

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

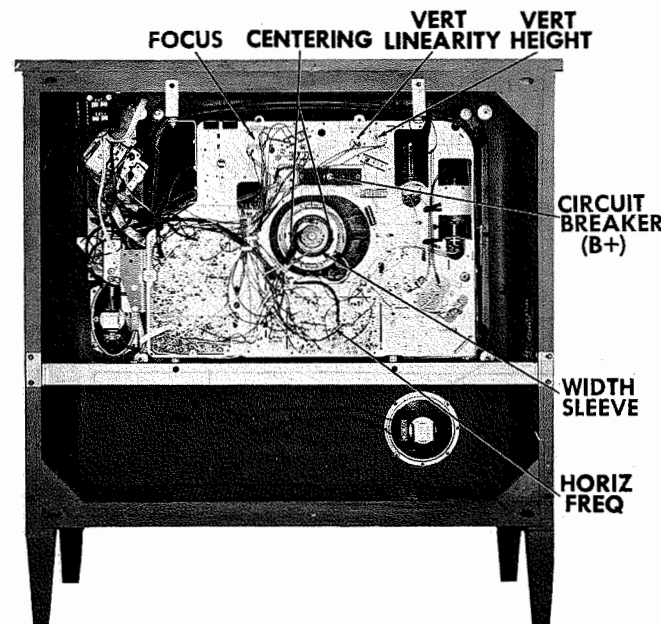
1. Remove all knobs and rear cover held by 10 screws.
2. Disconnect antenna leads, speaker leads, picture tube socket, yoke plug, and HV anode lead.
3. Remove 5 screws holding UHF tuner and controls bracket, 4 screws holding the VHF tuner bracket (2 front and 2 rear).
4. Remove 2 screws holding the upper chassis brackets and 2 screws at bottom edge of chassis.
5. Remove chassis and tuner assembly.

PICTURE TUBE REMOVAL

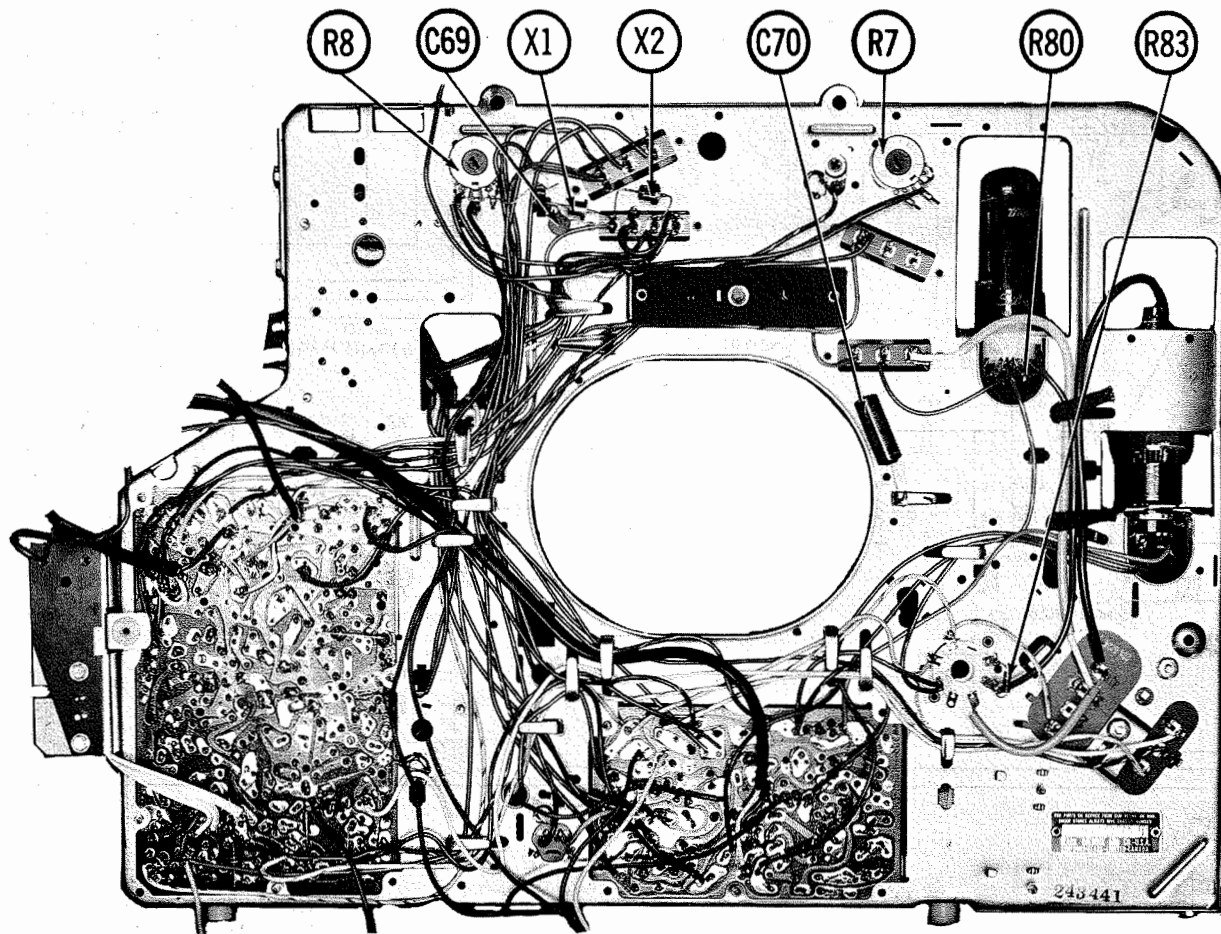
For picture tube removal, follow steps 1 through 5 of "Chassis Removal". Lay cabinet face down on a soft protective surface, remove 4 corner nuts holding the picture tube and mask assembly, and lift off cabinet.

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Place a jumper across the Horizontal Stabilizer Coil (L21). Set the Horizontal Hold control (R3) to the center of its range. Tune in a station and adjust Horizontal Frequency control (R9) until the picture is in sync. Remove the jumper and adjust the Horizontal Stabilizer Slug (B1) until the picture is in sync. Check all available channels to see that the picture remains in sync.



CABINET-REAR VIEW



CHASSIS-REAR VIEW

SET 646 FOLDER 2

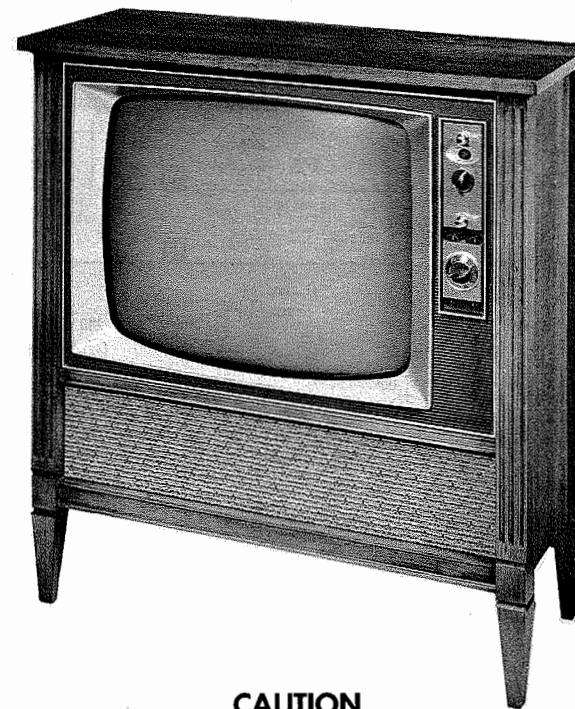
SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591

PHOTOFACT® Folder

with CIRCUITRACE®



SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591



MODEL 3157

CAUTION

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	Silvertone Models	Chassis
	PC-3150, 3152, 3154, 3156, 3158.....	456.60020/22/24/28/38/590
	PC-3151, 3153, 3155, 3157, 3159.....	456.60021/23/25/29/39/591
	3150, 3152, 3154, 3156, 3158.....	528.60020/22/24/28/38/590
	3151, 3153, 3155, 3157, 3159.....	528.60021/23/25/29/39/591
SUPPLIER	Sears, Roebuck & Co., 925 S. Homan Ave., Chicago, Illinois	
TYPE SET	Television Receiver	
TUBES	VHF-Fifteen, UHF-Sixteen	
POWER SUPPLY	110-120 Volts AC, 60 Cycles	RATING 150 Watts, 1.6Amp. @ 117 Volts AC
TUNING RANGE	Channel 2 Thru 13 VHF, 14 Thru 83UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)	

SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE OR 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 ADJUSTMENT

The Fine Tuning knob adjusts the VHF Oscillator slug of each individual channel.

