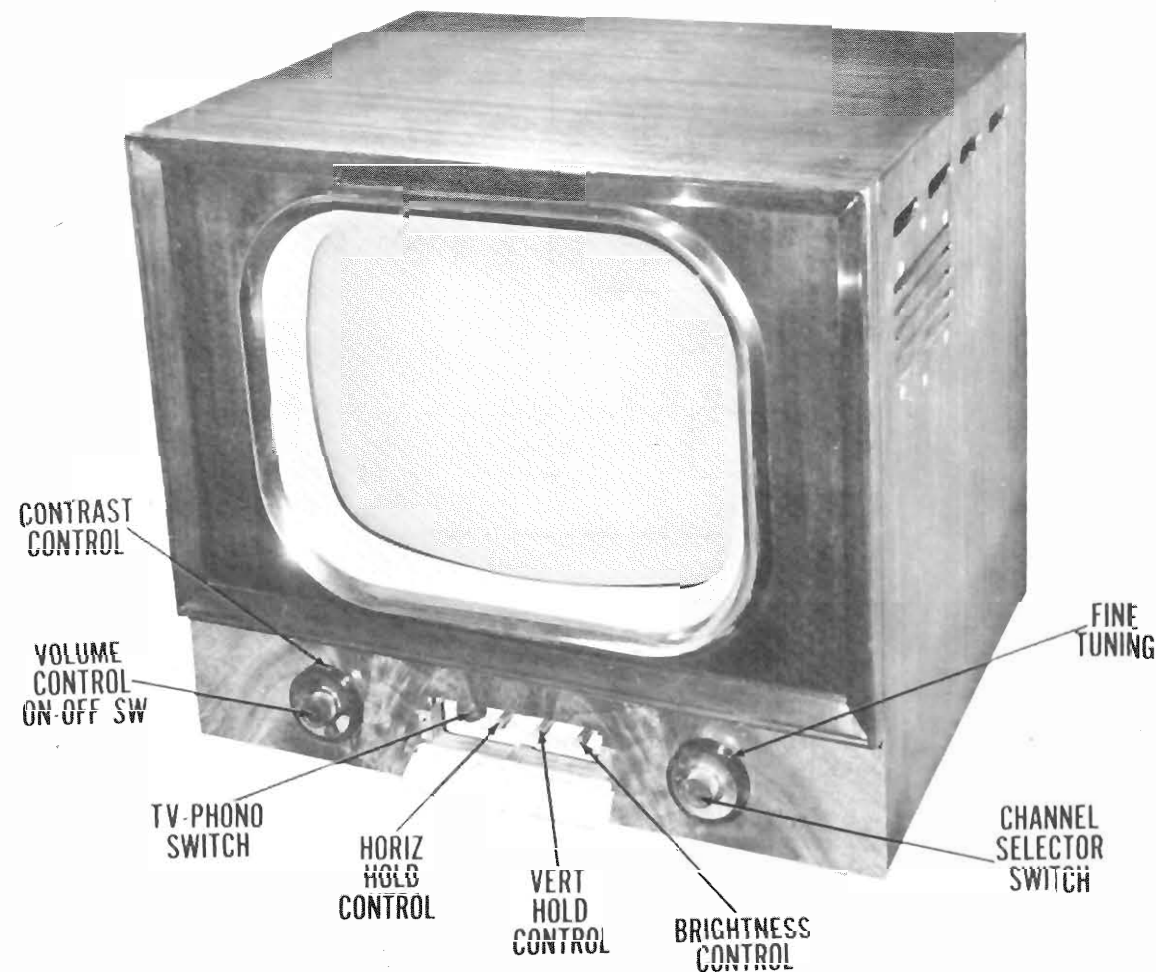


CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION



TELE-TONE MODELS TV-330, TV-331, TV-332, TV-333, TV-355, TV-357, TV-360, TV-365

TELE-TONE MODEL TV365	
TRADE NAME	Tele-Tone Models TV330, TV331, TV332, TV333 (Ch. TA0) TV355, TV357, TV360, TV365 (Ch. 8001, 2, 3)
MANUFACTURER	Tele-Tone Radio Corp., 540 West 58th Street New York, N. Y.
TYPE SET	Television Receiver
TUBES	Twenty One
POWER SUPPLY	110-120 Volts AC-60 Cycle
TUNING RANGE	Channels 2 thru 13
RATING	2.2 Amp. @ 117 Volts AC
INDEX	
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HOWARD W. SAMs & CO., INC. • Indianapolis 5, Indiana

