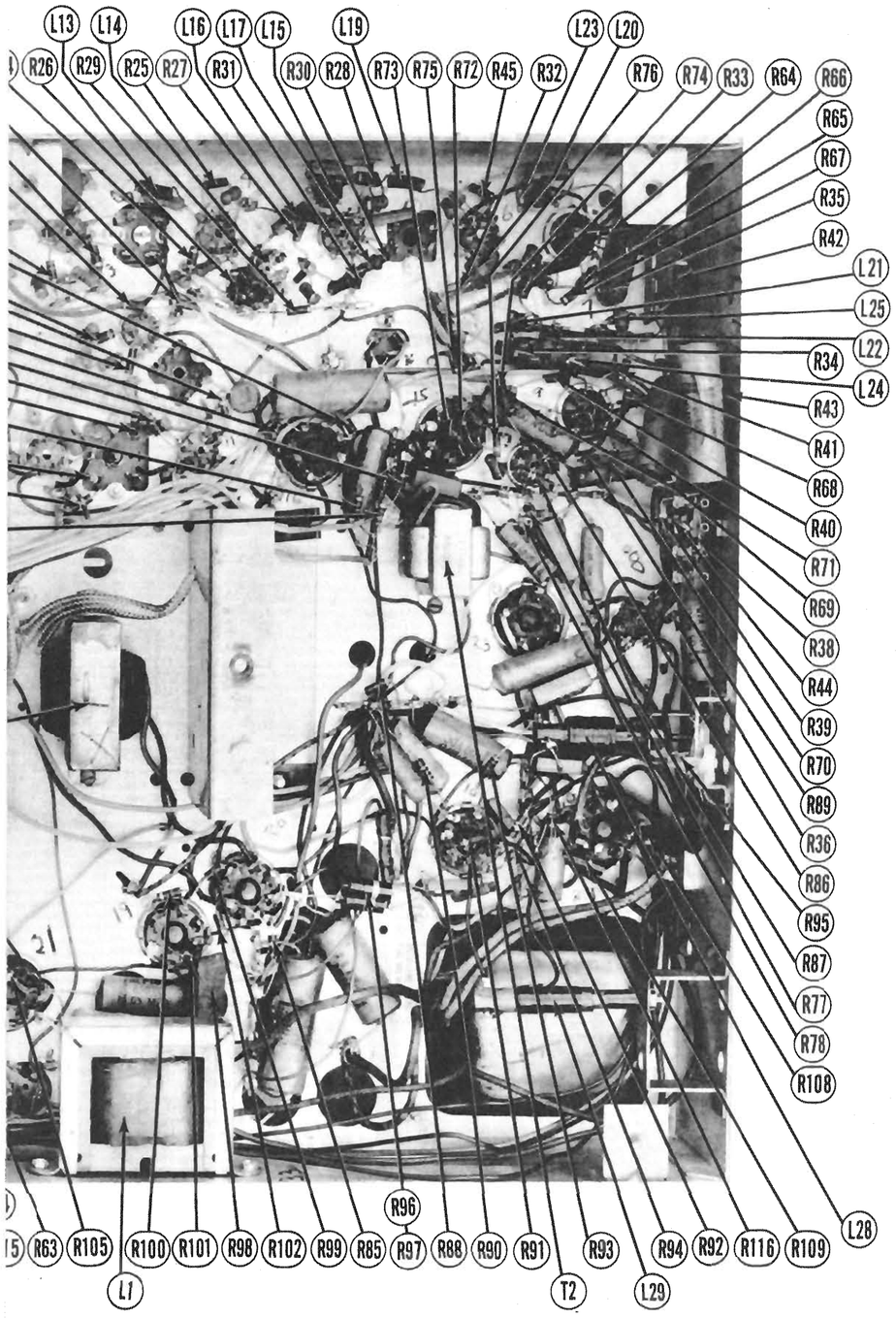
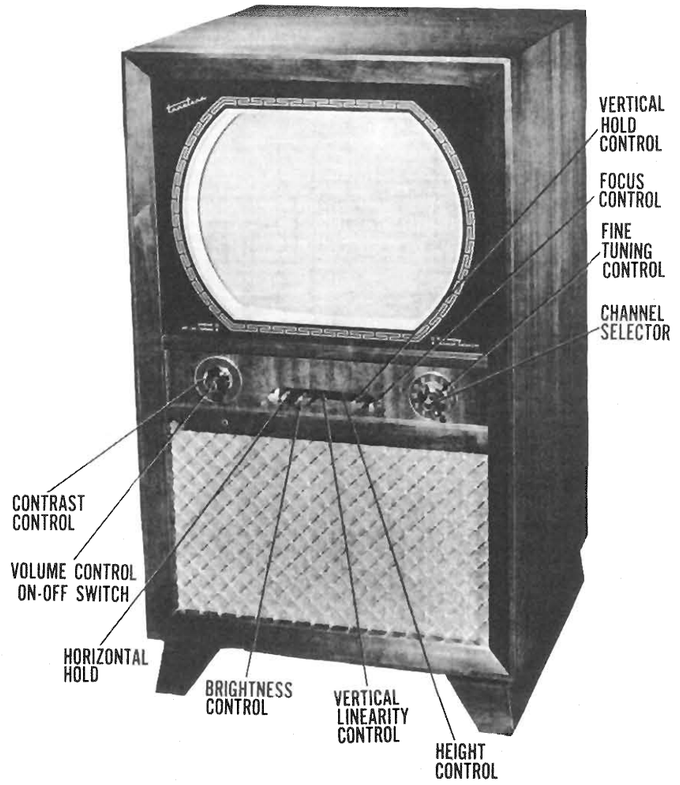


TOR AND INDUCTOR IDENTIFICATION



TRADE NAME	Truetone, Model 2D1089A (Factory Model 20T14-956)
SUPPLIER	Western Auto Supply, 2107 Grand Ave., Kansas City, Mo.
TYPE SET	Television Receiver
TUBES	Twenty-Five
POWER SUPPLY	110-120 Volts AC-60 Cycle
RATING	2.2 Amp. at 117 Volts AC
TUNING RANGE—	Channels 2 thru 13

INDEX

THIS SERVICE INFORMATION SUPERCEDES PRELIMINARY DATA PREVIOUSLY ISSUED ON THESE MODELS.

HOWARD W. SAMS & CO., INC. • Indianapolis 1, Indiana

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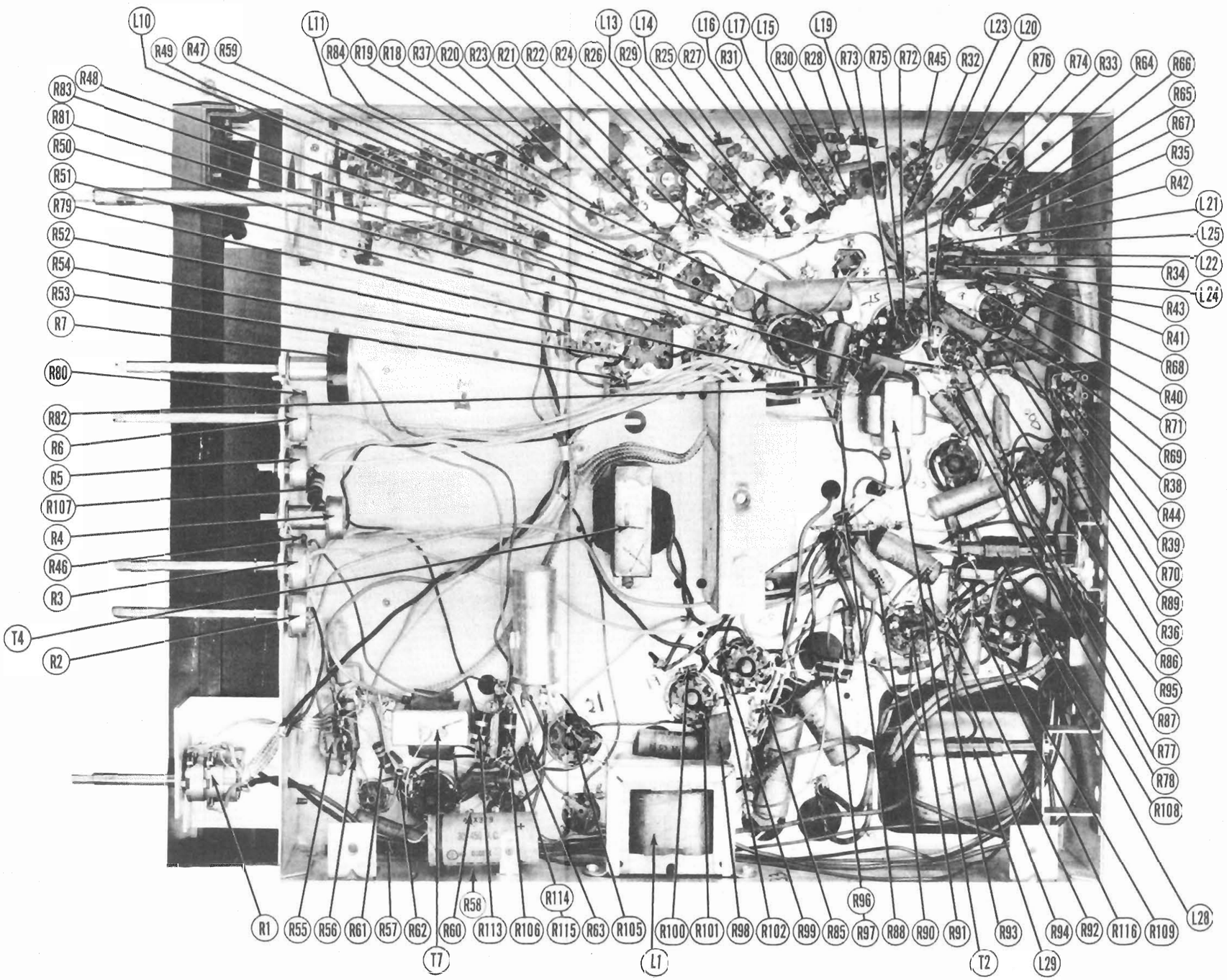
DATE 11-50 SET 113 FOLDER 10