AGC

No provision is made to vary the AGC on this receiver.

FOCUS

The focus may be varied by means of a Focus control. (See "Tube Placement Chart" for location.)

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Coarse adjustment of the Horizontal Hold is accomplished by the proper setting of the Horizontal Frequency control. (For location, see "Tube Placement Chart".)

WIDTH

The width may be varied by adjusting a metallic sleeve, located between the yoke and the picture tube neck in or out of the yoke.

CENTERING

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

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



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed.
MA145

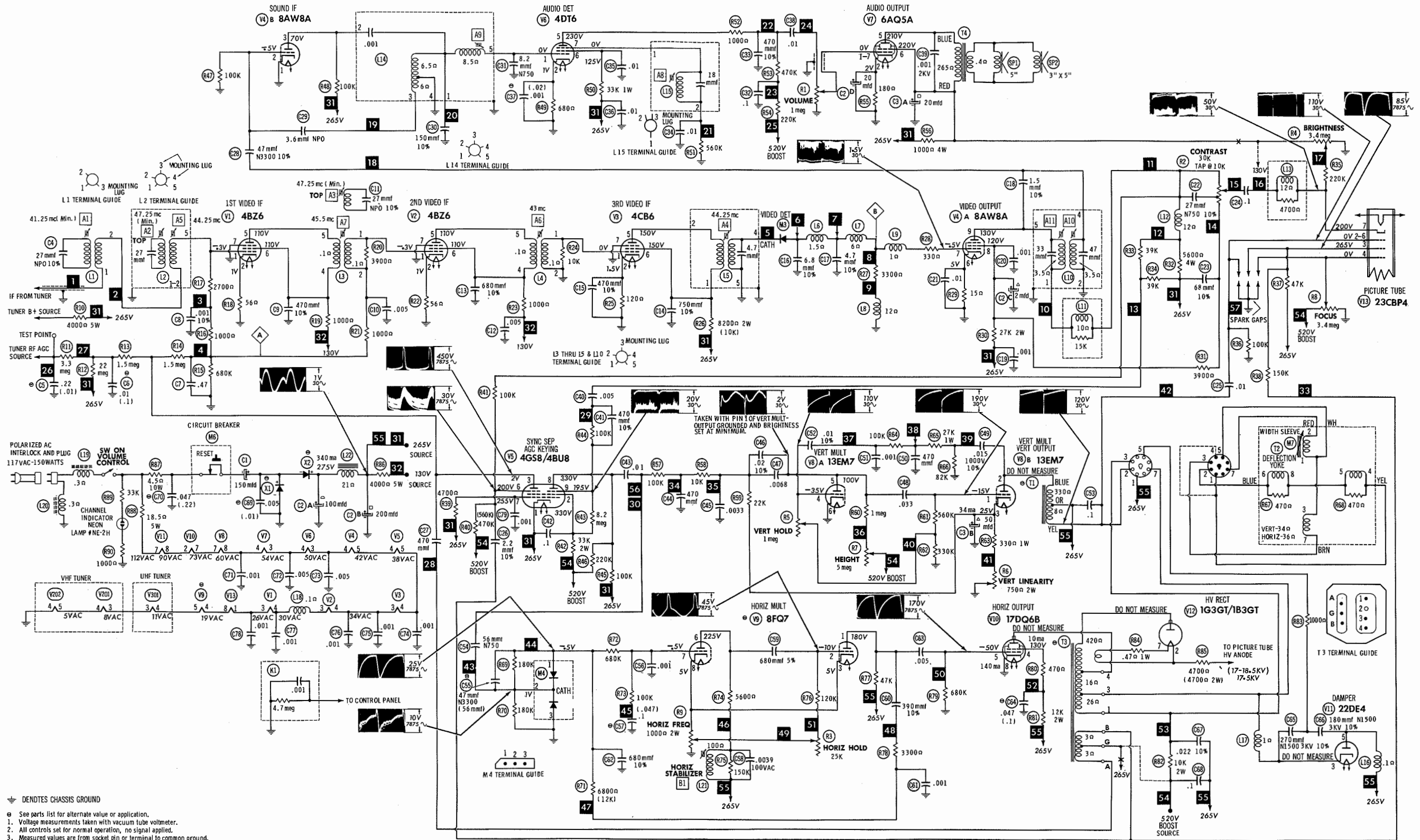
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DATE 7-63

SET 646 FOLDER 2

SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591

SET 646 FOLDER 2



- ⚡ DENOTES CHASSIS GROUND
- Ⓢ See parts list for alternate value or application.
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Waveforms taken with controls set to produce 50 volts peak-to-peak signal at picture tube.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**
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SILVERTONE CHASSIS 456/528.60020
21/22/23/24/25/28/29/38/39/590/591

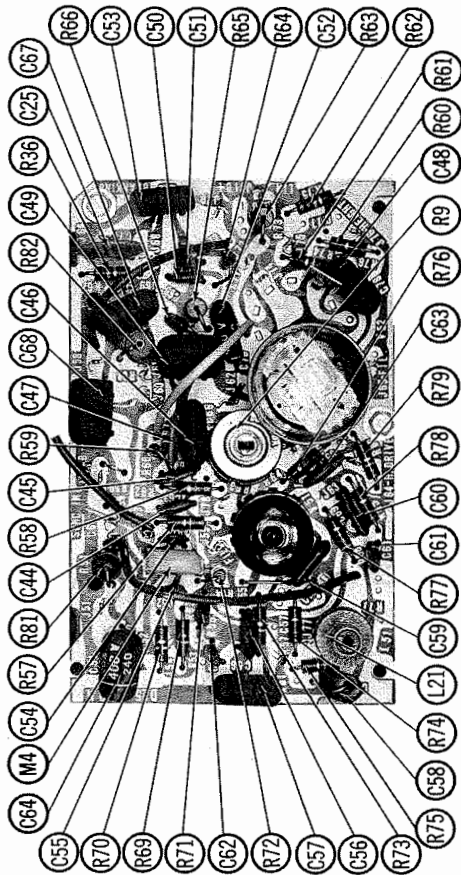
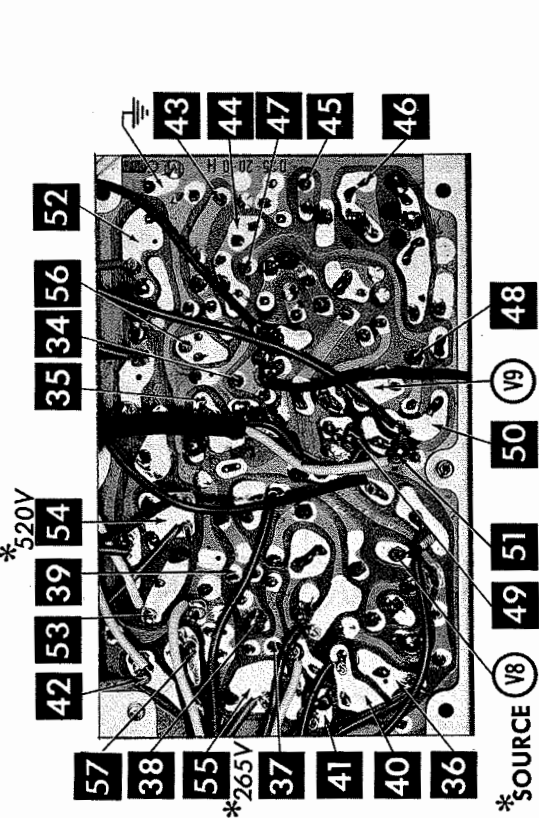
FOLDER 2

SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591

RESISTANCE MEASUREMENTS

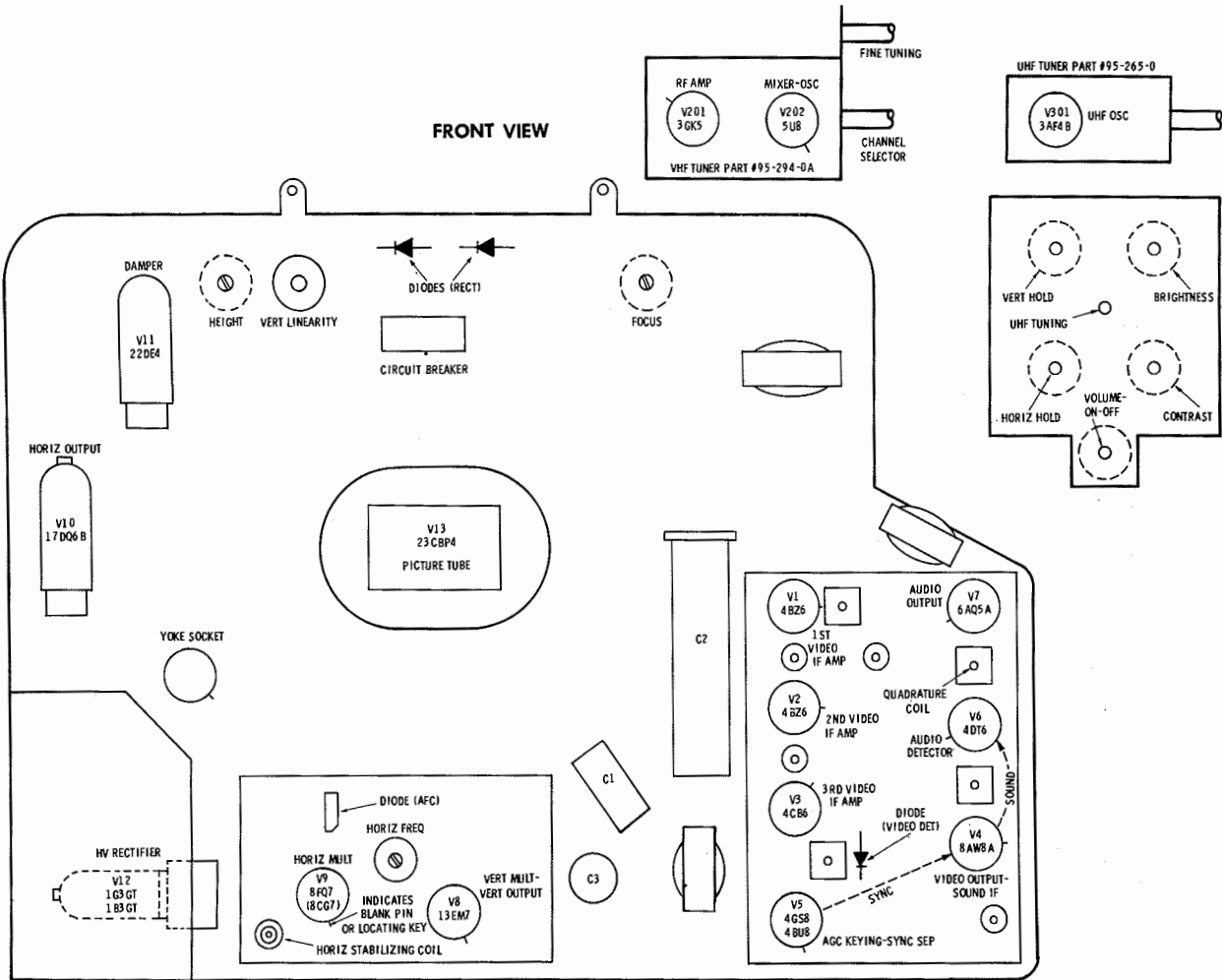
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	4BZ6	700K	56Ω	8Ω	9Ω	±5000Ω	±5000Ω	0Ω		
V2	4BZ6	690K	56Ω	9Ω	11Ω	±5000Ω	±5000Ω	0Ω		
V3	4C86	0Ω	120Ω	11Ω	12Ω	±8200Ω	±8200Ω	0Ω		
V4	8AW8A	0Ω	100K	±100K	15Ω	13Ω	15Ω	660Ω	±15K	±5000Ω
V5	4GS8 4BUB	±21Ω	±43K	2meg	13Ω	12Ω	±80K	±4700Ω	±195K	±8.2meg
V6	4DT6	14Ω	680Ω	15Ω	16Ω	±700K	±33K	560K		
V7	6AQ5A	NC	180Ω	16Ω	18Ω	±1200Ω	±1000Ω	250K		
V8	13EM7	900K	±360Ω	680Ω	790K	±4.5meg	0Ω	22Ω	18Ω	
V9	8FQ7	±47K	130K	1000Ω	6.5Ω	4Ω	±5600Ω	1meg	1000Ω	NC
V10	17D06B	NC	26Ω	TP	±12K	620K	NC	22Ω	0Ω	TOP CAP ±17Ω
V11	22DE4	TP	NC	1.7meg	NC	±20Ω	TP	30Ω	26Ω	
V12	1G3GT 1B3GT									
V13	23CBP4	8Ω	100K	±35K	110K	NC	NC	600K	6.5Ω	
V201	3GK5	0Ω	±8meg	3Ω	2Ω	±5500Ω	0Ω	0Ω		
V202	5U8	15K	±16K	0Ω	0Ω	2Ω	±6000Ω	±16K	0Ω	95K
V301	3AF4B	±7800Ω	±5600Ω	4Ω	3Ω	±0Ω	±5600Ω	±7800Ω		
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9

† MEASURED FROM OUTPUT OF X2.
‡ MEASURED FROM PIN 3 OF V11.
▲ MEASURED IN UHF POSITION.
NC NO CONNECTION
TP TIE POINT
¶ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
• 95-294-0A VHF TUNER - A95-265-0 UHF



SWEEP PRINTED BOARD

TUBE PLACEMENT CHART

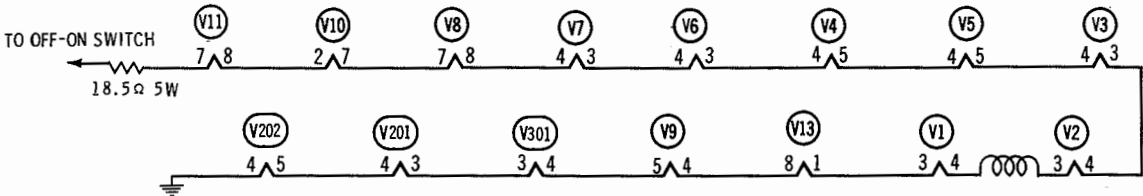


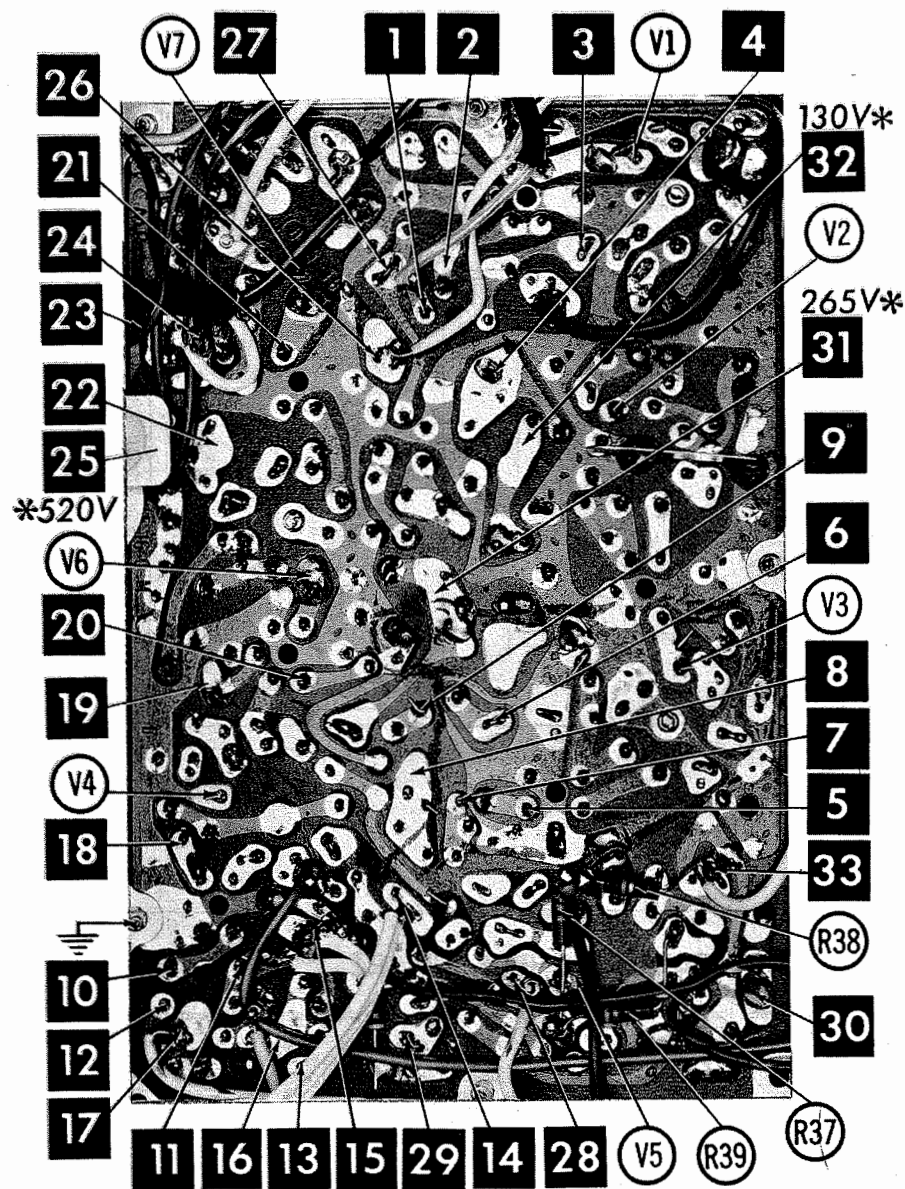
TUBE FAILURE CHECK CHART

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.

