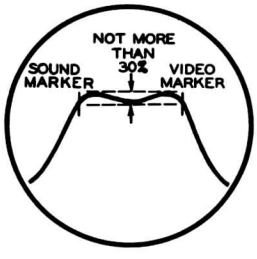


FIG. 5

RF AMP & MIXER ALIGNMENT (STAND

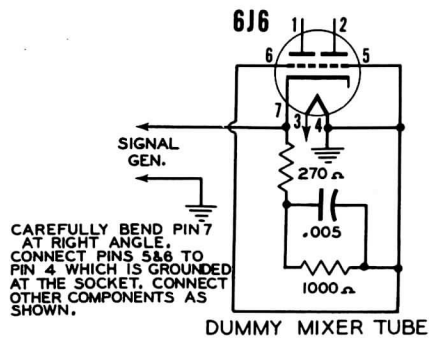
Set contrast control to -1.5 volts. Measure from arm of c

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	
16	Direct	Across antenna terminals.	207MC (10MC Sweep)	205.25MC 209.75MC	12	Ve th to si
17	Direct	"	213MC (10MC Sweep)	211.25MC* 215.75MC†	13	
			201MC (10MC Sweep)	199.25MC* 203.75MC†	11	
			195MC (10MC Sweep)	193.25MC* 197.75MC†	10	
			189MC (10MC Sweep)	187.25MC* 191.75MC†	9	
			183MC (10MC Sweep)	181.25MC* 185.75MC†	8	
			177MC (10MC Sweep)	175.25MC* 179.75MC†	7	
		* Picture carrier † Sound carrier	85MC (10MC Sweep)	83.25MC* 87.75MC†	6	
			79MC (10MC Sweep)	77.25MC* 81.75MC†	5	
			69MC (10MC Sweep)	67.25MC* 71.75MC†	4	
			63MC (10MC Sweep)	61.25MC* 65.75MC†	3	
			57MC (10MC Sweep)	55.25MC* 59.75MC†	2	

OSCILLATOR ALIGNMENT (STA

Complete alignment of the oscillator circuit may not be n zero reading is obtained for each channel when the fine tuni (Connect signal generator and VTVM as in steps 18 & 19. Sou majority of the channels seem to need oscillator alignment t adjusting A19. It should be noted that this is an all chann channels. If step 18 fails to align the oscillator circuit oscillator coil slugs. These are accessible one channel at counter-clockwise position which automatically centers this one by one, as the channel switch is rotated, through the sm Follow Step 19 for alignment frequencies.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM
18	Direct	High side to one ant. terminal. Low side to chassis.	215.75MC	13	DC Probe to P (C) Common lea chassis.
19	Direct	"	215.75MC	13	"
			209.75MC	12	"
			203.75MC	11	"
			197.75MC	10	"
			191.75MC	9	"
			185.75MC	8	"
			179.75MC	7	"
			87.75MC	6	"
			81.75MC	5	"
			71.75MC	4	"
			65.75MC	3	"
			59.75MC	2	"



DUMMY MIXER TUBE

FIG. 6

RF AMP & MIXER ALIGNMENT (STANDARD COIL TUNER)

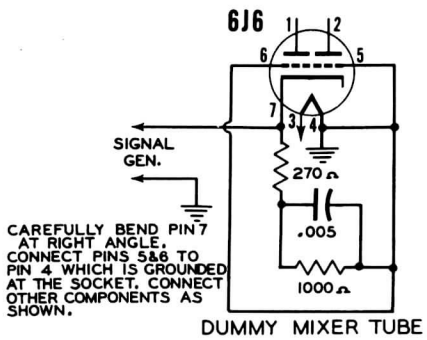
Set contrast control to -1.5 volts. Measure from arm of control to chassis.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
16	Direct	Across antenna terminals.	207MC (10MC Sweep)	205.25MC 209.75MC	12	Vertical amp. through 10KΩ to point J Low side to chassis.	A16, A17, A18	Adjust for flat top pattern with markers appearing as per Fig. 5.
17	Direct	"	213MC (10MC Sweep)	211.25MC* 215.75MC†	13			Check marker for all channels. If maximum reception is desired for one specific channel, adjust A16, A17 & A18 on that channel and then check all other channels to make certain that they have not been appreciably affected.
			201MC (10MC Sweep)	199.25MC* 203.75MC†	11			
			195MC (10MC Sweep)	193.25MC* 197.75MC†	10			
			189MC (10MC Sweep)	187.25MC* 191.75MC†	9			
			183MC (10MC Sweep)	181.25MC* 185.75MC†	8			
			177MC (10MC Sweep)	175.25MC* 179.75MC†	7			
		* Picture carrier † Sound carrier	85MC (10MC Sweep)	83.25MC* 87.75MC†	6			
			79MC (10MC Sweep)	77.25MC* 81.75MC†	5			
			69MC (10MC Sweep)	67.25MC* 71.75MC†	4			
			63MC (10MC Sweep)	61.25MC* 65.75MC†	3			
			57MC (10MC Sweep)	55.25MC* 59.75MC†	2			

OSCILLATOR ALIGNMENT (STANDARD COIL TUNER)

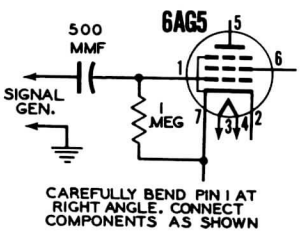
Complete alignment of the oscillator circuit may not be necessary. This is determined by checking to see that a zero reading is obtained for each channel when the fine tuning control is turned through the midpoint of its range. (Connect signal generator and VTVM as in steps 18 & 19. Sound carrier frequencies are listed in Step 19.) If the majority of the channels seem to need oscillator alignment this sometines may be done in one operation-Step 18, by adjusting A19. It should be noted that this is an all channel adjustment and should not be adjusted for individual channels. If step 18 fails to align the oscillator circuit sufficiently, it will be necessary to adjust the oscillator coil slugs. These are accessible one channel at a time. Turn the fine tuning control to its extreme counter-clockwise position which automatically centers this control. Note that the oscillator slugs are now available one by one, as the channel switch is rotated, through the small hole in the front panel of the tuner sub-chassis. Follow Step 19 for alignment frequencies.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
18	Direct	High side to one ant. terminal. Low side to chassis.	215.75MC	13	DC Probe to Point C Common lead to chassis.	A19	Adjust for zero reading. between positive and negative peaks with fine tuning control at midpoint. Rotate channel switch and adjust oscillator slugs for individual channels. Then repeat Step 18.
19	Direct	"	215.75MC	13	"	A20	
			209.75MC	12	"	A21	
			203.75MC	11	"	A22	
			197.75MC	10	"	A23	
			191.75MC	9	"	A24	
			185.75MC	8	"	A25	
			179.75MC	7	"	A26	
			87.75MC	6	"	A27	
			81.75MC	5	"	A28	
			71.75MC	4	"	A29	
			65.75MC	3	"	A30	
			59.75MC	2	"	A31	



DUMMY MIXER TUBE

FIG. 6



DUMMY MIXER TUBE

FIG. 7

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT (SARKES TARZIAN TUNER)

The RF Amplifier and mixer lines of this tuner are very stable and normally should never require adjustment. Set tuning control at center of its range during alignment of the oscillator circuit. The osc. adjustments are independent of each other and only those channels out of alignment need be adjusted.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
16	Two 150Ω carbon res.	Insert 150Ω resistor in series with each generator lead and connect across the antenna terminals.	215.75MC (no mod.)	13	DC Probe to Point (B) Low side to chassis.	A401	Expand or compress coil for maximum deflection. Signal generator must be set very accurately.
17	Two 150Ω carbon res.	"	209.75MC	12	"	A402	"
			203.75MC	11		A403	
			197.75MC	10		A404	
			191.75MC	9		A405	
			185.75MC	8		A406	
			179.75MC	7		A407	
18	Two 150Ω carbon res.	"	87.75MC	6	"	A408	Adjust for maximum deflection.
19	Two 150Ω carbon res.	"	81.75MC	5	"		"
			71.75MC	4			
			65.75MC	3			
			59.75MC	2			

RF AMP & MIXER ALIGNMENT (RCA TUNER)

Set fine tuning to mid-capacity point and contrast control to -1.5 volts reading.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
16	Direct	Across antenna terminals.	213MC (10MC Sweep)	211.25MC* 215.75MC†	13	Vertical amp. through 10KΩ to point (D) Low side to chassis.	A601, A602, A603, A604	Adjust for flat top response pattern and markers falling as Per Fig. 5.
17	Direct	"	207MC	205.25MC* 209.75MC†	12	"		Check response pattern as per Fig. 5.
			201MC	199.25MC* 203.75MC†	11	"		"
			195MC	193.25MC* 197.75MC†	10	"		
			189MC	187.25MC* 191.75MC†	9	"		
			183MC	181.25MC* 185.75MC†	8	"		
			177MC	175.25MC* 179.75MC†	7	"		
			85MC (10MC Sweep)	83.25MC* 87.75MC†	6	"	A605, A606, A607, A608	Adjust for flat top response pattern with markers appearing as per Fig. 5.
			79MC	77.25MC* 81.75MC†	5	"		Check response pattern as per Fig. 5.
			69MC	67.25MC* 71.75MC†	4	"		"
			63MC	61.25MC* 65.75MC†	3	"		"
		* Picture carrier † Sound carrier	57MC	55.25MC* 59.75MC†	2	"		"

OSCILLATOR ALIGNMENT (RCA TUNER)

Set fine tuning control to mid-capacity point.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
18	Direct	High side to one ant. terminals. Low side to chassis.	215.75MC	13	DC Probe to Point (C) Low side to chassis.	A609, A610	Adjust for zero reading between positive and negative peaks.
19			209.75MC	12	"	A611	"
			203.75MC	11		A612	
			197.75MC	10		A613	
			191.75MC	9		A614	
			185.75MC	8		A615	
			179.75MC	7		A616	
			87.75MC	6		A617, 618	
			81.75MC	5		A619	
			71.75MC	4		A620	
			65.75MC	3		A621	
			59.75MC	2		A622	

Wave traps A623 & A624 are used for specific types of interference and their alignment will depend upon the type encountered.

With the receiver tuned to the channel having the interference, set fine tuning control until interference is at maximum. Adjust A623 & A624 for minimum interference in the picture and sound keeping both cores at approximately the same relative position. Turn one core 1/2 turn and adjust the other for minimum interference.

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	TOP CAP
V 1A	6AG5	-.9VDC	0V	6.3VAC	0V	135VDC	135VDC	0V		
V 2A	6J6	95VDC	150VDC	6.3VAC	0V	-.9VDC	§-3.8VDC	0V		
V 3										
V 4	6AG5	-5.2VDC	0V	0V	6.3VAC	138VDC	138VDC	0V		
V 5	6AG5	-5.2VDC	0V	6.3VAC	0V	138VDC	138VDC	0V		
V 6	6AG5	-5.4VDC	0V	6.3VAC	0V	138VDC	138VDC	0V		
V 7	6AG5	0V	1.2VDC	6.3VAC	0V	100VDC	130VDC	1.2VDC		
V 8	6AL5	0V	-48VDC	6.3VAC	0V	-27VDC	0V	-1VDC		
V 9	6AU6	-.8VDC	0V	0V	6.3VAC	240VDC	138VDC	0V		
V 10	6K6GT	0V	0V	100VDC	138VDC	-2.4VDC	0V	6.3VAC	4.3VDC	
V 11	6BA6	0V	0V	0V	6.3VAC	140VDC	120VDC	1.8VDC		
V 12	6BA6	0V	0V	6.3VAC	0V	125VDC	120VDC	1.8VDC		
V 13	6AU6	-.3VDC	0V	0V	6.3VAC	48VDC	48VDC	0V		
V 14	6AL5	0V	-.1VDC	4.9VAC	0V	0V	0V	-.3VDC		
V 15	6AT6	-.4VDC	0V	0V	6.3VAC	-.5VDC	-.5VDC	70VDC		
V 16	6V6GT	0V	6.3VAC	230VDC	245VDC	-5.7VDC	-20VDC	0V	0V	
V 17	6SK7	0V	0V	0V	-.8VDC	0V	125VDC	6.3VAC	185VDC	
V 18	6SH7	0V	0V	0V	-1VDC	0V	138VDC	6.3VAC	138VDC	
V 19	6SH7GT	-.4VDC	88VDC	0V	-110VDC	-27VDC	-80VDC	6.3VAC	0V	
V 20	6J5	0V	0V	0V 215VDC	-80VDC	-85VDC	-80VDC	6.3VAC	-80VDC	
V 21	6K6GT	0V	6.3VAC	220VDC	220VDC	-55VDC	-55VDC	0V	-45VDC -55VDC	
V 22	6AL5	-.8VDC	-3.6VDC	0V	4.9VAC	-1.2VDC	0V	-7.5VDC		
V 23	6AC7	0V	0V	0V	-1VDC	0V	105VDC	6.3VAC	240VDC	
V 24	6K6GT	0V	0V	175VDC	200VDC	-21VDC -28VDC	340VDC	6.3VAC	.2VDC	
V 25	6BG6G	0V	6.3VAC	-70VDC	0V	-80VDC	0V	0V	155VDC	+
V 26	5V4G	0V	340VDC	.2VDC	275VDC	0V	275VDC	0V	340VDC	
V 27	1B3GT									
V 28	5U4G	0V	280VDC	0V	350VAC	0V	350VAC	0V	280VDC	
V 29	5U4G	0V	280VDC	0V	350VAC	0V	350VAC	0V	280VDC	
V 30	10BP4	0V	-45VDC	PIN 10 260VDC	PIN 11 0V	PIN 12 6.3VAC				