TRUETONE
MODEL 2D1089A



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

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TRADE NAME	Tru
SUPPLIER	We
TYPE SET	Tel
TUBES	Tw
POWER SUPPLY	110-
TUNING RANGE—Chan	

Alignment Instruction

Horiz. Sweep Circuit

Parts List and Descr

Photographs

Cabinet-Rear View

Capacitor and Alig

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as to the quality and suitability
parts have been compiled from
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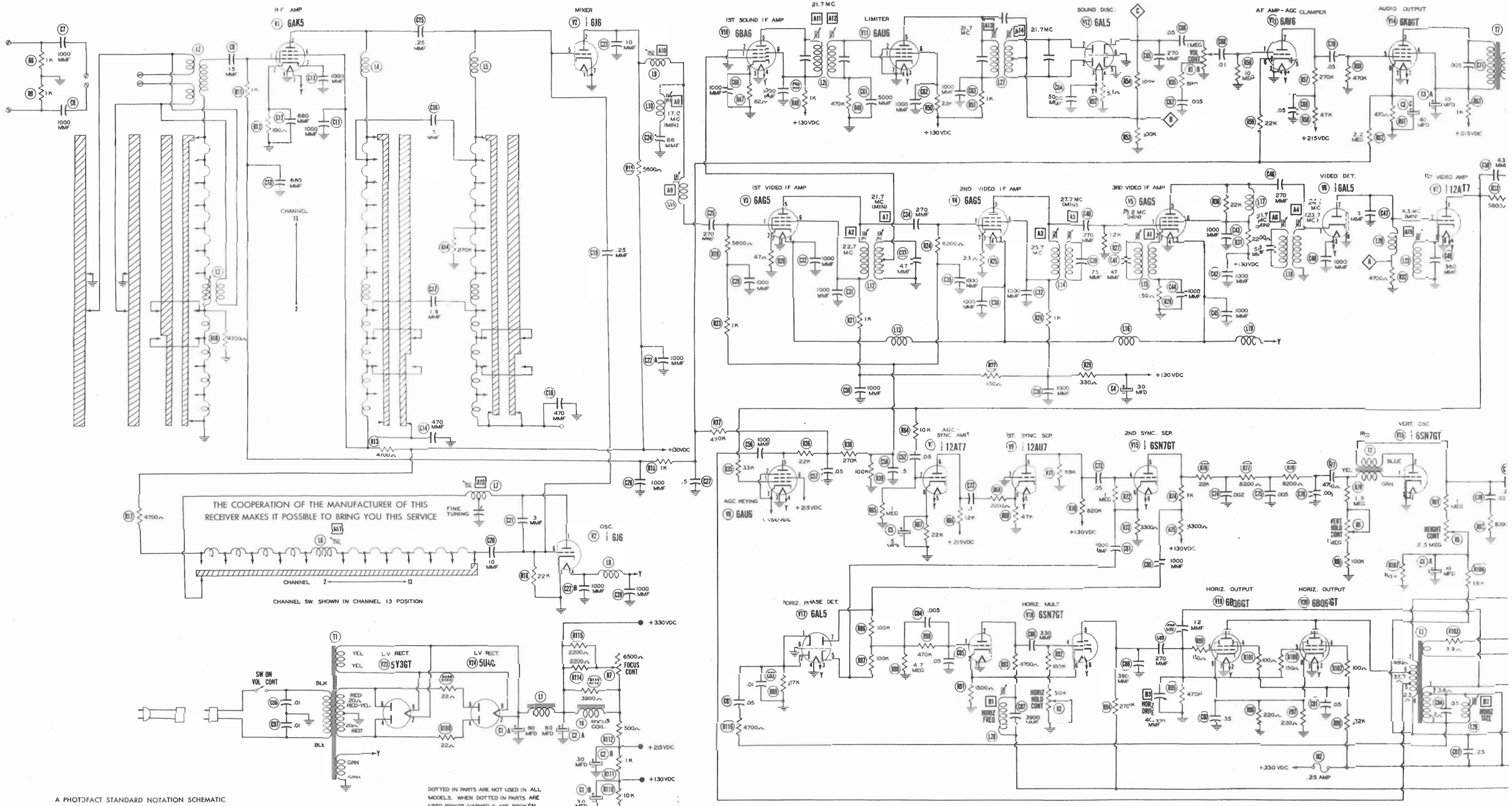
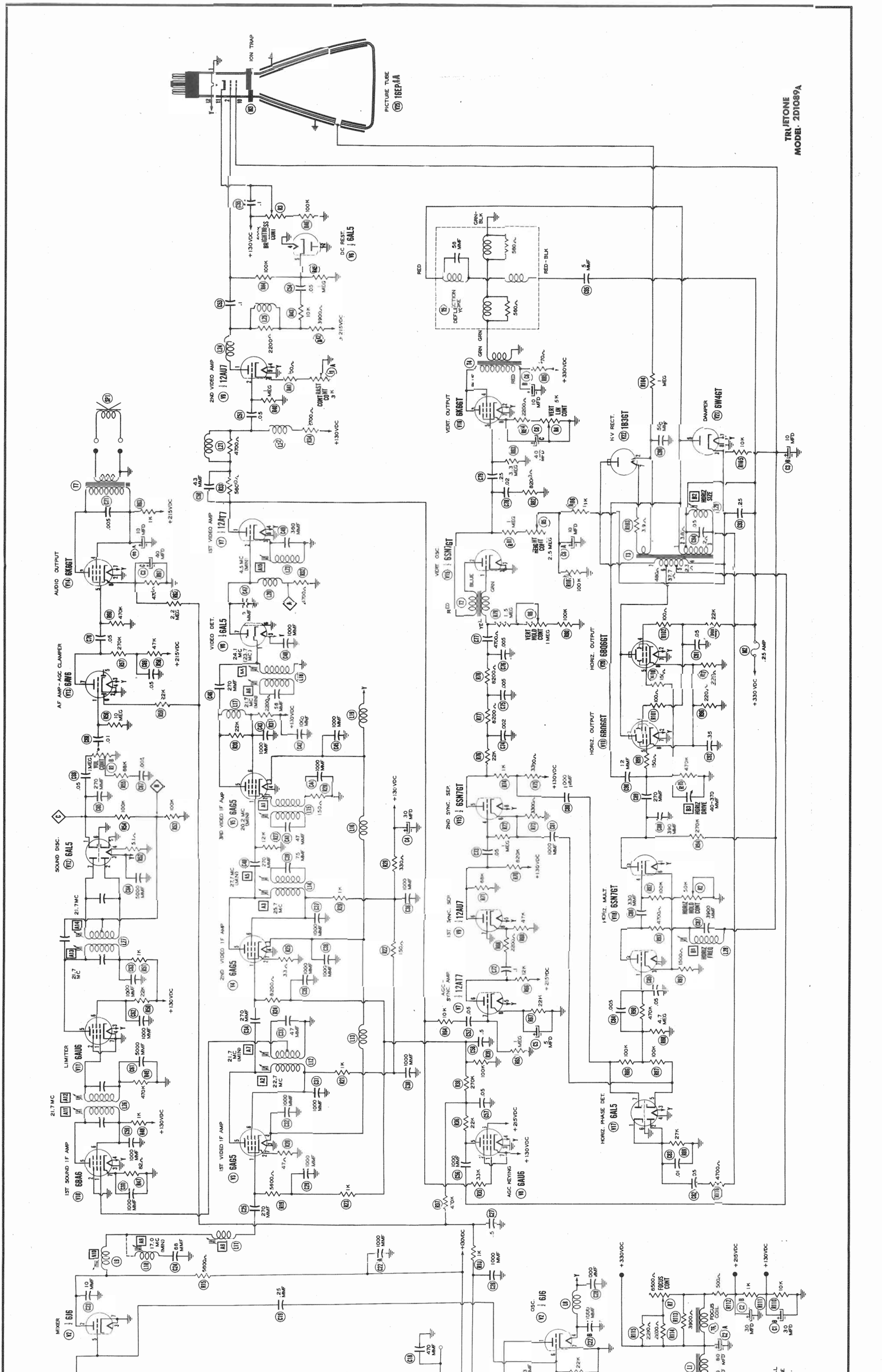
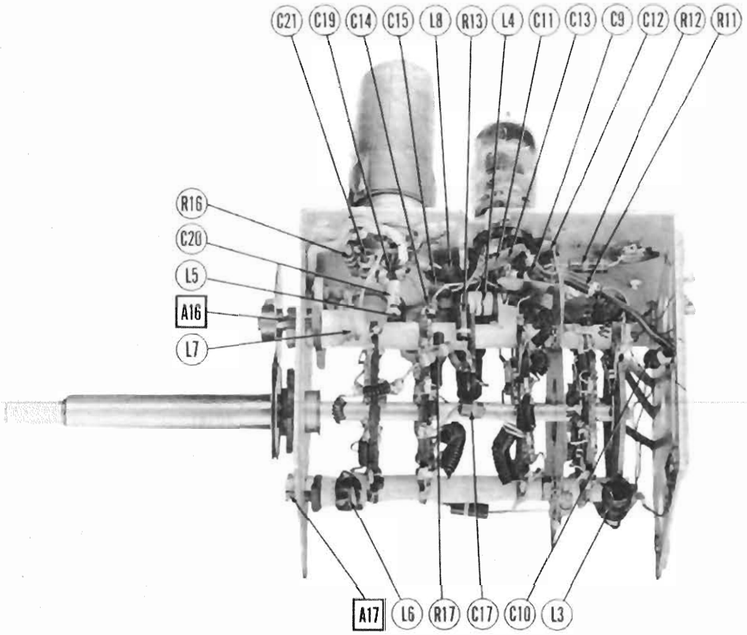
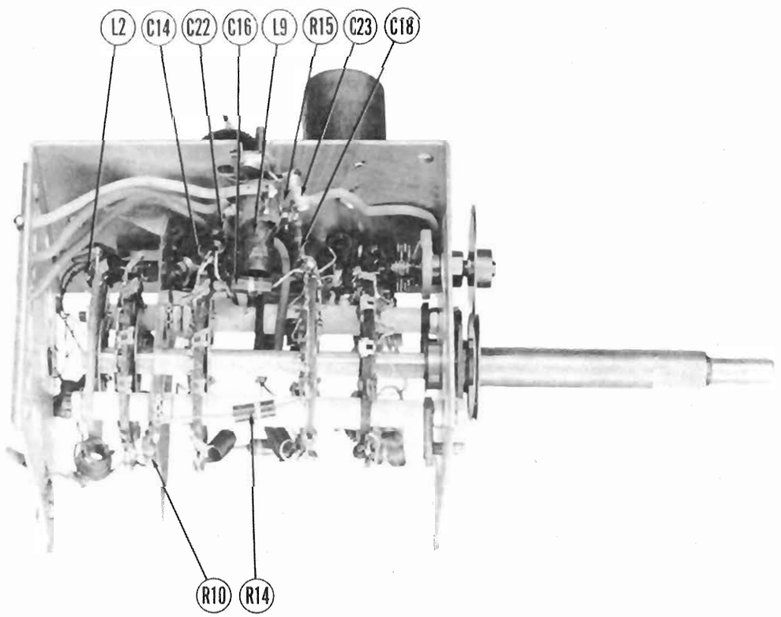