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DATE 9-51

SET 145

FOLDER 11

CONTRAST  
CONTROL

VOLUME  
CONTROL  
ON-OFF SW

TV-PI  
SW

TRADE NAME	Tele-
MANUFACTURER	Tele-
TYPE SET	Tele-
TUBES	Twen

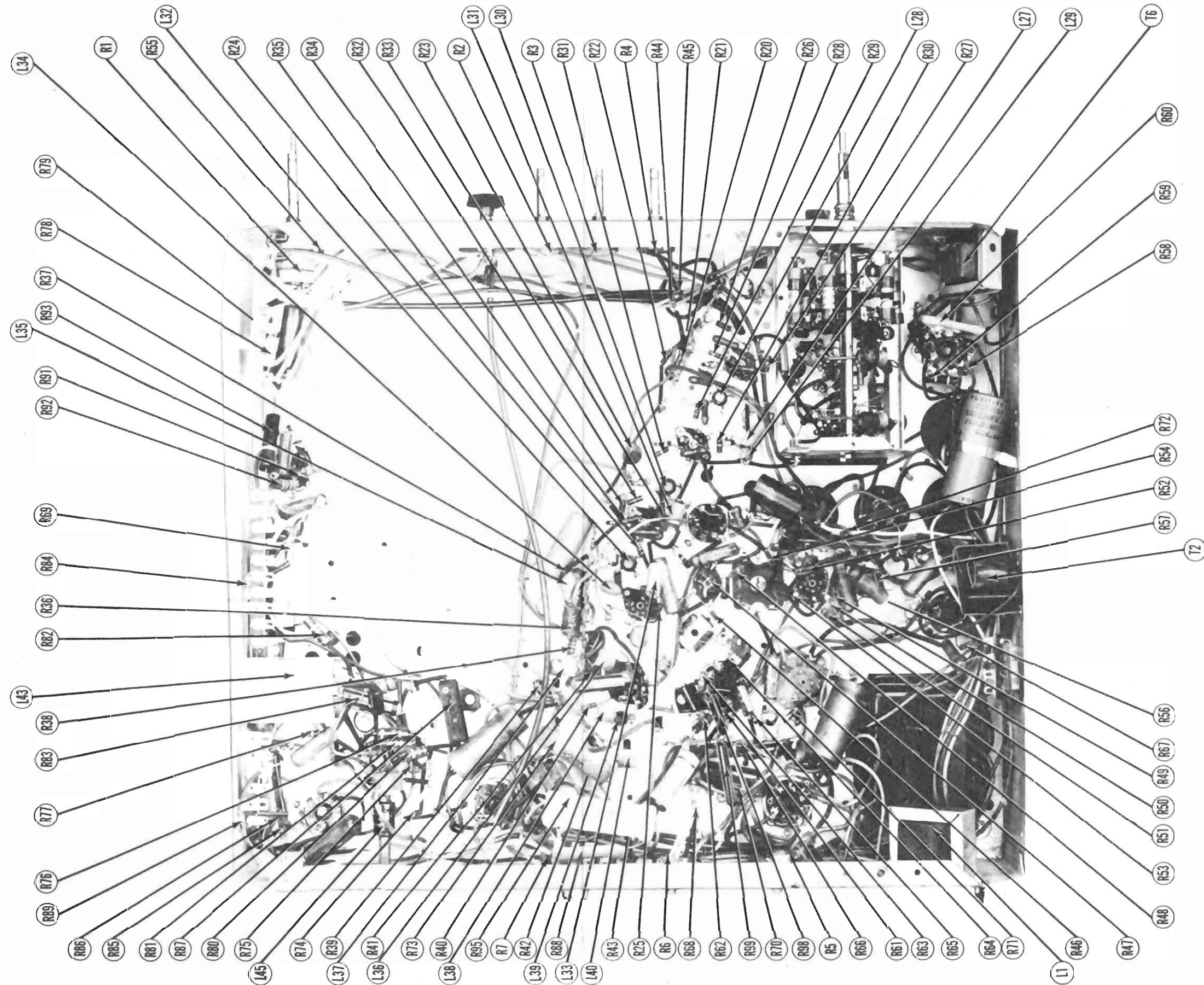
POWER SUPPLY	110-12
TUNING RANGE—Char	

Alignment Instruc
Drive Cord String
Disassembly Insti
Horizontal Sweep
Parts List And De
Photographs
Cabinet - Res
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"The listing of any available re  
case a recommendation, warre  
as to the quality and suitability  
parts have been compiled from  
Inc., by the manufacturers of t  
"reproduction or use, without

# CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION





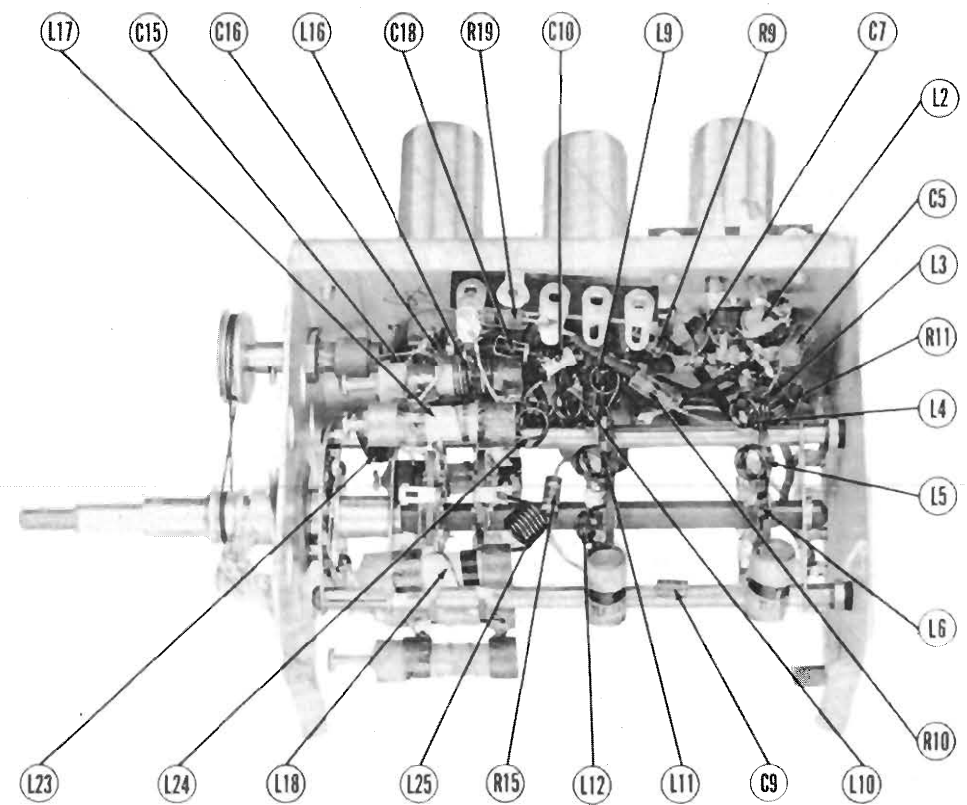
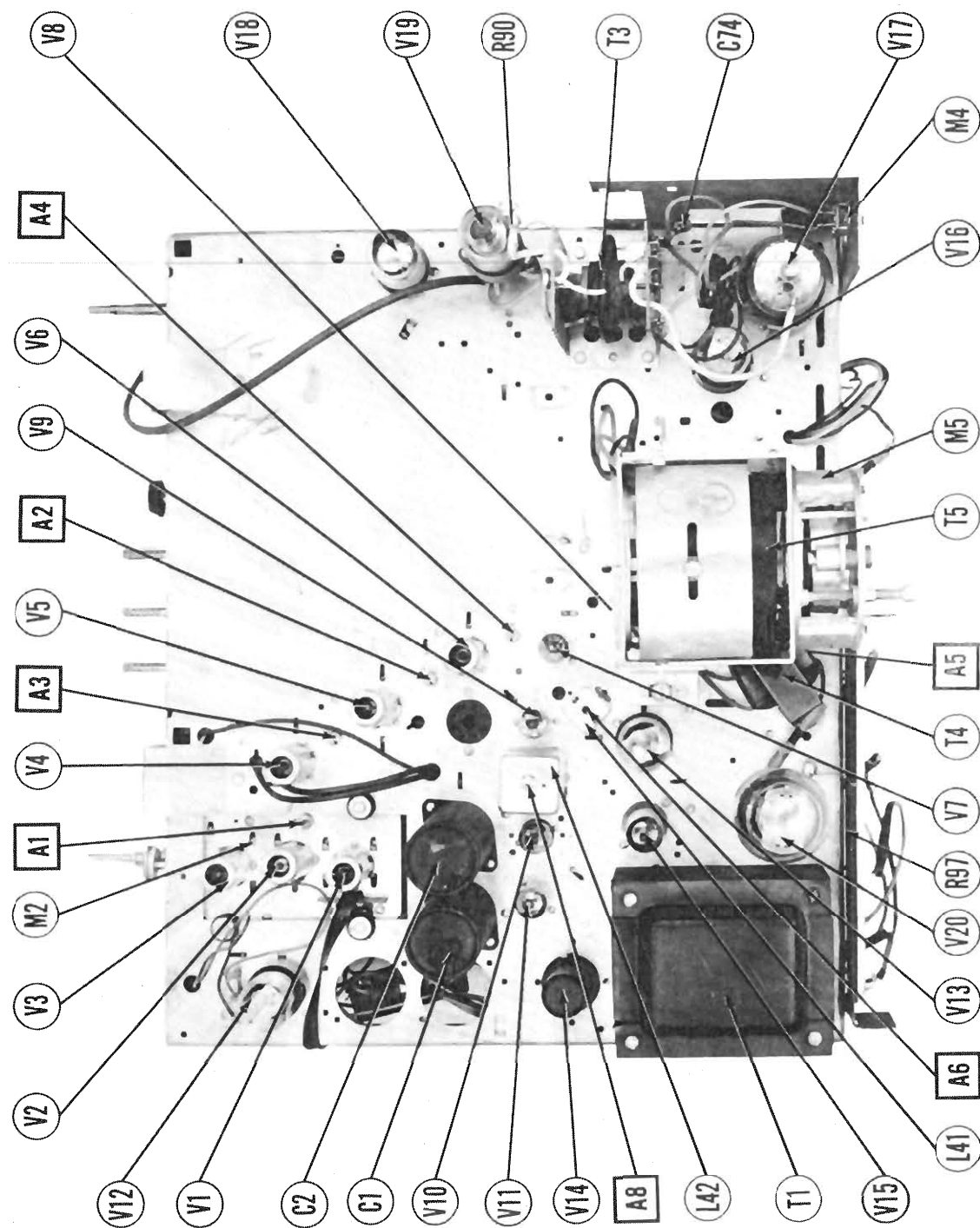




