

## CABINET-REAR VIEW

### HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

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

Set the Brightness and Contrast Controls for a normal picture.

Turn the Horizontal Hold (Freq. Slug) clockwise until the picture loses sync. It may be necessary to switch off channel and back again for picture to lose sync.

Turn the Horizontal Hold slowly counterclockwise until the picture just falls into sync.

Adjust Width Control for a picture SLIGHTLY wider than necessary to fill picture mask horizontally.

### DISASSEMBLY INSTRUCTIONS

#### CHASSIS REMOVAL MODEL 127

1. Remove 7 push-on type knobs at front of cabinet.
2. Remove 6 screws holding rear cover. Remove rear cover.
3. Remove 1 screw supporting vertical hold control shaft and knob.
4. Remove antenna terminal board from cabinet.
5. Remove picture tube socket, yoke, hi voltage lead, and speaker lead.
6. Remove 4 nuts holding tuner and control panel to cabinet.
7. Loosen 2 screws at rear (bottom) of cabinet holding chassis.

8. Lift chassis up and back to remove.

#### PICTURE TUBE REMOVAL

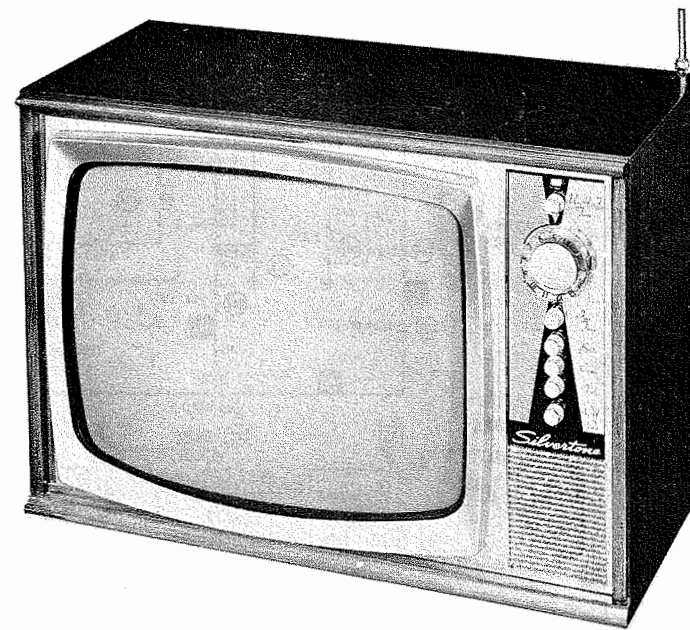
1. Remove 3 screws holding trim at top of cabinet. Tilt out and remove mask.
2. Remove rear cover.
3. Remove yoke, picture tube socket, and high voltage lead.
4. Remove 4 screws holding picture tube mounting to cabinet (at front).
5. Remove picture tube out front.

FOLDER 2  
SET 530

PHOTOFACT® Folder

with CIRCUITRACE®

SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)



MODEL 127 (Ch. 101.60200)

**CAUTION**  
ONE SIDE OF AC LINE CONNECTED TO CHASSIS.

TRADE NAME	SILVERTONE	MODELS 122, 124, 126 (Ch. 101.60100) 123, 125, 127 (Ch. 101.60200)
SUPPLIER	Sears, Roebuck & Co., 925 S. Homan Ave., Chicago, Illinois	
TYPE SET	Television Receiver	
TUBES	VHF - Sixteen, UHF - Seventeen	
POWER SUPPLY	110-120 Volts AC, 60 Cycle	RATING UHF - 155 Watts, 1.5 Amp. @ 117 Volts AC
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)	

### SERVICING IN THE FIELD

#### SAFETY GLASS REMOVAL

The safety glass is an integral part of the picture tube.

#### FUSE DEVICE

A Circuit Breaker is used for low voltage power supply protection, and may be reset by depressing the reset button. (For location, see "Tube Placement Chart".)

#### TUNER OSCILLATOR ADJUSTMENTS

To touch up VHF Oscillator, it is necessary to remove the tuner.

#### AGC

The AGC may be adjusted by means of an AGC Control. First tune in strongest channel in the area and set normal-strong switch to normal position. (For AGC Control and Switch location, see photo "Cabinet - Rear View".)

#### FOCUS

The focus may be varied by means of a Focus Control. (For location, see "Tube Placement Chart".)

#### HORIZONTAL OSCILLATOR FIELD ADJUSTMENTS

The Horizontal Frequency Slug is used for the Horizontal Hold. (For location, see "Tube Placement Chart".)

#### WIDTH

The width may be varied by a Width Control. (For location, see "Tube Placement Chart".)

#### BUZZ ADJUSTMENT

To eliminate intercarrier buzz, adjust the Ratio Detector secondary (All) located at top of chassis.

#### CENTERING

Centering is accomplished by 2 magnetic rings, located behind the yoke, on the neck of the picture tube.

SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)