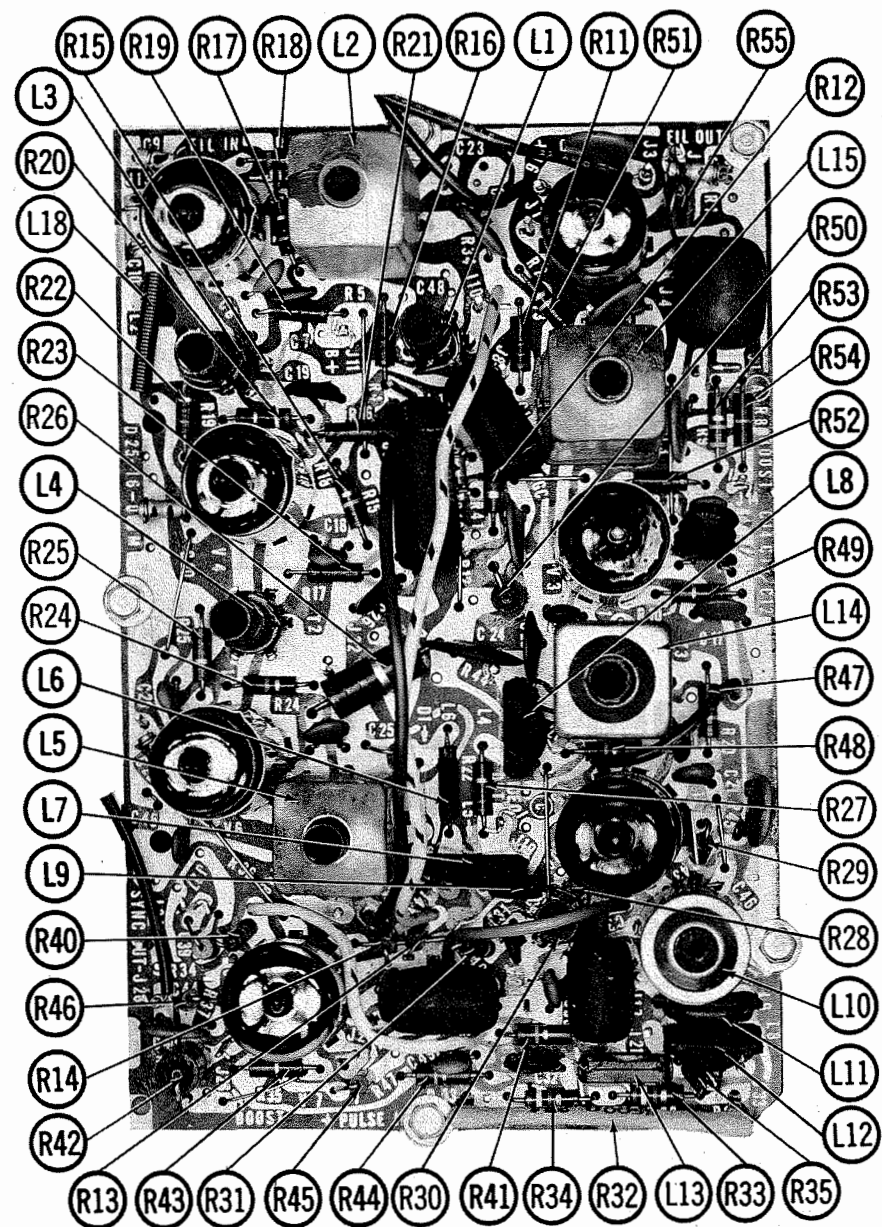
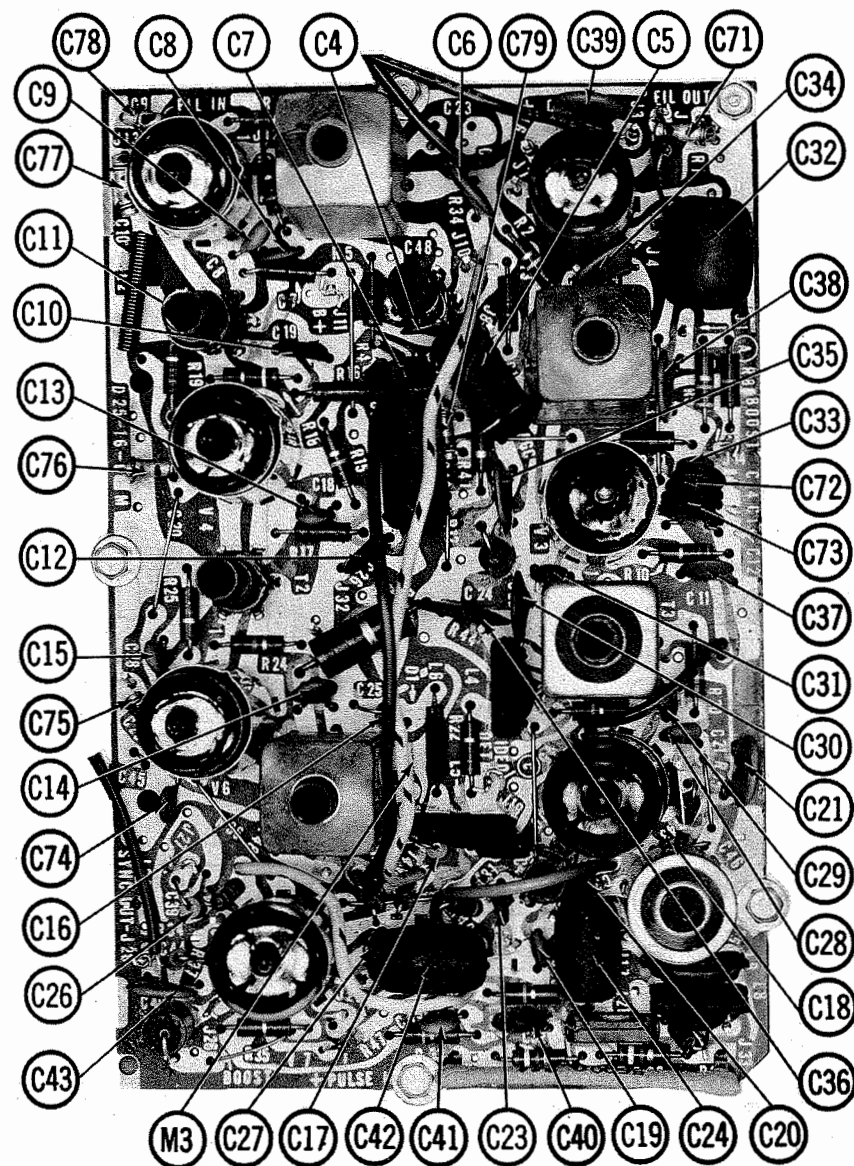
- POWER SUPPLY FAILURE**
No raster, no sound Circuit Breaker M6, Selenium Rectifiers X1, X2.
- SWEEP FAILURE**
No raster, has sound V8, V10, V11, V12, V13
No vertical deflection V8.
Poor vert. linearity or foldover V8.
Poor horiz. linearity or foldover V9, V10, V11.
Narrow picture V9, V10, V11, X1, X2.
Vert. off freq. V8.
Horiz. off freq. AFC Diode M4, V8.
- LOSS OF PICTURE OR SOUND**
No pic, no sound, has raster V1, V2, V3, Video Det M3, V4.
No pic, no sound, has snow V201, V202, V1.
No pic, has sound, has raster V4, V13.
Has pic, no sound V4, V8, V7.
Overloaded picture V5.
- SYNC FAILURE**
No vert. sync V5.
No horiz. sync V5.
No vert. or horiz. sync V5.

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.)