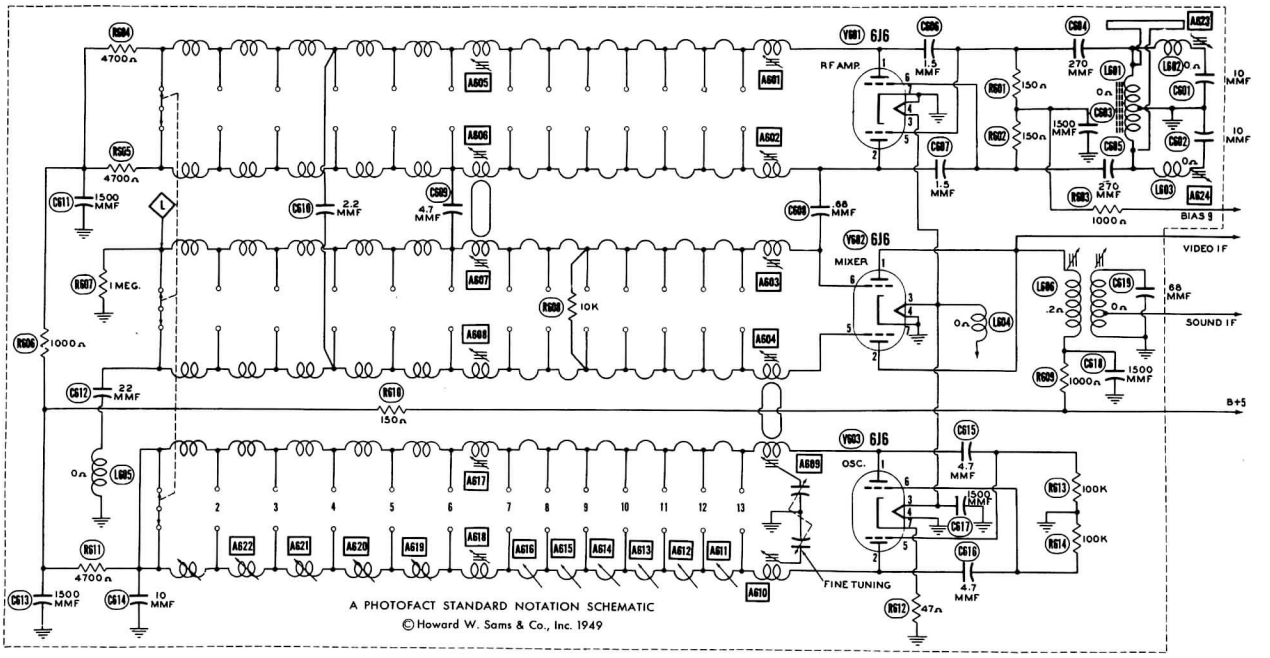
+ Do not measure
§ Taken with vacuum tube voltmeter

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	TOP CAP
V 1	6AG5	60KΩ	0Ω	.2Ω	0Ω	*7KΩ	*7KΩ	0Ω		
V 2	6J6	*9.5KΩ	*5KΩ	.2Ω	0Ω	250KΩ	10KΩ	0Ω		
V 3										
V 4	6AG5	18KΩ	39Ω	0Ω	.2Ω	*2.5KΩ	*2.5KΩ	39Ω		
V 5	6AG5	17KΩ	39Ω	.2Ω	0Ω	*2.5KΩ	*2.5KΩ	39Ω		
V 6	6AG5	11KΩ	39Ω	.2Ω	0Ω	*5KΩ	*2.2KΩ	39Ω		
V 7	6AG5	.5Ω	150Ω	.2Ω	0Ω	*8KΩ	*2.2KΩ	150Ω		
V 8	6AL5	.5Ω	180KΩ	.2Ω	0Ω	1 Meg.	0Ω	3.9KΩ		
V 9	6AU6	470KΩ	0Ω	0Ω	.2Ω	*10KΩ	*1200Ω	0Ω		
V 10	6K6GT	0Ω	0Ω	*4.5KΩ	*1200Ω	470KΩ	Inf.	.2Ω	330Ω	
V 11	6BA6	.1Ω	0Ω	0Ω	.2Ω	*2.2KΩ	*2.2KΩ	100Ω		
V 12	6BA6	470KΩ	0Ω	.2Ω	0Ω	*2.2KΩ	*4.5KΩ	100Ω		
V 13	6AU6	22KΩ	0Ω	0Ω	.2Ω	*7.5KΩ	*7.5KΩ	0Ω		
V 14	6AL5	200KΩ	100KΩ	.2Ω	0Ω	0Ω	0Ω	100KΩ		
V 15	6AT6	10Meg.	0Ω	0Ω	.2Ω	Inf.	Inf.	*320KΩ		
V 16	6V6GT	Inf.	.2Ω	*1500Ω	*1000Ω	300KΩ	100Ω	0Ω	0Ω	
V 17	6SK7	0Ω	0Ω	0Ω	1 Meg.	0Ω	*2.5KΩ	.2Ω	*10KΩ	
V 18	6SH7	0Ω	0Ω	0Ω	850KΩ	0Ω	*1500Ω	.2Ω	*8KΩ	
V 19	6SN7GT	1 Meg.	*7KΩ	0Ω	250KΩ	*700KΩ	400Ω	.2Ω	0Ω	
V 20	6J5	0Ω	0Ω	*1.5Meg. *280KΩ	50KΩ	1.5Meg.	80KΩ	.2Ω	400Ω	
V 21	6K6GT	Inf.	.2Ω	*10KΩ	*10KΩ	2.2Meg.	4.7KΩ	0Ω	7.5KΩ 3KΩ	
V 22	6AL5	900KΩ	1.4Meg.	0Ω	.2Ω	12Ω	0Ω	1.4Meg		
V 23	6AC7	0Ω	0Ω	0Ω	1.3Meg.	10Ω	*18KΩ	.2Ω	*22KΩ	
V 24	6K6GT	Inf.	0Ω	*5KΩ	*10KΩ	75KΩ	110KΩ	.2Ω	9.5Ω	
V 25	6BG6G	Inf.	.2Ω	480Ω	Inf.	450KΩ	Inf.	0Ω	*10KΩ	*5.5KΩ
V 26	5V4G	Inf.	*5.5KΩ	380Ω	*42Ω	Inf.	*42Ω	Inf.	*5.5KΩ	
V 27	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	*5.5KΩ
V 28	5U4G	Inf.	6KΩ	Inf.	410Ω	Inf.	410Ω	Inf.	6KΩ	
V 29	5U4G	Inf.	6KΩ	Inf.	410Ω	Inf.	410Ω	Inf.	6KΩ	
V 30	10BP4	0Ω	1.3Meg.	PIN 10 *150KΩ	PIN 11 0Ω	PIN 12 .2Ω				

* Measured from pin 2 of V29

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.



PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	
V601	R. F. Amp.	6J6	7BF	
V602	Mixer	6J6	7BF	
V603	Oscillator	6J6	7BF	

CAPACITORS

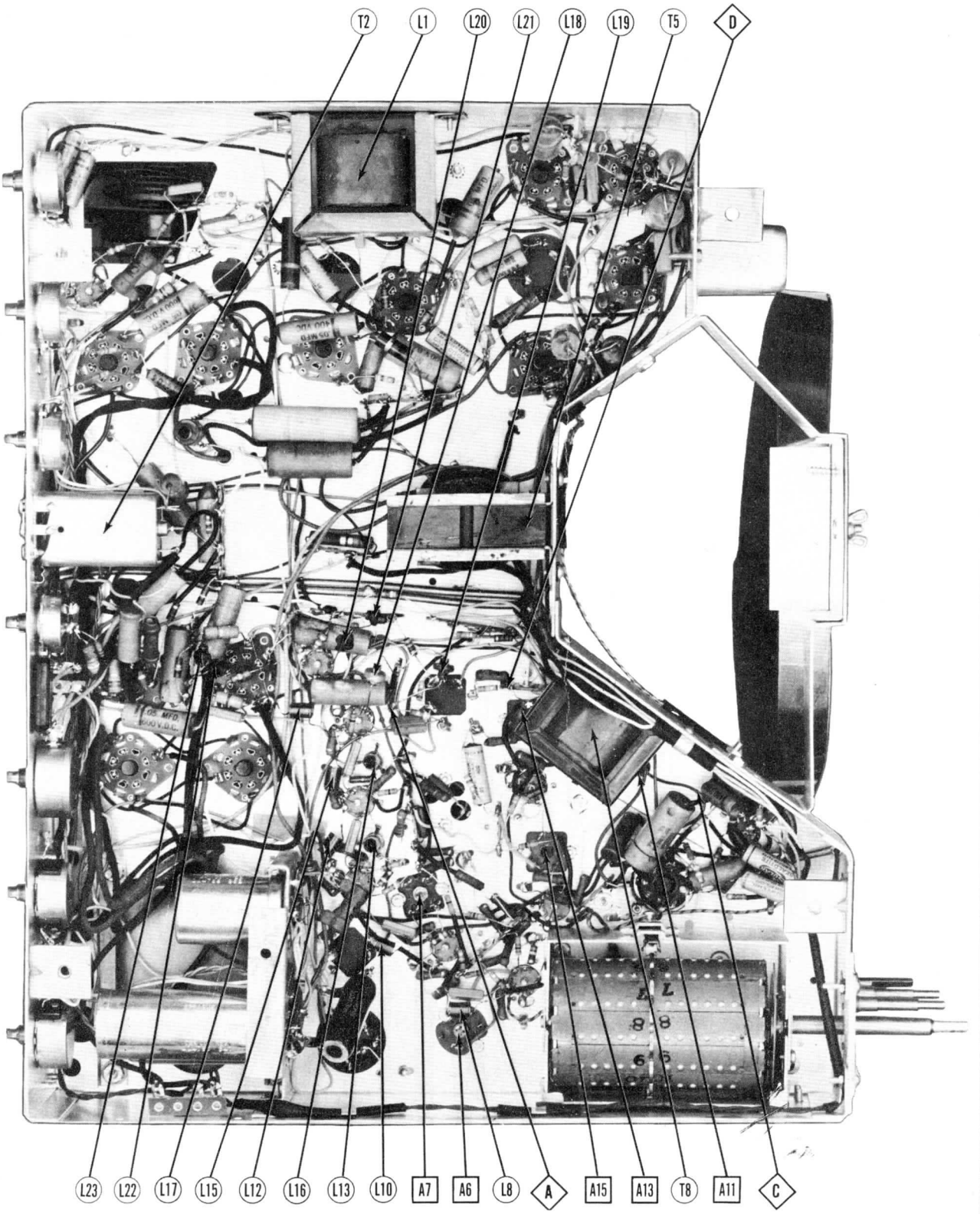
ITEM No.	RATING: CAP.	RATING: VOLT	IDENTIFICATION
C601	10		Fixed Trimmer
C602	10		Fixed Trimmer
C603	1500		RF Bypass
C604	270		RF Coupling
C605	270		RF Coupling
C606	1.5		Neutralizing
C607	1.5		Neutralizing
C608	.68		RF Coupling
C609	4.7		RF Coupling
C610	2.2		RF Coupling
C611	1500		RF Decoupling
C612	22		Fixed Trimmer
C613	1500		Osc. Decoupling
C614	10		Fixed Trimmer
C615	4.7		Osc. Feedback
C616	4.7		Osc. Feedback
C617	1500		Filament Bypass
C618	1500		Mixer Decoupling
C619	68		Fixed Trimmer