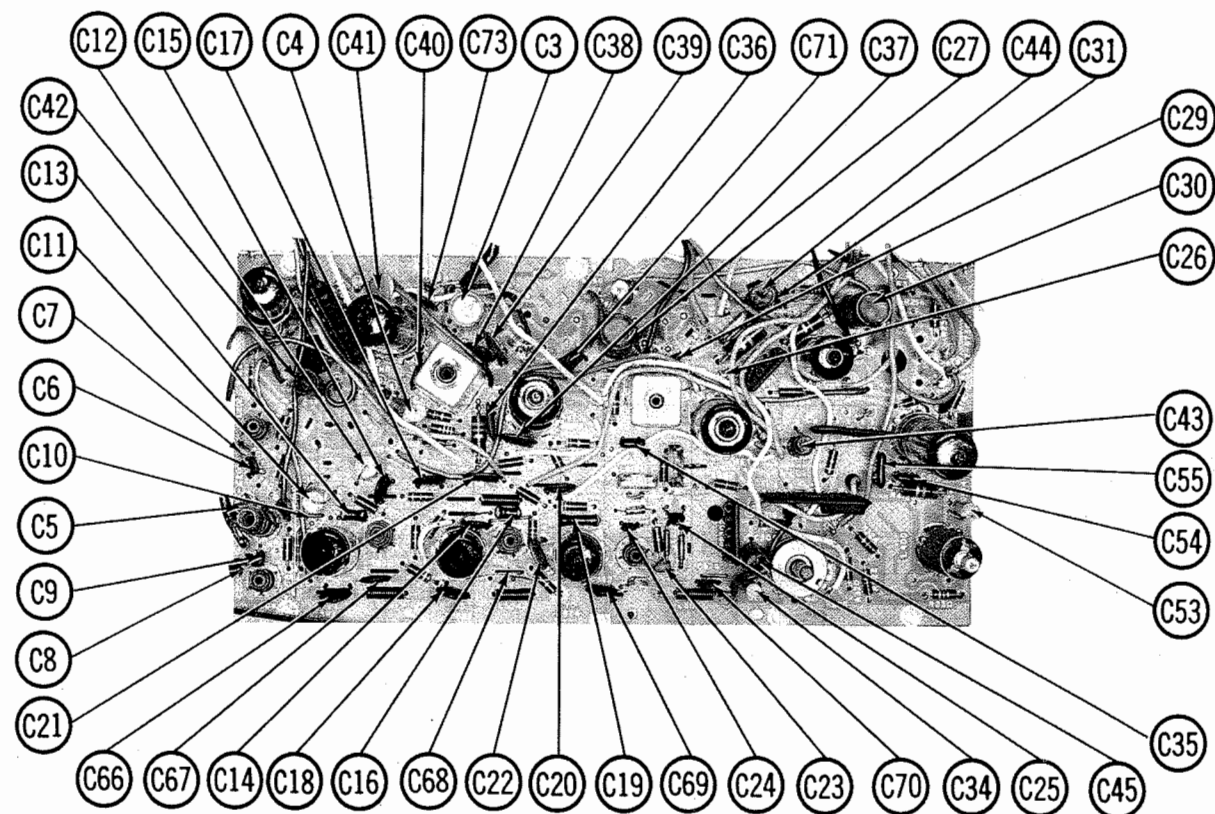
SET 530 FOLDER 2

### HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

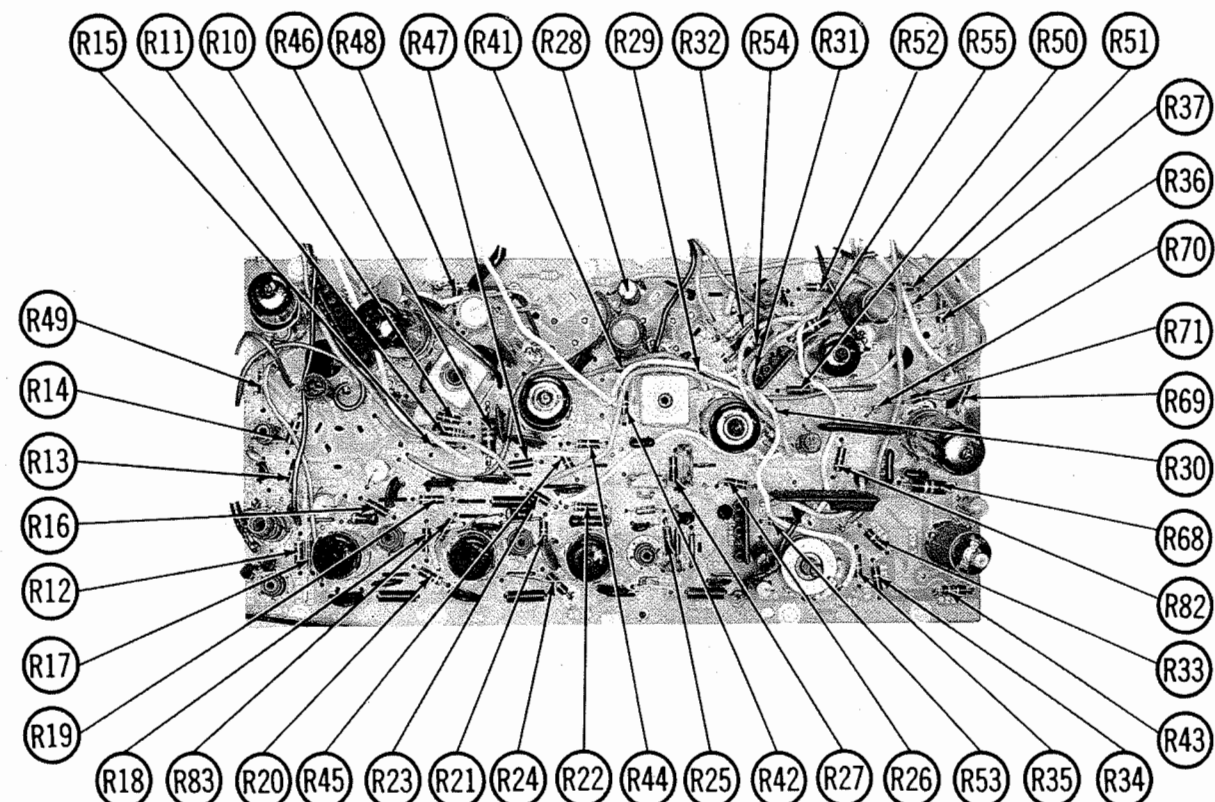
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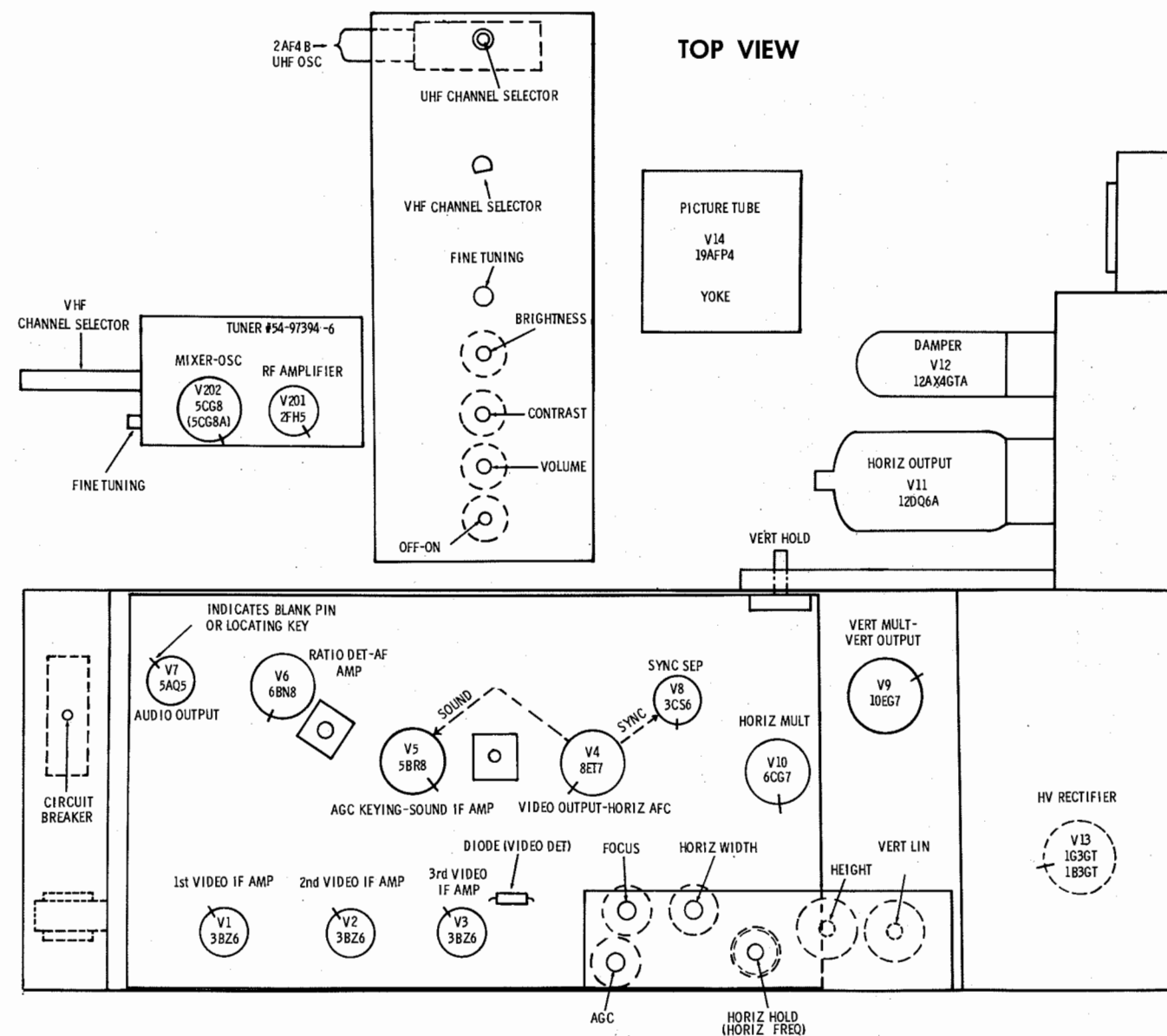


PRINTED BOARD - CAPACITOR IDENT.



PRINTED BOARD - RESISTOR IDENT.

## TUBE PLACEMENT CHART



SILVERTONE MODELS 122, 123, 124, 125, 126, 127 (Ch. 101.60100, 101.60200)

## TUBE FAILURE CHECK CHART

The following chart lists tubes whose failures are most likely to produce indicated symptoms. Refer to tube placement chart for location and type of tube.

### POWER SUPPLY FAILURE

No raster, no sound Circuit Breaker, Rectifiers (B+).

### SWEEP FAILURE

No raster, has sound V10, V11, V12, V13, V14  
No vertical deflection V9  
Poor vert. linearity or foldover V9  
Poor horiz. linearity or foldover V10, V11, V12  
Narrow picture V10, V11, V12, Rectifiers (B+)  
Vert. off freq. V9  
Horiz. off freq. V4, V10

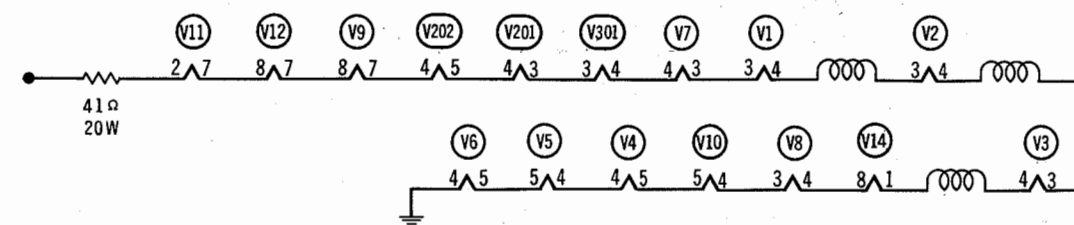
### LOSS OF PICTURE OR SOUND

No pic, no sound, has raster V1, V2, V3, Diode (Video Det.), V4  
No pic, no sound, has snow V201, V202, V301, V1  
No pic, has sound, has raster V4, V14  
Has pic, no sound V5, V6, V7  
Overloaded picture V5

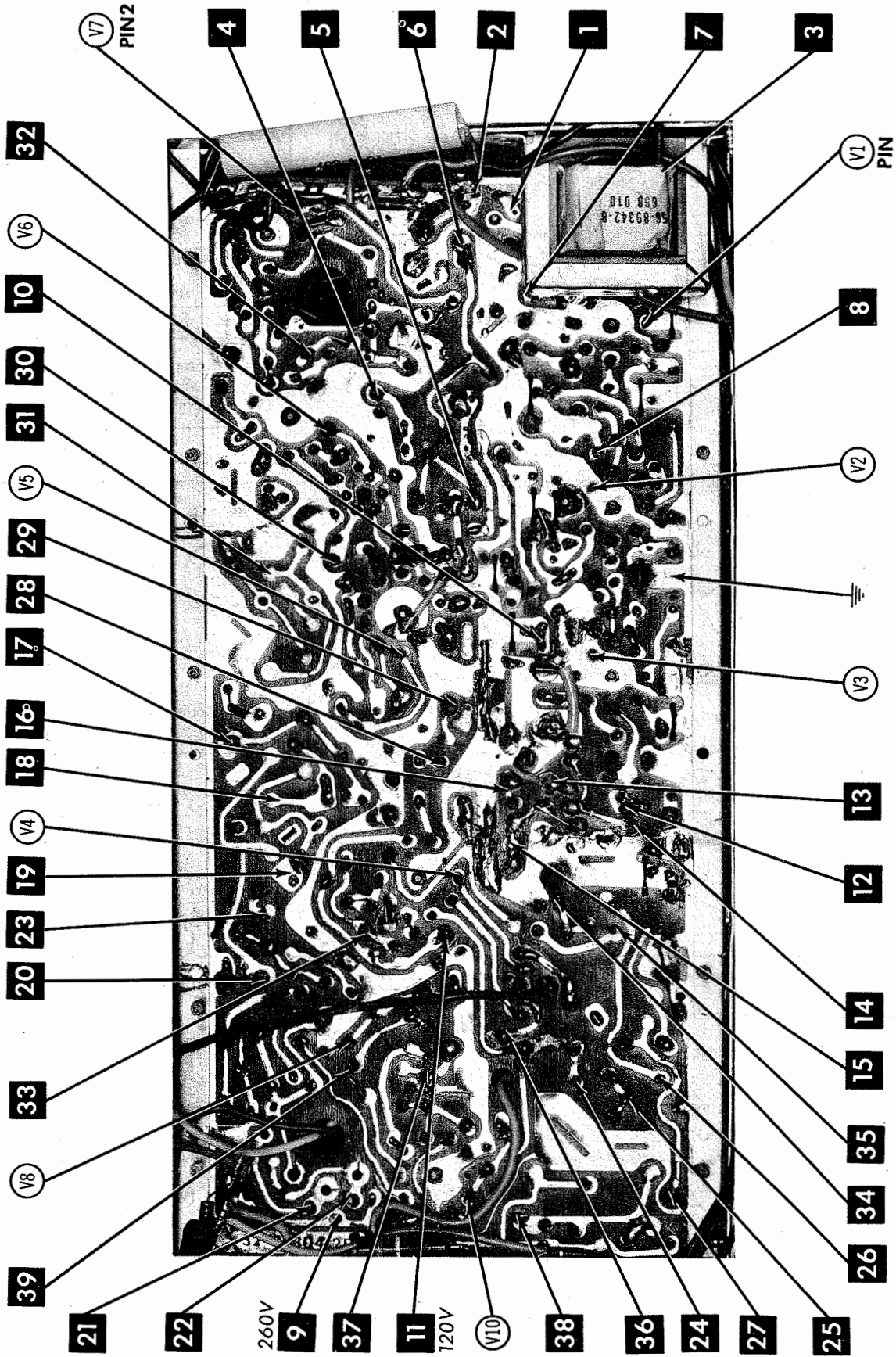
### SYNC FAILURE

No vert. sync V8  
No horiz. sync V8, V4  
No vert. or horiz. sync V8

This receiver employs tubes used in a series filament network, an open filament in any tube will cause the set to be inoperative. (See circuit below.)