RF AMP
V1 6AK5
MIXER
V2 6J6
1ST SOUND IF AMP
V10 6BA6
LIMITER
V11 6AU6
21.7 MC
SOUND DISC.
V12 6AL5
AF AMP-AGC CLAMPER
V13 6AV6
AUDIO OUTPUT
V14 6K6GT
1ST VIDEO IF AMP
V3 6AG5
2ND VIDEO IF AMP
V4 6AG5
3RD VIDEO IF AMP
V5 6AG5
VIDEO DET.
V6 ½6AL5
1ST VIDEO AMP
V7 ½12AT7
AGC KEYING
V8 6AU6
AGC SYNC AMP.
V ½12AT7
1ST. SYNC. SEP.
V9 ½12AU7
2ND SYNC. SEP.
V15 ½6SN7GT
VERT. OSC.
V15 ½6SN7GT
HORIZ. PHASE DET.
V17 6AL5
HORIZ. MULT.
V18 6SN7GT
HORIZ. OUTPUT
V19 6BQ6GT
HORIZ. OUTPUT
V20 6BQ6GT
LV RECT.
V23 5Y3GT
LV RECT.
V24 5U4G
OSC.
V2 ½6J6
CHANNEL
FINE TUNING
SW ON VOL CONT
FOCUS CONT
HORIZ HOLD CONT
HORIZ FREQ
HORIZ DRIVE
HORIZ SIZE
VERT HOLD CONT
HEIGHT CONT
VOL CONT
+130VDC
+215VDC
+330VDC
THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE
CHANNEL SW. SHOWN IN CHANNEL 13 POSITION
DOTTED IN PARTS ARE NOT USED IN ALL MODELS. WHEN DOTTED IN PARTS ARE USED POINTS MARKED X ARE BROKEN.
A PHOTOFACT STANDARD NOTATION SCHEMATIC
© Howard W. Sams & Co., Inc. 1950

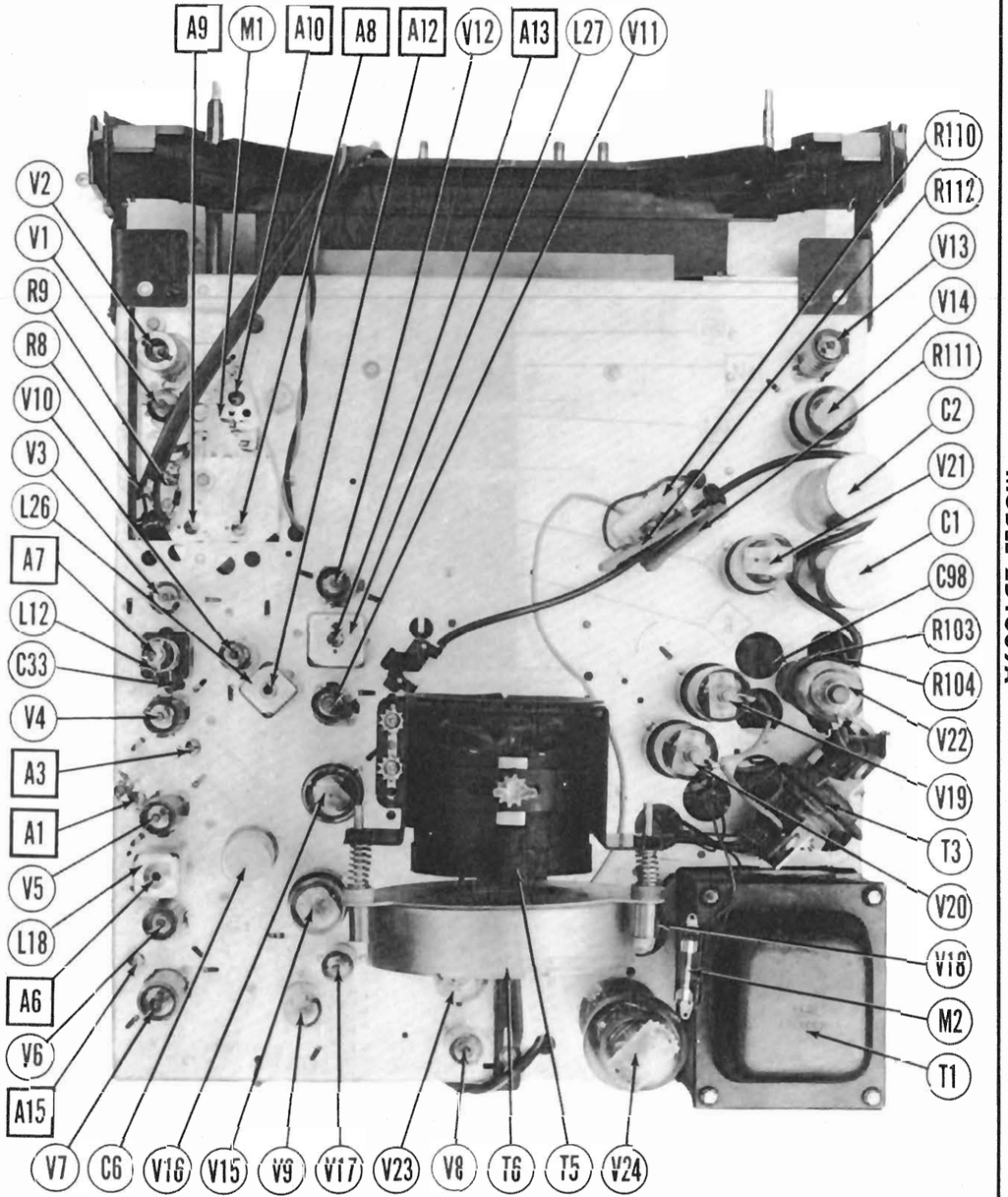

TRUETONE
MODEL 2D1089A
PICTURE TUBE
(V22) 16EP4A
ION TRAP
DEFLECTION YOKE
2ND VIDEO AMP (V6) 12AU7
1ST VIDEO AMP (V7) 12AT7
VIDEO DET. (V8) 6AL5
2ND VIDEO IF AMP (V14) 6AG5
1ST VIDEO IF AMP (V13) 6AG5
1ST SOUND IF AMP (V10) 6BA6
LIMITER (V11) 6AU6
SOUND DISC. (V12) 6AL5
AF AMP-AGC CLAMPER (V12) 6AV6
AUDIO OUTPUT (V11) 6K6GT
MIXER (V2) 6J6
OSC. (V3) 6J6
DC REST. (V9) 6AL5
VERT. OSC. (V15) 6SN7GT
VERT. OUTPUT (V18) 6K6GT
2ND SYNC. SEP. (V15) 6SN7GT
1ST SYNC. SEP. (V19) 12AU7
AGC SYNC. AMP (V7) 12AT7
AGC KEYING (V8) 6AU6
HORIZ. PHASE DET. (V17) 6AL5
HORIZ. MULT. (V16) 6SN7GT
HORIZ. OUTPUT (V20) 6B0GT
HORIZ. OUTPUT (V19) 6BH6GT
H.V. RECT. (V22) 1B3GT
DAMPER (V21) 6W4GT
+330VDC
+215VDC
+130VDC
BRIGHTNESS CONT.
CONTRAST CONT. 3K
VERT HOLD CONT 1 MEG
VERT LIN CONT 5K
HEIGHT CONT 2.5 MEG
WIDTH COIL
HORIZ HOLD CONT 50K
HORIZ FREQ 3300 MMF
FOCUS CONT
FOCUS COIL
NOT USED IN ALL
ED IN PARTS ARE
X ARE BROKEN.