RESISTORS

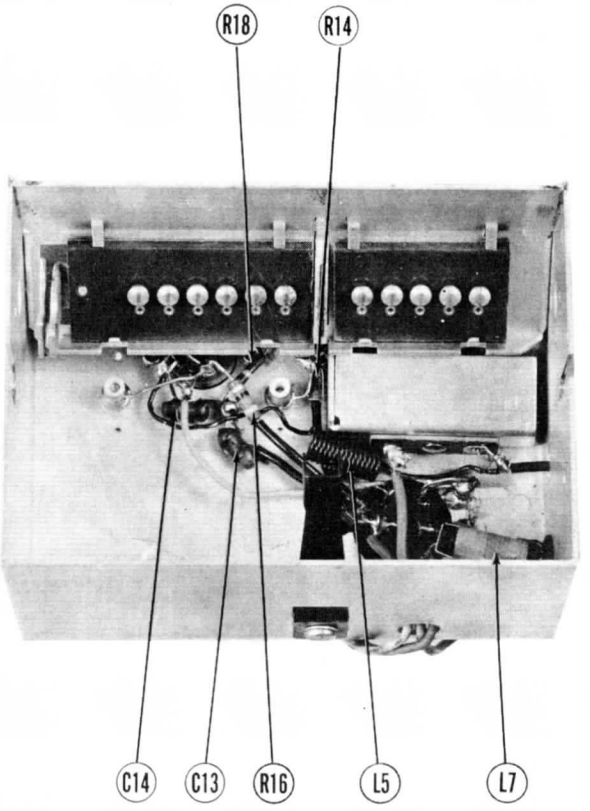
ITEM No.	RATING: RESISTANCE	RATING: WATTS	IDENTIFICATION
R601	150Ω	½	RF Grid
R602	150Ω	½	RF Grid
R603	1000Ω	½	Bias Filter
R604	4700Ω	½	RF Plate
R605	4700Ω	½	RF Plate
R606	1000Ω	½	RF Decoupling
R607	1 Meg.	½	Mixer Grid
R608	10KΩ	½	Mixer Grid Shunt
R609	1000Ω	½	Mixer Decpupling
R610	150Ω	½	Decoupling
R611	4700Ω	½	Osc. Plate
R612	47Ω	½	Osc. Cathode
R613	100KΩ	½	Osc. Grid
R614	100KΩ	½	Osc. Grid

COILS

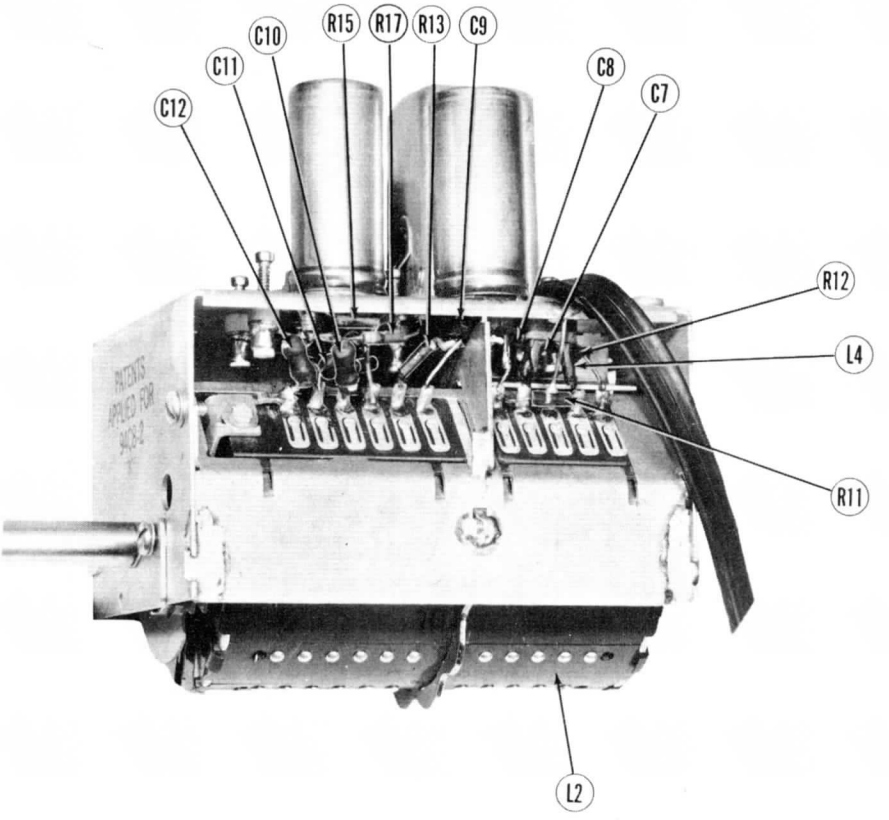
ITEM No.	USE	DC RES.: PRI.	DC RES.: SEC.	
L601	Ant. Input	0Ω		
L602	Interference Trap	0Ω		
L603	Interference Trap	0Ω		
L604	Filament Choke	0Ω		
L605	Mixer Grid Trap	0Ω		
L606	1st. Video IF and Sound Trap	.2Ω	0Ω	