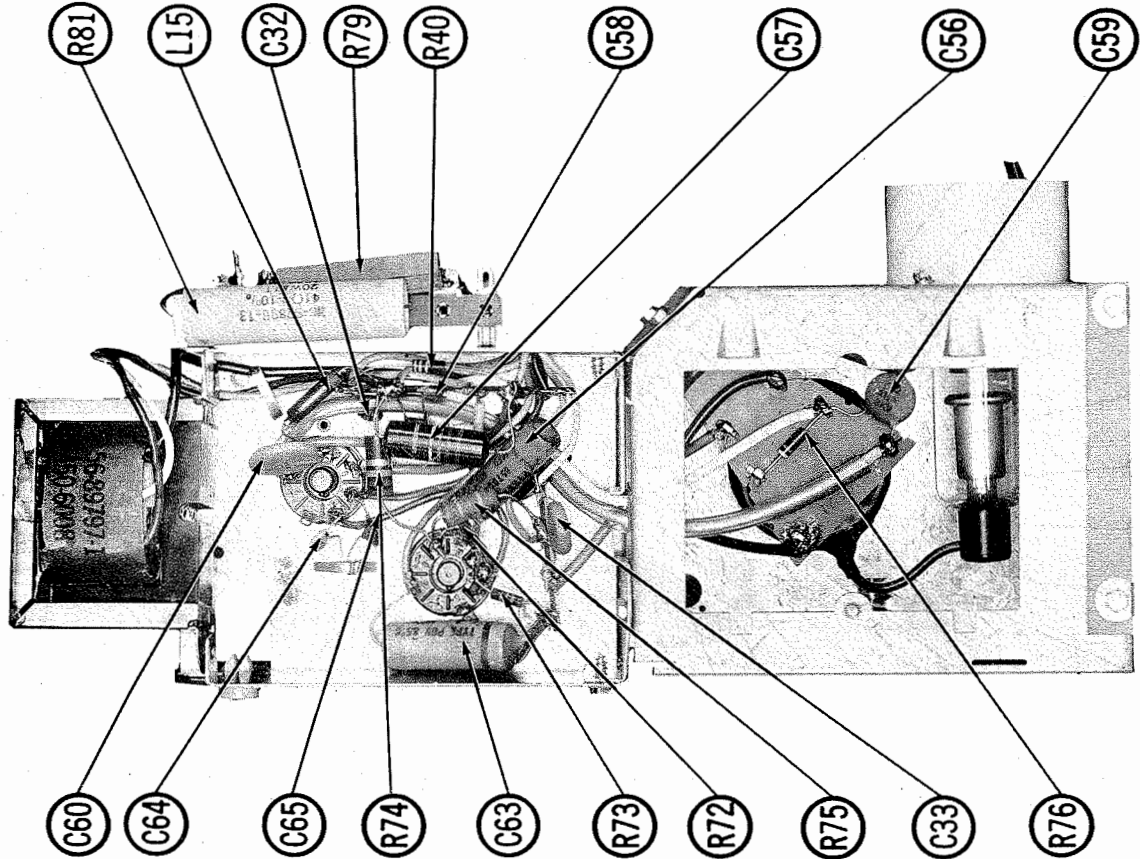




A Howard W. Sams CIRCUITRACE<sup>®</sup> Photo

PRINTED BOARD

ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



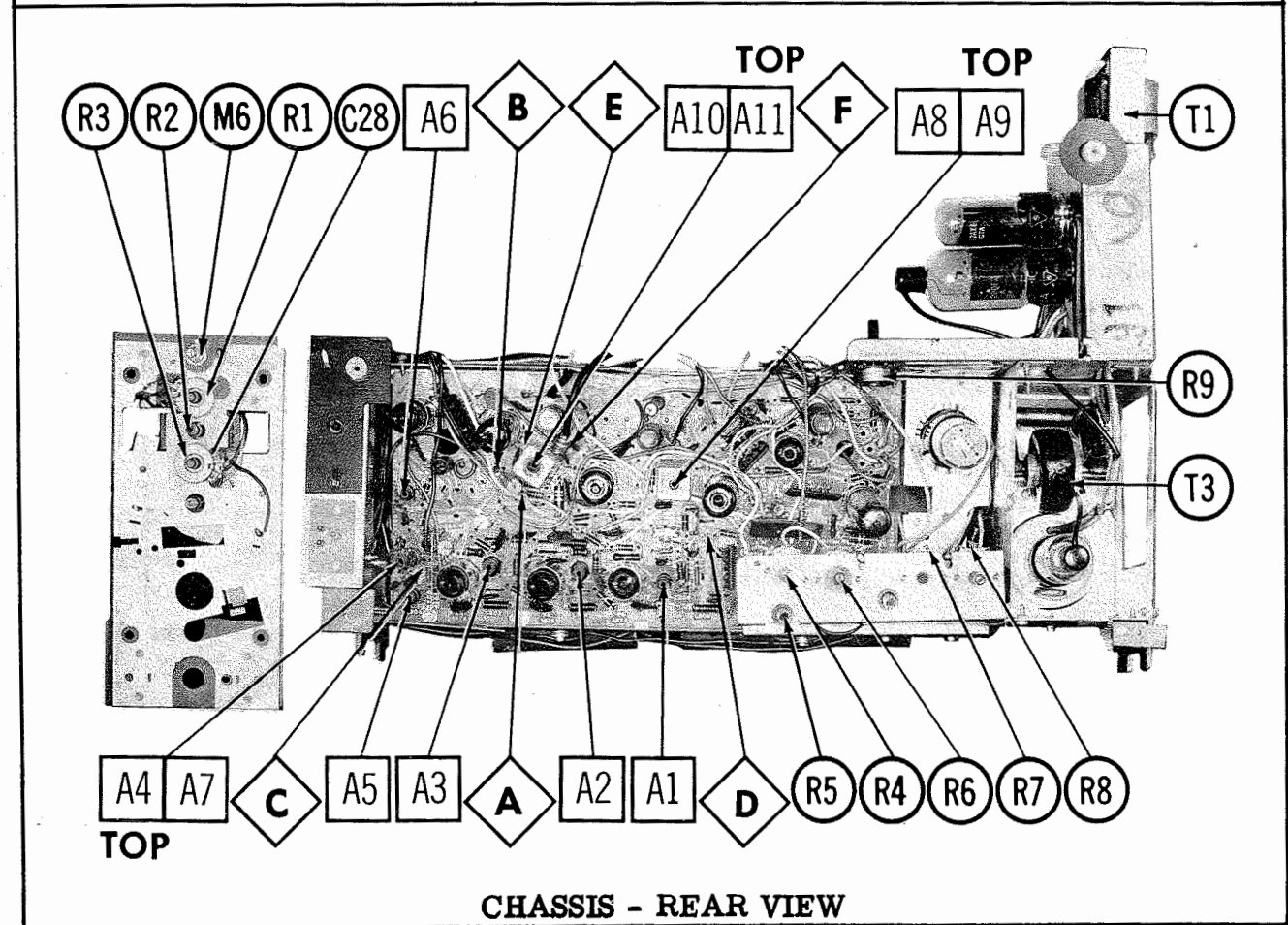
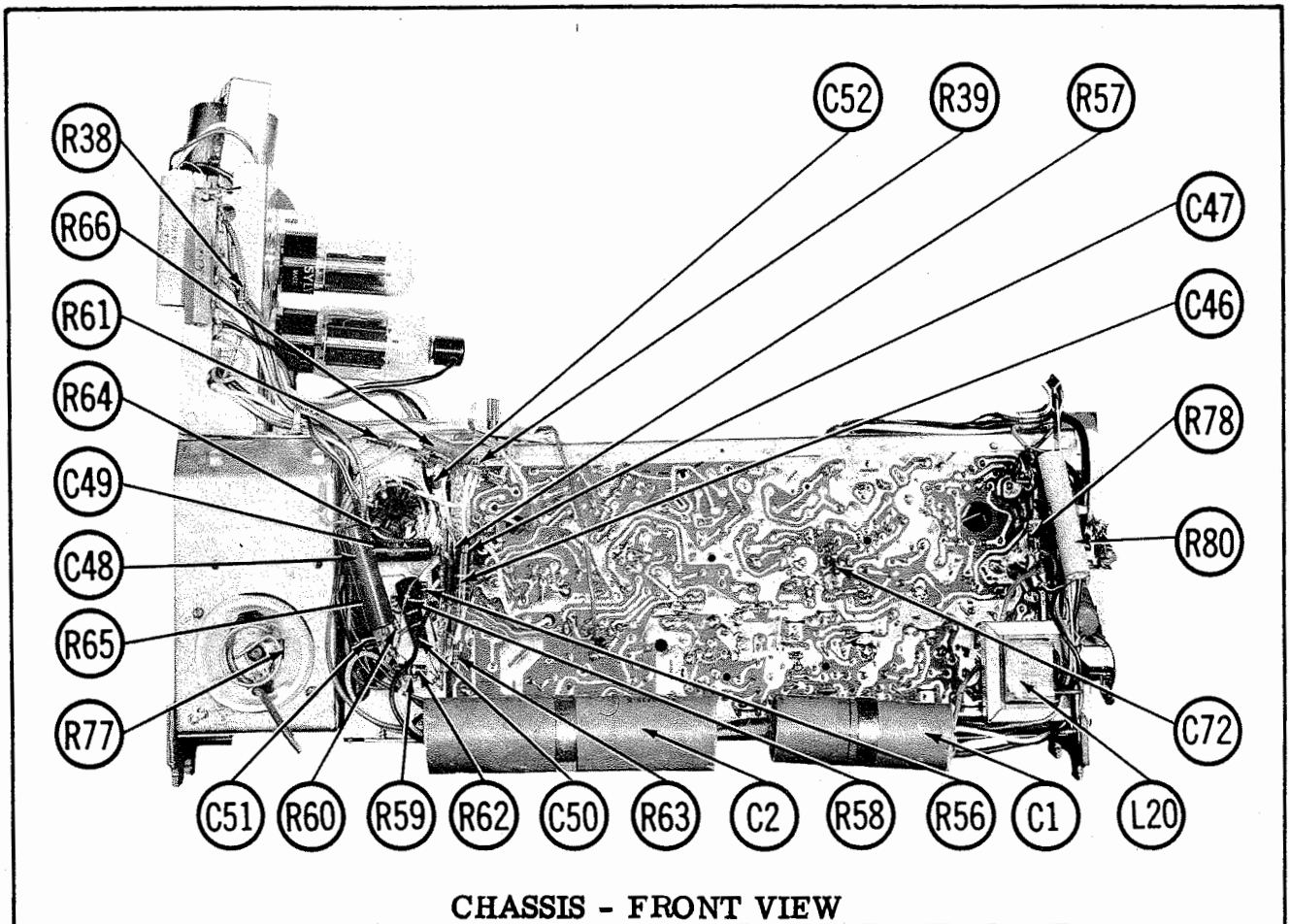
HORIZONTAL SWEEP SECTION

RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	3BZ6	325K	240Ω	14Ω	13Ω	140Ω	140Ω	0Ω		
V2	3BZ6	25K	INF	13Ω	12Ω	135Ω	135Ω	39Ω		
V3	3BZ6	.1Ω	180Ω	12Ω	11Ω	15400Ω	15400Ω	0Ω		
V4	8E7	330K	600K	2700Ω	4Ω	6Ω	27Ω	3300Ω	12700Ω	17000Ω
V5	5BR8	145K	320K	60K	4Ω	2Ω	156K	156K	220Ω	10K
V6	6BN8	INF	27K	INF	0Ω	2Ω	0Ω	1470K	10meg	0Ω
V7	5A05	NC	330Ω	14Ω	16Ω	1665Ω	12700Ω	470K		
V8	3C56	11meg	0Ω	8Ω	9Ω	20K	17200Ω	1.3meg		
V9	10EG7	1.6meg	1180Ω	470Ω	3meg	2meg	0Ω	20Ω	25Ω	
V10	6CG7	110K	800K	1000Ω	8Ω	6Ω	168K	96K	1000Ω	0Ω
V11	12DQ6A	NC	35Ω	NC	112K	270K	TP	30Ω	0Ω	TOP CAP 13Ω
V12	12AX4GT	NC	NC	1.2meg	NC	135Ω	TP	25Ω	30Ω	
V13	1G3GT 1B3GT			PINS 1 THRU 8	HAVE	INFINITE	RESISTANCE			TOP CAP 280Ω
V14	19AF4	11Ω	40K	14700	2.1meg	NC	NC	400K	9Ω	
V201	2FH5	0Ω	6.3meg	17Ω	18Ω	13700Ω	0Ω	0Ω		
V202	5C8	4700Ω	17400Ω	0Ω	20Ω	18Ω	13700Ω	12700Ω	0Ω	220K
V301	2AF4B	16000Ω	10K	17Ω	16Ω	0Ω	10K	16000Ω		
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9

THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.  
• MEASURED IN "UHF" POSITION.  
† MEASURED FROM PIN 3 OF V12.  
‡ MEASURED FROM PIN 2 OF V2.  
NC NO CONNECTION  
TP TIE POINT

SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)



# ALIGNMENT INSTRUCTIONS

## PRE-ALIGNMENT INSTRUCTIONS

Use an ISOLATION TRANSFORMER TO PROTECT the Test Equipment.  
 The High Voltage lead should be securely taped and kept away from the chassis.  
 Allow a 20 minute warm-up period for the receiver and test equipment.  
 Suggested Alignment Tools: GENERAL CEMENT # 8282, 8808, 8806L, 9295  
 WALSCO #2526, 2543, 2544, 2545

## VIDEO IF ALIGNMENT

Connect the negative lead of a 3.5 volt bias supply to point A. Positive to chassis.  
 Connect the negative lead of a 25 volt bias supply to point B. Positive to chassis.  
 If a separate marker generator is used, couple loosely to sweep generator output. Use low marker output. Keep all leads of generator and scope shielded and short as possible.  
 Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
 Detune Mixer Plate Coil by turning core fully counterclockwise. Detune A5.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	High side thru .0047 mfd to point C. Low side to chassis.	43.5MC (10MC Swp)	42.6MC 45.75MC	Any non-interfering channel	Vert. Amp. thru 33K to point D. Low side to chassis. (Across Video Det. load)	A1, A2, A3	Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown. A1 controls top of curve. A2 controls placement of 45.75MC marker and A3 controls placement of 42.6MC marker.
2.	Place a thin insulated metal strip between the Mixer-Osc. tube (V202) and tube shield. Connect the high side of sweep generator to the metal strip. Low side to chassis.	"	47.25MC	"	"	A4, A5	Adjust for MINIMUM response at 47.25MC marker as in Fig. 2.
3.	"	"	41.25MC	"	"	A6	Adjust to place marker in trap notch as in Fig. 2.
4.	"	"	42.6MC 45.75MC	"	"	Mixer Plate Coil & A7	Adjust for maximum gain and symmetry of response similar to Fig. 2 with markers as shown.

## 4.5MC TRAP ALIGNMENT

Set Contrast fully clockwise.  
 Set Brightness fully counterclockwise.  
 Connect the negative lead of a 30 volt bias supply to point A. Positive to chassis.  
 Connect a 4.5MC series tuned trap between pin 7 (cathode) of picture tube and chassis.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
5.	High side thru .0047 mfd to point D. Common to chassis. (Across Video Det. load)	4.5MC (Unmod)	Any non-interfering channel	RF probe across coil of 4.5MC series tuned circuit.	A8	Adjust for MINIMUM deflection.

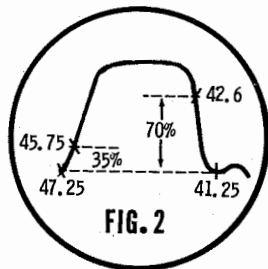
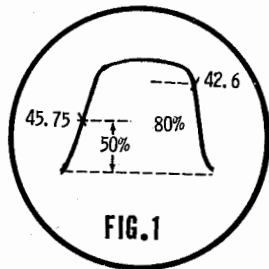
## ALTERNATE 4.5MC TRAP ALIGNMENT USING AIR SIGNAL

Tune in a strong TV signal and set Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible. Adjust A8 for MINIMUM beat interference.

## SOUND IF ALIGNMENT

Connect two matched 100K (±1%) resistors in series from point E to chassis. The junction of these two resistors is alignment point G as shown on the schematic.  
 Connect the negative lead of a 30 volt bias supply to point A. Positive to chassis.  
 Set Contrast fully clockwise.  
 Set Brightness fully counterclockwise.

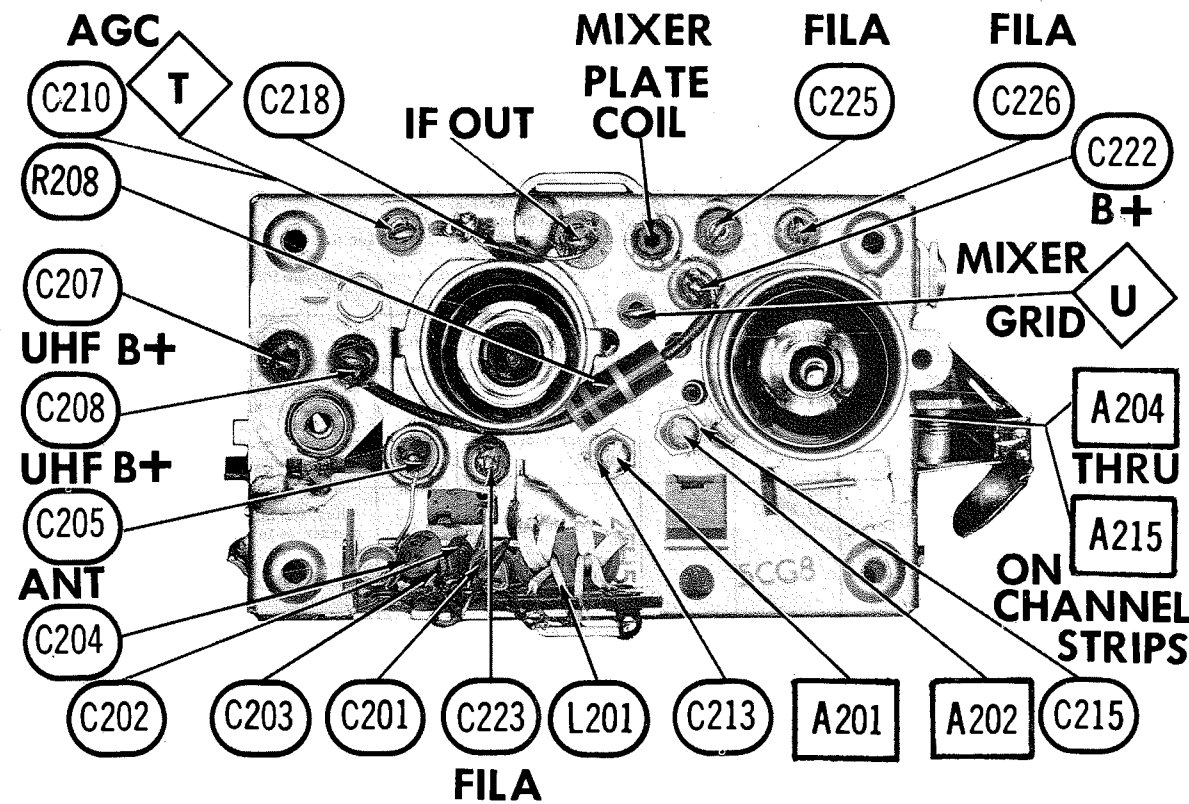
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
6.	High side thru .0047 mfd to point D. Low side to chassis.	4.5MC (Unmod)	Any non-interfering channel	DC probe thru 100K to point E. Common to chassis.	A9, A10	Adjust for maximum deflection.
7.	"	"	"	DC probe thru 100K to point G. Common to point D.	A11	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.