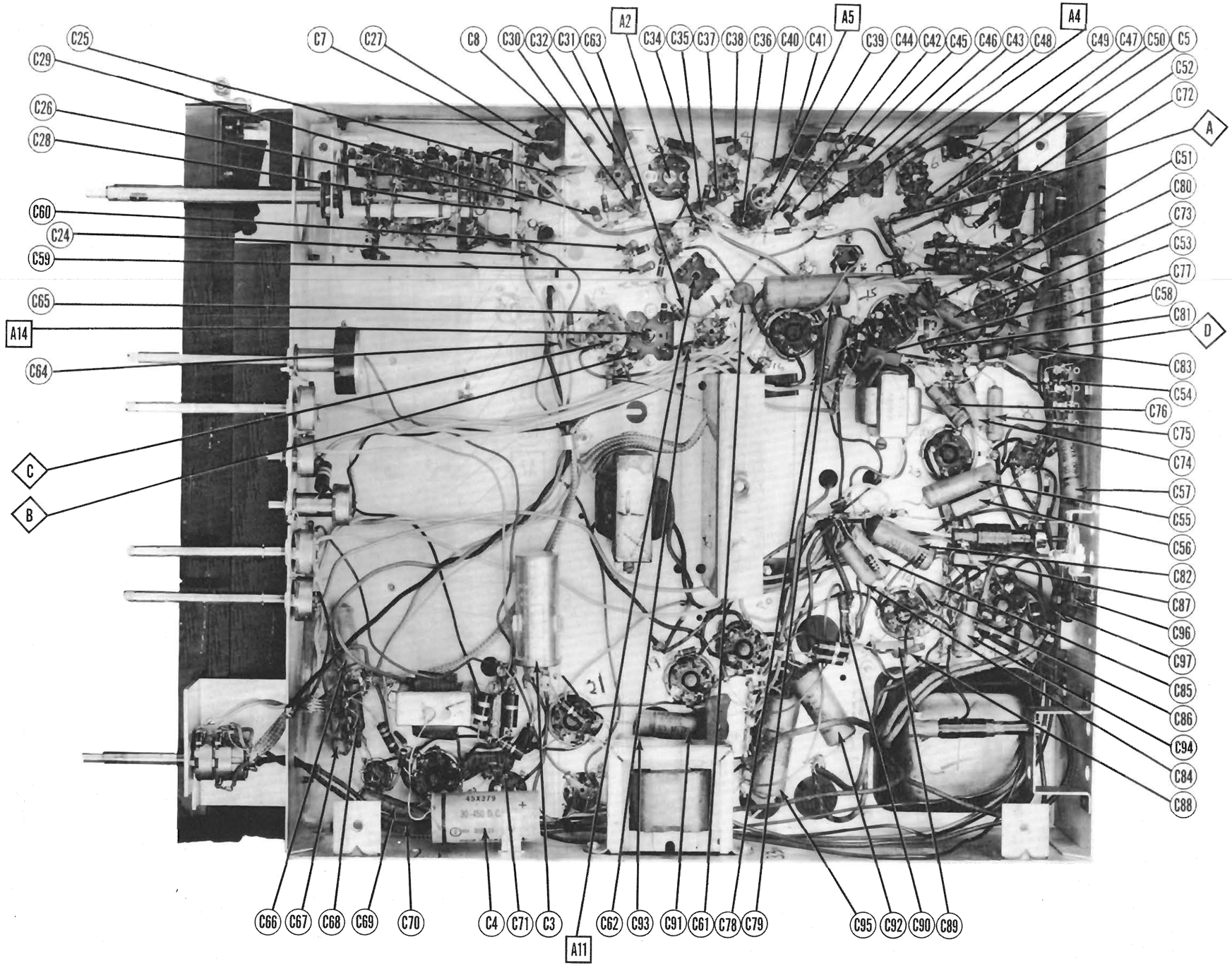
RF TUNER-RIGHT SIDE



RF TUNER-LEFT SIDE



CHASSIS TOP VIEW



CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AK5	-.4VDC	.3VDC	6.3VAC	0V.	90VDC	90VDC	.9VDC		
V 2	6J6	75VDC	95VDC	0V.	6.3VAC	-1.4VDC	§-3.7VDC	0V.		
V 3	6AG5	-1.2VDC	.3VDC	0V.	6.3VAC	105VDC	110VDC	.3VDC		
V 4	6AG5	-1.2VDC	.3VDC	6.3VAC	0V.	105VDC	105VDC	.3VDC		
V 5	6AG5	-.3VDC	1.3VDC	6.3VAC	0V.	110VDC	110VDC	1.3VDC		
V 6	6AL5	0V.	0V.	6.3VAC	0V.	1.4VDC	0V.	-.9VDC		
V 7	12AT7	165VDC	-.9VDC	0V.	6.3VAC	6.3VAC	210VDC	0V.	6.4VAC	0V.
V 8	6AU6	125VDC	130VDC	0V.	6.3VAC	-.5VDC	215VDC	130VDC		
V 9	12AU7	200VDC	0V.	9.6VDC	6.3VAC	6.3VAC	7.7VDC	0V.	1.2VDC	0V.
V 10	6BA6	0V.	0V.	0V.	6.3VAC	110VDC	110VDC	1.5VDC		
V 11	6AU6	-.7VDC	0V.	6.3VAC	0V.	125VDC	85VDC	0V.		
V 12	6AL5	.2VDC	-.7VDC	6.3VAC	1VAC	0V.	0V.	-.7VDC		
V 13	6AV6	-1.6VDC	0V.	6.3VAC	0V.	0V.	-1.2VDC	90VDC		
V 14	6K6GT	-.4VDC	0V.	180VDC	190VDC	0V.	195VDC	6.3VAC	13VDC	
V 15	6SN7GT	-16VDC -16VDC	190VDC 95VDC	0V.	1.2VDC	100VDC	23VDC	0V.	6.3VAC	
V 16	6K6GT	0V. 37VDC	6.3VAC	320VDC	320VDC	0V.	0V.	0V.	35VDC 52VDC	
V 17	6AL5	0V.	0V.	6.3VAC	0V.	3VDC	0V.	-3VDC		
V 18	6SN7GT	.3VDC	330VDC	14VDC	-7.2VDC -5.4VDC	120VDC	14VDC	0V.	6.3VAC	
V 19	6BQ6GT	0V.	6.3VAC	0V.	100VDC	.7VDC	-.7VDC	0V.	15VDC	TOP CAP *
V 20	6BQ6GT	460VDC	0V.	330VDC	100VDC	.7VDC	0V.	6.3VAC	15VDC	TOP CAP *
V 21	6W4GT	460VDC	0V.	460VDC	0V.	330VDC	0V.	6.3VAC	0V.	
V 22	1B3GT		* DO NOT MEASURE							
V 23	5Y3GT	0V.	340VDC	0V.	335VAC	0V.	335VAC	0V.	340VDC	
V 24	5U4G	0V.	340VDC	0V.	335VAC	335VAC	335VAC	335VAC	340VDC	
V 25	16EP4A	0V.	.6VDC	PIN 10 370VDC	PIN 11 19VDC 130VDC	PIN 12 6.3VAC				

FOCUS CONTROL SET FULLY COUNTERCLOCKWISE.
§ TAKEN WITH VACUUM TUBE VOLTMETER.
* DO NOT MEASURE.

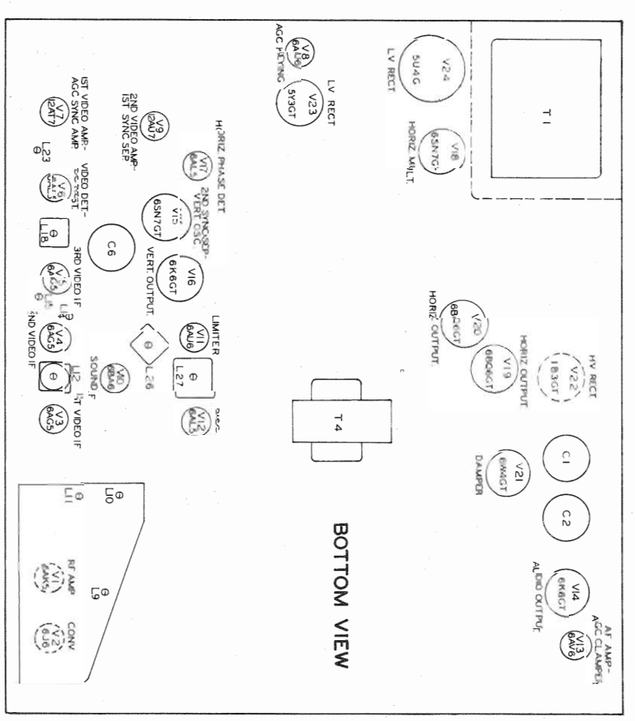
RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AK5	650KΩ	100Ω	.1Ω	0Ω	†7KΩ	†7KΩ	100Ω		
V 2	6J6	†7KΩ	†8KΩ	0Ω	.2Ω	270KΩ	22KΩ	0Ω		
V 3	6AG5	105KΩ	47Ω	0Ω	.1Ω	†3.6KΩ	†3.6KΩ	47Ω		
V 4	6AG5	105KΩ	33Ω	.1Ω	0Ω	†3.5KΩ	†3.5KΩ	33Ω		
V 5	6AG5	12KΩ	150Ω	.1Ω	0Ω	†4.3KΩ	†4.3KΩ	150Ω		
V 6	6AL5	.3Ω	0Ω	.1Ω	0Ω	1 Meg.	0Ω	4.7KΩ		
V 7	12AT7	†10KΩ	4.7KΩ	.3Ω	.1Ω	1Ω	†13KΩ	1 Meg.	22KΩ	0Ω
V 8	6AU6	†40KΩ	†2.1KΩ	0Ω	.1Ω	390KΩ	†1.1KΩ	†2.1KΩ		
V 9	12AU7	†5KΩ	1 Meg.	3.1KΩ	.1Ω	.1Ω	†80KΩ	0Ω	47KΩ	0Ω
V 10	6BA6	0Ω	0Ω	0Ω	.1Ω	†3.2KΩ	†3.2KΩ	82Ω		
V 11	6AU6	470KΩ	0Ω	.1Ω	0Ω	†3.2KΩ	†25KΩ	0Ω		
V 12	6AL5	200KΩ	100KΩ	.1Ω	2.2Ω	0Ω	0Ω	100KΩ		
V 13	6AV6	10 Meg.	0Ω	.1Ω	0Ω	Inf.	650KΩ	†320KΩ		
V 14	6K6GT	600KΩ	0Ω	†2.5KΩ	†2.1KΩ	470KΩ	†30KΩ	.1Ω	470Ω	
V 15	6SN7GT	1.6 Meg. 2.6 Meg.	▲1 Meg. ▲3.5 Meg.	0Ω	1 Meg.	†6.4KΩ	3.3KΩ	0Ω	.1Ω	
V 16	6K6GT	0Ω 5KΩ	.1Ω	†1.2KΩ	†1.2KΩ	3.3 Meg.	Inf.	0Ω	7.2KΩ 2.2KΩ	
V 17	6AL5	27KΩ	27KΩ	.1Ω	0Ω	4.8 Meg.	Inf.	4.8 Meg.		
V 18	6SN7GT	5.2 Meg.	▲15KΩ	1.5KΩ	100KΩ 150KΩ	▲280KΩ	1.5KΩ	0Ω	.1Ω	
V 19	6BQ6GT	Inf.	.1Ω	Inf.	†22KΩ	470KΩ	470KΩ	0Ω	110Ω	TOP CAP ▲30Ω
V 20	6BQ6GT	▲0Ω	0Ω	†320Ω	†22KΩ	470KΩ	1Ω	.1Ω	110Ω	TOP CAP ▲30Ω
V 21	6W4GT	▲0Ω	Inf.	118KΩ	Inf.	†50Ω	Inf.	.1Ω	0Ω	
V 22	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP ▲510Ω
V 23	5Y3GT	Inf.	12KΩ	Inf.	20Ω	Inf.	20Ω	Inf.	12KΩ	
V 24	5U4G	Inf.	12KΩ	Inf.	42Ω	20Ω	42Ω	20Ω	12KΩ	
V 25	16EP4A	0Ω	1.1 Meg.	PIN 10 ▲10KΩ	PIN 11 100KΩ 11KΩ	PIN 12 .1Ω				