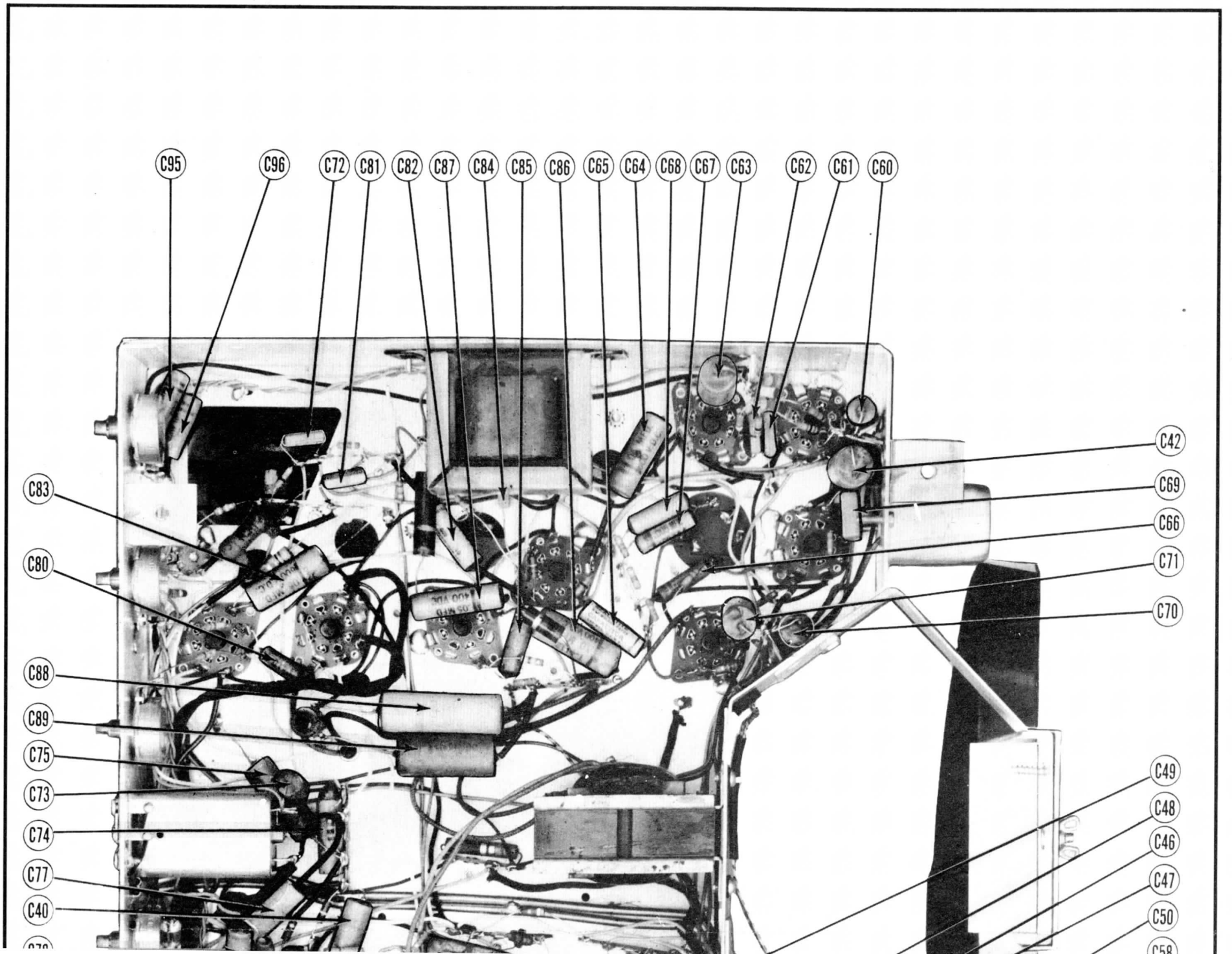
CHASSIS BOTTOM VIEW-TRANS., INDUCTOR AND ALIGNMENT IDENTIFICATION



RF TUNER-LEFT SIDE



RF TUNER-RIGHT SIDE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C71
C70
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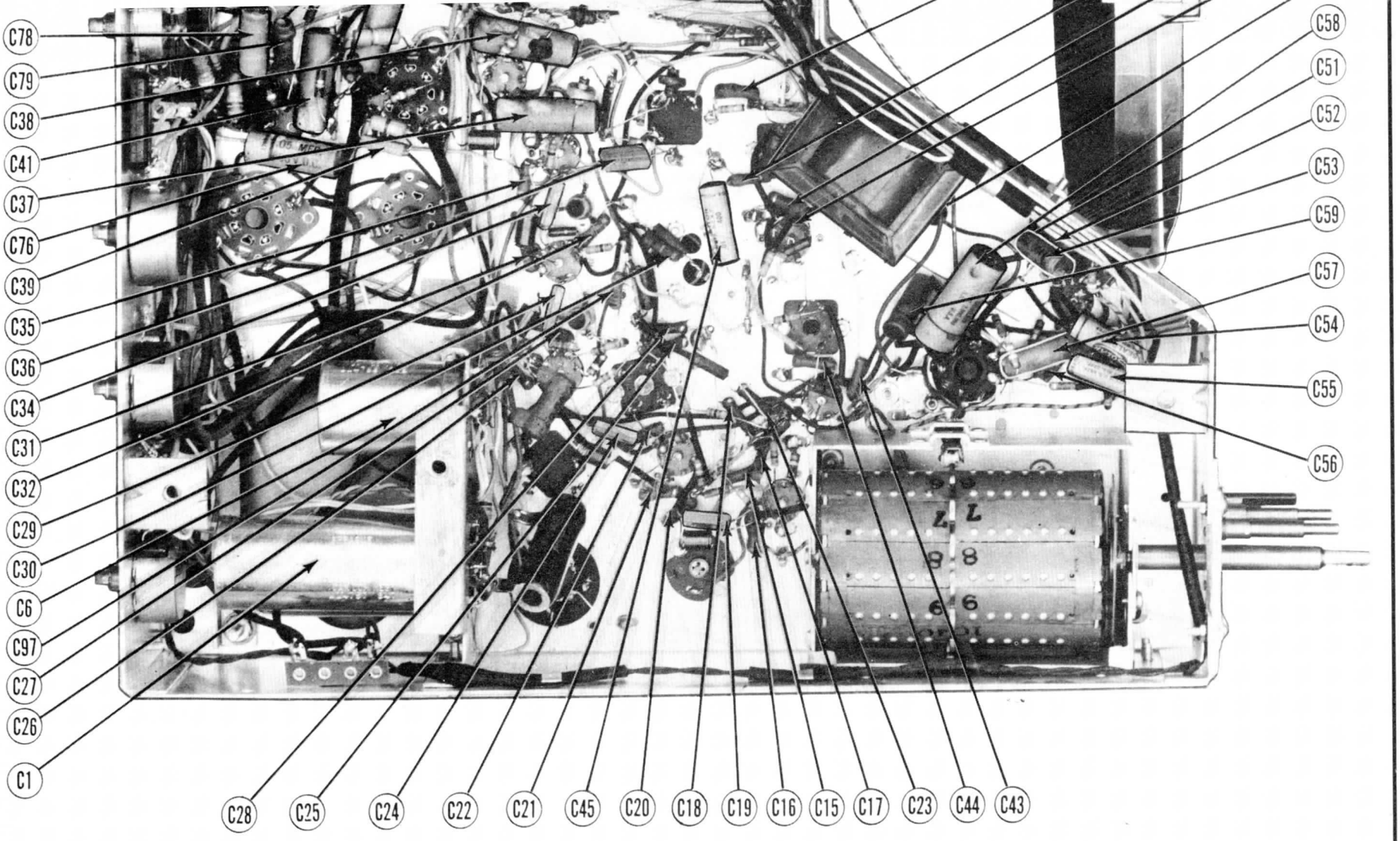
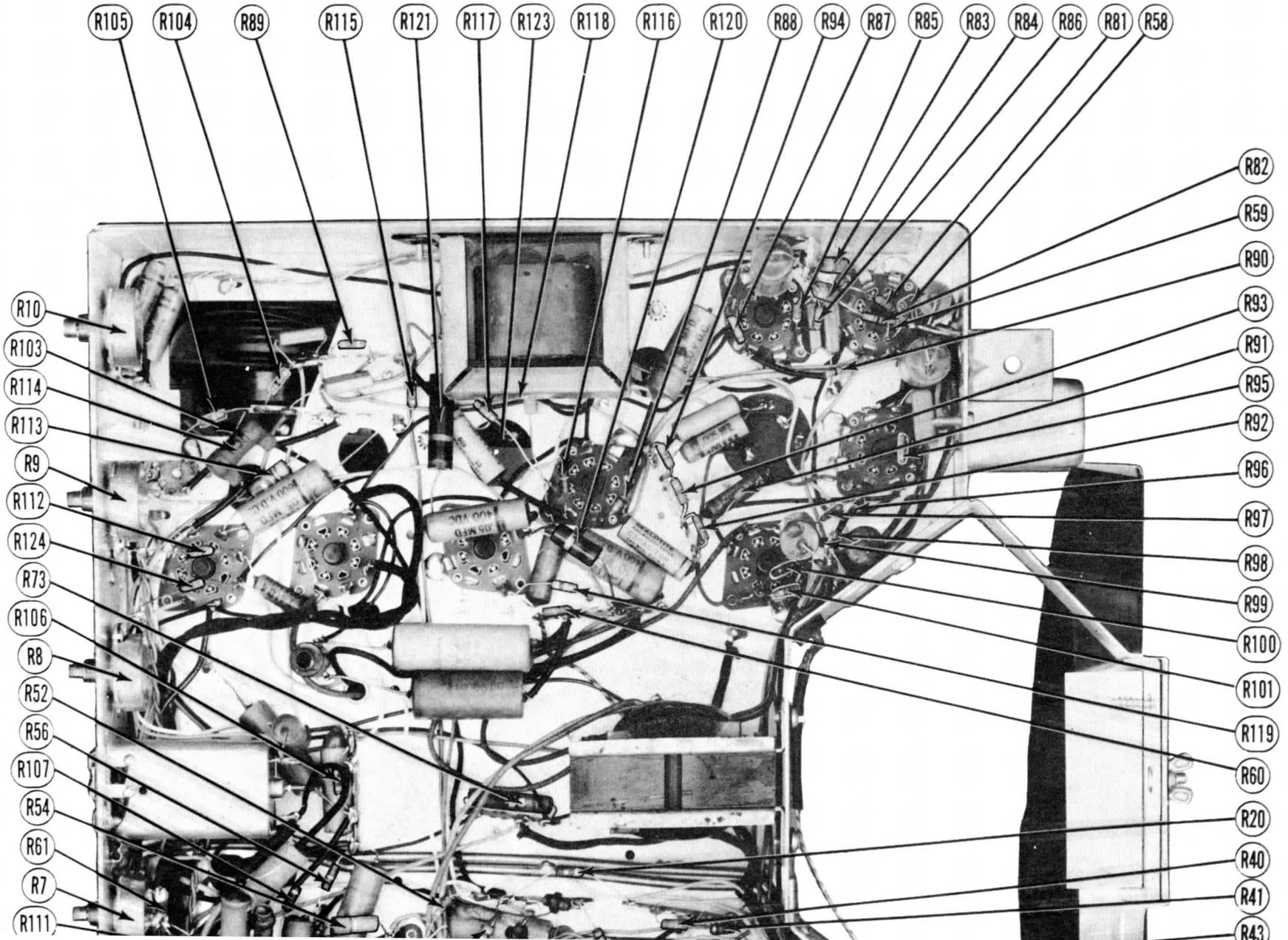
C73
C74
C77
C40
C49
C48
C46
C47
C50
C58



CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION


R105
R104
R89
R115
R121
R117
R123
R118
R116
R120
R88
R94
R87
R85
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R86
R81
R58
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R101
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R60
R20
R40
R41
R43
R10
R103
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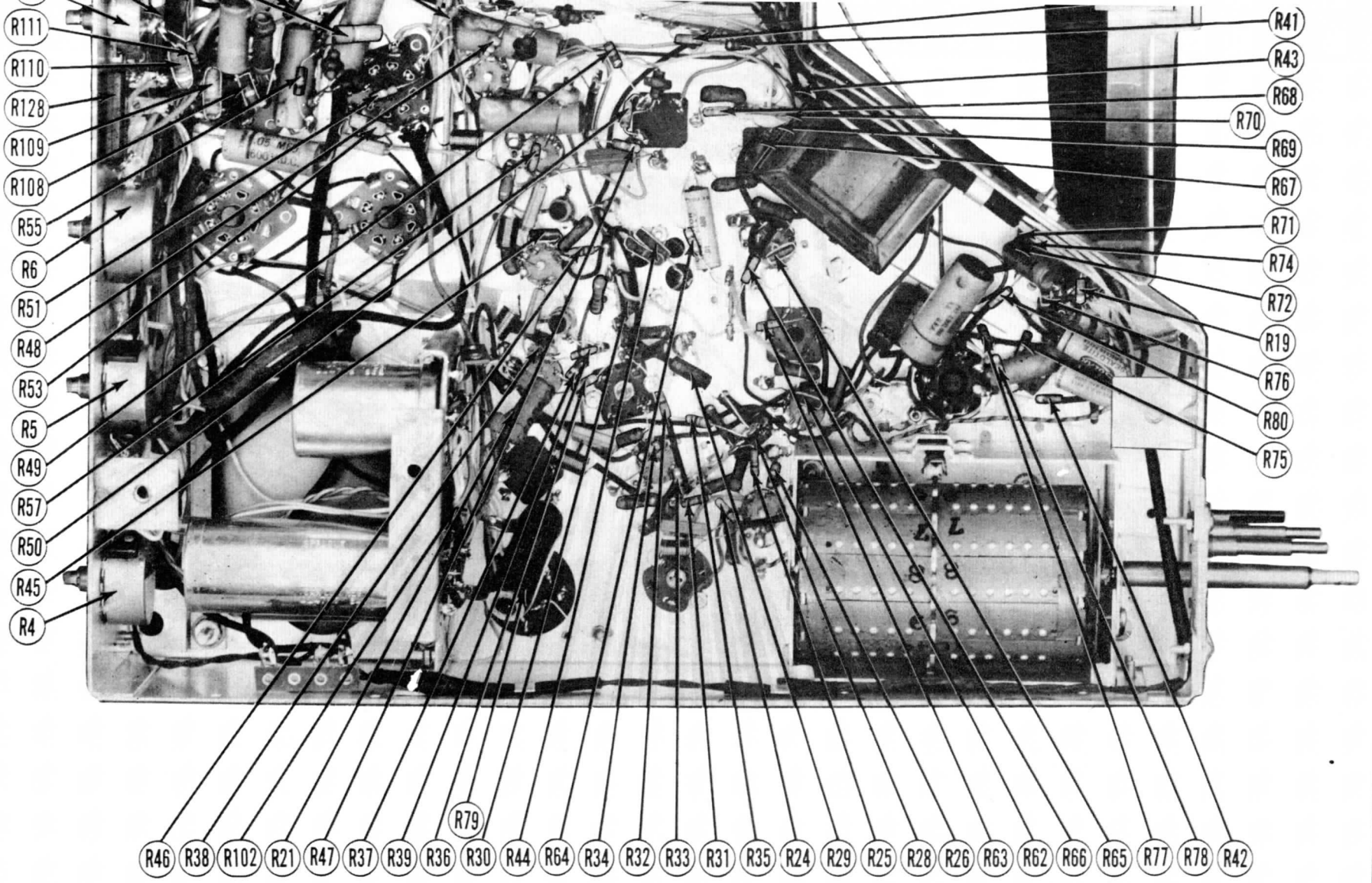
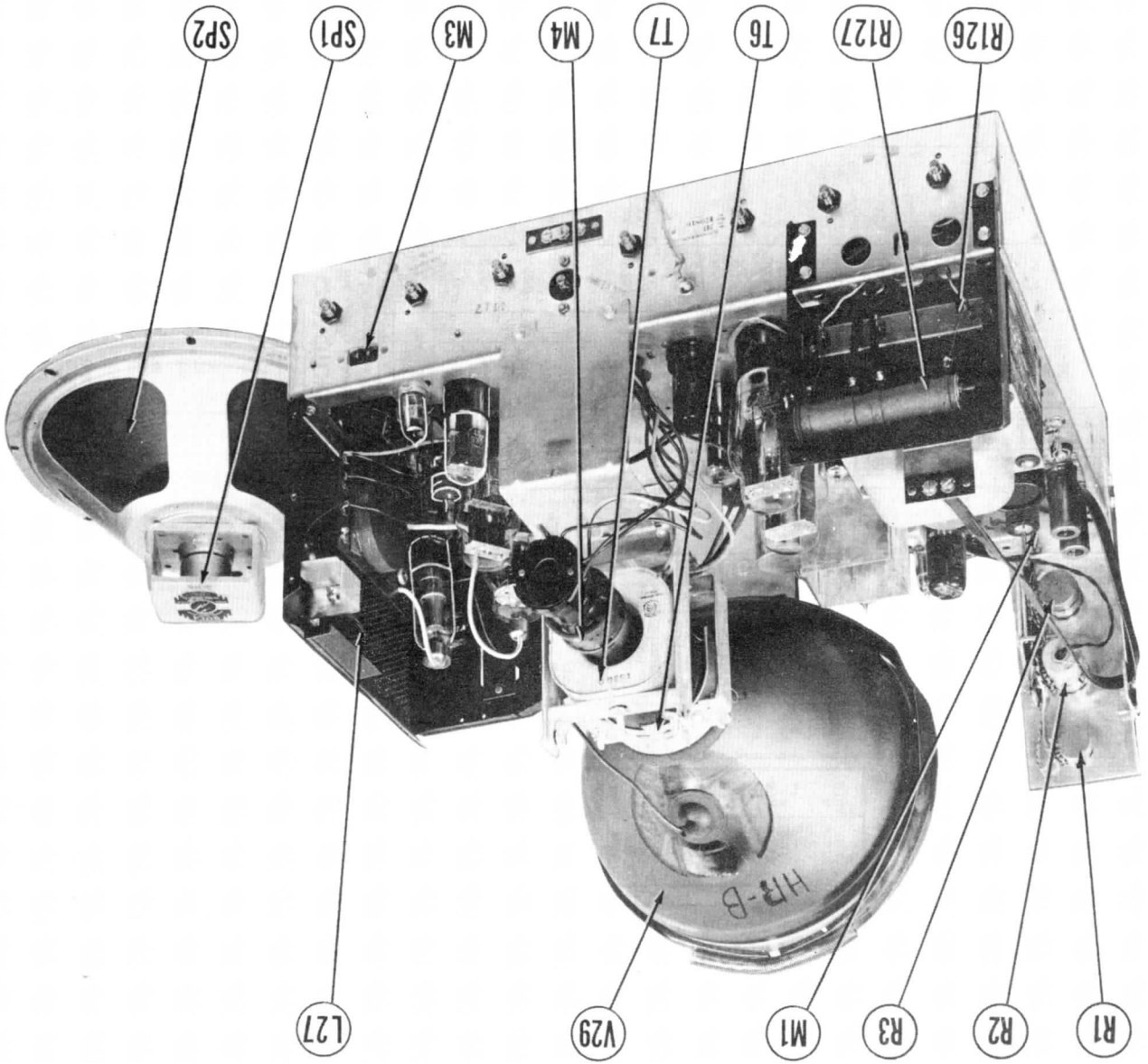
R61
R7
R111



CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION

CHASSIS TOP VIEW



TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: HOFFMAN PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amp.	6AG5	6AG5	7BD	
V2	Converter	6J6	6J6	7BF	
V4	1st Video IF	6AG5	6AG5	7BD	
V5	2nd Video IF	6AG5	6AG5	7BD	
V6	3rd Video IF	6AG5	6AG5	7BD	
V7	4th Video IF	6AG5	6AG5	7BD	
V8	Video Det.-DC Rest.	6AL5	6AL5	6BT	
V9	Video Amp.	6AU6	6AU6	7BK	
V10	Video Output	6K6GT	6K6GT	7S	
V11	1st Sound IF	6BA6	6BA6	7BK	
V12	2nd Sound IF	6BA6	6BA6	7BK	
V13	3rd Sound IF	6AU6	6AU6	7BK	
V14	Disc.	6AL5	6AL5	6BT	
V15	Audio Amp.	6AT6	6AT6	7BT	
V16	Audio Output	6V6GT	6V6GT	7AC	
V17	1st Sync. Amp.	6SK7	6SK7	8N	
V18	Sync. Sep.	6SH7	6SH7	8BK	
V19	2nd Sync. Amp.-Horiz. Disch.	6SN7GT	6SN7GT	8BD	
V20	Vert. Osc. & Disch.	6J5	6J5	6Q	
V21	Vert. Output	6K6GT	6K6GT	7S	
V22	Horiz. Sync. Disc.	6AL5	6AL5	6BT	
V23	Horiz. Reactance	6AC7	6AC7	8N	
V24	Horiz. Osc.	6K6GT	6K6GT	7S	
V25	Horiz. Output	6BG6G	6BG6G	5BT	
V26	Damper	6V4G	5V4G	5L	
V27	HV Rect.	1B3GT	1B3GT	3C	
V28	LV Rect.	5U4G	5U4G	5T	
V29	LV Rect.	5U4G	5U4G	5T	
V30	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: HOFFMAN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	40	450	T4204	AF4444J	UP9CJ			TVL-30	◓ Filter
B	40	450		PRS450/10	897				■ Filter
C	10	450							Filter
C2A	40	450	T4203	AFH82J16D	UP9CJ			TVL-25	◓ Filter
B	10	450			729				■ Decoupling
C	80	150							▲ Bias Filter
C3A	20	450	T4201	AF4444J	UP8BJ			TVL-16	◓ Filter
B	80	350			337				▲ Filter
C4A	40	450	T4202	AF4444J	UP9CJ			TVL-53	◓ Filter
B	10	450			731				■ Low Pass Filter
C	10	350							▲ Decoupling
C5A	80	450	T4205	AF88J	UP9BJ			TVL-18	◓ Filter
B	50	50		PRS50/150	730				▲ Vert. Output Cath.Byp
C6A	250	10	T4206	PRS12/250	UP7BJ			TVL-66	◓ Hor. Cent. Bypass
B	1000	6		PRS6/1000	808				▲ Vert. Cent. Bypass
C7	5					NPOK-5			Fixed Trimmer
C8	1000					GP2L-001			RF Fil. Bypass
C9	120					GP2K-150			RF Decoupling
C10	100					GP1K-100			RF Coupling
C11	20					NPOK-20			Osc. Grid Cap.
C12	10					NPOK-10			Osc. Feedback
C13	1000					GP2L-001			RF Bypass
C14	1000					GP2L-001			Conv. Fil. Bypass
C15	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Bias Filter
C16	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	1st V. IF Fil. Bypass
C17	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	1st V. IF Decoupling
C18	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Decoupling
C19	270	500	T4004	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	IF Coupling
C20	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Bias Filter
C21	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	2nd V. IF Fil. Bypass
C22	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	2nd V. IF Decoupling
C23	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Decoupling
C24	270	500	T4004	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	IF Coupling
C25	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Bias Filter
C26	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	3rd V. IF Fil. Bypass
C27	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	3rd V. IF Decoupling
C28	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	Decoupling
C29	270	500	T4004	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	IF Coupling
C30	82		T4003						4th V. IF Cath. Byp. ±5%
C31	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	4th V. IF Fil. Byp.
C32	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	4th V. IF Decoupling
C33	.25	400	T4113	P488-25	GT4P25		ST-4-25	TC-2	RF Bypass
C34	270	500	T4004	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	IF Coupling
C35	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	V. Det. Fil. Bypass
C36	10	500	T4000	1468-00001	5W5Q1	GP1K-10	MO.5-41	MS-41	Diode Filter
C37	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	Video Coupling
C38	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	" "
C39	470	500	T4010	1468-0005	5W5T5	GP2K-500	MO.5-35	1FM-35	Video Output Cath. Byp.
C40	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	Video Coupling
C41	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	" "
C42	.25	400	T4113	P488-25	GT4P25		ST-4-25	TC-2	Brightness Cont. Byp.
C43	1500		T4007	1468-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	1st S. IF Cath. Byp.
C44	1500		T4007	1468-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	1st S. IF Decoupling
C45	.01	400	T4106	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	2nd S. IF Grid Filter
C46	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	2nd S. IF Cath. Bypass
C47	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	2nd S. IF Screen Bypass
C48	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	2nd S. IF Plate Dec.
C49	51		T4001	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	3rd S. IF Grid Filter
C50	6500		T4009	1467-006	1D3D7	GP2-335-01	MW.5-26	1FM-27	3rd S. IF Decoupling
C51	270	500	T4014	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	RF Bypass
C52	.002	400	T4101	P688-002	GT6D2	GP2M-002	ST-6-002	TM-22	De-emphasis
C53	.01	400	T4106	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Audio Coupling
C54	.01	400	T4106	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	" "
C55	.01	400	T4106	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Tone Comp.

PARTS LIST AN

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMEN: HOFFMAN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.
C56	100	500	T4013	1468-0001	5W5T1
C57	.02	400	T4120	P488-02	GT4S2
C58	.2	200		484-.2	GT4P2
C59	.01	600	T4106	P688-01	GT6S1
C60	.05	400	T4111	P488-05	GT4S5
C61	270	1000	T4014		
C62	270	500	T4004	1468-00025	5W5T25
C63	.1	600	T4119	P638-1	GT6P1
C64	.05	600	T4118	P688-05	GT6S5
C65	.01	400	T4114	P488-01	GT4S1
C66	.002	400	T4101	P688-002	GT6D2
C67	.005	400	T4116	P688-005	GT6D5
C68	.005	400	T4116	P688-005	GT6D5
C69	4700	500	T4008		
C70	.05	600	T4118	P688-05	GT6S5
C71	.1	400	T4115	P488-1	GT4P1
C72	82	500	T4002		
C73	.015	400	T4108	P488-015	GT6S15
C74	.004	1000	T4103	P1088-004	GT16D4
C75	.05	400	T4111	P488-05	GT4S5
C76	.05	600	T4118	P688-05	GT6S5
C77	.004	1000	T4103	P1088-004	GT16D4
C78	.015	400	T4108	P488-015	GT6S15
C79	1200		T4011		
C80	.004	400	T4104	P688-004	GT6D4
C81	390	500	T4005	1469-0004	5R5T4
C82	.01	400	T4106	P488-01	GT4S1
C83	.05	600	T4118	P688-05	GT6S5
C84	680	500	T4006	1479-0007	2R5T7
C85	.001	1000	T4100	P1088-001	GT16D1
C86	.1	400	T4112	P488-1	GT4P1
C87	.05	400	T4111	P488-05	GT4S5
C88	.05	1000	T4117	P1088-05	GT16S5
C89	.035	1000	T4105		
C90	500	10000	T4200		
C91	15				
C92	15				
C93	43			1469-00004	5R5Q4
C94	75			1469-000075	5R5Q7
C95	.01	600	T4107	P688-01	GT6S1
C96	.01	600	T4107	P688-01	GT6S1
C97	1500		T4007	1467-0015	1W5D15

* Some models use .01MFD in this applica
† Not used in all models.

CON

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: HOFFMAN PART No.	IRC PART No.	CLARC PART
R1A	500KΩ	½	T4809	D13-137	M-60-5
B	Shaft		Not Req.	A	Not R
R2A	10KΩ	½	T4801		
B	1 Meg.	½			
R3A	1 Meg.	½	T4804		
B	50KΩ	½			
R4	20Ω	1	T4808	W-20	43-20
R5	20Ω	1	T4805	W20X10	43-20
R6	1500Ω	2	T4802	W-1500	58-150
R7A	5000Ω	½	T4807	D11-114	M-19-5
B	Shaft		Not Req.	A	Not R
R8	2.5 Meg.	½	T4806		M-83-5
R9A	50KΩ	½	T4800	D11-123	M-44-5
B	Shaft		Not Req.	A	Not R
R10A	20KΩ	½	T4803	D11-120	M-40-5
B	Shaft		Not Req.	A	Not R

RESI

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: HOFFMAN PART No.	IRC PART No.
R11	3900Ω	½		BTS-3900
R12	47KΩ	½		BTS-47K
R13	10KΩ	½		BTS-10K
R14	2200Ω	½		BTS-2200
R15	10KΩ	½		BTS-10K
R16	4700Ω	½		BTS-4700
R17	4700Ω	½		BTS-4700
R18	220KΩ	½		BTS-220K
R19	3900Ω	½		BTS-3900
R20	3900Ω	½		BTS-3900
R21	5KΩ	5	T4704	AB-5000
R22	680KΩ	½	T4543	BTS-680K
R23	10KΩ	½	T4559	BTS-10K
R24	10KΩ	½	T4527	BTS-10K-5%
R25	1000Ω	½	T4512	BTS-1000
R26	39Ω	½	T4503	
R27	150Ω	½	T4507	BW-½-150
R28	150Ω	½	T4507	BW-½-150
R29	150Ω	½	T4507	BW-½-150
R30	150Ω	½	T4507	BW-½-150
R31	1000Ω	½	T4512	BTS-1000
R32	1000Ω	½	T4512	BTS-1000
R33	10KΩ	½	T4527	BTS-10K-5%
R34	39Ω	½	T4503	
R35	1000Ω	½	T4512	BTS-1000
R36	4700Ω	½	T4520	BTS-4700-5%
R37	39Ω	½	T4503	
R38	2700Ω	½	T4555	BTS-2700-5%
R39	1000Ω	½	T4512	BTS-1000

PARTS LIST AND DESCRIPTIONS

NOTES

r Electrolytic
c Capacitors.

RAGUE RT No.	IDENTIFICATION CODES AND INSTALLATION NOTES
VL-30	◓ Filter
	■ Filter
	Filter
VL-25	◓ Filter
	■ Decoupling
	▲ Bias Filter
VL-16	◓ Filter
	▲ Filter
VL-53	◓ Filter
	■ Low Pass Filter
	▲ Decoupling
VL-18	◓ Filter
	▲ Vert. Output Cath.Byp
VL-66	◓ Hor. Cent. Bypass
	▲ Vert. Cent. Bypass
	Fixed Trimmer
	RF Fil. Bypass
	RF Decoupling
	RF Coupling
	Osc. Grid Cap.
	Osc. Feedback
	RF Bypass
	Conv. Fil. Bypass
M-215	Bias Filter
M-215	1st V. IF Fil. Bypass
M-215	1st V. IF Decoupling
M-215	Decoupling
M-325	IF Coupling
M-215	Bias Filter
M-215	2nd V. IF Fil. Bypass
M-215	2nd V. IF Decoupling
M-215	Decoupling
M-325	IF Coupling
M-215	Bias Filter
M-215	3rd V. IF Fil. Bypass
M-215	3rd V. IF Decoupling
M-215	Decoupling
M-325	IF Coupling
	4th V. IF Cath. Byp. ±5%
M-215	4th V. IF Fil. Byp.
M-215	4th V. IF Decoupling
-2	RF Bypass
M-325	IF Coupling
M-215	V. Det. Fil. Bypass
-41	Diode Filter
-15	Video Coupling
-15	" "
M-35	Video Output Cath. Byp.
-15	Video Coupling
-15	" "
-2	Brightness Cont. Byp.
M-215	1st S. IF Cath. Byp.
M-215	1st S. IF Decoupling
-11	2nd S. IF Grid Filter
M-215	2nd S. IF Cath. Bypass
M-215	2nd S. IF Screen Bypass
M-215	2nd S. IF Plate Dec.
M-45	3rd S. IF Grid Filter
M-27	3rd S. IF Decoupling
M-325	RF Bypass
-22	De-emphasis
-11	Audio Coupling
-11	" "
-11	Tone Comp.