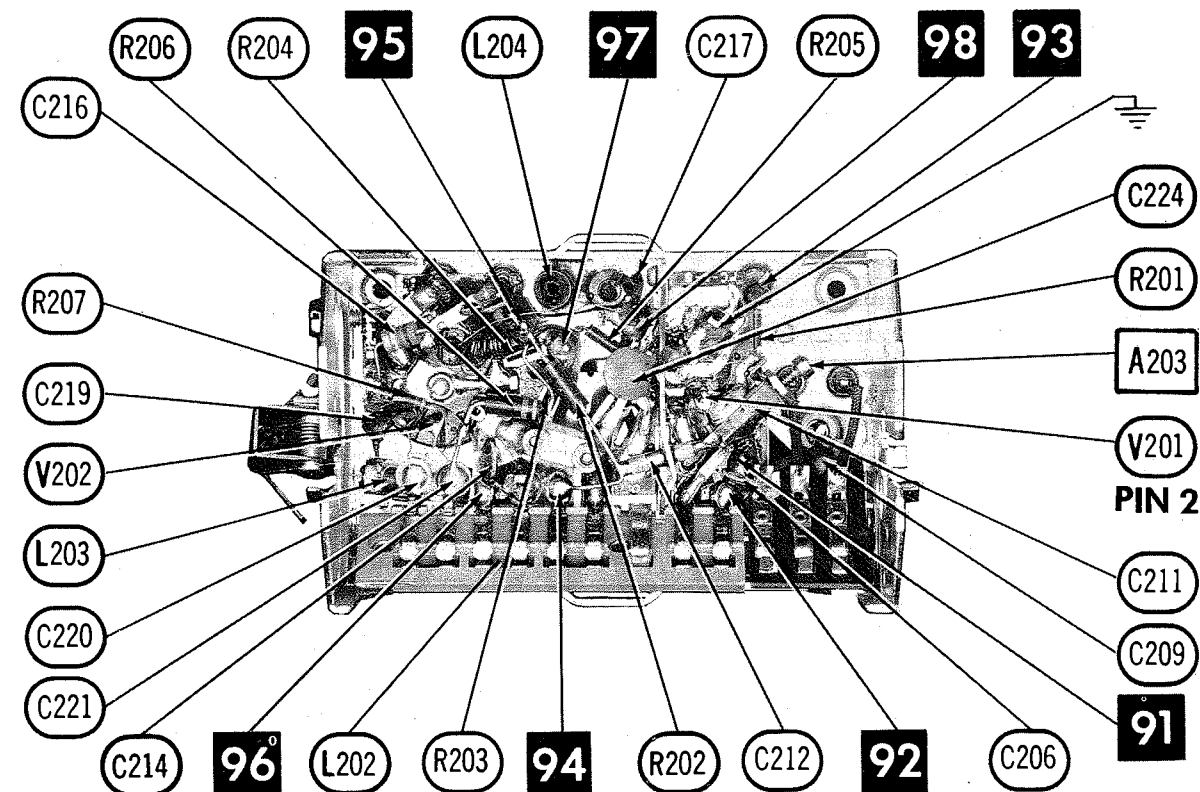
SILVERTONE MODELS 122, 123, 124, 125,  
 126, 127 (Ch. 101.60100, 101.60200)

FOLDER 2





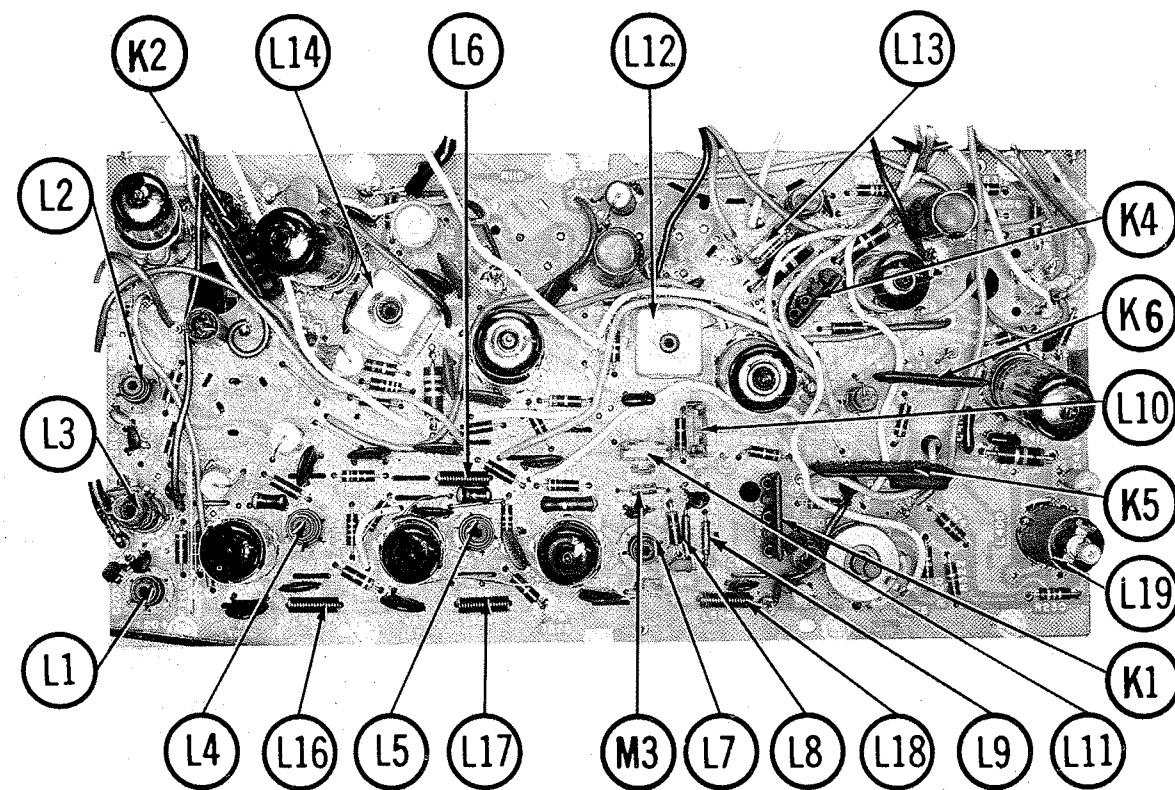
VHF TUNER WITH UHF PROVISIONS 54-97394-6 - TOP VIEW



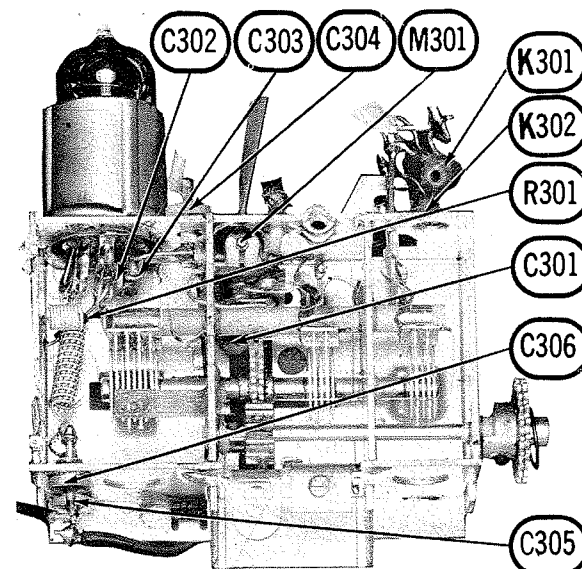
A Howard W. Sams CIRCUITRACE® Photo

ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED

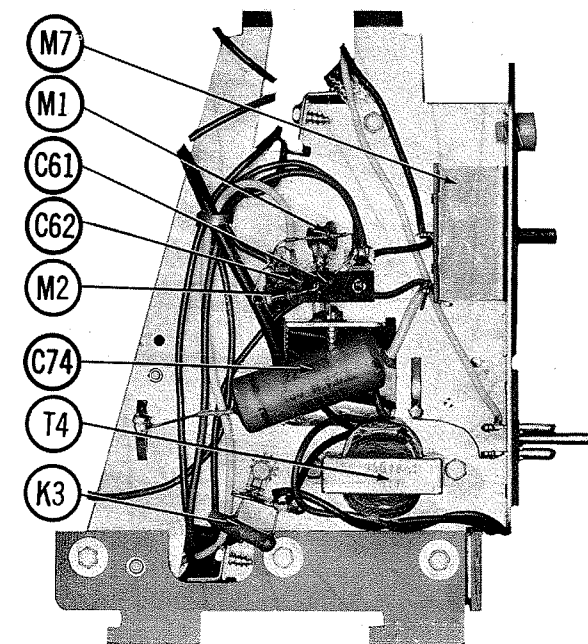
VHF TUNER WITH UHF PROVISIONS 54-97394-6 - BOTTOM VIEW



PRINTED BOARD - INDUCTOR & MISC. IDENT.



UHF TUNER 54-95755-4



LV SUPPLY SECTION

SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)

FOLDER 2

UHF TUNER PARTS LIST AND DESCRIPTIONS

54-95755-4

TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V301	UHF Osc.	2AF4B						

FIXED CAPACITORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C301	30 N750 5%	#43-93017-1		TCN-30	C10Q3U	*		
C302	4.5 N330	#43-93017-3						
C303	150	#43-93017-2						
C304	1000		EF-001	MFT-1000		CCF-102	CT280A	
C305	1000		EF-001	MFT-1000		CCF-102	CT280A	
C306	1000		EF-001	MFT-1000		CCF-102	CT280A	

# Silvertone Part Number

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R301	10K								

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	SILVERTONE PART No.	REPLACEMENT DATA
K301	UHF Antenna Isolation	470mmf, .3-1meg	190-0035	Centralab RC-471 Sprague ACI-1
K302	UHF Antenna Isolation	470mmf, .3-1meg	190-0035	Centralab RC-471 Sprague ACI-1

COILS (RF-IF)

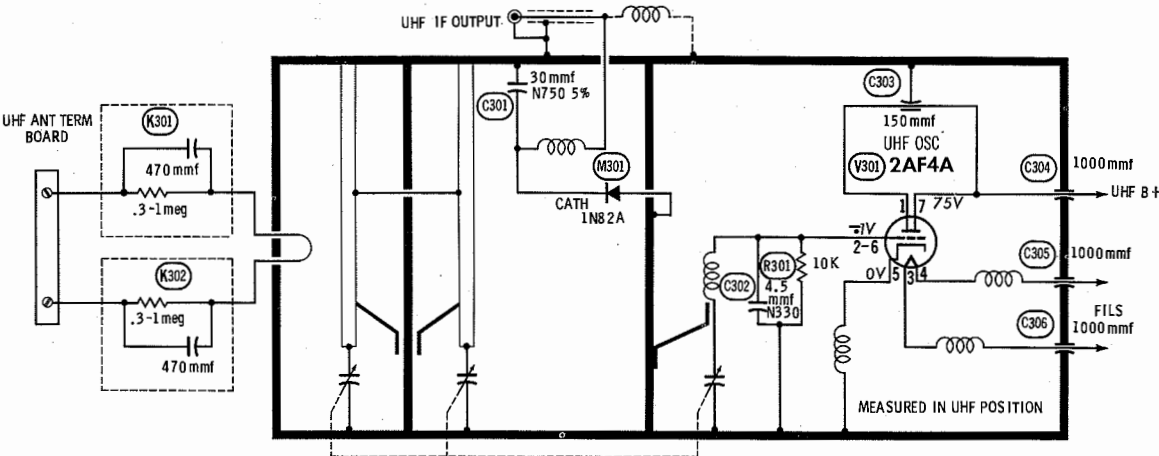
ITEM No.	USE	SILVERTONE PART No.	NOTES	ITEM No.	USE	SILVERTONE PART No.	NOTES
L301	RF	54-97672-3		L304	Cathode Choke	54-97672-1	
L302	Mixer	54-97672-3		L305	IF Choke	54-97672-4	
L303	RF Choke			L306	IF Choke	54-97672-2	