FOCUS CONTROL SET FULLY COUNTERCLOCKWISE.
† MEASURED FROM PIN 2 OF V24.
▲ MEASURED FROM PIN 3 OF V21.

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.

TUBE PLACEMENT CHART



TRUETONE
MODEL 2D1089A

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

To eliminate the high voltage shock hazard remove the horizontal multivibrator tube (V18) from its socket.

VIDEO IF ALIGNMENT

Remove the converter tube (V2) from its socket and replace with a 6J6 with pin 1 removed to prevent erroneous indications.

This receiver employs one of two tuners, a switch type tuner or a turret type tuner. The frequency used when adjusting A4 when the switch type tuner is employed differs slightly from the frequency used with the turret type tuner. The frequency used with a switch type tuner will be designated by an "asterisk" (*) and the frequency used with a turret type tuner will be designated by a "dagger" (†). Determine which tuner is employed before attempting Video IF Alignment. Before attempting step 8 short out the AGC line.

In step 9 connect the negative terminal of a 3 volt battery to the junction of R23 and C35 and positive terminal to chassis. If turret type tuner is employed, omit step 7.

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

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	Not used	20.2MC (Unmod.)	Any	Use VTVM. DC Probe to Point (A). Common to chassis.	A1	Adjust for MINIMUM deflection.
2.	Direct	"	"	22.7MC	"	"	A2	Adjust for maximum deflection.
3.	Direct	"	"	25.7MC	"	"	A3	"
4.	Direct	"	"	24.1MC * 23.7MC †	"	"	A4	"
5.	Direct	"	"	27.7MC	"	"	A5	Adjust for MINIMUM deflection.
6.	Direct	"	"	21.7MC	"	"	A6, A7	"
7.	Direct	"	"	17MC	"	"	A8	"
8.	Direct	"	24MC (10MC SWP)	21.7MC 26.2MC	"	Vert. Amp. thru detector probe as shown in figure 1 to pin 5 (plate) of 6AG5 (V3). Low side to chassis.	A9, A10	Adjust for response curve similar to figure 2 with markers as shown. A slight readjustment of A8 may be necessary for optimum results. The response for turret type tuner is shown by dotted line in figure 2.
9.	Direct	"	"	21.7MC 22.4MC 22.6MC 25.25MC 26.2MC	"	"		Check for response curve similar to figure 3. The 22.4MC and 26.2MC markers should be at 50% response. If necessary, slightly retouch A2, A3, and A4 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10.	Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	21.7MC (Unmod.)	Any	DC Probe to Point (B). Common to chassis.	A11, A12, A13	Adjust for maximum deflection.
11.	Direct	"	"	"	DC Probe to Point (C). Common to chassis.	A14	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10.	Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassi chassis.	21.7MC (450KC SWP)	21.7MC	Any	Vert. Amp. thru 10KΩ to pin 1 (Grid) of 6AU6 (V11). Low side to chassis.	A11, A12	Adjust for maximum amplitude and symmetry as per figure 4.
11.	Direct	"	"	"	"	Vert. Amp. to Point (C). Low side to chassis.	A13, A14	Adjust A14 to place 21.7MC at center of diagonal line as per figure 5. Adjust A13 for maximum amplitude and straightness of diagonal line.

4.5MC TRAP ADJUSTMENT

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
12.	.001MFD	High side to pin 2 (Grid) of 12AT7 (V7). Low side to chassis.	4.5MC (Unmod.)	Any	DC Probe thru detector probe as per figure 1 to Point (D). Common to chassis.	A15	Adjust for MINIMUM deflection.

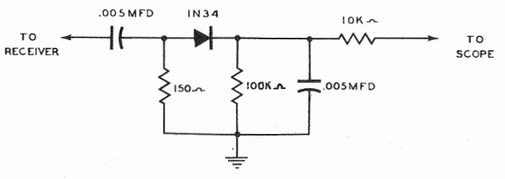


FIG.1

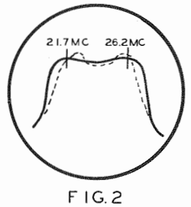


FIG.2

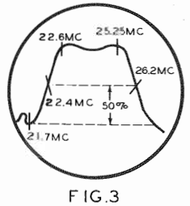


FIG.3

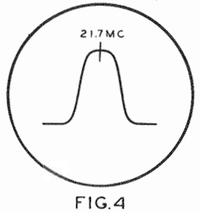


FIG.4

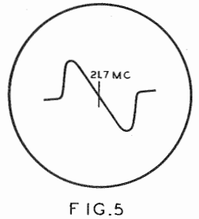


FIG.5

FIG.6

OSCILLATOR ALIGNMENT (SWITCH TYPE TUNER)

Remove the dummy converter tube and replace original 6J6 in its socket.
Connect a 3 volt battery as in step 9 of Video IF Alignment.
The RF portion of this tuner is pre-set at the factory and is very stable and should not require adjustment in the field.
Set the fine tuning control to the mid-position of its range.
The signal generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
13.	Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	215.75MC (Unmod.)	13	DC Probe to Point (E). Common to chassis.	A16	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
14.	"	"	209.75MC	12	"		Check all high band channels to see if a zero reading can be obtained well within the range of the fine tuning control. If not, a compromise adjustment of A16 will be required.
			203.75MC	11			
			197.75MC	10			
			191.75MC	9			
			185.75MC	8			
			179.75MC				
15.	"	"	87.75MC	6	"	A17	Adjust for zero reading. A positive and negative reading wil be obtained on either side of the correct setting.
16.	"	"	81.75MC	5	"		Check all low band channels to see if a zero reading can be obtained well within the range of the fine tuning control. If not a compromise adjustment of A17 will be required.
			71.75MC	4			
			65.75MC	3			
			59.75MC	2			

RF AND MIXER ALIGNMENT (TURRET TYPE TUNER)

The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
17.	Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	207MC (10MC SWP)	205.25MC 209.75MC	12	Vert. Amp. thru 10KΩ to Point (E). Low side to chassis.	A18, A19, A20	Adjust for flat top response curve similar to figure 6 with markers as shown.
18.	"	"	213MC (10MC SWP)	211.25MC 215.75MC	13	"		Check the position of markers on all channels. If maximum reception is desired for one specific channel, adjust A18, A19 and A20 on that channel and then check all other channels to make certain that they have not been seriously effected.
			201MC (10MC SWP)	199.25MC 203.75MC	11			
			195MC (10MC SWP)	193.25MC 197.75MC	10			
			189MC (10MC SWP)	187.25MC 191.75MC	9			
			183MC (10MC SWP)	181.25MC 185.75MC	8			
			177MC (10MC SWP)	175.25MC 179.75MC	7			
			85MC (10MC SWP)	83.25MC 87.75MC	6			
			79MC (10MC SWP)	77.25MC 81.75MC	5			
			69MC (10MC SWP)	67.25MC 71.75MC	4			
			63MC (10MC SWP)	61.25MC 65.75MC	3			
			57MC (10MC SWP)	55.25MC 59.75MC	2			

OSCILLATOR ALIGNMENT (TURRET TYPE TUNER)