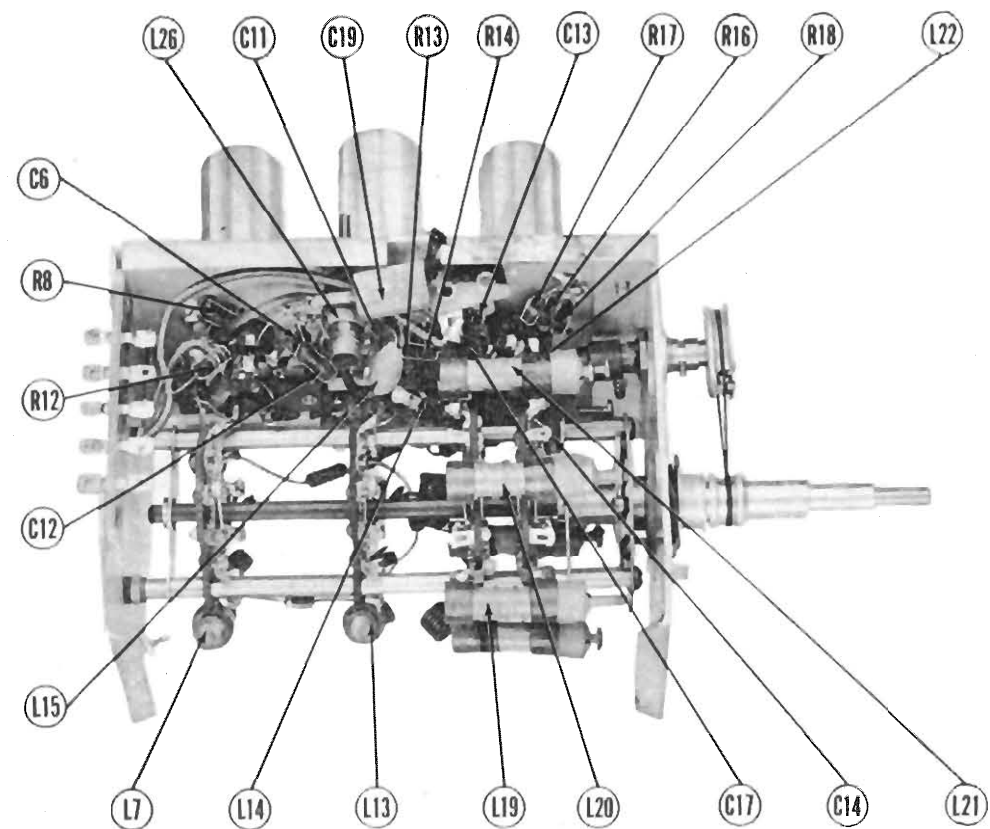
TELE-TONE MODELS TV-330, TV-331, TV-332,  
TV-333, TV-355, TV-357, TV-360, TV-365