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		SILVERTONE PART No.	GENERAL ELECTRIC	RAYTHEON PART No.	SYLVANIA PART No.	
M301	1N82A	1N82A		1N82A	1N82A	UHF Mixer

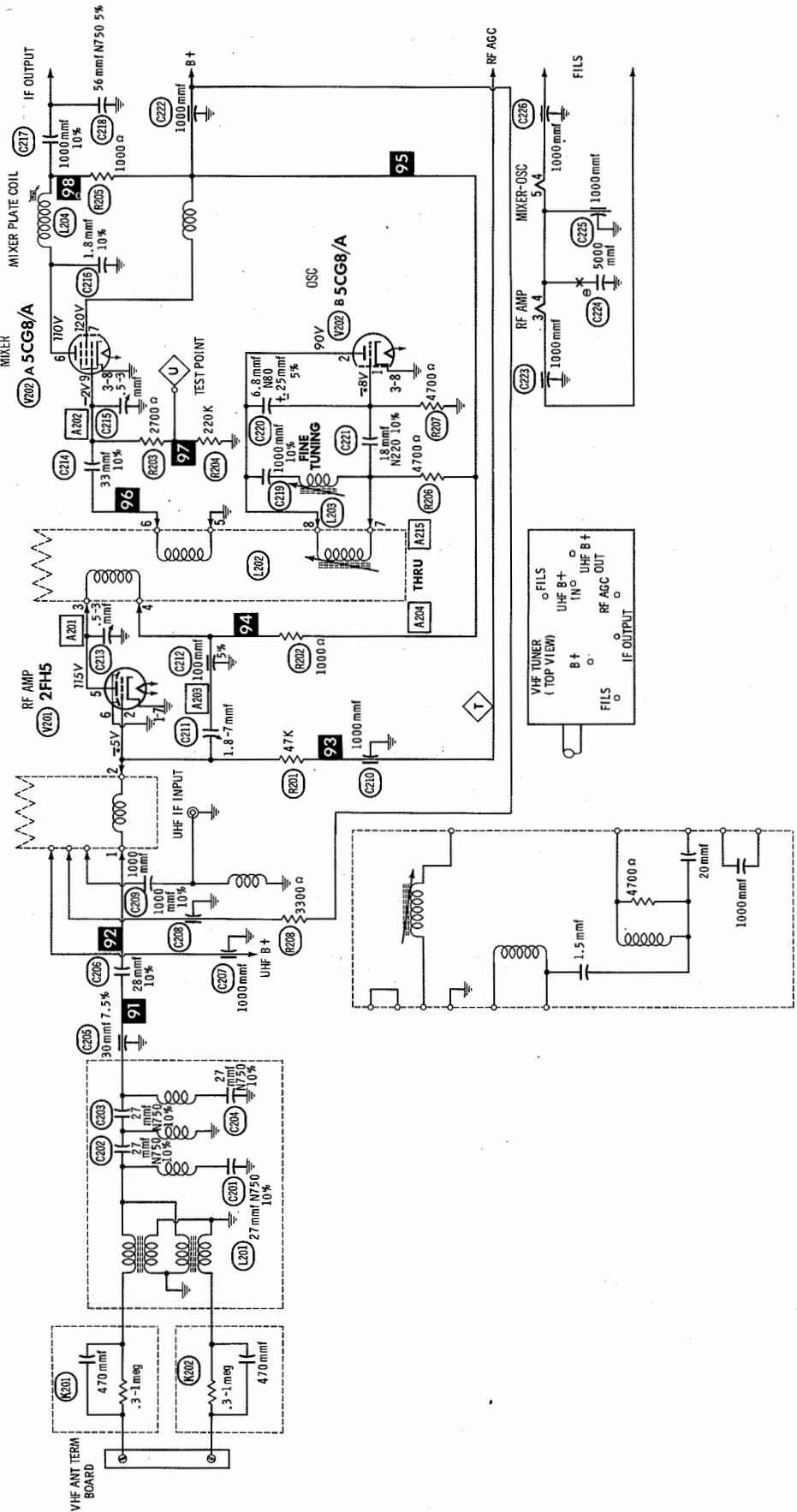
MISCELLANEOUS

ITEM No.	PART NAME	SILVERTONE PART No.	NOTES	ITEM No.	PART NAME	SILVERTONE PART No.	NOTES
	Board Assembly	480-0031	Antenna		Hub & Gear Assy.	484-0034	
	Pinion Gear	484-0038			Shaft, Gear Drive	493-0187	



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UHF TUNER 54-95755-4



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with CIRCUITTRACE  
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SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)  
UHF TUNER WITH UHF PROVISIONS 54-9394-6

FOLDER 2

# VHF TUNER PARTS LIST AND DESCRIPTIONS

54-97394-6

## TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	2FH5	V202	Mixer - Osc.	5CG8 (5CG8A) *			

\* Alternate

## FIXED CAPACITORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MAILORRY PART No.	SPRAGUE PART No.
C201	27 N750 10%	#169-0073	N750-DI 25	TCN-27	C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C202	27 N750 10%		N750-DI 25	TCN-27	C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C203	27 N750 10%		N750-DI 25	TCN-27	C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C204	27 N750 10%		N750-DI 25	TCN-27	C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C205	30 7.5% 10%		N750-DI 25	TCN-27	C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C206	28 10%	#172-0063	NPO-DI 25	TCZ-27	C10Q27C	CCTO-270	CNO-427	10TCC-Q27
C207	1000		EF-001	MFT-1000		CCF-102	CT280A	
C208	1000		EF-001	MFT-1000		CCF-102	CT280A	
C209	1000 10%		DI-1000	DD-102		CCD-102	GP210	10TS-D10
C210	1000		EF-001	MFT-1000		CCF-102	CT280A	
C211	1.8-7			829-7				
C212	100 5%		EF-0001	MFT-100				
C213	.5-3			829-3		CV-1	CT565	
C214	33 10%		NPO-DI 33	DTZ-33	C10Q33C	C10Q33C	CNO-433	10TCC-Q33
C215	.5-3			829-3		CV-1	CT565	
C216	1.8 10%	#168-0104	NPO-SI 2.0		C10V2C			10TCC-V18
C217	1000 10%		DI-1000	DD-102		CCD-102	GP210	10TS-D10
C218	56 N750 5%			TCN-56	C10Q56U	CCTN-560	CN7-456	10TCU-Q56
C219	1000 10%		DI-1000	DD-102		CCD-102	GP210	10TS-D10
C220	6.8 N80 +5%-.25mmf					*		
C221	18 N220 10%					*		10TCR-Q18
C222	1000		EF-001	MFT-1000		CCF-102	CT280A	
C223	1000		EF-001	MFT-1000		CCF-102	CT280A	
C224	5000		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C225	1000		EF-001	MFT-1000		CCF-102	CT280A	
C226	1000		EF-001	MFT-1000		CCF-102	CT280A	

Note 1. May not be used in some versions.

# Silvertone Part Number.

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

## RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R201	47K				R205	1000Ω			
R202	1000Ω				R206	4700Ω			
R203	2700Ω				R207	4700Ω			
R204	220K				R208	3300Ω			

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	SILVERTONE PART No.	REPLACEMENT DATA
K201	VHF Antenna Isolation	470mmf, .3-lmeg	190-0035	Centralab RC-47I
K202	VHF Antenna Isolation	470mmf, .3-lmeg	190-0035	Sprague ACL-1

## COILS (RF-IF)

ITEM No.	USE	SILVERTONE PART No.	NOTES
L201	Ant. Trans.	111-0058	
L202A	Ant., RF, Mixer & Osc.	110-2002	Channel 2
B	"	110-2003	Channel 3
C	"	110-2004	Channel 4
D	"	110-2005	Channel 5
E	"	110-2006	Channel 6
F	"	110-2007	Channel 7
G	"	110-2008	Channel 8

ITEM No.	USE	SILVERTONE PART No.	NOTES
L202H	Ant., RF, Mixer & Osc.	110-2009	Channel 9
I	"	110-2010	Channel 10
J	"	110-2011	Channel 11
K	"	110-2012	Channel 12
L	"	110-2013	Channel 13
M	40MC IF	110-2001	UHF
L203	Fine Tuning	115-0003	Core #339-0072
L204	Mixer Plate	118-0069	

## MISCELLANEOUS

ITEM No.	PART NAME	SILVERTONE PART No.	NOTES
	Shaft and Drum Spring	339-0077 496-0245	Assembly Turret Retaining

# TUNER ALIGNMENT INSTRUCTIONS

54-97393-3

## PRE-ALIGNMENT INSTRUCTIONS

USE AN ISOLATION TRANSFORMER TO PROTECT THE TEST EQUIPMENT.  
The High Voltage lead should be securely taped and kept away from the chassis.  
Allow a 20 minute warm-up period for the receiver and test equipment.