Remove the dummy converter tube and replace the original 6J6 in its socket.
Connect a 3 volt battery as in step 9 of Video IF Alignment.
Complete oscillator alignment 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 mid-point of its range. (connect signal generator and VTVM as in steps 19 and 20. Sound carrier frequencies are listed in step 20). If the majority of the channels seem to need oscillator alignment this sometimes may be done in one operation -step 19, by adjusting A21. It should be noted that this is an all channel adjustment and should not be adjusted for any individual channels. If step 19 fails to align the oscillator circuit sufficiently, it will be necessary to adjust the individual channel oscillator slugs. These are accessible one channel at a time through the small hole to the right of the channel switch shaft as the channel switch is rotated to each channel.
The signal generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Set the fine tuning control to the mid-position of its range.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
19.	Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	215.75MC	13	DC Probe to Point (E). Common to chassis.	A21	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. Rotate channel switch and adjust oscillator slugs for each individual channel as in step 20. Then repeat step 19.
20.	"	"	215.75MC	13	"	A22	
			209.75MC	12		A23	
			203.75MC	11		A24	
			197.75MC	10		A25	
			191.75MC	9		A26	
			185.75MC	8		A27	
			179.75MC	7		A28	
			87.75MC	6		A29	
			81.75MC	5		A30	
			71.75MC	4		A31	
			65.75MC	3		A32	
			59.75MC	2		A33	

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		TRUETONE	STANCOR	MERIT	CHICAGO	
	PRI.	SEC.	PRI.	SEC.	PART No.	PART No.	PART No.	PART No.	
T7	7100Ω	4.2Ω	450Ω	.5Ω	51X146	A-3878	A-2931	RO-13	

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	TRUETONE PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	4.2Ω	12A490	ST-101 MOD. P12-T	12A4A	
	CONE DIA.	V. C. DIA.				
SP2	11 1/2"	1"				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ~)	TRUETONE PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.270ADC	51Ω	2 Henries	52X88	C-2326	C-2991	TR-3300①	① Drill one new mounting hole.

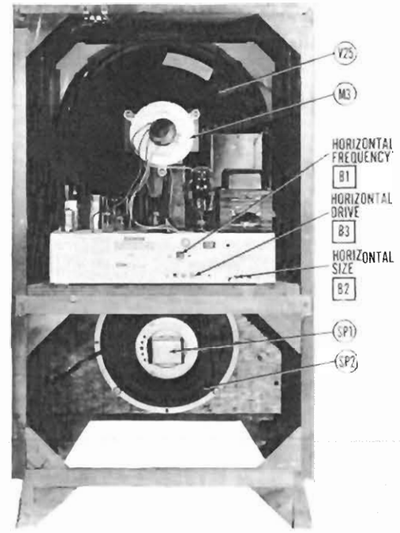
COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	TRUETONE PART No.	MEISSNER PART No.	
L2	Ant. Coil 0Ω	0Ω	0Ω	*		
L3	Ant. Coil	0Ω	0Ω	*		
L4	RF Coil	0Ω		*		
L5	Mixer Grid	0Ω		*		
L6	Osc. Coil	0Ω		*		
L7	Osc. Coil	0Ω		*		
L8	Fil. Choke	.1Ω		*		
L9	1st Video IF	.3Ω		*		
L10	Video Trap	.2Ω		9A2059		
L11	1st Video IF Coupling	.3Ω		9A2072		
L12	2nd Video IF -Sound Take Off	.2Ω	0Ω	9A2076		
L13	Fil. Choke	0Ω		9A2033		
L14	3rd Video IF	.2Ω	0Ω	9A2055		With adj. channel sound trap
L15	Adj. Channel Video Trap	.2Ω	.2Ω	9A2073		
L16	Fil. Choke	0Ω		9A2033		
L17	RF Choke	3.8Ω		9A1979		
L18	4th Video IF	.3Ω		9A2071		With trap
L19	Fil. Choke	0Ω		9A2033		
L20	Peaking	10Ω		9A2090	19-1923	.390 microhenries, gren dot
L21	Peaking	5Ω		9A2086	19-1920 †	.195 microhenries, yellow dot wound on 4.7KΩ resistor.
L22	Peaking	7.2Ω		9A2088	19-1922	.196 microhenries, blue dot
L23	4.5MC Trap	.3Ω		9A2074		
L24	Peaking	5.8Ω		9A2087	19-1921	.125 microhenries, white dot
L25	Peaking	7Ω		9A2089	19-1921 #	.183 microhenries, red dot, wound on 2.2KΩ resistor
L26	Sound IF	.2Ω	.1Ω	9A1986		
L27	Disc. Trans.	.1Ω	.1Ω	9A2049		
L28	Horiz. Osc.	50Ω		9A2096		
L29	Horiz. Size	.2Ω		9A2075		

* Part of tuner part No. 25A1074.
† Parallel with 4.7KΩ resistor.
# Parallel with 2.2KΩ resistor.

MISCELLANEOUS

ITEM No.	PART NAME	TRUETONE PART No.	NOTES
M1A	RF Tuner	25A1074	Switch type
B	RF Tuner	25A1066	Switch type
C	RF Tuner	25A1070	Turret type
M2	Fuse	16X133	.25A 250V Type MDL
M3	Iris Trap	2A104	
B3	Trimmer	17A261	Horiz. drive, 40-370MMF
	Safety Glass	17X112	
	Escutcheon	4X1065	Channel selector
	Escutcheon	4X1029	Volume, contrast
	Knob	10A741	Channel selector
	Knob	10A742	Fine tuning
	Knob	10A752	Contrast
	Knob	10A753	Volume



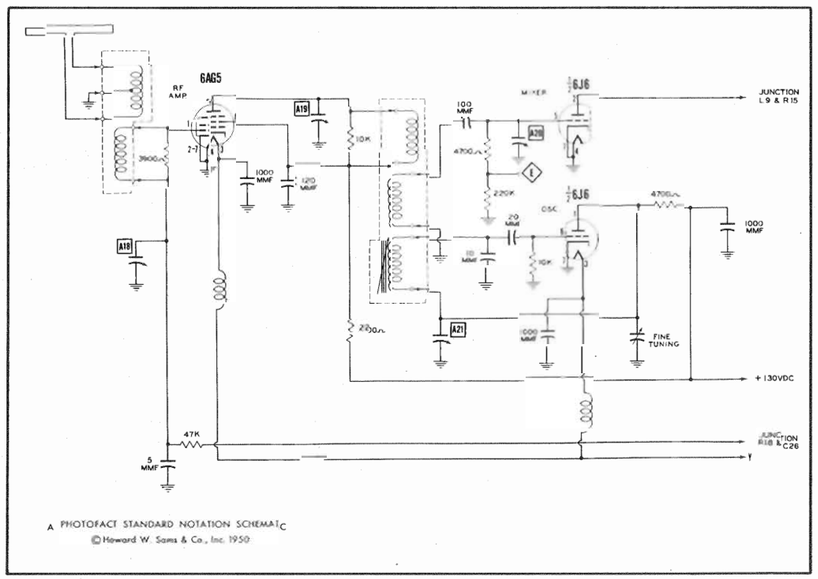
CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

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

Turn the horizontal hold control to the mid-position of its range and adjust the horizontal frequency slug (B1) until the picture synchronizes horizontally.

Turn the horizontal size slug (B2) fully clockwise and adjust the horizontal drive trimmer (B3) for best linearity from left to right. Readjust B2 until picture fills the mask horizontally. If the B3 is opened counter-clockwise too far, a white line may appear at the left center portion of the picture.