* SOURCE



VIDEO, SOUND, SYNC PRINTED BOARD

UHF TUNER PARTS LIST AND DESCRIPTION

TUBES

♦ AMPEREX ♦			♦ GENERAL ELECTRIC ♦			♦ RCA ♦			♦ RAYTHEON ♦			♦ SYLVANIA ♦		
ITEM No.	USE		TYPE			ITEM No.	USE		TYPE					
V301	UHF Converter		3AF4B											

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			NOTES
			MAILORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X301		86-12-1				UHF Diode (1N82A)

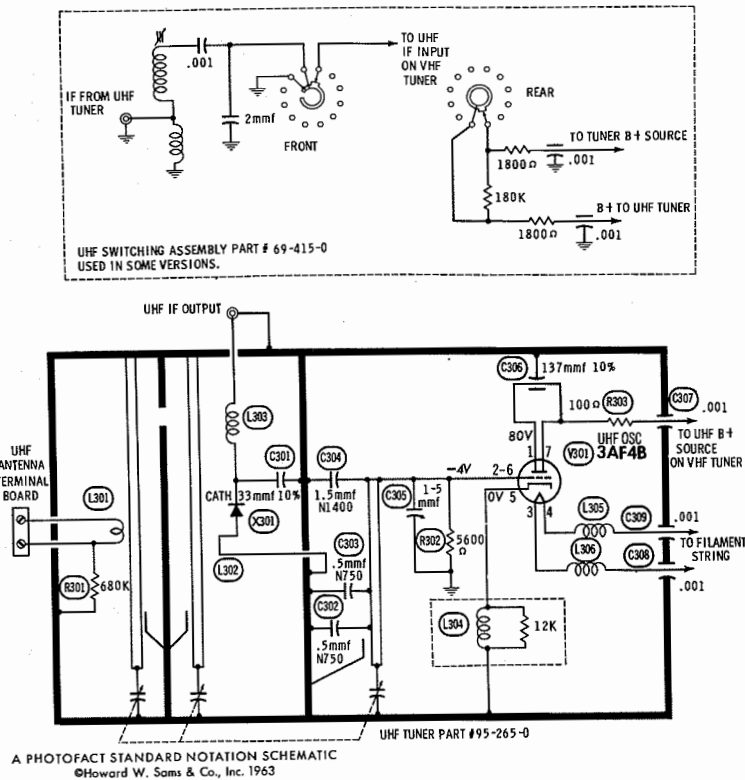
FIXED CAPACITORS

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	33 10%		DI-33	DD-330	L10Q33	CCD-330	GP433	10TS-Q33
C302	.5mmf N750 20%	#20-498-0						
C303	.5mmf N750	#20-498-0						
C304	1.5mmf N1400	#20-497-0						
C305	1-5	#19-204-0		829-6		CV-3	CT552	
C306	137 10%							
C307	.001		EF-001	MFT-1000		CCF-102	CT280A	
C308	.001		EF-001	MFT-1000		CCF-102	CT280A	
C309	.001		EF-001	MFT-1000		CCF-102	CT280A	

Silvertone Part Number

COILS (RF-IF)

ITEM No.	USE	SILVERTONE PART No.	NOTES	ITEM No.	USE	SILVERTONE PART No.	NOTES
L301	Ant. Coil		Part of antenna ass'y 84-14561	L303	IF Output	10-39-2	
L302	Crystal Coupling		Made from piece of wire .032 x 1 3/4"	L304	RF Choke	10-195-1	Wound on 12K resistor
				L305	Fil. Choke	10-194-1	
				L306	Fil. Choke	10-194-1	



UHF TUNER & SWITCH

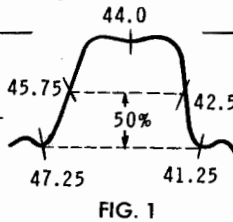
ALIGNMENT INSTRUCTIONS

Use an isolation transformer and maintain voltage at 117 volts. Allow a 20-minute warm-up period for the receiver and test equipment. Suggested Alignment Tools: GENERAL CEMENT #8606, 8606L, 8689; WALSCO #2543, 2544, 2588

VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from those shown. Connect a variable bias supply to the IF AGC line (point A) and adjust to obtain a response curve which shows no indication of overload. Disable Oscillator section of Mixer-Osc. Set the Channel Selector to any non-interfering channel.

INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
1. Connect DC probe of a VTVM thru a 47K resistor to point B. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		41.25MC 47.25MC	A1 A2, A3	Adjust for MINIMUM.
2. Connect DC probe of a VTVM thru a 47K resistor to point B. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		44.25MC 43.0MC 45.5MC	A4, A5, Mixer Plate Coil A6 A7	Adjust for maximum.
3. Connect vertical input of a scope to point B. Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	41.25MC 42.5MC 44.0MC 45.75MC 47.25MC		Check for maximum gain and symmetry of response with markers as shown in Figure 1. In order to obtain a proper response, it may be necessary to slightly retouch A5, Mixer Plate.

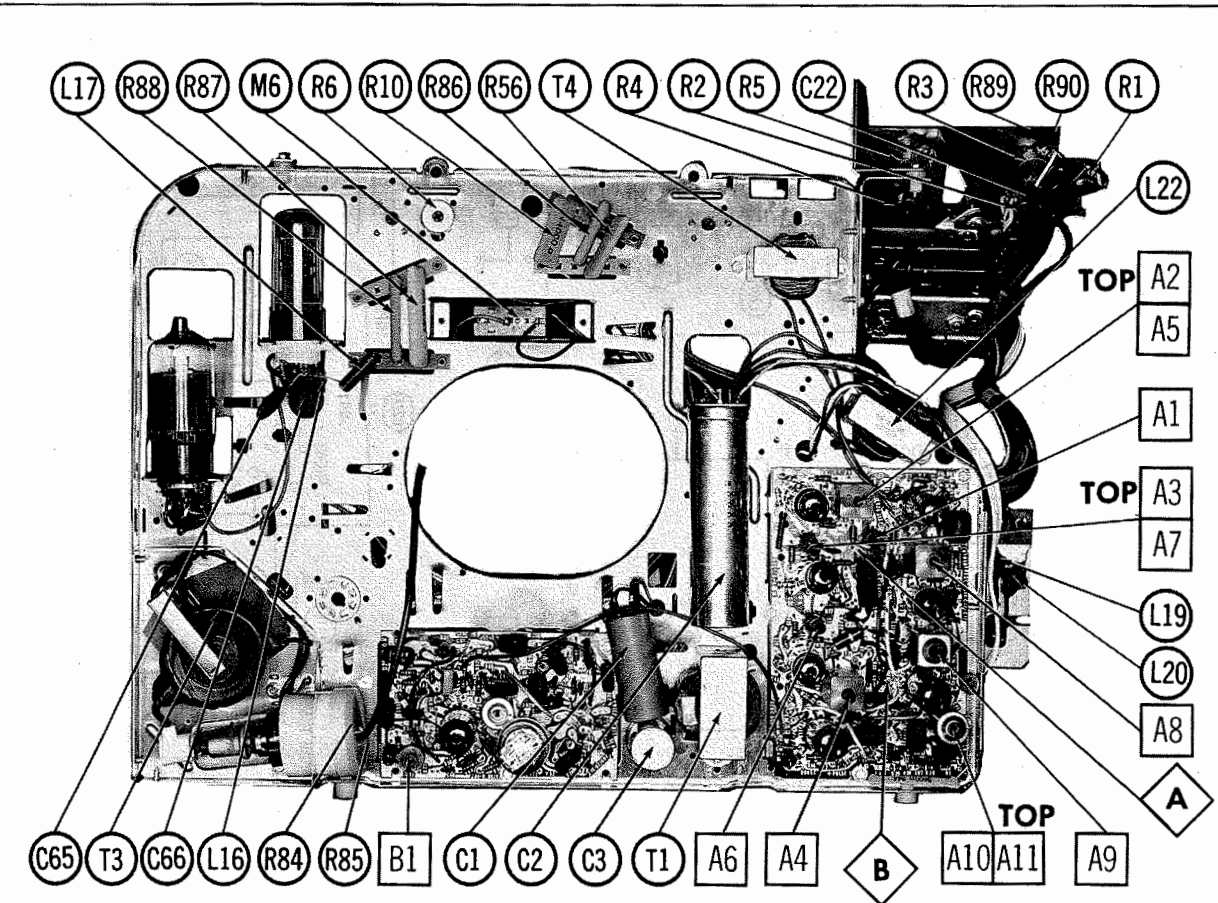


SOUND IF ALIGNMENT

Tune in a station and adjust A8 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce signal while aligning for undistorted output by adjusting A8, A9, and A10.