## VHF RF AND MIXER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope. Use 10MC Sweep unless otherwise noted.  
Connect the negative lead of a 2.5 volt bias supply to point ④. Positive to chassis.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	Across VHF Antenna Terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Amp. thru 10K to point ④. Low side to chassis.	A201, A202	Adjust for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2.	"	207MC	205.25MC 209.75MC	12	"	A203, A204	"
3.	"	201MC	199.25MC 203.75MC	11	"	A205, A206	"
4.	"	195MC	193.25MC 197.75MC	10	"	A207, A208	"
5.	"	189MC	187.25MC 191.75MC	9	"	A209, A210	"
6.	"	183MC	181.25MC 185.75MC	8	"	A211, A212	"
7.	"	177MC	175.25MC 179.75MC	7	"	A213, A214	"
8.	"	85MC	83.25MC 87.75MC	6	"	A215, A216	"
9.	"	79MC	77.25MC 81.75MC	5	"	A217, A218	"
10.	"	69MC	67.25MC 71.75MC	4	"	A219, A220	"
11.	"	63MC	61.25MC 65.75MC	3	"	A221, A222	"
12.	"	57MC	55.25MC 59.75MC	2	"	A223, A224	"
13.	"	201MC	199.25MC 203.75MC	"	"	A225	Increase bias over -10 volts. Adjust A225 for MINIMUM response.

## VHF OSCILLATOR ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
Set the Fine Tuning to the center of its range.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope. Use 10MC Sweep unless otherwise noted.  
Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
14.	Across VHF Antenna Terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Amp. thru 10K across Video Detector Load.	A226	Adjust to place sound marker in trap notch as in Fig. 202. Video marker should fall at 50%.
15.	"	207MC	205.25MC 209.75MC	12	"	A227	"
16.	"	195MC	193.25MC 197.75MC	10	"	A228	"
17.	"	183MC	181.25MC 185.75MC	8	"	A229	"
18.	"	85MC	83.25MC 87.75MC	6	"	A230	"
19.	"	69MC	67.25MC 71.75MC	4	"	A231	"
20.	"	57MC	55.25MC 59.75MC	2	"	A232	"

SOUND VIDEO



FIG. 201

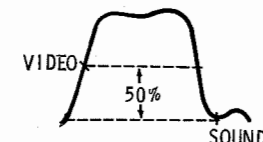


FIG. 202

SILVERTONE MODELS 122, 123, 124, 125,  
126, 127 (Ch. 101.60100, 101.60200)

FOLDER 2



PARTS LIST AND DESCRIPTIONS (Continued)

MISCELLANEOUS

ITEM No.	PART NAME	SILVERTONE PART No.	NOTES
M4	Tuner (VHF with UHF Provisions)	54-97394-6	Used in Chassis 101-80200 STANDARD COIL REPLACEMENT #GGS-422L-A * Use original Fine Tuning Arm & Fine Tuning Iron Core Assy.
M5	Tuner (VHF)	54-97393-3	Used in Chassis 101-80100
M6	Switch	54-95755-4	Used in Chassis 101-80200
M7	Switch	571-0018	AGC (Normal-Strong), SPDT Slide Type
M8	Circuit Breaker	571-0044	Off-On
M8	Antenna	191-0026	JFD REPLACEMENT Type #TA404.
		580-0012	

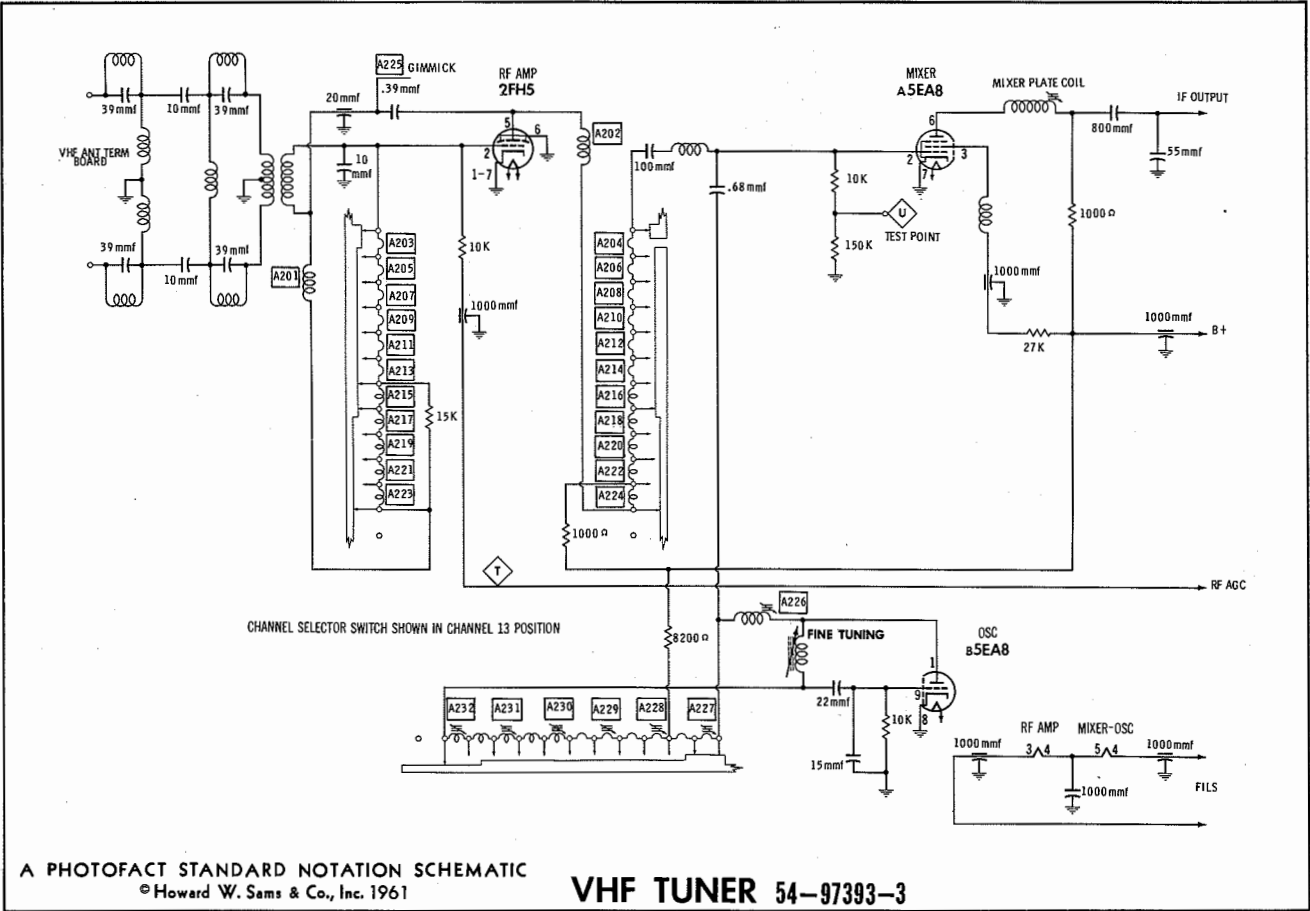
CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Mask	716-0076	VHF Channel Selector, Models 122, 124, 126
Knob	743-0117	VHF Channel Selector, Models 123, 125, 127
Knob	743-0118	UHF Channel Selector, Models 123, 125, 127
Knob	740-0417	UHF Channel Indicator, Models 123, 125, 127
Knob	722-0089	Fine Tuning, Brightness, Contrast, Volume
Knob	740-0416	Vertical Hold
Knob	740-0254	Models 122 and 123
Cabinet	10-97861-1	Models 124 and 125
Cabinet	10-97861-2	Models 126 and 127
Cabinet	10-97861-3	

WIRING DATA

High Voltage Lead .....	Use Belden No. 8869
Shielded Hook-up Wire .....	Use Belden No. 8885 (Single Conductor) 8738 (Two Conductor)
General-use Unshielded Hook-up Wire .....	Use Belden No. 8530 (Solid) Available in Ten Colors 8524 (Stranded) Available in Ten Colors
Power Cord (Interlock Type) .....	Use Belden No. 8874
300Ω Tuner Input Lead .....	Use Belden No. 8225
300Ω Antenna Lead-in .....	Use Belden No. 8230 or 8275
Antenna Rotor Cable .....	Use Belden No. 8464 (Flat) or 8484 (Round) - 4 Conductor 8485 (Round) - 5 Conductor 8488 (Round) - 6 Conductor



TUNER ALIGNMENT INSTRUCTIONS

54-97394-6

PRE-ALIGNMENT INSTRUCTIONS

Use an ISOLATION TRANSFORMER TO PROTECT the Test Equipment.  
The High Voltage lead should be securely taped and kept away from the chassis.  
Allow a 20 minute warm-up period for the receiver and test equipment.  
Suggested Alignment Tools: A201 thru A203 ..... GENERAL CEMENT #5000, 5003, 5014, 5015, 5016, 8276, 8290  
WALSCO #2512, 2515, 2522, 2523, 2525, 2537  
A204 thru A215 ..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8278, 8987  
WALSCO #2531

RF AND MIXER ALIGNMENT

Connect the negative lead of a 4 volt bias supply to point ⬢. Positive to chassis.  
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope.  
Use 10MC sweep unless otherwise noted.  
Turn Contrast fully clockwise.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	195MC	193.25MC 197.75MC	10	Vert. Amp. to point ⬢ Low side to chassis.	A201, A202, A203	Adjust A201 and A202 for maximum amplitude and symmetry with markers as shown in Fig. 201. Increase bias for MINIMUM amplitude of response curve. Without changing the bias adjust A203 to obtain MINIMUM response on the scope.
2. "	"	213MC	211.25MC 215.75MC	13	"		Check for response curve similar to Fig. 201. If markers fall below 70% on any channel, make compromise adjustment of A201 and A202 with channel switch set to that channel. Check to see that other channels have not been seriously affected.
		207MC	205.25MC 209.75MC	12			
		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	83.25MC 87.75MC	6			
		79MC	77.25MC 81.75MC	5			
		69MC	67.25MC 71.75MC	4			
		63MC	61.25MC 65.75MC	3			
		57MC	55.25MC 59.75MC	2			

FIG. 201

OSCILLATOR ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Set the Fine Tuning to the center of its range.  
Use only enough sweep generator output to provide a usable pattern on scope.  
Use 10MC sweep unless otherwise noted.  
Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
3. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Amp. thru 10K across Video Det. load.	A204	Adjust to place sound marker in trap notch as in Fig. 202. Video marker should fall at 50%.
		207MC	205.25MC 209.75MC	12		A205	
		201MC	199.25MC 203.75MC	11		A206	
		195MC	193.25MC 197.75MC	10		A207	
		189MC	187.25MC 191.75MC	9		A208	
		183MC	181.25MC 185.75MC	8		A209	
		177MC	175.25MC 179.75MC	7		A210	
		85MC	83.25MC 87.75MC	6		A211	
		79MC	77.25MC 81.75MC	5		A212	
		69MC	67.25MC 71.75MC	4		A213	
		63MC	61.25MC 65.75MC	3		A214	
		57MC	55.25MC 59.75MC	2		A215	

FIG. 202

UHF TUNER

This portion of the receiver has been properly aligned at the factory and is very stable. Alignment of this portion should not be required in the field.