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA HOFFMAN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C56	100	500	T4013	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	AF Plate Bypass
C57	.02	400	T4120	P488-02	GT4S2		ST-4-02	TM-12	Audio Coupling
C58	.2	200		484-.2	GT4P2		ST-4-.2	68P18	Audio Feedback*
C59	.01	600	T4106	P688-01	GT6S1		ST-6-01	TM-11	Output Plate Bypass †
C60	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	Sync. Coupling
C61	270	1000	T4014						1st Sync. Amp. Plate Byp
C62	270	500	T4004	1468-00025	5W5T25	GP2K-250	MO.5-325	1FM-325	Sync. Coupling
C63	.1	600	T4119	P688-1	GT6P1		ST-6-1	TM-1	1st Sync. Amp. Plate Dec
C64	.05	600	T4118	P688-05	GT6S5		ST-6-05	TM-15	Sync. Coupling
C65	.01	400	T4114	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Vert. Sync. Coupling
C66	.002	400	T4101	P688-002	GT6D2	GP2M-002	ST-6-002	TM-22	Integrator Net.
C67	.005	400	T4116	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	" "
C68	.005	400	T4116	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	" "
C69	4700	500	T4008						Vert. Osc. Grid Cap.
C70	.05	600	T4118	P688-05	GT6S5		ST-6-05	TM-15	Vert. Discharge
C71	.1	400	T4115	P488-1	GT4P1		ST-4-1	TM-1	Vert. Coupling
C72	82	500	T4002						Hor. Sync. Coupling
C73	.015	400	T4108	P488-015	GT6S15				Fixed Trimmer
C74	.004	1000	T4103	P1088-004	GT16D4		STM-16-004	MB-24	Sync. Coupling
C75	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	AFC Filter
C76	.05	600	T4118	P688-05	GT6S5		ST-6-05	TM-15	Hor. Osc. Cont. Screen Byp.
C77	.004	1000	T4103	P1088-004	GT16D4		STM-16-004	MB-24	AFC Coupling
C78	.015	400	T4108	P488-015	GT6S15				Phase Shifter
C79	1200		T4011						" "
C80	.004	400	T4104	P688-004	GT6D4		ST-6-004	TM-24	Hor. Osc. Grid Cap.
C81	390	500	T4005	1469-0004	5R5T4		MOS.5-34	MS-34	Differentiator Net.
C82	.01	400	T4106	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Hor. Osc. Coupling
C83	.05	600	T4118	P688-05	GT6S5		ST-6-05	TM-15	Hor. Osc. Screen Bypass
C84	680	500	T4006	1479-0007	2R5T7		MWS.5-37	MS-37	Hor. Discharge ± 5%
C85	.001	1000	T4100	P1088-001	GT16D1		STM-16-001	TR-21	Hor. Sweep Coupling
C86	.1	400	T4112	P488-1	GT4P1		ST-4-1	TM-1	Hor. Output Cath. Byp.
C87	.05	400	T4111	P488-05	GT4S5		ST-4-05	TM-15	Hor. Output Screen Byp
C88	.05	1000	T4117	P1088-05	GT16S5		STM-10-05	TR-15	Damper Filter
C89	.035	1000	T4105						Damper Filter ± 5%
C90	500	10000	T4200						HV Filter Tn. Oxide
C91	15								Fixed Trimmer †
C92	15								" " †
C93	43			1469-00004	5R5Q4		MOS.5-44	MS-44	" "
C94	75			1469-000075	5R5Q7	NPOM-75	MOS.5-47	MS-47	" "
C95	.01	600	T4107	P688-01	GT6S1		ST-6-01	TM-11	Line Filter
C96	.01	600	T4107	P688-01	GT6S1		ST-6-01	TM-11	" "
C97	1500		T4007	1467-0015	1W5D15	GP2L-0015	MW.5-215	1FM-215	RF Bypass

* Some models use .01MFD in this application.
† Not used in all models.

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA HOFFMAN PART No.	IRC PART No.	CLAROSTAT PART No.	INSTALLATION NOTES
R1A	500KΩ	½	T4809	D13-137	M-60-Z	Tone control
B	Shaft		Not Req.	A	Not Req.	Attach to R1A Per Instructions
R2A	10KΩ	½	T4801			Contrast control Dual concentric
B	1 Meg.	½				Volume control & SW.
R3A	1 Meg.	½	T4804			Vert. Hold control Dual concentric
B	50KΩ	½				Brightness control
R4	20Ω	1	T4808	W-20	43-20	Horiz. centering control
R5	20Ω	1	T4805	W20X10	43-20 CT	Vert. centering control
R6	1500Ω	2	T4802	W-1500	58-1500	Focus control
R7A	5000Ω	½	T4807	D11-114	M-19-S	Vert. Linearity control
B	Shaft		Not Req.	A	Not Req.	Attach to R7A Per Instructions
R8	2.5 Meg.	½	T4806		M-83-S	Height control
R9A	50KΩ	½	T4800	D11-123	M-44-S	Horiz. hold control
B	Shaft		Not Req.	A	Not Req.	Attach to R9A Per Instructions
R10A	20KΩ	½	T4803	D11-120	M-40-S	Horiz. drive control
B	Shaft		Not Req.	A	Not Req.	Attach to R10A Per Instructions

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA HOFFMAN PART No.	IRC PART No.	IDENTIFICATION CODES All resistors are ± 10% unless otherwise stated.	
R11	3900Ω	½		BTS-3900	RF Grid	20%
R12	47KΩ	½		BTS-47K	" "	20%
R13	10KΩ	½		BTS-10K	RF Coil Shunt	20%
R14	2200Ω	½		BTS-2200	Decoupling	20%
R15	10KΩ	½		BTS-10K	Osc. Grid	20%
R16	4700Ω	½		BTS-4700	Osc. Plate Load	20%
R17	4700Ω	½		BTS-4700	Mixer Grid	
R18	220KΩ	½		BTS-220K	" "	20%
R19	3900Ω	½		BTS-3900	Bias Voltage Divider See Note 1	
R20	3900Ω	½		BTS-3900	" " " " " "	
R21	5KΩ	5	T4704	AB-5000	Decoupling " " "	
R22	680KΩ	½	T4543	BTS-680K	Bias Voltage Divider See Note 2	
R23	10KΩ	½	T4559	BTS-10K	" " " " " "	
R24	10KΩ	½	T4527	BTS-10K-5%	1st Video IF Grid	5%
R25	1000Ω	½	T4512	BTS-1000	1st Video IF Decoupling	20%
R26	39Ω	½	T4503		1st Video IF Cathode	
R27	150Ω	½	T4507	BW-½-150	Decoupling See Note 2	20%
R28	150Ω	½	T4507	BW-½-150	"	20%
R29	150Ω	½	T4507	BW-½-150	"	20%
R30	150Ω	½	T4507	BW-½-150	"	20%
R31	1000Ω	½	T4512	BTS-1000	Bias Network	
R32	1000Ω	½	T4512	BTS-1000	" "	
R33	10KΩ	½	T4527	BTS-10K-5%	2nd Video IF Grid	5%
R34	39Ω	½	T4503		2nd Video IF Cathode	
R35	1000Ω	½	T4512	BTS-1000	2nd Video IF Decoupling	20%
R36	4700Ω	½	T4520	BTS-4700-5%	3rd Video IF Grid	5%
R37	39Ω	½	T4503		3rd Video IF Cathode	
R38	2700Ω	½	T4555	BTS-2700-5%	3rd Video IF Plate	5%
R39	1000Ω	½	T4512	BTS-1000	3rd Video IF Decoupling	20%

ITEM No.	RATING RESISTANCE	RATING WATTS	HO PA
R40	18KΩ	½	T452
R41	8200Ω	½	T452
R42	2700Ω	½	T451
R43	680Ω	½	T451
R44	150Ω	½	T450
R45	5600Ω	½	T452
R46	1000Ω	½	T451
R47	3900Ω	½	T451
R48	470KΩ	½	T454
R49	3300Ω	½	T451
R50	6800Ω	½	T452
R51	820KΩ	½	T454
R52	1.2 Meg.	½	T454
R53	330Ω	½	T450
R54	3300Ω	1	T451
R55	10KΩ	½	T455
R56	100KΩ	½	T453
R57	1 Meg.	½	T454
R58	47KΩ	½	T453
R59	150KΩ	½	T453
R60	22KΩ	½	T452
R61	150KΩ	½	T453
R62	100Ω	½	T450
R63	1000Ω	½	T451
R64	470KΩ	½	T454
R65	100Ω	½	T450
R66	3300Ω	½	T451
R67	1000Ω	½	T451
R68	22KΩ	½	T456
R69	10KΩ	1	T455
R70	10KΩ	½	T455
R71	100KΩ	½	T456
R72	100KΩ	½	T456
R73	2.2Ω	1	T450
R74	22KΩ	½	T452
R75	10 Meg.	½	T455
R76	220KΩ	½	T456
R77	1 Meg.	½	T454
R78	470KΩ	½	T454
R79	1000Ω	10	T470
R80	47KΩ	½	T453
R81	6.8 Meg.	½	T455
R82	1 Meg.	½	T456
R83	4700Ω	1	T451
R84	4700Ω	1	T451
R85	1 Meg.	½	T456
R86	4.7 Meg.	½	T455
R87	6800Ω	½	T452
R88	1 Meg.	½	T456
R89	4700Ω	½	T455
R90	1000Ω	½	T455
R91	22KΩ	½	T452
R92	22KΩ	½	T452
R93	8200Ω	½	T452
R94	8200Ω	½	T452
R95	1.5 Meg.	½	T454
R96	100KΩ	½	T456
R97	2.2 Meg.	½	T454
R98	22KΩ	½	T453
R99	2.2 Meg.	½	T454
R100	8200Ω	½	T455
R101	2700Ω	½	T451
R102	10KΩ	1	T452
R103	470KΩ	½	T456
R104	1 Meg.	½	T456
R105	470KΩ	½	T456
R106	470KΩ	½	T456
R107	560Ω	½	T451
R108	10Ω	1	T450
R109	27KΩ	1	T452
R110	39KΩ	1	T456
R111	22KΩ	½	T452
R112	27KΩ	½	T453
R113	10KΩ	1	T455
R114	5000Ω	5	T470
R115	6800Ω	½	T452
R116	220KΩ	½	T456
R117	680KΩ	½	T454
R118	6800Ω	½	T452
R119	470KΩ	½	T456
R120	100Ω	2	T450
R121	10KΩ	2	T456
R122	3.3Ω	½	T450
R123	1 Meg.	1	T454
R124	56KΩ	½	T452
R125A	5300Ω	20	T470
B	500Ω	2	
C	500Ω	2	
R126A	93Ω	4	T470
B	12Ω	½	
C	6750Ω	4	
R127A	230Ω	10	T470
B	1360Ω	20	
R128	100Ω	3	T456

Note 1. Used in models
Note 2. Used in models
Note 3. Not used in all
Note 4. R11 thru R21 ar
the RCA tuner o

ITEM No.	RATINGS TOTAL DIRECT CURRENT	RATINGS D. C. RESISTANCE	IN (0
L1	.310A	37.5Ω	1.