**TELE-TONE MODELS TV-330, TV-331, TV-332,  
TV-333, TV-355, TV-357, TV-360, TV-365**

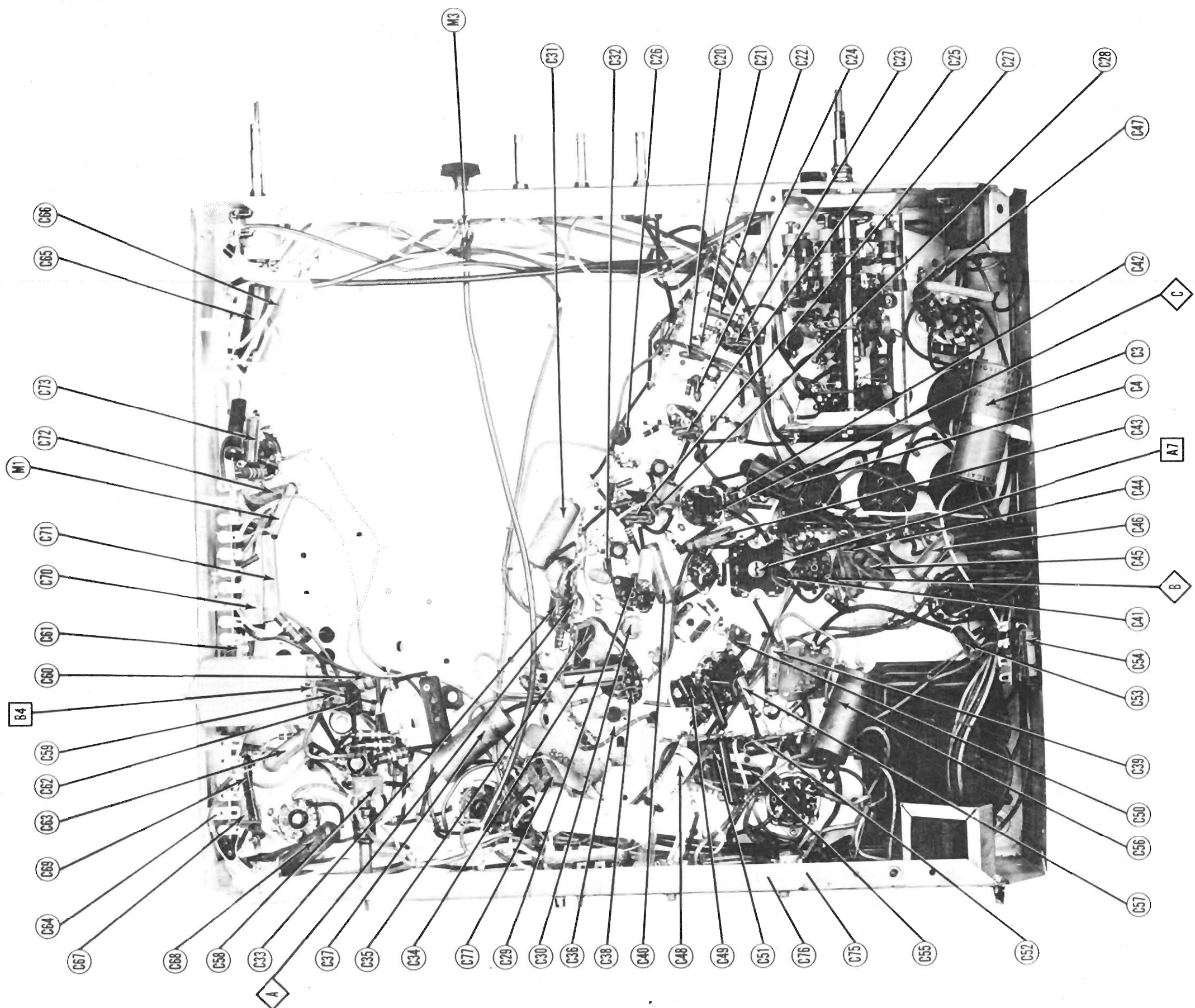
MAIN TOP VIEW CHASSIS



RF TUNER-RIGHT SIDE



RF TUNER-LEFT SIDE



TELE-TONE MODELS TV-330, TV-331, TV-332,  
TV-333, TV-355, TV-357, TV-360, TV-365

# 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	6J6	100VDC	100VDC	6.3VAC	0V	-4VDC	-4VDC	0V		
V 2	6AG5	-2.8VDC	0V	6.3VAC	0V	115VDC	115VDC	0V		
V 3	6J6	100VDC	100VDC	6.3VAC	0V	8-1.7VDC	8-1.7VDC	4VDC		
V 4	6CB6	-2VDC	6VDC	0V	6.3VAC	120VDC	120VDC	0V		
V 5	6CB6	-1VDC	6VDC	0V	6.3VAC	125VDC	125VDC	0V		
V 6	6CB6	0V	8VDC	0V	6.3VAC	130VDC	130VDC	0V		
V 7	6AL5	0V	0V	6.3VAC	0V	8VDC	0V	-1VDC		
V 8	12AU7	135VDC	-6VDC	1.1VDC	6.3VAC	125VDC	125VDC	-6VDC	6VDC	0V
V 9	6AU6	0V	0V	6.3VAC	130VDC	130VDC	130VDC	1.5VDC		
V 10	6AL5	2VDC	-2VDC	1.2VAC	0V	0V	0V	0V		
V 11	6AV6	-4VDC	0V	6.3VAC	0V	0V	65VDC			
V 12	6K4GT	360VDC	0V	200VDC	1.3VDC	0V	6.3VAC	15VDC		
V 13	6SN7GT	-4.8VDC	165VDC	0V	-25VDC	250VDC	3.3VDC	6.3VAC	0V	
V 14	6SR7	0V	1-20VDC	0V	-5VDC	36VDC	36VDC	6.3VAC	0V	
V 15	6S4	0V	28VDC	0V	6.3VAC	0V	0V	0V	0V	530VDC
V 16	6SN7GT	8-18VDC	170VDC	3.8VDC	200VDC	200VDC	0V	6.3VAC	0V	
V 17	6BG6G	0V	0V	3VDC	0V	4.9VDC	0V	6.3VAC	285VDC	Top Cap
V 18	6W4GT	500VDC	0V	500VDC	500VDC	260VDC	0V	10V	6.3VAC	Top Cap
V 19	1B3GT	* DO NOT MEASURE								
V 20	5U4G	0V	275VDC	0V	270VAC	0V	270VAC	0V	275VDC	
V 21	17BP4	10V	195VDC	500VDC	PIN 12 16.3VAC	PIN 11 155VDC	H. V. CONNECTOR ** 12K. V.			

ALL MEASUREMENTS TAKEN WITH PICTURE TUBE REMOVED  
† MEASURED FROM -90VDC LINE  
‡ MEASURED FROM 250VDC LINE  
\* DO NOT MEASURE  
\*\* USE EXTREME CAUTION WHEN MEASURING THIS VOLTAGE  
‡ TAKEN WITH VACUUM TUBE VOLTMETER

RESISTANCE READINGS

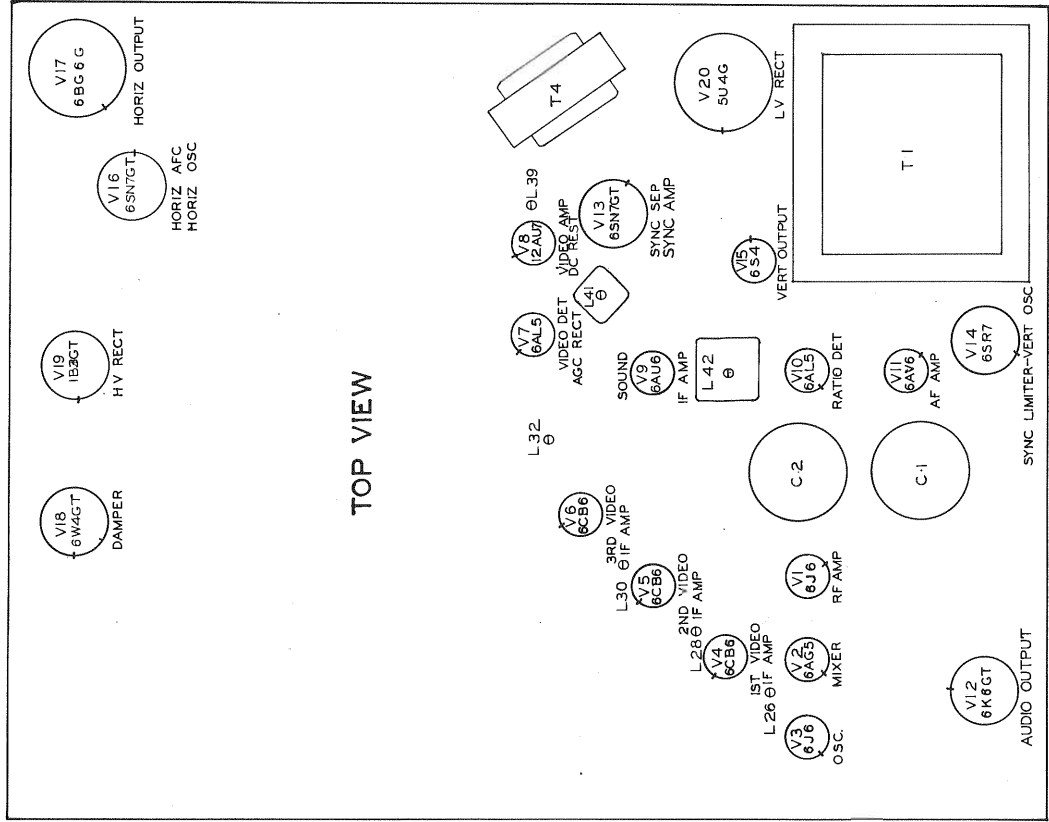
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6J6	12.6KΩ	12.6KΩ	.1Ω	0Ω	1.2Meg	1.2Meg	0Ω		
V 2	6AG5	100KΩ	0Ω	.1Ω	0Ω	12.6KΩ	12.6KΩ	0Ω		
V 3	6J6	12.6KΩ	12.6KΩ	.1Ω	0Ω	27KΩ	27KΩ	47Ω		
V 4	6CB6	700KΩ	47Ω	0Ω	.1Ω	12.3KΩ	12.3KΩ	0Ω		
V 5	6CB6	680KΩ	47Ω	0Ω	.1Ω	12.3KΩ	12.3KΩ	0Ω		
V 6	6CB6	.3Ω	100Ω	0Ω	.1Ω	12.3KΩ	12.3KΩ	0Ω		
V 7	6AL5	.4Ω	120KΩ	.1Ω	0Ω	1.1KΩ	0Ω	3.9KΩ		
V 8	12AU7	14.6KΩ	1Meg	5KΩ	.1Ω	12.4KΩ	12.4KΩ	1Meg	47Ω	0Ω
V 9	6AU6	1.6Ω	0Ω	0Ω	.1Ω	12.3KΩ	12.3KΩ	180Ω		
V 10	6AL5	15KΩ	15KΩ	2.5Ω	.1Ω	Inf.	0Ω	Inf.		
V 11	6AV6	10Meg	0Ω	0Ω	.1Ω	0Ω	0Ω	1330KΩ		
V 12	6K4GT	150Ω	0Ω	14.2KΩ	13.5KΩ	470KΩ	0Ω	.1Ω	390Ω	
V 13	6SN7GT	1Meg	115KΩ	0Ω	3.9Meg	1300Ω	6.8KΩ	.1Ω	0Ω	
V 14	6SR7	0Ω	1.2Meg	0Ω	3.9Meg	3.9Meg	1325KΩ	.1Ω	0Ω	
V 15	6S4	Inf.	5.8KΩ	2.2Meg	.1Ω	0Ω	2.2Meg	Inf.	Inf.	9.2KΩ
V 16	6SN7GT	1.5Meg	115KΩ	40KΩ	480KΩ	195KΩ	0Ω	.1Ω	0Ω	Top Cap
V 17	6BG6G	Inf.	0Ω	100Ω	Inf.	11Meg	Inf.	.1Ω	14.8KΩ	80Ω
V 18	6W4GT	415KΩ	Inf.	300KΩ	2.2KΩ	162Ω	Inf.	10Ω	1Ω	Top Cap
V 19	1B3GT	PINS 1-8 HAVE INF. RESISTANCE								
V 20	5U4G	Inf.	8KΩ	Inf.	750Ω	Inf.	750Ω	Inf.	8KΩ	
V 21	17BP4	1Ω	14.3KΩ	455KΩ	110KΩ	1.1Ω				