4.5 MC TRAP ALIGNMENT

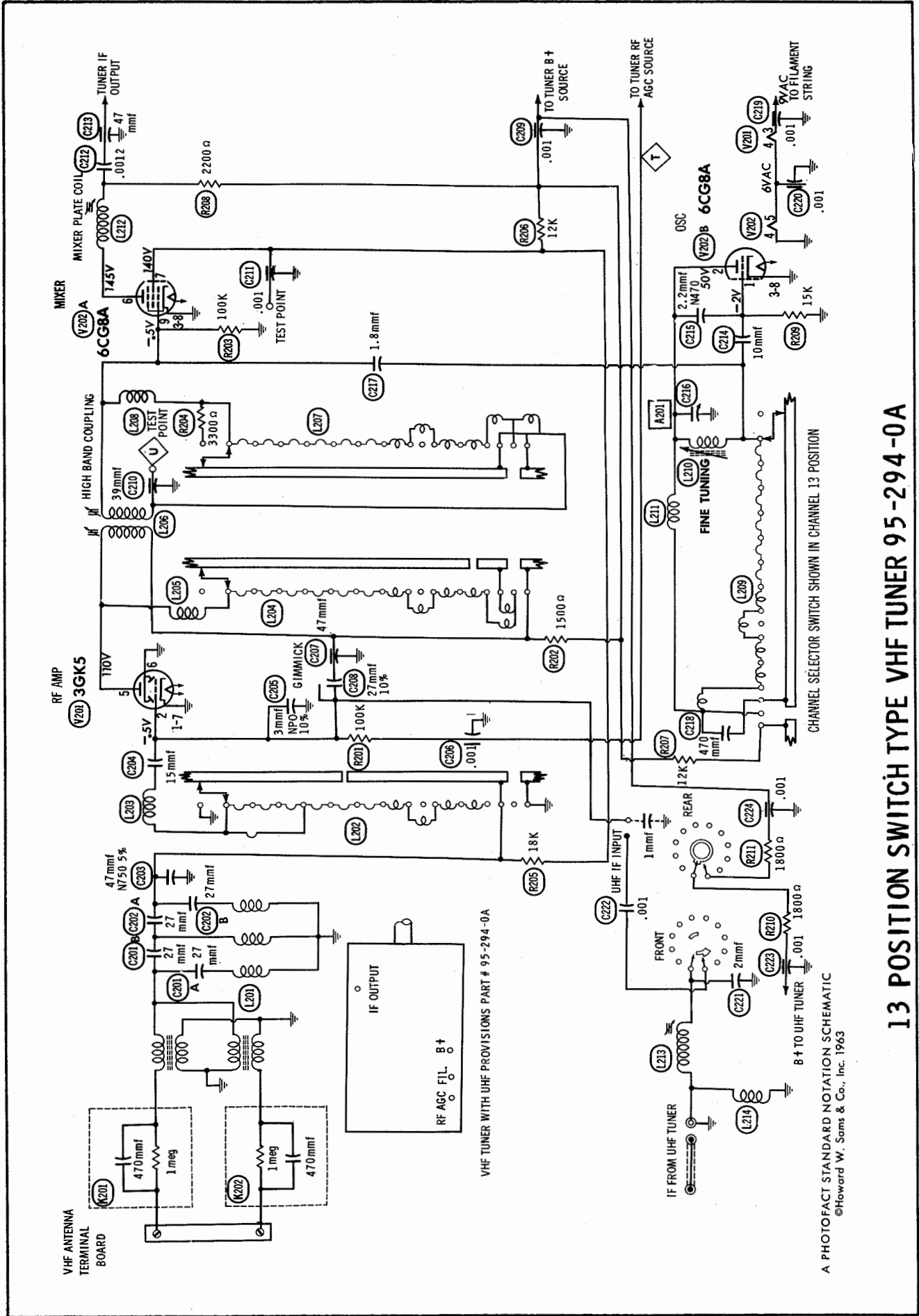
Tune in a strong TV signal and set the Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible on the screen. Adjust A11 for MINIMUM beat interference.



CHASSIS—FRONT VIEW

SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591

FOLDER 2



VHF TUNER ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

Use only enough generator output to provide a usable indication. Allow a 20 minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: GENERAL CEMENT #9087, 8290, 8888; WALSCO #2525, 2528, 2587

OSCILLATOR ALIGNMENT

The oscillator is preset on each channel by means of the fine tuning control. Starting with the highest available channel and working toward the lowest, adjust fine tuning for best picture and sound. If any channel cannot be adjusted properly with the fine tuning, adjust overall oscillator adjustment A201 and recheck all channels.

RF AND MIXER ALIGNMENT ALL

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use 10MC sweep unless otherwise noted.
Connect variable bias to RF AGC line at point ①. 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
1. Connect across antenna terminals with 120Ω in each lead.	213MC	211. 25MC 215. 75MC	13	Connect Vert. Input of Scope to point ①. Low side to ground.	High Band Coupling	Adjust high band coupling and expand or compress turns if necessary. Check for response curve similar to Figure 201.
2. "	207MC	205. 25MC 209. 75MC	12	"	"	Check all channels for response curve similar to Figure 201 and if necessary, expand or compress coil turns.
	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			

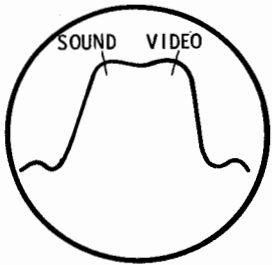
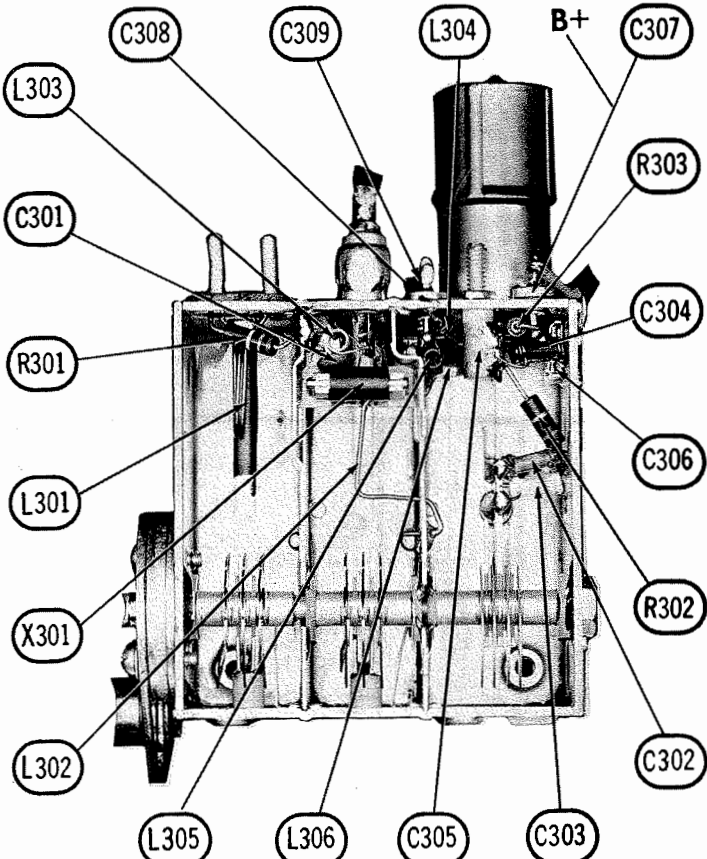


FIG. 201

Tune in a UHF station and adjust UHF IF Input Coil for best picture and sound.



UHF TUNER 95-265-0

PARTS LIST AND DESCRIPTION (CONTINUED)

CABINETS & CABINET PARTS
(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Bezel	40-93-5	Knob-Dial Inductor UHF	52-1851-0
Knob-Channel Selector VHF	52-1859-0	Knob-Skirt, UHF Models	52-1847-0
Knob-Fine Tuning, Volume Push On-Off	52-1854-0	Knob-Controls (4 used)	52-1849-0
Knob-Channel Selector UHF	52-1860-0		

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869 (17KV) or 8868 (25KV)
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 12 Colors 8524 (Stranded) Available in 12 Colors 8874 (Rubber) or 8895 (Plastic)
Power Cord (Interlock Type)	Use BELDEN No. 8225
300Ω Tuner Input Lead	Use BELDEN No. 8230 or 8275
300Ω Antenna Lead-in	Use BELDEN No. 8484 (Flat) or 8484 (Round) - 4 Conductor 8485 (Round) - 5 Conductor 8488 (Round) - 8 Conductor
Antenna Rotor Cable	

VHF TUNER 95-294-0A

TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	3GK5	V202	Mixer - Osc.	6CG8A