SILVERTONE MODELS 122, 123, 124, 125, 126, 127 (Ch. 101.60100, 101.60200)

FOLDER 2

## PARTS LIST AND DESCRIPTIONS

## TUBES

GENERAL ELECTRIC			RAYTHEON		SYLVANIA	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	
V1	1st Video IF Amp.	3BZ6	V7	Audio Output	5AQ5	
V2	2nd Video IF Amp.	3BZ6	V8	Sync Sep.	3CS6	
V3	3rd Video IF Amp.	3BZ6	V9	Vert. Mult. - Vert. Output	10EG7	
V4	Video Output - Horiz. AFC	8ET7	V10	Horiz. Mult.	6CG7	
V5	AGC Keying - Sound IF Amp.	5BR8	V11	Horiz. Output	12DQ6A	
V6	Ratio Det. - AF Amp.	6BN8	V12	Damper	12AX4GTA	
			V13	HV Rectifier	1G3GT/1B3GT	

## PICTURE TUBE

REPLACEMENT DATA					NOTES
ITEM No.	SILVERTONE PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	
V14	19AFP4		19AFP4 ①		① Aluminized ② Silver Screen "85"

## ELECTROLYTIC CAPACITORS

RATING		REPLACEMENT DATA							NOTES
ITEM No.	CAP.	VOLT.	SILVERTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	150	200	161-1025	PR1-100	XA0315	TC892	TD-150-200	TVAS-1447 *	
C2A	150	350	161-4028	PR4-325				TVAS-4580	
B	100	350							
C	20	350							
D	100	25							
C3	2	50	161-1087	PR8L300	BBR2-50	TC302	TD-2-50	TYA-1301	

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

## FIXED CAPACITORS

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

RATING		REPLACEMENT DATA							REMARKS
ITEM No.			SILVERTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.	
C4	.22	100V		P288N-22	CUB2P22	1DP-3-224	GEM-2022	2TM-P22	
C6	39	NPO 5%			C10Q39C		CNO-439	10TCC-Q39	
C8	6.8	NPO ±.25mmf		NPO-DI 6.8	C10V68C	CCTO-6R8	CNO-568	10TCC-V68	
C7	4.7	NPO ±.25mmf		NPO-DI 4.7	C10V47C	CCTO-4R7	CNO-547	10TCC-V47	
C8	2.7	NPO ±.25mmf		NPO-DI 3.3	C10V3C			10TCC-V27	
C9	2.7	NPO ±.25mmf		NPO-DI 3.3	C10V3C			10TCC-V27	
C10	1000			BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C11	.22	100V		P288N-22	CUB2P22	1DP-3-224	GEM-2022	2TM-P22	
C12	15	200V		P288N-15	CUB2P15	2DP-3-154	GEM-2015	2TM-P15	
C13	510	10%		DI-500	5R5T51	CCD-510	GP351	10TS-T50	
C14	1000			BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C15	1000			BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C16	330	10%		BPD-001	D6-331	L10T33	GP333	10TS-T33	
C17	1000			BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C18	68	N220 5%	#43-85969-18	DI-820	5R5T8	CCD-801	GP382	10TS-T80	
C19	800	10%		BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C20	1000			BPD-01	BYA10D1	CCD-103	B-110	5HK-S10	
C21	10000			BPD-01	BYA10D1	CCD-103	B-110	5HK-S10	
C22	270	N1500 10%	#43-85969-1						
C23	5.6	NPO 5%		NPO-DI 10	DTZ-10	C10Q5C	CCTO-100	10TCC-Q10	
C24	10	NPO 10%		NPO-DI 10	DTZ-10	C10Q1C	CCTO-100	10TCC-Q10	
C25	10	NPO 10%		V84C2522-10%	PM4S22	4DP-2-223	GEM-1612	2TM-S22	
C26	.022	200V 10%		P488N-22	CUB4P22	4DP-5-224	GEM-4022	4TM-P22	
C27	.22	400V		NPO-DI 20	TCZ-18	C10Q18C	CNO-418	10TCC-Q18	
C28	18	NPO 10%		N750-DI 20	TCN-18	C10Q18U	CN7-418	10TCU-Q18	
C29	18	N750 10%		P488N-22	CUB4P22	4DP-2-223	GEM-4022	4TM-P22	
C30	.22	400V		BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C31	1000		Notes 1	BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C32	1000			BPD-001	BYA10D1	CCD-102	B-210	5HK-D10	
C33	47 5000V N150 10%		#69-0094	P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	
C34	.022	400V		1489-0001	TCZ-100	22R5T1	CM-19B-101K	MS-31	
C35	100	10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	
C36	10000			BPD-01	DD-103	BYA10S1	CCD-103	B-110	
C37	10000			BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	
C38	4700			BPD-01	DD-103	BYA10S1	CCD-103	B-110	
C39	10000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C40	1000			DI-2300	PM6D22	CCD-222	GP222	10TS-D22	
C41	2200	10%		P684CM-0082	DPMS6D82	6DP-2-822	GEM-16282	6TM-D80	
C42	.0082	600V 10%		P488N-01	D6-103	CUB4S1	4DP-1-103	GEM-411	
C43	.01	400V		P288N-1	DF-104	CUB4S21	4DP-3-104	GEM-4201	
C44	.1	200V		P288N-1	DD-203	CUB4S22	4DP-2-223	GEM-4122	
C45	.022	400V		V84C8D1-10%	DD-102	PM6D1	6DP-1-102	GP210	
C46	.0022	1000V 10%		P488N-33	CUB4P33	4DP-5-334	GEM-4033	4TM-P33	
C47	.001	600V 10%		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	
C48	.33	400V		P488N-1	DF-104	CUB4S1	4DP-3-104	GEM-401	
C49	.047	400V		BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C50	.1	400V		BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C51	.0056	1000V 10%		BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C52	1000			P488N-0047	D6-472	CUB6D47	6DP-1-472	GEM-6247	
C53	.0047	400V		1489-000047	TCZ-47	22R5Q47	CM-19B-470K	MS-447	
C54	47	10%		1489-000033	TCZ-300	5R5T33	CM-19B-331K	MS-330	
C55	.047	400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	
C56	.022	800V 10%		V84C8S22-10%	DD-102	PM6S22	6DP-2-223	GP222	
C57	1000		Notes 1	BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C58	82	3000V 10%	#69-0061						
C59	75	5000V 10%	#69-0095						
C60	1000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C61	1000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C62	1000			P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	
C63	.1	400V		BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C64	1000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C65	1000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	
C66	1000			BPD-001	DD-102	BYA10D1	CCD-102	B-210	

## FIXED CAPACITORS (cont)

RATING		REPLACEMENT DATA						
ITEM No.		REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C67	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C68	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C69	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C70	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C71	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C72	1000		SI 1000	D6-102	BYA10D1	CCD-102	B-210	5HK-D10
C73	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C74	.22 400V		P488N-22		CUB4P22	4DP-5-224	GEM-4022	4TM-P22

Note 1. May not be used in some versions. # Silvertone Part Number.  
\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

## CONTROLS

RATING		REPLACEMENT DATA						INSTALLATION NOTES
ITEM No.	RESISTANCE	WATTS	SILVERTONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	250K		153-0245					Volume Contrast
R2	25K		153-0193					
R3	8000Ω Stop 17K Tap		153-0244	TT-87	B47-5meg-S	HLC5	PTA56L	Brightness
R4	1meg		153-0200					Focus
R5	5meg		153-0179					AGC
R6A	50K		153-0236	TT-31	B47-50K-S	BL1-23	PTA54L	Width
B	Shaft			Not Req.	Not Req.	TM4	Not Req.	
R7	5meg		153-0200	TT-87	B47-5meg-S	HLC5	PTA56L	Height
R8	2meg		153-0177	TT-75	B47-2meg-S	HLC1	PTA26L	Vert. Linearity
	1.8meg Stop			*	*	*	*	
R9A	1meg		153-0199	TT-69	B47-1meg-S	BL1-137	TA16L	Vert. Hold
	950K Stop			**	**	**	**	
B	Shaft			Not Req.	Not Req.	TM4	Not Req.	

\* Use 100K Resistor in series with right hand terminal, viewed shaft end terminals down.  
\*\* Use 47K Resistor in series with right hand terminal, viewed shaft end terminals down.

## RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

RATING		REPLACEMENT DATA			RATING		REPLACEMENT DATA		
ITEM No.		IRC PART No.	WORKMAN TV PART No.	REMARKS	ITEM No.		IRC PART No.	WORKMAN TV PART No.	REMARKS
R10	5.6meg				R47	220Ω			
R11	470K				R48	27K			
R12	4700Ω				R49	330Ω			
R13	220K				R50	1meg			
R14	100K				R51	100K			
R15	220K				R52	33K			
R16	100Ω				R53	68K			
R17	240Ω				R54	10K 2W			
R18	18K				R55	10K 1W			
R19	47K				R56	6.8meg			
R20	39Ω				R57	2.2meg			
R21	18K				R58	1.5meg			
R22	470Ω				R59	330K			
R23	2200Ω				R60	680K			
R24	180Ω				R61	500K			
R25	100Ω				R62	12K 1W			
R26	6800Ω				R63	33K			
R27	3300Ω				R64	1000Ω			
R28	7000Ω 7W	PW7-7000	10W-SQ-7000	#189-0088	R65	1meg			
R29	18K				R66	470Ω 2W			
R30	18K				R67	2200Ω			
R31	27Ω				R68	10K 1W			
R32	15K				R69	1000Ω			
R33	22K				R70	470K			
R34	22K				R71	68K			
R35	22K				R72	220Ω			
R36	1.2meg				R73	270K			
R37	180K				R74	15K 2W			
R38	4700Ω				R75	18K 2W			
R39	470K				R76	4700Ω			
R40	470K				R77	4700Ω			
R41	56K				R78	6.8meg			
R42	150K				R79	2700Ω 10W	PW10-2700	10W-SQ-2700	#189-0081
R43	56K				R80	4.7Ω 5W	PW5-4.7	5W-SQ-4.7	#187-0034
R44	470Ω				R81	41Ω 20W			#187-0067
R45	10K				R82	4700Ω			
R46	56K 1W				R83	47K			

Note 1. May not be used in some versions. # Silvertone Part Number.