ALL MEASUREMENTS TAKEN WITH PICTURE TUBE REMOVED  
† MEASURED FROM PIN 2 OF V20  
‡ MEASURED FROM PIN 3 OF V18  
\* MEASURED FROM 250VDC LINE  
‡ MEASURED FROM -90VDC LINE

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

TELE-TONE MODELS TV-330, TV-331, TV-332,  
TV-333, TV-335, TV-357, TV-360, TV-365





ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
The high voltage shock hazard may be eliminated by removing the horizontal oscillator tube, (V16), from its socket.							
VIDEO IF ALIGNMENT							
Remove the local oscillator tube, (V3), from its socket to prevent the possibility of erroneous indications. Connect the negative lead of a 3 volt battery to the ungrounded lead of C31, connect the positive lead to chassis.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS	
Direct	High side to an ungrounded tube shield floating over mixer tube, (V2). Low side to chassis.	36.9MC (unmod.)	Any	DC probe to Point A. Common to chassis.	A1, A2	Adjust for maximum deflection.	
"	"	34.8MC	"	"	A3, A4	"	
OVERALL VIDEO IF RESPONSE CHECK							
Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Direct	High side to an ungrounded tube shield floating over mixer tube, (V2). Low side to chassis.	35MC (10MC SWP)	32.8MC 37.3MC	Any	Vert. Amp. to Point A. Low side to chassis.		Check for response curve similar to fig. 1. If necessary retouch A1, A2, A3, and A4 for proper response.
4.5MC TRAP ADJUSTMENT							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
.01MFD.	High side to pin 7, (Grid) of 12AU7, (V8). Low side to chassis.	Not used	4.5MC (400% Mod.)	Any	Vert. Amp. to pin 2 of picture tube. Low side to chassis.	A5	Adjust for MINIMUM 400% indication on scope. After alignment is completed, connect an antenna and tune in a test pattern. Retouch A5 for maximum vertical wedge definition.
SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS	
.01MFD.	High side to pin 7, (Grid) of 12AU7, (V8). Low side to chassis.	4.5MC (unmod.)	Any	DC probe to Point B. Common to chassis.	A6, A7	Adjust for maximum deflection.	
"	"	"	"	DC probe to Point C. Common to chassis.	A8	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							
Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
.01MFD.	High side to pin 7, (Grid) of 12AU7, (V8). Low side to chassis.	4.5MC (450KC SWP)	4.5MC	Any	Vert. Amp. to Point B. Low side to chassis.	A6, A7	Disconnect stabilizer capacitor C4. Adjust for maximum amplitude and symmetry as per fig. 2.
"	"	"	"	"	Vert. Amp. to Point C. Low side to chassis.	A8	Reconnect capacitor C4. Adjust A3 so 4.5MC occurs at center of crossover lines as per fig. 3. SLIGHTLY retouch A7 for maximum amplitude and straightness of crossover lines.

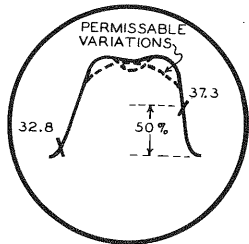


FIG. 1

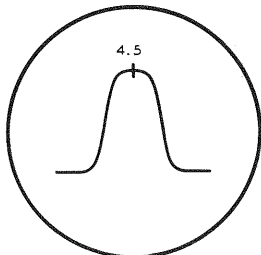


FIG. 2

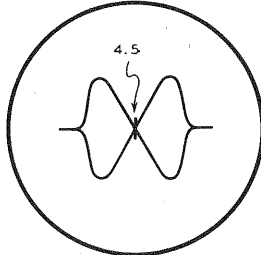


FIG. 3

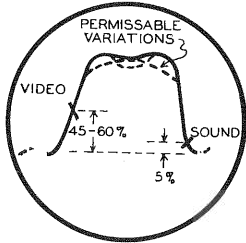
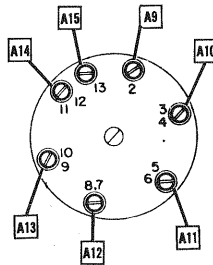