FIXED 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.
C201A	27			DD-270	L10Q27	CCD-270	GP427	5GA-Q27
C201B	27			DD-270	L10Q27	CCD-270	GP427	5GA-Q27
C202A	27			DD-270	L10Q27	CCD-270	GP427	5GA-Q27
C202B	27			DD-270	L10Q27	CCD-270	GP427	5GA-Q27
C203	47	N750 5%		DTN-47	L10Q47U	CCD-47	CN7-447	10TCU-Q47
C204	15		BPD-000015	DD-150	L10Q15	CCD-150	GP415	5GA-Q15
C205	3	NPO 10%	NPO-DI 3					
C206	.001	#222-309	EF-001	MFT-1000		CCF-102	CT280A	
C207	47	#259-470						
C208	27	10%	#2101-279					
C209	.001		EF-001	MFT-1000		CCF-102	CT280A	
C210	39	#259-390						
C211	.001		EF-001	MFT-1000		CCF-102	CT280A	
C212	.0012		DI-1200	DD-122	L10D12	CCD-122	B-212	5GA-DI2
C213	47	#292-470						
C214	10		BPD-00001	DD-100	L10Q1	CCD-100	GP410	5GA-Q10
C215	2.2	N470	#175-229			*		
C216		#1620-10						
C217	1.8	#2101-189						
C218	470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347	10TS-T47
C219	.001		EF-001	MFT-1000		CCF-102	CT280A	
C220	.001		EF-001	MFT-1000		CCF-102	CT280A	
C221	2mmf	#2101-209						
C222	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C223	.001		EF-001	MFT-1000		CCF-102	CT280A	
C224	.001		EF-001	MFT-1000		CCF-102	CT280A	

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
Silvertone Part Number

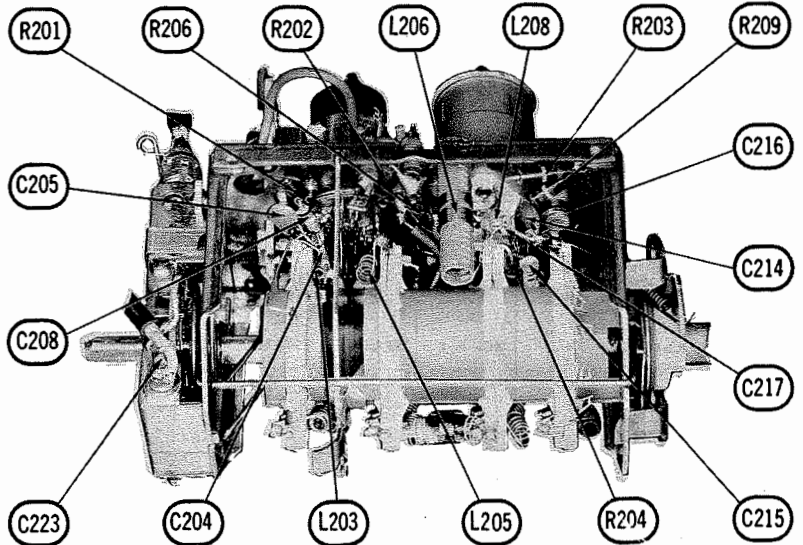
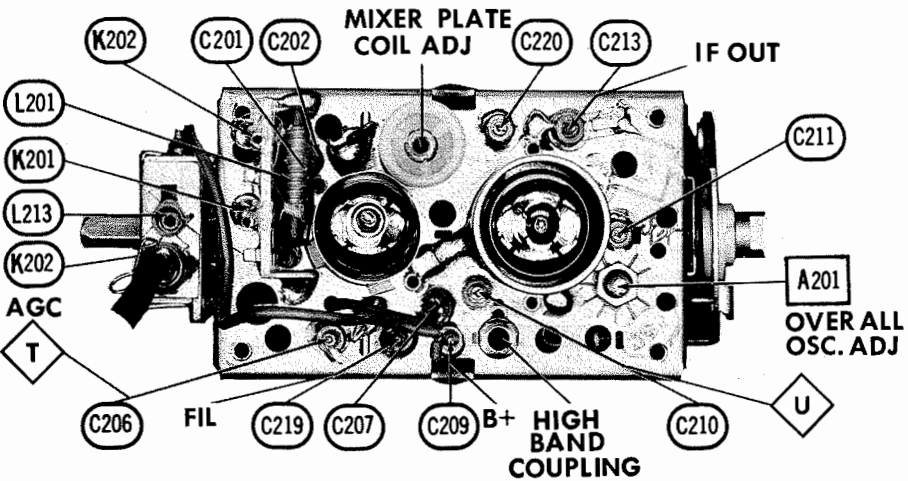
COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	SILVERTONE PART No.	REPLACEMENT DATA
K201	Antenna Isolation	470mmf, 1meg	330-1	Centralab RC-471 Sprague AC1-1
K202	Antenna Isolation	470mmf, 1meg	330-1	Centralab RC-471 Sprague AC1-1

COILS (RF-IF)

ITEM No.	USE	SILVERTONE PART No.	NOTES
L201	Ant. Assembly	3718-502	
L202	Ant. Wafer Assy	2820-505	
L203	RF Choke	300-2	
L204	RF Wafer Assy	2821-503	
L205	RF Choke	301-5	
L206	Coupling	3652-505	
L207	Mixer Wafer Assembly	2822-505	

ITEM No.	USE	SILVERTONE PART No.	NOTES
L208	RF Choke	300-4	
L209	Osc. Wafer Assy	2823-507	
L210	Memory Fine Tuning	3362-513	
L211	RF Choke	300-4	
L212	Mixer Plate	3356-8	
L213	UHF IF Input		
L214	RF Choke		



VHF TUNER 95-294-0A
SET 646 FOLDER 2

SILVERTONE CHASSIS 456/528.60020/
21/22/23/24/25/28/29/38/39/590/591

FOLDER 2

PARTS LIST AND DESCRIPTION

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	1st Video IF Amp.	4BZ6	V7	Audio Output	6AQ5A
V2	2nd Video IF Amp.	4BZ6	V8	Vert. Mult-Vert. Output	13EM7
V3	3rd Video IF Amp.	4CB6	V9	Horiz. Mult.	8CQ7 (8CG7)*
V4	Video Output-Sound IF-Sync. Sep.	8AW8A	V10	Horiz. Output	17DQ6B
V5	Keyed AGC-Sync. Sep.	4G88/4BU8	V11	Damper	22DE4
V6	Audio Det.	4DT6	V12	HV Rect.	1G3GT/1B3GT

* Alternate

PICTURE TUBE

ITEM No.	SILVERTONE PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	NOTES
V13	23CBP4				23CBP4	Silver Screen "85"

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	MALLORY PART No.	RECTIFIERS RCA PART No.	SARKES TARZIAN PART No.	NOTES
X1	.34A	86-1-3	IN540 ①	IN3194	40H	Voltage Doubler (Silicon)
X2	.34A	86-1-3	IN540 ①	IN3194	40H	Voltage Doubler (Silicon) ① X1 and X2 may be replaced by VB400.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	SILVERTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	150	150	18-138-5	PR1-060	BR150-150	QTI-25	TC495	TD-150-150
C2A	100	300	18-156-5	AFH4-46-15	B0286	XC4-37	FP419, 54A	TMQ-4173
C2B	200	300			BRDR16845	TC69		TVA-1422
C2C	20	300						TMQ-4173
C2D	20	15						TVA-1701
C3A	20	300	18-75-3	AFH2-94-60	B0674	XC2-28.1	FP230A	TMD-2575
C3B	50	50						TVL-2722