ALTERNATE TUNER

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: TRUETONE PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amp.	6AK5	6AK5	7BD	
V2	Converter	6J6	6J6	7BF	
V3	1st Video IF	6AG5	6AG5	7BD	
V4	2nd Video IF	6AG5	6AG5	7BD	
V5	3rd Video IF	6AG5	6AG5	7BD	
V6	Video Det.-DC Rest.	6AL5	6AL5	6BT	
V7	1st Video Amp.-AGC-Sync. Amp.	12AT7	12AT7	9A	
V8	AGC Keying	6AU6	6AU6	7BK	
V9	2nd Video Amp.-1st Sync. Sep.	12AU7	12AU7	9A	
V10	Sound IF Amp.	6BA6	6BA6	7BK	
V11	Limiter	6AU6	6AU6	7BK	
V12	Disc.	6AL5	6AL5	6BT	
V13	AF Amp.-AGC Clamper	6AV6	6AV6	7BT	
V14	Audio Output	6K6GT	6K6GT	7S	
V15	2nd Sync. Sep.-Vert. Osc.	6SN7GT	6SN7GT	8BD	
V16	Vert. Output	6K6GT	6K6GT	7S	
V17	Hor. Phase Det.	6AL5	6AL5	6BT	
V18	Hor. Mult.	6SN7GT	6SN7GT	8BD	
V19	Hor. Output	6BQ6GT	6BQ6GT	6AM	
V20	Hor. Output	6BQ6GT	6BQ6GT	6AM	
V21	Damper	6W4GT	6W4GT	4CG	
V22	HV Rect.	1B3GT	1B3GT	3C	
V23	LV Rect.	5Y3GT	5Y3GT	5T	
V24,	LV Rect.	5U4G	5U4G	5T	
V25	Picture Tube	16EP4A	16EP4A	12D	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT DATA: TRUETONE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	80	450	45X376	AF166J		UPT44445		TVL-2777	▲ Filter
B	30	450							▲ Filter
C2A	80	450	45X376	AF166J		UPT44445		TVL-2777	▲ Filter
B	30	450							▲ Filter
C3A	10	450	45X375	AF22J8B		UPTl145V4		TVL-3749	■ Output Decoup. ▲ Decoupling Output Cathode
B	10	450							Filter
C	40	50							
C4	30	450	45X379	PRS450/30		BR3045A		TVA-1711	Sync. Amp. Cath.
C5	5	25	45X378	PRS150/4		BBR5-25		TVA-1203	■ Vert. Osc. Dec.
C6A	10	450	45X375	AF22J8B		UPTl145V4		TVL-3749	▲ Vert. Output Dec. Vert. Output Cath.
B	10	450							
C	40	50							
C7	1000		47X519	SI1000	D6-102		GP2L-001	19C1	Ant. Coupling
C8	1000		47X519	SI1000	D6-102		GP2L-001	19C1	Ant. Coupling
C9	15			SI15	D6-150		GP1K-15	19C22	RF Coupling
C10	680			SI680	D6-681		GP2K-680	19C17	AGC Filter
C11	1000			BPD-001	DD-102		811-001	19C1	RF Decoupling
C12	680			SI680	D6-681		GP2K-680	19C17	RF Cathode
C13	1000			BPD-001	DD-102		811-001	19C1	RF Suppressor
C14	470			SI470	D6-471		GP2K-470	19C15	RF Plate Dec.
C15	.25								RF Coupling
C16	.5				TCZ-.5				RF Coupling
C17	1.8								RF Coupling
C18	470			SI470	D6-471		GP2K-470	19C15	Mixer Grid Filter
C19	.25								Osc. Coupling
C20	10			SI10NPO	TCZ-10		NPOK-10	19C3	Osc. Grid Cap.
C21	3			SI3NPO	TCZ-3.3		NPOK-3		Osc. Feedback
C22A	1000			BPD-2 x 001	DD-2-102		882-2 x 0015	29C7	RF Bypass
B	1000								Conv. Fil. Bypass
C23	10			SI10NPO	TCZ-10		NPOK-10	19C3	Fixed Trimmer
C24	68		47X501		TCN-68		N750L-68	29C15	Fixed Trimmer
C25	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	IF Coupling
C26	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	AGC Filter
C27	.5	200	B65604	P288-5		GT2P5		2TM-P5	AGC Filter
C28	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	Filament Bypass
C29	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	AGC Filter
C30	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	RF Bypass
C31	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	1st V. IF Dec.
C32	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	1st V. IF Fil.
C33	47			SI47NPO	TCZ-47		NPOM-47	29C14	Fixed Trimmer
C34	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	IF Coupling
C35	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	AGC Filter
C36	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	RF Bypass
C37	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	2nd V. IF Dec.
C38	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	2nd V. IF Fil.
C39	75			SI75NPO	TCZ-75		NPOM-75		Fixed Trimmer
C40	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	IF Coupling
C41	47	500	47X361	1469-00005	TCZ-47	5R5Q5	NPOM-50	MS-45	Fixed Trimmer
C42	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	RF Bypass
C43	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	3rd V. IF Dec.
C44	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	3rd V. IF Cath.
C45	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	3rd V. IF Fil.
C46	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	IF Coupling
C47	5		47X562	SI5	TCZ-4.7	5W5V5	GP1K-5	MS-55	V. Diode Filter
C48	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	V. Det.-DC Res. Fil.
C49	360	500	47X568	1469-00035			GP2K-360	1FM-335	Fixed Trimmer
C50	43		47X563		TCZ-43		NPOM-43		Peaking
C51	.05	400	D67503	P488-05	DF-503	PTE485		4TM-S5	Video Coupling
C52	.05	400	D67503	P488-05	DF-503	PTE485		4TM-S5	Video Coupling
C53	.1	400	D65104	P488-1	DF-104	PTE4P1		4TM-P1	Video Coupling
C54	.05	400	D67503	P488-05	DF-503	PTE485		4TM-S5	Video Coupling
C55	.1	200	B65104	P288-1	DF-104	PTE4P1		2TM-P1	Pic. Tube Cath.
C56	1000	1000	47X569	1464-HV-001					Hor. Sweep Coupling
C57	.05	400	D67503	P488-05	DF-503	PTE485		4TM-S5	AGC Filter
C58	.5	200	B65504	P288-5		GT2P5		2TM-P5	AGC Filter
C59	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	S. IF Decoupling

CAPACITORS (CONT.)

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT DATA: TRUETONE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C60	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	S. IF Cath.
C61	5000		47X507	BPD-005	DD-502	1D5D5	811-005	29C1	Limiter Grid Filter
C62	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	Limiter Screen
C63	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	Limiter Plate Dec.
C64	5000		47X507	BPD-005	DD-502	1D5D5	811-005	29C1	Discr. Fil.
C65	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	RF Bypass
C66	.05	200	D67503	P288-05	DF-503	PTE4S5		2TM-S5	Audio Coupling
C67	.005	600	B65502	P688-005	DF-502	PTE6D5	811-0x5	6TM-D5	Tone Comp.
C68	.01	200	B65103	P488-01	DD-103	PTE4S1	811-01	4TM-S1	Audio Coupling
C69	.05	400	D67503	P488-05	DF-503	PTE4S5		4TM-S5	AF Amp. Plate Dec.
C70	.05	400	D67503	P488-05	DF-503	PTE4S5		4TM-S5	Audio Coupling
C71	.005	600	**F65502**	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Output Plate Byp.
C72	.1	400	**F65104**	P488-1	DF-104	PTE4P1		4TM-P1	Sync. Coupling
C73	.05	400	**D67503**	P488-05	DF-503	PTE4S5		4TM-S5	Sync. Coupling
C74	.002	600	**B65202**	P688-002	D6-202	PTE6D2	GP2M-002	6TM-D2	Integrator Net.
C75	.005	600	D65502	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Integrator Net.
C76	.005	600	B65502	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Integrator Net.
C77	4700	500	47X543	1467-005	D6-472	1D5D5	GP2M-0047	1FM-25	Vert. Sync. Coupling
C78	.02	600	F65203	P688-02		PTE6S2		6TM-S2	Vert. Discharge
C79	.25	400	D65254	P488-25		GT4P25		4TM-P25	Vert. Sweep Coupling
C80	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	Hor. Sync. Coupling
C81	1000		47X519	SI1000	D6-102	1W5D1	GP2L-001	29C21	Hor. Sync. Coupling
C82	.05	600	F67503	P688-05	DF-503	PTE6S5		6TM-S5	Hor. Feedback
C83	.01	200	B65103	P488-01	D6-103	PTE4S1	811-01	4TM-S1	Voltage Divider
C84	.005	600	F65502	P688-005	D6-502	PTE6D5	811-005	6TM-D5	AFC Filter
C85	.05	200	B65503	P288-05	DF-503	PTE4S5		2TM-S5	AFC Filter
C86	330	500	47X570	1468-00035	D6-331	5W5T3	GP2K-330	1FM-335	Hor. Feedback
C87	3900	500	47X572	1464-004		1DR5D4		MS-24	Fixed Trimmer
C88	390	500	47X571	1468-004	D6-391	5W5T4	GP2K-390	1FM-34	Hor. Discharge
C89	270	500	47X445	1468-00025	D6-271	5W5T25	GP2K-270	1FM-325	Hor. Sweep Coupling
C90	12	2500	47X574						Hor. Feedback
C91	.05	600	F67503	P688-05	DF-503	PTE6S5		6TM-S5	Hor. Output Screen
C92	.35	200	B65354	P288-33		GT2P5		2TM-P47	Hor. Output Cath.
C93	.25	200	B65254	P488-25		GT2P25		2TM-P25	Damper Filter
C94	.05	200	D67503	P288-05	DF-503	PTE4S5		2TM-S5	Fixed Trimmer
C95	.5	200	B65504	P288-5		GT2P5		2TM-P5	Hor. Sweep Coupling
C96	.01	400	47X410	P488-01	D6-103	PTE4S1	811-01	4TM-S1	Line Filter
C97	.01	400	47X410	P488-01	D6-103	PTE4S1	811-01	4TM-S1	Line Filter
C98	500	20000	47X560	HV20C	TV3-502				HV Filter

CONTROLS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: TRUETONE PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	INSTALLATION NOTES
R1A	3000Ω			Concentrikit			
B	1 Meg.			B11-112 *			Contrast control-front
C	Shaft End		78X4	B13-137X *		SBBT-503-S	Volume control-tapped at 200KΩ-rear
D	Switch			E-202 *			Attach per instr. in "Concentrikit".
				76-1 *			Attach per instr. in "Concentrikit".
R2A	50KΩ	½	40X299	Q11-123, C-3†	AG-44-S	B-31	Horiz. hold control
B	Shaft		Not Req.	Not Req.	KSS-5	AK-16 ø	Attach to R2A per instructions
R3A	500KΩ	½	40X297	Q11-133, C-3†	AG-58-S	B-59	Brightness control
B	Shaft		Not Req.	Not Req.	KSS-5	AK-16 ø	Attach to R3A per instructions
R4A	5000Ω	½	40X294	Q11-114			Vert. linearity control
B	Sleeve						
	Bushing		Not Req.	S-3			Attach to R4A per instructions
R5A	2.5 Meg.	½	40X293	Q11-239	AG-84-S	B-83 †	Height control
B	Shaft		Not Req.	RQ	FKS-1/4	Not Req.	Attach to R5A per instructions
R6A	1 Meg.	½	40X298	Q11-137, C-3†	AG-61-S	B-69	Vert. hold control
B	Shaft		Not Req.	Not Req.	KSS-5	AK-16 ø	Attach to R6A per instructions
R7	6500Ω	2	40X302			SV-919	Focus control-Wire Wound

* Additional parts to be used with "Concentrikit".
† File slot in shaft to duplicate original.
‡ Saw off shaft of new control so that C-3 coupler can be employed to connect part of original shaft to new control.
ø Cut off shaft to replacement control and attach original shaft using coupler.