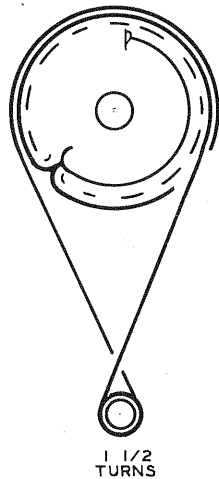
FIG. 4



OSCILLATOR ALIGNMENT POINTS

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT							
Replace the local oscillator tube, (V3), in its socket. The oscillator coils for channels 3 thru 12 are paired with one variable and two fixed coils, therefore only the channels on which the receiver is to operate should be aligned. Since the channel 2 coil is parallel with all other oscillator coils, it is important that channel be aligned first. The order of alignment for the remaining channels is not important. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
7. Two 1200 carbon resistors	Across antenna terminals with 120Ω in each lead.	57MC (10MC SWP)	55.25MC 54.75MC	2	Vert. Amp. to Point A. Low side to chassis.	A9	Adjust to place sound marker as shown in fig. 4. The video marker should be at 50%.
8. "	"	63MC (10MC SWP) 69MC (10MC SWP)	61.25MC 65.75MC 67.25MC 71.75MC	3 or 4	"	A10	"
9. "	"	79MC (10MC SWP) 85MC (10MC SWP)	77.25MC 81.75MC 83.25MC 87.75MC	5 or 6	"	A11	"
10. "	"	177MC (10MC SWP) 183MC (10MC SWP)	175.25MC 179.75MC 181.25MC 185.75MC	7 or 8	"	A12	"
11. "	"	189MC (10MC SWP) 195MC (10MC SWP)	187.25MC 191.75MC 193.25MC 197.75MC	9 or 10	"	A13	"
12. "	"	201MC (10MC SWP) 207MC (10MC SWP)	199.25MC 203.75MC 205.25MC 209.75MC	11 or 12	"	A14	"
13. "	"	213MC (10MC SWP)	211.25MC 215.75MC	13	"	A15	"
THE RF AND MIXER PORTION OF THIS RECEIVER HAS BEEN PROPERLY ALIGNED AT THE FACTORY AND IS VERY STABLE. ALIGNMENT OF THIS PORTION SHOULD NOT BE REQUIRED IN THE FIELD.							



COUNTER-CLOCKWISE

1 1/2 TURNS

FINE TUNING DRIVE CORD STRINGING DISASSEMBLY INSTRUCTIONS

1. Remove four push-on type control knobs.
2. Remove ten wood screws from rear cover. Remove rear cover.
3. Disconnect built-in antenna.
4. Disconnect antenna terminal strip.
5. Disconnect speaker.
6. Remove four 3/8" hex head bolts from chassis. Remove chassis.
7. Remove two 1/4" hex nuts from speaker. Remove speaker.

NOTE: For picture tube removal it is necessary to remove the chassis as outlined above.

TELE-TONE MODELS TV-330, TV-331, TV-332, TV-333, TV-355, TV-357, TV-360, TV-365



PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	TOTAL DIRECT CURRENT	RATINGS		INDUCTANCE (0 CURRENT 1000 $\mu$ )	REPLACEMENT DATA				INSTALLATION NOTES
		D. C. RESISTANCE			TELE-TONE PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.250A	37 $\Omega$		1Henry	TTR-106-2D	C-2326 ①	C-2996 ①	TR-3300 ①	① Drill one new mounting hole.

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	TELE-TONE PART No.	MEISSNER PART No.	
L2	Ant. Matching Trans.	0 $\Omega$		TLF365-D		
L3	Ant. Coil	0 $\Omega$		TLF128-D		Channel #2
L4	Ant. Coil	0 $\Omega$		TLF129-D		Channel #3
L5	Ant. Coil	0 $\Omega$		TLF129-D		Channel #4
L6	Ant. Coil	0 $\Omega$		TLF130-D		Channel #5
L7	Ant. Coil	0 $\Omega$		TLF143-D		Channel #6
L8	Ant. Coil	0 $\Omega$		TLF138-D		
L9	Mixer Grid Coil	0 $\Omega$		TLF128-D		Channel #2
L10	Mixer Grid Coil	0 $\Omega$		TLF129-D		Channel #3
L11	Mixer Grid Coil	0 $\Omega$		TLF129-D		Channel #4
L12	Mixer Grid Coil	0 $\Omega$		TLF130-D		Channel #5
L13	Mixer Grid Coil	0 $\Omega$		TLF143-D		Channel #6
L14	Mixer Grid Coil	0 $\Omega$		TLF138-D		
L15	RF Choke	2.7 $\Omega$		TLF146-D		
L16	Osc. Coil	0 $\Omega$		TLF120-1		Channel #2
L17	Osc. Coil	0 $\Omega$		TLF120-3		Channel #3 and 4
L18	Osc. Coil	0 $\Omega$		TLF120-5		Channel #5 and 6
L19	Osc. Coil	0 $\Omega$		TLF120-6		Channel #7 and 8
L20	Osc. Coil	0 $\Omega$		TLF120-9		Channel #9 and 10
L21	Osc. Coil	0 $\Omega$		TLF120-10		Channel #11 and 12
L22	Osc. Coil	0 $\Omega$		TLF120-10		Channel #13
L23	Incremental coil	0 $\Omega$		TLF542-D		
L24	Incremental Coil	0 $\Omega$		TLF542-D		
L25	Incremental Coil	0 $\Omega$		TLF541-D		
L26	1st. Video IF Fil. Choke	.8 $\Omega$		TLF551-D		
L27	2nd. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF520-D		
L28	3rd. Video IF Fil. Choke	.3 $\Omega$	.3 $\Omega$	TLF567-D		
L29	4th. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF520-D		
L30	5th. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF567-10		
L31	6th. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF520-D		
L32	7th. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF567-10		
L33	8th. Video IF Fil. Choke	.4 $\Omega$	.4 $\Omega$	TLF520-D		
L34	RF Choke	2.8 $\Omega$		TLF146-D		
L35	Peaking	6.5 $\Omega$		TLF135-D	19-1921	15 Microhenries
L36	Peaking	6.5 $\Omega$		TLF135-D	19-1921 †	180 Microhenries (Orange and Purple Dot)
L37	Peaking	6.5 $\Omega$		TLF135-D	19-1921	180 Microhenries Wound on 22K $\Omega$ Resistor
L38	Peaking	8 $\Omega$		TLF562-D	19-1923	180 Microhenries (Orange and Purple Dot)
L39	4.5MCTrap	1.3 $\Omega$		TLF570-D		350 Microhenries (Red Dot)
L40	Peaking	5 $\Omega$		TLF502-D	19-1921 †	120 Microhenries wound on 22K $\Omega$ resistor
L41	Sound IF Ratio Det.	1.6 $\Omega$		TLF114-D		
L42	Trans.	6.1 $\Omega$	.6 $\Omega$	TLF582		Tap .6 $\Omega$
L43	Horiz. Osc.	(A-C)34 $\Omega$	(C-F)60 $\Omega$	TLF566-D		(C-D)40 $\Omega$
L44	Width Coil	25 $\Omega$		TLF553-D		Not used in all models
L45	Horiz. Lin.	36 $\Omega$		TLF506-DA		