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	.27 NPO 10%	.01 ①	P288N-22	DTZ-27	C10Q27C	CC20-270	CNO-427
C5	.22 100V	.1 ①	BPD-01	DD-103	CUB2P22	DDP-3-224	PVC-1022
C6	.01		P288N-47	DD-102	BYA10S1	CCD-103	B-110
C7	.47 100V		CUB2P47	DD-103	CUB2P47	DDP-4-474	PVC1047
C8	.001		DI-1000	DD-471	SR5D1	CCD-102	10TS-D10
C9	.470 10%		DI-470	DD-471	GP347	CCD-471	10TS-T47
C10	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C11	.27 NPO 10%			DTZ-27	C10Q27C	CC20-270	CNO-427
C12	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C13	.680 10%		DI-680	DD-681	SR5T68	CCD-681	10TS-T68
C14	.750 10%		DI-750	DD-751		CCD-751	10TS-T75
C15	.470 10%		DI-470	DD-471		CCD-471	10TS-T47
C16	6.8 10%	#20-27-0					
C17	4.7 10%	#20-23-0					
C18	1.5 10%	#20-10-0					
C19	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C20	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C21	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C22	.27 N750 10%			TCN-27	C10Q27U	CC2N-270	CN7-427
C23	.68 10%		DI-68	DD-680	L10Q68	CCD-680	GP468
C24	.1 400V		P488N-1	DD-104	CUB4P1	4DP-3-104	GEM-401
C25	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C26	2.2 10%	#20-5-0					
C27	.470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347
C28	.47 N3300 10%	#12-470288-4					
C29	3.6 NPO	#12-369271-4					
C30	150 10%		DI-150	DD-151	L10T15	CCD-151	GP315
C31	8.2 N750	#12-829244-4					
C32	1.5 600V						
C33	.470 10%		P688N-1	DD-104	CUB6P1	6DP-4-104	GEM-601
C34	.01		DI-470	DD-471	GP347	CCD-471	10TS-T47
C35	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C36	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C37	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C38	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C39	.001 2KV		HVD-30-1000	DD30-102	HVB30D1	3CCD-102	2HV-210
C40	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C41	.470 10%		DI-470	DD-471	GP347	CCD-471	10TS-T47
C42	.1 400V		P488N-1	DD-104	CUB4P1	4DP-3-104	GEM-401
C43	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110
C44	.470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347
C45	.0033		BPD-0033	DD-332	BYA10D33	CCD-332	B-233
C46	.02 400V 10%		BE4S2	DD-682	4DP-2-233	PVC412	4TM-S20
C47	.0068		BPD-0068	DD-682	BYA10D68	CCD-682	10TS-D68
C48	.033 400V		P288N-033		CUB6S33	4DP-2-333	GEM-4133
C49	.015 1000V 10%	#20-170-1				16DP-4-153	10TM-S15
C50	.470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347
C51	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C52	.01 400V 10%		BE4S1	CF-103	PM4S1	4DP-1-103	PVC411
C53	.1 200V		P288N-1	DD-104	CUB2P1	2DP-3-104	GEM-201
C54	56 N750			TCN-56	C10Q56U	CC2N-560	CN7-456
C55	.47 N3300 10%	56 ①	BPD-001	DD-102	BYA10D1	CCD-102	B-210
C56	.001						

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C57	.1 100V	.047 ①	P288N-1	DF-104	CUB2P1	IDP-2-104	PVC101
C58	.0039 100VAC		1469-00068	CPR-3900J	IR5D39	DM-19-392J	MCJ462.5
C59	.680 5%		1469-00039	CPR-680J	SR5T68	DM-19-681J	MCJ249
C60	.390 10%		DI-680	DD-681	SR5T68	CCD-681	GP368
C61	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C62	.680 10%		DI-680	DD-681	SR5T68	CCD-681	GP368
C63	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C64	.047 400V	.1 ③	P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147
C65	270 N1500 3KV 10%	#12-271516-0					
C66	180 N1500 3KV 10%	#12-181516-0					
C67	.022 600V 10%		BE6S22	DD-682	PM6S22	6DP-2-223	PVC6122
C68	.1 200V		P288N-1	DF-104	CUB2P1	2DP-3-104	GEM-201
C69	.005	.01 ④	BPD-005	DD-502	BYA10D5	CCD-502	B-250
C70	.047 400V	.22 ④	P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147
C71	.005		SI 1000	D6-102	BYA10D1	CCD-102	B-210
C72	.001		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C73	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250
C74	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210
C75	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210
C76	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210
C77	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210
C78	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210
C79	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
① Used in Chassis 456.60020/21/22/23/24/25 and 528.60020/21/22/23/24/25.
② Used in Chassis 456.60024/25 and 528.60024/25.
③ Used in Chassis 456.60022/23 and 528.60022/23.
④ Used in Chassis 456.60590/91 and 528.60590/91.
Silvertone Part Number

CONTROLS

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

ITEM No.	USE	RESISTANCE	SILVERTONE PART No.	CORNELL-DUBILIER PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	1meg	24-559D (24-559)				
R2	Contrast	30K, 10K Tap 25K	24-563B (24-563)				
R3	Horiz. Hold	3.4meg	24-568B (24-568)				
R4	Brightness	3.4meg	24-568B (24-568)				
R5	Vert. Hold	1meg	24-564B (24-564)				
R6	Vert. Linearity	750K 2W	24-520A (24-520)	WN-751 or (WW-751)	A43-750 FKS-1/2	W11-105, SK5 or (BU11, WF2, SS3, DC1)*	R750L or (VW-750)
R7	Height	5meg	24-437D (24-437)	TT-87 or (F3-5meg, SNO10, AK-38)	B47-5meg-S	HLC5	PTA56L or (TA56R) or (RU56R, SL37, SNO1000)
R8	Focus	3.4meg	24-491A (24-491)	TT-84 or (F1-3meg, SNO10, AK-38)	B47-3meg-S	HLC3	PTA355L or (RU36L, SL37, SNO1000) or (UA36L, CN1000)
R9	Horiz. Frequency	1000K 2W	24-570A (24-570)			110-1000	PFL-1K

* "SNAPTROL"

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	ITEM No.	RATING	REPLACEMENT DATA
R10	4000K 5W	IRC PART No.	R86	4000K 5W	IRC PART No.
R12	5600K 4W	WORKMAN PART No.	R87	4.5K 10W	WORKMAN PART No.
R56	1000K 4W	REMARKS	R88	18.5K 5W	REMARKS
		#61-251-0			
		4G-1000			

Silvertone Part Number

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	SILVERTONE PART No.	REPLACEMENT DATA
X1	Chassis Isolation	4.7meg, .001mfd	13-17-3	Sprague PRC-8 Centralab PC-377

COILS (RF-IF)

ITEM No.	USE	SILVERTONE PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	NOTES
L1	41.25MC Trap - Video Input	10-34-3					
L2	47.25MC Trap - 1st Video IF	10-33-3					
L3	2nd Video IF - 47.25MC Trap	10-35-3					
L4	3rd Video IF	10-122-1					
L5	4th Video IF	10-28-3					
L6	RF Choke (12uh)	10-65-1	BC-566	4812	RTC-8522	T660	
L7	Peaking (80uh)	10-148-1	BC-666	6100	RTC-8573	T336	
L8	Peaking (26uh)	10-147-1	BC-674	6130	RTC-8576	T347	
L9	RF Choke (4.7uh)	10-124-1	SW-631	4529	RTC-8505	T977	
L10	Sound Takeoff - 4.5MC Trap	10-209-1					
L11	Peaking (180uh)	10-183-1 ①	TV-184	6180	RTC-8528	T310	① Wound on 15K resistor.
L12	Peaking (28uh)	10-147-1	BC-674	6130	RTC-8576	T347	② Wound on 15K resistor
L13	Peaking (270uh)	10-207-1 ②	TV-198	6130	RTC-8529	T316	③ Wound on 4.7K resistor
L14	1st Sound IF	10-31-3					
L15	Quadrature	10-35-5					
L16	RF Choke (2uh)	10-172-1	BC-563	4606	RTC-8517	T857	
L17	RF Choke (4.7uh)	10-124-1	SW-631	4529	RTC-8505	T977	
L18	FL Choke (1uh)	10-156-1	BC-561	4602	RTC-8515	T855	
L19	Line Choke (4uh)	10-149-1	TV-180	4628	RTC-8667	T301	
L20	Line Choke (4uh)	10-149-1	TV-180	4628	RTC-8667	T301	

COILS (SWEEP CIRCUITS)

ITEM No.	USE	SILVERTONE PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	Workman PART No.	NOTES
L21	Horiz. Stabilizer	10-34-5							TA-121

FILTER CHOKE

ITEM No.	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000-)	SILVERTONE PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	NOTES
L22	.34A	21.5Ω	330 MH	80-20-6B 80-20-6 *		C-2343		C-34X	* Alternate

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	SILVERTONE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	NOTES
T1	Vert. Output	80-13-2E	A-2823 ①	VO-112 ①	26S24	A-133X	① Connect as autotransformer.
T2	Alt. Vert. Output	80-13-2	A-2823 ①	VO-120	26S29	A-134X	② Use original width sleeve.
	Yoke (Horiz. 22.5MH) 100V (Vert. 36MH)	D80-29-4F	MDF-133 & M47-110 ③	Y-53 ② ③	Y-53 ② ③	Y-62 & NW20 ②	③ Use original vertical damping network if necessary.
	Alt. Yoke	80-29-4					
	Rear Cover and Centering Device	83-1453					
	Width Sleeve	83-1387					
	Clamp	22-145-3					
T3	Horiz. Output	D80-13-3G				YC-111	
	Alt. Horiz. Output	80-13-3					

* COMPONENT CONNECTION DATA

ORIGINAL →	HV TRANSFORMER	VERTICAL OUTPUT	YOKE	YOKE PLUG</
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