DESCRIPTIONS

No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
00	MO.5-31	1FM-31	AF Plate Bypass
	ST-4-02	TM-12	Audio Coupling
	ST-4-.2	68P18	Audio Feedback*
	ST-6-01	TM-11	Output Plate Bypass †
	ST-4-05	TM-15	Sync. Coupling
			1st Sync. Amp. Plate Byp
50	MO.5-325	1FM-325	Sync. Coupling
	ST-6-1	TM-1	1st Sync. Amp. Plate Dec
	ST-6-05	TM-15	Sync. Coupling
5-01	ST-4-01	TM-11	Vert. Sync. Coupling
02	ST-6-002	TM-22	Integrator Net.
05	ST-6-005	TM-25	" "
05	ST-6-005	TM-25	" "
			Vert. Osc. Grid Cap.
	ST-6-05	TM-15	Vert. Discharge
	ST-4-1	TM-1	Vert. Coupling
			Hor. Sync. Coupling
			Fixed Trimmer
	STM-16-004	MB-24	Sync. Coupling
	ST-4-05	TM-15	AFC Filter
	ST-6-05	TM-15	Hor. Osc. Cont. Screen Byp.
	STM-16-004	MB-24	AFC Coupling
			Phase Shifter
			" "
	ST-6-004	TM-24	Hor. Osc. Grid Cap.
	MOS.5-34	MS-34	Differentiator Net.
5-01	ST-4-01	TM-11	Hor. Osc. Coupling
	ST-6-05	TM-15	Hor. Osc. Screen Bypass
	MWS.5-37	MS-37	Hor. Discharge ± 5%
	STM-16-001	TR-21	Hor. Sweep Coupling
	ST-4-1	TM-1	Hor. Output Cath. Byp.
	ST-4-05	TM-15	Hor. Output Screen Byp
	STM-10-05	TR-15	Damper Filter
			Damper Filter ± 5%
			HV Filter Tn. Oxide
			Fixed Trimmer †
			" " "
	MOS.5-44	MS-44	" "
5	MOS.5-47	MS-47	" "
	ST-6-01	TM-11	Line Filter
	ST-6-01	TM-11	" "
015	MW.5-215	1FM-215	RF Bypass

LS

INSTALLATION NOTES	
Tone control	
Attach to R1A Per Instructions	
Contrast control	
Volume control & SW.	Dual concentric
Vert. Hold control	
Brightness control	Dual concentric
Horiz. centering control	
Vert. centering control	
Focus control	
Vert. Linearity control	
Attach to R7A Per Instructions	
Height control	
Horiz. hold control	
Attach to R9A Per Instructions	
Horiz. drive control	
Attach to R10A Per Instructions	

S

IDENTIFICATION CODES	
esistors are ± 10% unless otherwise stated.	
id	20%
	20%
il Shunt	20%
pling	20%
Grid	20%
Plate Load	20%
Grid	
"	20%
Voltage Divider See Note 1	
" " " " "	
pling " " "	
Voltage Divider See Note 2	
" " " " "	
ideo IF Grid	5%
ideo IF Decoupling	20%
ideo IF Cathode	
pling See Note 2	20%
	20%
	20%
	20%
Network	
"	
ideo IF Grid	5%
ideo IF Cathode	
ideo IF Decoupling	20%
ideo IF Grid	5%
ideo IF Cathode	
ideo IF Plate	5%
ideo IF Decoupling	20%

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES	
	RESISTANCE	WATTS	HOFFMAN PART No.	IRC PART No.		
R40	18KΩ	½	T4528	BTS-18K	Bias Voltage Divider	
R41	8200Ω	½	T4525	BTS-8200	Bias Net.	
R42	2700Ω	½	T4515	BTS-2700	" "	
R43	680Ω	½	T4511	BTS-680	Bias Voltage Divider	
R44	150Ω	½	T4507	BW-½-150	4th Video IF Cathode	20%
R45	5600Ω	½	T4522	BTS-5600-5%	4th Video IF Plate	5%
R46	1000Ω	½	T4512	BTS-1000	4th Video Plate Decoupling	20%
R47	3900Ω	½	T4518	BTS-3900-5%	Video Det. Load	5%
R48	470KΩ	½	T4542	BTS-470K-5%	Video Amp. Grid	
R49	3300Ω	2	T4516	BTS-3300	Video Amp. Plate	
R50	6800Ω	½	T4524	BTS-6800	Video Amp. Plate Decoupling	
R51	820KΩ	½	T4544	BTS-820K-5%	Video Output Grid	5%
R52	1.2 Meg.	½	T4547	BTS-1.2Meg.-5%	Bias Network	5%
R53	330Ω	½	T4509	BTA-330	Video Output Cathode	
R54	3300Ω	1	T4517	BTA-3300	Video Output Plate	
R55	10KΩ	½	T4559	BTS-10K	Phase Correction	
R56	100KΩ	½	T4537	BTS-100K	Picture Tube Grid	20%
R57	1 Meg.	½	T4546	BTS-1 Meg.	DC Restorer Load	20%
R58	47KΩ	½	T4535	BTS-47K	" " "	
R59	150KΩ	½	T4538	BTS-150K	Bias Network	
R60	22KΩ	½	T4529	BTS-22K	Voltage Divider	
R61	150KΩ	½	T4538	BTS-150K	Accelerating Anode Dropping	
R62	100Ω	1	T4505		1st Sound IF Cathode	20%
R63	1000Ω	½	T4512	BTS-1000	1st Sound IF Decoupling	
R64	470KΩ	½	T4542	BTS-470K	2nd Sound IF Grid	
R65	100Ω	½	T4505		2nd Sound IF Cathode	
R66	3300Ω	½	T4516	BTS-3300	2nd Sound IF Screen Decoupling	20%
R67	1000Ω	½	T4512	BTS-1000	2nd Sound IF Plate Decoupling	20%
R68	22KΩ	½	T4560	BTS-22K	3rd Sound IF Grid	
R69	10KΩ	1	T4558	BTA-10K	3rd Sound IF Decoupling	
R70	10KΩ	½	T4559	BTS-10K	3rd Sound IF Bleeder	
R71	100KΩ	½	T4562	BTS-100K	Disc. Load	
R72	100KΩ	½	T4562	BTS-100K	" "	
R73	2.2Ω	1	T4500	BW-1-2.2	Filament Dropping	
R74	22KΩ	½	T4529	BTS-22K	De-emphasis	
R75	10 Meg.	½	T4552	BTS-10 Meg.	AF Grid	
R76	220KΩ	½	T4563	BTS-220K	AF Plate	
R77	1 Meg.	½	T4546	BTS-1 Meg.	Output Grid	
R78	470KΩ	½	T4542	BTS-470K	Bias Network	
R79	1000Ω	10	T4705	AB-1000	Filter	
R80	47KΩ	½	T4535	BTS-47K	"	5%
R81	6.8 Meg.	½	T4551	BTS-6.8Meg-5%	Bias Network	
R82	1 Meg.	½	T4565	BTS-1 Meg.	Sync. Amp. Grid	
R83	4700Ω	1	T4519	BTA-4700	Sync. Amp. Plate	
R84	4700Ω	1	T4519	BTA-4700	Sync. Amp. Decoupling	
R85	1 Meg.	½	T4565	BTS-1 Meg.	Sync. Sep. Grid	
R86	4.7 Meg.	½	T4550	BTS-4.7 Meg.	Bias Network	
R87	6800Ω	½	T4524	BTS-6800	Sync. Sep. Plate	
R88	1 Meg.	½	T4565	BTS-1 Meg.	2nd Sync. Amp. Grid	
R89	4700Ω	½	T4556	BTS-4700	2nd Sync. Amp. Plate	
R90	1000Ω	½	T4554	BTS-1000	2nd Sync. Amp. Decoupling	
R91	22KΩ	½	T4529	BTS-22K	Differentiator	20%
R92	22KΩ	½	T4529	BTS-22K	Integrator Network	20%
R93	8200Ω	½	T4525	BTS-8200	" "	
R94	8200Ω	½	T4525	BTS-8200	" "	
R95	1.5 Meg.	½	T4548	BTS-1.5Meg-5%	Vert. Osc. Grid	5%
R96	100KΩ	½	T4562	BTS-100K	Voltage Divider	
R97	2.2 Meg.	½	T4549	BTS-2.2 Meg.	" "	
R98	220KΩ	½	T4539	BTS-220K	Vert. Osc. Plate	
R99	2.2 Meg.	½	T4549	BTS-2.2 Meg.	Vert. Output Grid	
R100	8200Ω	½	T4557	BTS-8200-5%	Vert. Peaking	5%
R101	2700Ω	½	T4515	BTS-2700	Vert. Output Cathode	
R102	10KΩ	1	T4526	BTA-10K	Vert. Output Plate Decoupling	
R103	470KΩ	½	T4561	BTS-470K	Horiz. AFC Filter	
R104	1 Meg.	½	T4565	BTS-1 Meg.	Horiz. Disc. Load	
R105	470KΩ	½	T4561	BTS-470K	" " "	
R106	470KΩ	½	T4561	BTS-470K	" " "	
R107	560Ω	½	T4510	BTS-560	Grid Current Limiter	
R108	10Ω	1	T4502		Horiz. AFC Cathode	
R109	27KΩ	1	T4531	BTA-27K	Horiz. AFC Bleeder	
R110	39KΩ	1	T4561	BTA-39K-5%	Horiz. AFC Screen	5%
R111	22KΩ	½	T4529	BTS-22K	Horiz. AFC Plate	20%
R112	27KΩ	½	T4532	BTS-27K	Horiz. Osc.Grid	
R113	10KΩ	1	T4558	BTA-10K	Horiz. Osc. Screen Decoupling	
R114	5000Ω	5	T4704	AB-5000	Horiz. Osc. Plate	
R115	6800Ω	½	T4524	BTS-6800	Differentiator	
R116	220KΩ	½	T4563	BTS-220K	Horiz. Disch. Grid	
R117	680KΩ	½	T4543	BTS-680K-5%	Horiz. Disch. Plate	5%
R118	6800Ω	½	T4524	BTS-6800-5%	Horiz. Peaking	5%
R119	470KΩ	½	T4561	BTS-470K	Horiz. Output Grid	
R120	100Ω	2	T4506		Horiz. Output Cathode	
R121	10KΩ	2	T4566	BTA-10K	Horiz. Output Screen Decoupling	
R122	3.3Ω	½	T4501	BW-½-3.3-5%	HV Filament See note 3	5%
R123	1 Meg.	1	T4545		HV Filter	
R124	56KΩ	½	T4536	BTS-56K	Decoupling	
R125A	5300Ω	20	T4701	AB-500	Damper Filter	
B	500Ω	2			" "	
C	500Ω	2		AB-500	" "	
R126A	93Ω	4	T4702		Voltage Divider	
B	12Ω	½		BW-1-12	" "	
C	6750Ω	4			" "	
R127A	230Ω	10	T4700		Voltage Divider	
B	1360Ω	20			" "	
R128	100Ω	3	T4568	AB-100	" "	

Note 1. Used in models employing standard coil tuner.
Note 2. Used in models employing RCA tuner.
Note 3. Not used in all models.
Note 4. R11 thru R21 are used in the standard coil tuner only. Items R22, R23 are used with the RCA tuner only.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ∿)	HOFFMAN PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.310A	37.5Ω	1.35 Henry	T5100	C-2326			

HOFFMAN MODELS
CT-800 CT-801, CT-900, CT-901

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA HOFFMAN PART No.	REPLACEMENT DATA MEISSNER PART No.	NOTES
L2	Ant. & RF Grid Coils	0Ω				Part of tuner Assy. RF-3, are in matched pairs, with channel number stamped on clip.
L3	RF Plate, Mixer Grid & Osc.Coils	0Ω				Part of tuner Assy. RF-3, are in matched pairs, with channel number stamp on clip.
L4	Fil.Choke	0Ω				Part of tuner Assy. RF-3
L5	Fil.Choke	0Ω				" " " " "
L6	1st Video IF	0Ω	0Ω			" " " " "
L7	IF Grid Coke	0Ω				" " " " "
L8	Fil.Choke	0Ω		T5101		
L9	2nd Video IF	.2Ω	0Ω	T5201		
L10	Fil.Choke	0Ω		T5101		
L11	3rd Video IF	.2Ω	0Ω	T5203		
L12	Fil.Choke	0Ω		T5101		
L13	4th Video IF	.5Ω		T5204		
L14	4th Video Cath.	.1Ω	0Ω	T5202		
L15	Fil.Choke			T5101		
L16	Video Det.	.5Ω		T5204		
L17	Fil.Choke			T5101		
L18	Peaking	10Ω		T5207		180 Microhenry coil, wound on 39KΩ res.
L19	Peaking	9Ω		T5208		Inductance-250 Microhenries
L20	Peaking	5.5Ω		T5205		120 Microhenry coil, wound on 22KΩ res.
L21	Peaking	5Ω		T5206		Inductance-93 Microhenries
L22	Peaking	5.5Ω		T5205		120 Microhenry coil, wound on 22KΩ res.
L23	Peaking	5Ω		T5206		Inductance-93 Microhenies
L24	1st Sound IF	.1Ω	.1Ω	T-5209		
L25	2nd Sound IF	.1Ω	.1Ω	T5209		
L26	Sound Disc. XFMR.	.1Ω	.1Ω	T5210		
L27	Width control coil	.2Ω		T5212		
L28	Horiz. Linearity control	35Ω		T5211		