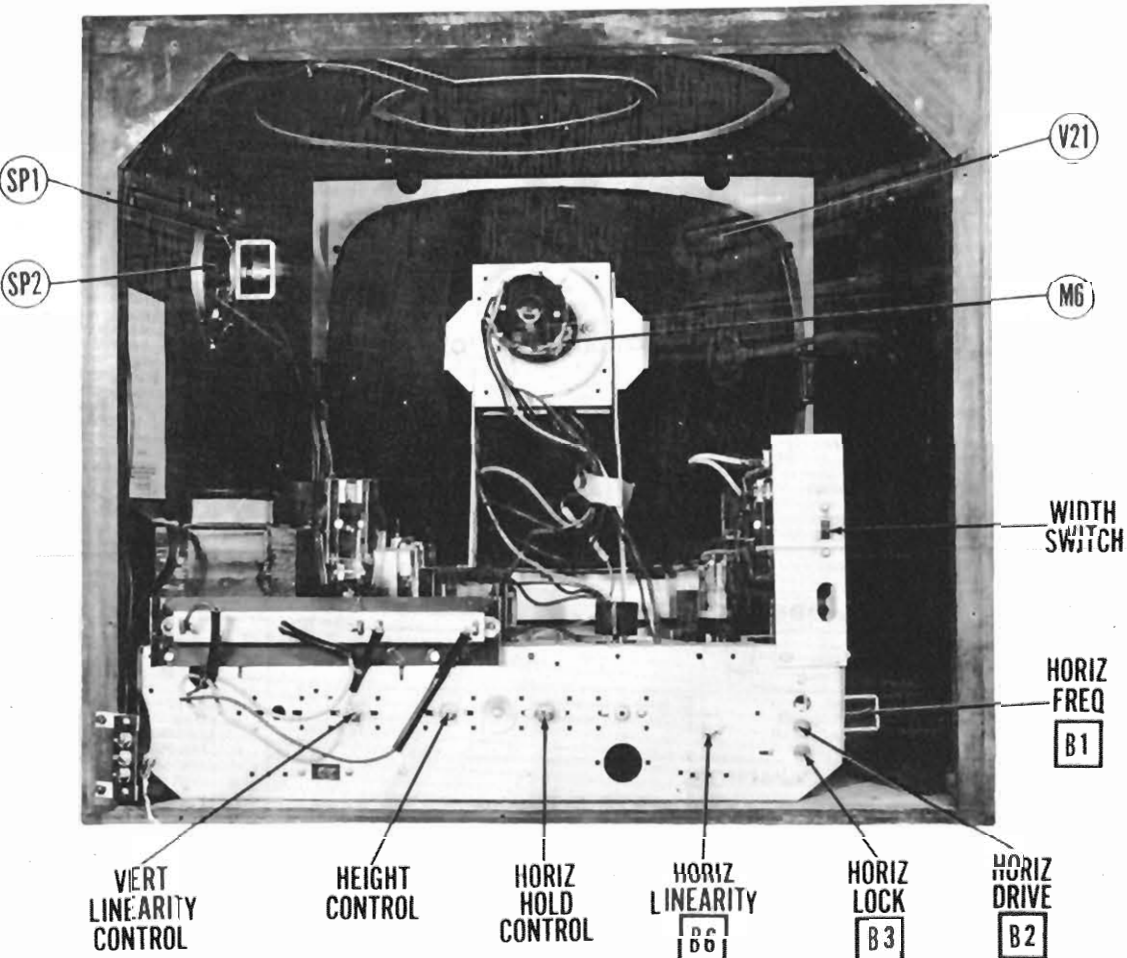
† Parallel with 22K $\Omega$  Resistor

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				REMARKS
			TELE-TONE PART No.		LITTELFUSE PART No.		
			FUSE	HOLDER	FUSE	HOLDER	
M1	3AG Pigtail	.025			318.250		

MISCELLANEOUS

ITEM No.	PART NAME	TELE-TONE PART No.	NOTES
M2	RF Tuner	TSW210-D	TV-Phono
M3	Switch	TSW301	Width
M4	Switch	TPM103-D	
M5	Focus Magnet		
M6	Ion Trap	TAS541-D	(Double) Horiz. Lock 4-70MMF
B3, B2	Trimmer		Horiz. Drive 10-16MMF
	Glass	TGL-172-D	Panel-TV-365 and 335
	Glass	TGL174-3-D	Panel-TV-357
	Glass	TGL175-D	Panel-TV-360
	Knob	TKN262-D	Panel-TV-355, 357, 360 and 365
	Knob	TKN257-D	Fine Tuning TV-355, 357, 360 and 365
	Knob	TKN260-D	Off/on-Volume TV-355, 357, 360 and 365
	Knob	TKN265-D	Contrast
	Knob		



CABINET-REAR VIEW  
HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Pre-set the horizontal lock trimmer, (B3), one turn counter-clockwise from tight and the horizontal drive trimmer, (B2), two turns counter-clockwise from tight.  
Connect a short across terminals C and D of L43.  
Turn the set on and tune in a TV station, preferably a test pattern.  
Turn the horizontal hold control to fully clockwise.  
Adjust the horizontal frequency slug, (B1), until the picture synchronizes horizontally.  
Adjust the horizontal drive trimmer, (B2), clockwise just far enough to remove any bright vertical lines, or crowding in the picture.  
If the picture falls out of synchronization readjust B1.  
Turn the hold control to fully counter-clockwise and momentarily interrupt the signal by switching to another channel and back again.  
Slowly turn the hold control clockwise and carefully note the least number of sloping bars present just before the picture pulls into synchronization. There should be 7 to 9 bars present. If less than 7 bars are present, turn the horizontal lock trimmer, (B3), slightly counter-clockwise. If more than 9 bars are present turn B3 slightly clockwise, and repeat the check.  
Remove the short from L43, and connect the vertical input lead of an oscilloscope through 22K $\Omega$  to terminal C of L43.  
Turn the hold control to the mid-position of its range.  
Adjust the horizontal phasing slug, (B4), until the broad and narrow peaks of the wave form on the scope are of equal height as shown in figure 5.  
If necessary during adjustment of B4, adjust B1 to keep the picture synchronized.  
Remove the oscilloscope and turn the hold control to maximum counter-clockwise and momentarily interrupt the signal.  
Slowly turn the hold control clockwise and carefully note the least number of sloping bars present just before the picture synchronizes. If less than 3½ or more than 4½ bars are present, adjust B3 slightly and repeat the check.  
The picture should remain in synchronization over at least ¾ of the hold control range.  
Adjust the horizontal linearity slug, (B6), until the picture is symmetrical from left to right.  
Since the horizontal drive trimmer effects both width and horizontal linearity, it may be necessary to retouch it for optimum results. However if the horizontal drive is changed a significant amount, recheck the horizontal oscillator alignment.