RESISTORS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: TRUETONE PART No.	IRC PART No.	IDENTIFICATION CODES ALL RESISTORS ARE ± 10% UNLESS OTHERWISE STATED
R8	1000Ω		B85102	BTS-1000	Antenna Isolation
R9	1000Ω		B85102	BTS-1000	Antenna Isolation
R10	4700Ω		B83472	BTS-4700	RF Coil Shunt
R11	1000Ω		B85102	BTS-1000	RF Amp. Grid
R12	100Ω 20%		B84101	BTS-100	RF Amp. Cathode
R13	4700Ω		B83472	BTS-4700	RF Amp. Decoupling
R14	270KΩ 20%		B85274		Mixer Grid
R15	560Ω		B83562		Mixer Plate
R16	22KΩ		B84223		Osc. Grid
R17	4700Ω		B83472	BTS-4700	Osc. Plate
R18	1000Ω		B85102	BTS-1000	AGC Network
R19	5600Ω 5%		B83562		1st Video IF Amp. Grid
R20	47Ω 5%		B83470		1st Video IF Amp. Cathode
R21	1000Ω		B85102	BTS-1000	1st Video IF Amp. Decoupling
R22	150Ω		B84151	BTS-150	Decoupling
R23	1000Ω		B85102	BTS-1000	AGC Network
R24	82000Ω 5%		B83822		2nd Video IF Amp. Grid
R25	33Ω 5%		B83330		2nd Video IF Amp. Cathode
R26	1000Ω		B85102	BTS-1000	2nd Video IF Amp. Decoupling
R27	12KΩ 5%		B83123		3rd Video IF Amp. Grid
R28	150Ω		B84151	BTS-150	3rd Video IF Cathode
R29	33Ω		B84331	BTS-330	Decoupling
R30	22KΩ		B84223		3rd Video IF Coil Shunt
R31	2200Ω		B84222	BTS-2200	De coupling
R32	4700Ω 5%		B83472	BTS-4700-5%	Video Det. Diode Load
R33	5600Ω	1	C84562	BTA-5600	1st Video Amp. Plate
R34	2700Ω 5%	1	C83272	BTA-2700-5%	1st Video Amp. Plate
R35	33KΩ		B84333	BTS-33K	AGC Keying Grid
R36	22KΩ		B84223	BTS-22K	AGC Network
R37	470KΩ		B85474	BTS-470K	AGC Network
R38	270KΩ		B85274	BTS-270K	AGC Network
R39	100KΩ		B84104	BTS-100K	AGC Network
R40	1 Meg.		B84105	BTS-1 Meg.	2nd Video Amp. Grid

RESISTORS (CONT.)

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: TRUETONE PART No.	IRC PART No.	IDENTIFICATION CODES
R41	100Ω		B84101	BTS-100	2nd Video Amp. Cathode
R42	39000Ω 5%		B83392	BTS-3900-5%	2nd Video Amp. Plate
R43	10KΩ		B84104	BTS-10K	Isolation
R44	100KΩ 20%		B84104	BTS-100K	Picture Tube Grid
R45	1 Meg.		B84105	BTS-1 Meg.	DC Rest. Load
R46	100KΩ 20%		B84104	BTS-100K	Voltage Divider
R47	82Ω		B84820		Sound IF Amp. Cathode
R48	1000Ω		B85102	BTS-1000	Sound IF Amp. Decoupling
R49	470KΩ 20%		B85474		Limiter Grid
R50	22KΩ		B84223		Limiter Screen
R51	1000Ω		B85102	BTS-1000	Limiter Plate Decoupling
R52	5.1Ω		43X239	BW-½-4.7	Disc. Filament-Wire Wound
R53	100KΩ		B84104	BTS-100K	Disc. Diode Load
R54	100KΩ		B84104	BTS-100K	Disc. Diode Load
R55	68KΩ		B84683	BTS-68K	Tone Compensation
R56	10 Meg. 20%		B85106	BTS-10 Meg.	AF Amp. Grid
R57	270KΩ 20%		B85274	BTS-270K	AF Amp. Plate
R58	47KΩ 20%		B84473	BTS-47K	AF Amp. Plate Decoupling
R59	22KΩ		B84223	BTS-22K	AGC Network
R60	470KΩ 20%	2	B85474	BTS-470K	Audio Output Grid
R61	470Ω	1	C84471	BTA-470	Audio Output Cathode
R62	2.2 Meg.	1	B84225	BTS-2.2 Meg.	AGC Network
R63	1000Ω	2	D84102	BTB-1000	Audio Output Decoupling
R64	10KΩ		B84104	BTS-10K	Isolation
R65	1 Meg.		B84105	BTS-1 Meg.	Sync. Amp. Grid
R66	12KΩ		B83123	BTS-12K	Sync. Amp. Plate
R67	22KΩ		B84223	BTS-22K	Sync. Amp. Cathode
R68	2200Ω		B84222	BTS-2200	Isolation
R69	47KΩ 5%		B84473	BTS-47K-5%	1st Sync. Sep. Cathode
R70	820KΩ		B84824	BTS-820K	1st Sync. Sep. Plate
R71	68KΩ		B84683	BTS-68K	Voltage Divider
R72	1 Meg.		B84105	BTS-1 Meg.	2nd Sync. Sep. Grid
R73	33000Ω 5%		B83332	BTS-3300-5%	2nd Sync. Sep. Cathode
R74	1000Ω		B85102	BTS-1000	2nd Sync. Sep. Plate
R75	33000Ω 5%		B83332	BTS-3300-5%	2nd Sync. Sep. Plate
R76	22KΩ		B8422K	BTS-22K	Integrator
R77	82000Ω		B83822	BTS-8200	Integrator
R78	82000Ω		B83822	BTS-8200	Integrator
R79	1.5 Meg.		B84155	BTS-1.5 Meg.	Vert. Osc. Grid
R80	100KΩ 20%		B84104	BTS-100K	Voltage Divider
R81	1 Meg.		B84105	BTS-1 Meg.	Vert. Osc. Plate
R82	82000Ω		B83822	BTS-8200	Vert. Peaking
R83	3.3 Meg 20%		B85335	BTS-3.3 Meg.	Vert. Output Grid
R84	22000Ω		B84222	BTS-2200	Vert. Output Cathode
R85	270Ω		B85270	BTS-270	Vert. Output Decoupling
R86	100KΩ		B84104	BTS-100K	Horiz. Phase Det. Diode Load
R87	100KΩ		B84104	BTS-100K	Horiz. Phase Det. Diode Load
R88	4.7 Meg. 20%		B85475	BTS-4.7 Meg.	Horiz. Phase Det. Diode Load
R89	27KΩ		B84273	BTS-27K	Horiz. AFC Filter Network
R90	470KΩ 20%		B85474	BTS-470K	Horiz. AFC Filter Network
R91	150Ω		B84152	BTS-1500	Horiz. Mult. Cathode
R92	100KΩ		B84104	BTS-100K	Horiz. Mult. Grid
R93	47000Ω 5%		B83472	BTS-4700-5%	Horiz. Mult. Plate
R94	270KΩ 20%		B85274	BTS-270K	Horiz. Mult. Plate
R95	470KΩ		B85474	BTS-470K	Horiz. Output Grid
R96	220Ω	2	D84221	BW-2-220	Horiz. Output Cathode
R97	220Ω	2	D84221	BW-2-220	Horiz. Output Cathode
R98	22KΩ	5	43X253		Horiz. Output Screen-Wire Wound
R99	150Ω		B84151		Parasitic Suppressor
R100	150Ω		B84151		Parasitic Suppressor
R101	100Ω		B84101		Parasitic Suppressor
R102	100Ω		B84101		Parasitic Suppressor
R103	3.9Ω		43X254		HV Rect. Filament-Wire Wound
R104	1 Meg.	1	C85105		HV Filter
R105	10KΩ	1	C84104	BTA-10K	Decoupling
R106	18KΩ	1	C84183	BTA-18K	Decoupling
R107	100KΩ	2	D84104	BTB-100K	Voltage Divider
R108	22Ω	1	C84220		Surge Limiter
R109	22Ω	1	C84220		Surge Limiter
R110	10KΩ	5	43X247	1 3/4A-10K	Bleeder-Wire Wound
R111	1000Ω	10	43X248	1 3/4A-1000	Filter-Wire Wound
R112	500Ω	10	43X245	1 3/4A-500	Filter-Wire Wound
R113	3900Ω	2	D83392	BTB-3900	Focus Coil Shunt
R114	2200Ω	2	D84222	BTB-2200	Focus Coil Shunt
R115	2200Ω	2	D84222	BTB-2200	Focus Coil Shunt
R116	47000Ω 5%	2	B83472	BTS-4700-5%	Feedback

TRANSFORMER (POWER)

ITEM No.	RATING: PRI.	RATING: SEC. 1	RATING: SEC. 2	RATING: SEC. 3	REPLACEMENT DATA: TRUETONE PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC @ 2.2A	720VCT .270ADC	5VAC @ 5A	6.3VAC @ 10.6A	53X302			TP-360

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING: DC RESISTANCE PRI.	RATING: DC RESISTANCE SEC.	REPLACEMENT DATA: TRUETONE PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	NOTES
T2	175Ω	130Ω	54X5	A-8111 ①	A-3000 ①	TBO-2 ①	Vert. Block Osc. Trans.
T3	510Ω Tap @ 300, 2.3Ω	3.8Ω Tap @ 3.6Ω SEC. 2 0Ω	43X303				Hor. Output Trans.
T4	1300Ω	10Ω	51X147	A-8112	A-3036	TSO-5 ①	Vert. Output Trans.
T5A	20Ω		9A2080	DY-7	MD-70		Hor. Deflection Coil
B	6Ω						Vert. Deflection Coil
T6	670Ω		9A2081				Focus Coil

① Drill one new mounting hole.

TRUETONE MODEL 2D1089A