SPEAKER

ITEM No.	RATING FIELD RES.	RATING V. C. IMP.	REPLACEMENT DATA HOFFMAN PART No.	REPLACEMENT DATA JENSEN PART No.	REPLACEMENT DATA QUAM PART No.	NOTES
SP1	PM	3.8Ω	9015	ST-102* MOD.P12-S	12A6	* Replace output transformer to match 6-8Ω voice coil.
	CONE DIA.	V. C. DIA.				
SP2	11 1/2"	1"				

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	RATING SEC. 3	REPLACEMENT DATA HOFFMAN PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.
T1	117VAC @ 2.6A	720VCT .310ADC SEC. 4 6.6VAC @ 6A	5VAC @ 2A SEC. 5 6.6VAC @ 5.0A	5VAC @ 6A	T5002	P-8152	TP-365	P-3063

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING DC RESISTANCE PRI.	RATING DC RESISTANCE SEC.	REPLACEMENT DATA HOFFMAN PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.	NOTES
T2	40Ω CT	36Ω Tap @ 8Ω	T5213				Hor. Sync. Disc. Trans.
T3	150Ω	1300Ω	T5214	A-8121	TBO-1	A-4000	Vert. Block Osc.Trans.
T4	340Ω Tap @ 130Ω	0Ω SEC.2 6Ω Tap @ .5Ω	T5102				Hor. Output Trans.
T5	500Ω	5.5Ω	T-5105	A-8116		A-3035	Vert. Output Trans.
T6A	38Ω		T5216	DY-1			Hor. Deflection Yoke
B	85Ω						Vert. Deflection Yoke
T7	220Ω		T5200	FC-10			Focus coil

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING IMPEDANCE PRI.	RATING IMPEDANCE SEC.	RATING DC RES. PRI.	RATING DC RES. SEC.	REPLACEMENT DATA HOFFMAN PART No.	REPLACEMENT DATA STANCOR PART No.	REPLACEMENT DATA CHICAGO PART No.	REPLACEMENT DATA MERIT PART No.	INSTALLATION NOTES
T8	6000Ω	3.8Ω	450Ω Tap @ 210Ω	.4Ω	T5104		RO-9	A-2935	

MISCELLANEOUS

ITEM No.	PART NAME	HOFFMAN PART No.	NOTES
M1A	Tuner Assembly RF-3		
B	Tuner Assembly RF-1	T5901	
M2	Fuse	T9511	Type 3AF, 1/4 Amp.
M3	Socket	T6103	AC Interlock
M4	Ion Trap		

HORIZONTAL OSC. ALIGNMENT

HORIZONTAL OSCILLATOR ALIGNMENT CHECK:

While receiving a television signal turn the horizontal hold control fully counter-clockwise. Remove the picture momentarily by turning the contrast control fully counter-clockwise and then return it to its normal operating position. The picture should pull back into synchronization.

Now turn the horizontal hold control fully clockwise. Remove the picture momentarily by turning the contrast control fully counter-clockwise and then return to its normal operating position. The picture should pull back into synchronization.

If receiver synchronizes properly under these checks it is not necessary to align the horizontal oscillator. However, if the picture is not normal or stable, the horizontal oscillator must be aligned.

SLIGHT RETOUCH ALIGNMENT

If the receiver failed in the above check at either extreme of the hold control, it may be possible to align the horizontal oscillator by making slight adjustments.

Tune in a TV station and adjust fine tuning for best sound quality. Adjust vertical hold control to vertically synchronize the picture. Adjust the contrast control to slightly less than normal. Turn the horizontal hold control to the extreme position in which the oscillator falls out of synchronization. Momentarily remove the signal. Adjust B2 (rear of chassis) until the oscillator pulls into synchronization. Check hold and pull-in as outlined above.

COMPLETE ALIGNMENT

Tune a TV station for the best sound quality. Adjust vertical hold control to vertically synchronized the picture. Adjust the contrast control to slightly less than normal.

Adjust B1 until the blanking bar, which may appear in the picture, moves to the right and off the raster. If ripples occur in the raster, turn B1 in a clockwise direction until the unstable condition is removed. The length of this adjustment screw in its correct position is usually about 1/2 inch beyond the bushing.

Turn horizontal hold control fully counter-clockwise and adjust B2 clockwise until picture fails to synchronize. Now slowly turn B2 counter-clockwise to the point where the picture synchronizes. Readjust B1 so that the left side of the picture is close to the left side of the raster but does not fold over.

Turn the horizontal hold control fully clockwise. The right side of the picture should be close to the right side of the raster, but should not fold over. If it does, readjust B1.

Momentarily remove the signal. When signal is restored, the picture should fall into synchronization. If it does not, turn B2 counter-clockwise until picture falls into synchronization.

Turn the horizontal hold control fully counter-clockwise. Picture should fall back into synchronization after momentary removal of the signal.

If picture fails to synchronize after momentary removal of the signal at both extremes of the horizontal hold control, there may be insufficient pull-in range. However, if picture will pull in through 3/4 of the hold control range, operation should be satisfactory as excessive pull-in is objectionable. Excessive pull-in makes the control circuits more sensitive which may result in their being triggered by noise pulses. Also the vertical synchronizing and equalizing pulses may cause a bend in the upper part of the picture.

LINEARITY ADJUSTMENTS

HEIGHT AND VERTICAL LINEARITY ADJUSTMENTS

Adjust the HEIGHT control until picture fills mask vertically (6 3/8 inches.) Adjust VERTICAL LINEARITY for best linearity top to bottom. Readjust the HEIGHT control for proper height. The two controls are interacting and adjustment of one will require readjustment of the other. Adjust vertical centerring to center picture vertically.

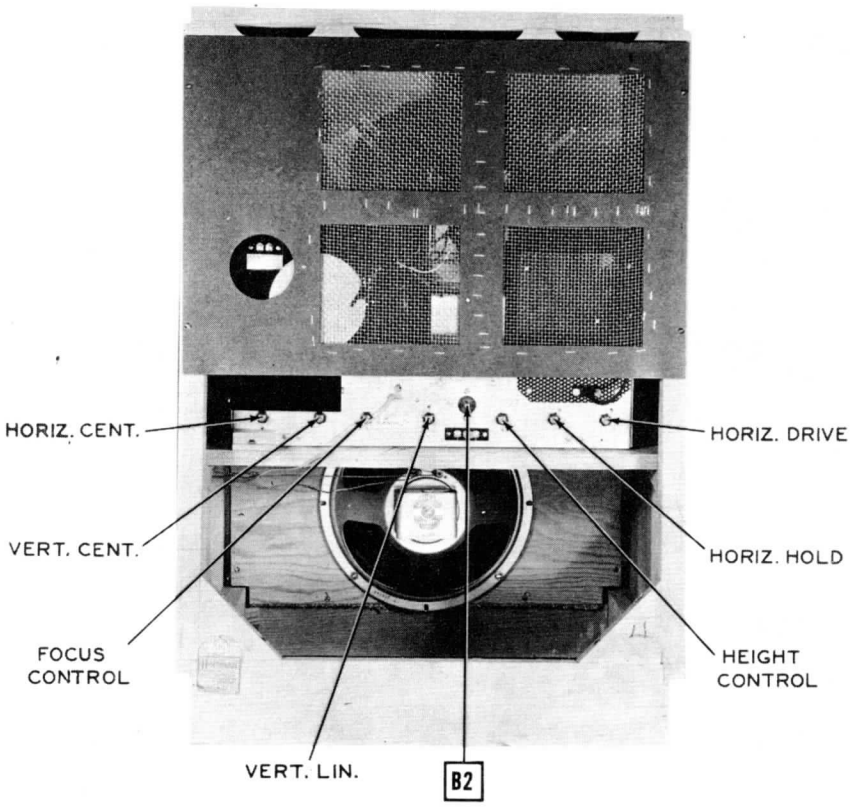
WIDTH AND HORIZONTAL LINEARITY ADJUSTMENTS

Turn the horizontal drive control clockwise as far as possible without crowding the right side of picture. This provides maximum voltage tube second anode. Adjust width control until raster fills the mask horizontally (8 1/2 inches). Adjust the horizontal linearity control until picture is symmetrical left to right. (It may be necessary to slightly readjust the horizontal drive control). Adjust the horizontal centering control to center picture horizontally.

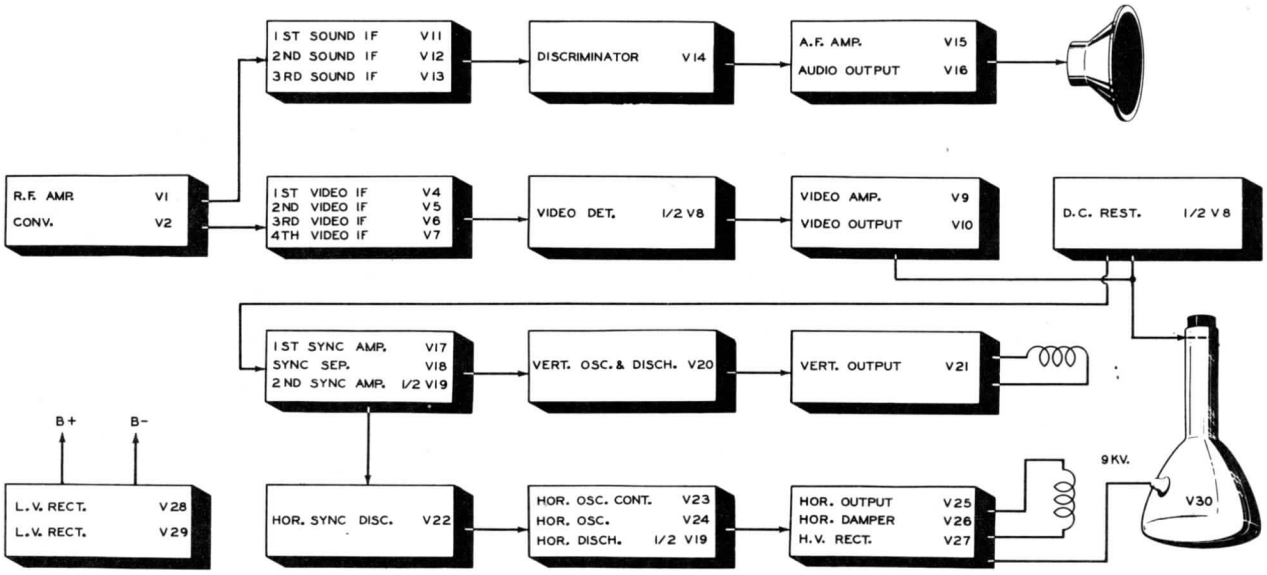
If continued adjustments of the drive , width and linearity controls fail to give proper linearity, it may be necessary to move the tap on R125 which is located in the high voltage compartment. After this tap is moved, it will be necessary to readjust the drive, width and linearity controls.

DISASSEMBLY INSTRUCTIONS

1. Remove four push-on and three set screw type control knobs.
2. Remove five screws holding back cover. Remove back cover.
3. Disconnect speaker leads at solderless connectors.
4. Remove wood screws holding block at rear of chassis.
5. Loosen wing nuts holding picture tube at front of tube.
6. Remove four machine screws holding chassis. Remove chassis.



CABINET-REAR VIEW



BLOCK DIAGRAM