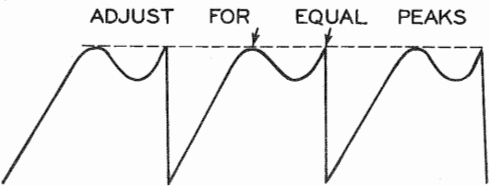


FIG. 5

TELE-TONE MODELS TV-330, TV-331, TV-332, TV-333, TV-355, TV-357, TV-360, TV-365

## PARTS LIST AND DESCRIPTIONS

## TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		TELE-TONE PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	
V1	RF Amplifier	6J6	6J6	7BF	
V2	Mixer	6AG5	6AG5	7BD	
V3	Oscillator	6J6	6J6	7BF	
V4	1st. Video IF Amp.	6CB6	6CB6	6CK	
V5	2nd. Video IF Amp.	6CB6	6CB6	6CK	
V6	3rd. Video IF Amp.	6CB6	6CB6	6CK	
V7	Video Detector-AGC Rectifier	6AL5	6AL5	6BT	
V8	Video Amplifier	12AU7	12AU7	9A	
V9	Sound IF Amp.	6AU6	6AU6	7BK	
V10	Ratio Detector	6AL5	6AL5	6BT	
V11A	AF Amplifier	6AV6	6AV6	7BT	
B	AF Amplifier	6AT6	6AT6	7BT	
V12	Audio Output	6K6GT	6K6GT	7S	
V13A	Sync. Separator-Sync. Amplifier	6SN7GT	6SN7GT	8BD	
B	Sync. Separator-Sync. Amplifier	7N7	7N7	7AC	
V14A	Sync. Limiter-Vert. Oscillator	6SR7	6SR7	8Q	
B	Sync. Limiter-Vert. Oscillator	6BF6	6BF6	7BT	
V15	Vertical Output	6S4	6S4	9AC	
V16A	Horizontal AFC-Horiz. Oscillator	6SN7GT	6SN7GT	8BD	
B	Horizontal AFC-Horiz. Oscillator	7N7	7N7	7AC	
V17	Horiz. Output	6BG6G	6BG6G	5BT	
V18	Damper	6W4GT	6W4GT	4CG	
V19	HV Rectifier	1B3GT	1B3GT	3C	
V20	LV Rectifier	5U4G	5U4G	5T	

## CATHODE-RAY TUBE

ITEM No.	TELE-TONE PART No.	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		SYLVANIA PART No.	THOMAS PART No.		
V21A	17BP4	17BP4A	17BP4		④ Space Permitting
B	16TP4	16TP4	16KP4 ④		⑤ Use single magnet ion trap
C	16PP4	16PP4	16KP4		
D	16XP4	16XP4 ⑤	16KP4 ⑤		

## CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA					SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES		
	CAP.	VOLTS	TELE-TONE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.				
C1A	10	475	TCE147-D	AF2X12J61	25B	UPT413		TVL-4811	• Vert. Amp. Decoup.		
B	80	450							• Filter		
C	30	400							• Filter		
D	125	50							Vert. Amp. Cathode		
C2A	80	450	TCE148-D	AF16J216G	8B	UPT412		TVL-4770	• Filter		
B	10	400							• Vert. Osc. Dec.		
C	30	300							• Decoupling		
D	40	150							Bias Filter		
C3A	20	400	TCE154-D	PR5450/20-20		UP2045C		TVA-3716	Audio Output Decoupling		
B	25	25							Audio Output Cathode		
C	5	250							Stabilizing Cap.		
D	5	250							RF Amp. Decoupling		
C4	5	250	TCE104-D	PR5150/4	BR425			TVA-1402	RF Amp. Grid		
C5	220		TCC221-7	SI220					GP2K-221	5GA-T22	RF Amp. Grid
C6	500		TCC501-GM	SI500					GP2K-501	5GA-T5	RF Amp. Grid
C7	500		TCC501-GM	SI500					GP2K-501	5GA-T5	RF Amp. Grid
C8	220		TCC221-7	SI220	D6-221	GP2K-221	5GA-T22	RF Coupling			
C9	1		TCC010-1	ICZ-1	NP0K-010	NP0K-010	RF Coupling				
C10	2.2		TCC22-12	ICZ-2.2	NP0K-2R2	NP0K-2R2	RF Coupling				
C11	5000		TCC502-SP	BPD-005	ID-502	811-005	5HK-D5	Mixer Decoupling			
C12	220		TCC221-7	SI220	D6-221	GP2K-221	5GA-T22	Mixer Fil.			
C13	220		TCC221-7	SI220	D6-221	GP2K-221	5GA-T22	RF Bypass			
C14	220		TCC221-7	SI220	D6-221	GP2K-221	5GA-T22	RF Bypass			
C15	4.7		TCC4.7-II			N750K-4R7		Osc. Feedback			
C16	4.7		TCC4.7-II			N750K-4R7		Osc. Feedback			
C17	220		TCC221-7	SI220	D6-221	GP2K-221	5GA-T22	Osc. Fil.			
C18	68		TCC068-8		ICZ-1.68	NP0K-R68		Osc. Coupling			
C19	270	500	TCC271-7	1469-0003	D6-270	GP2K-271	MS-33	IF Coupling			
C20	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	RF Bypass			
C21	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	AGC Filter			
C22	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	AGC Filter			
C23	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	1st. Video IF Dec.			
C24	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	AGC Filter			
C25	1500		TCC152-SP	SI1500	D6-152	1W5D15	5HK-D15	2nd. Video IF Dec.			
C26	5000		TCC502-SP	BPD-005	ID-502	811-005	5HK-D5	RF Bypass			
C27	5000		TCC502-SP	BPD-005	ID-502	811-005	5HK-D5	1st. Video IF Dec.			
C28	5000		TCC502-SP	BPD-005	ID-502	811-005	5HK-D5	3rd. Video IF Cathode			
C29	470		TCC471-10	SI470	D6-471	5GT5	GP2K-471	5GA-T47			
C30	5000		TCC502-SP	BPD-005	ID-502	D5D5	811-005	5HK-D5			
C31	.25	200	TCP254-1	P488-25	G72P25		2TM-P25	5HK-D5			
C32	5	500	TCC050-8	1469-000005	IRV5		NP0K-050	Video Det. Filter			
C33	.05	280	TCCPM503-1	P288-05	DF-503	PTE485		2TM-55			
C34	.047	400	TCCPM503-4	P488-047	DF-503	PTE485		4TM-847			
C35	.005	400	TCCPM503-4	P488-047	DF-502	PTE485	GP2-333-502	4TM-D5			
C36	.68		TCC068-8	SI68	D6-681	5G7P25	GPIK-680	Video Amp. Cathode			
C37	.22	400	TCCPM254-4	P488-22				4TM-P22			
C38	2.2		TCC2-2.7		ICZ-2.2	NP0K-2R2	GP2-333-103	4TM-S1			
C39	.01	400	TCP103-4	P488-01	DF-103	PTE481		2TM-S2			
C40	.02	200	TCP203-1	P488-02	DF-203	PTE482		4TM-S2			
C41A	2000		TCC2-1	BPD-2X002	ID-3-202	1W5D2	8B-002	5HK-D2D			
E	2000					1W5D2		Diode Load Cap.			
C42	1500		TCC152-SP	SI1500	D6-152	1W5D15	G2L-1-E2	De-emphasis			
C43	.002	600	TCP202-10	P688-002	D6-202	PTE6D2	G2-333-212	6TM-D2			
C44	.04	400	TCP103-4	P488-04	D6-103	PTE481	G2-333-103	4TM-S1			
C45	.001	600	TCP102-10	P688-001	D6-102	PTE6D1	G2L-1-D2	6TM-D1			
C46	.01	400	TCP103-4	P488-01	D6-103	PTE481	G2-333-103	4TM-S1			
C47	.0047	600	TCCPM503-10	P688-0047	D6-472	PTE6D5	G2-333-472	6TM-D47			
C48	.05	400	TCCPM502-4	P488-05	D7-503	PTE485		4TM-S5			