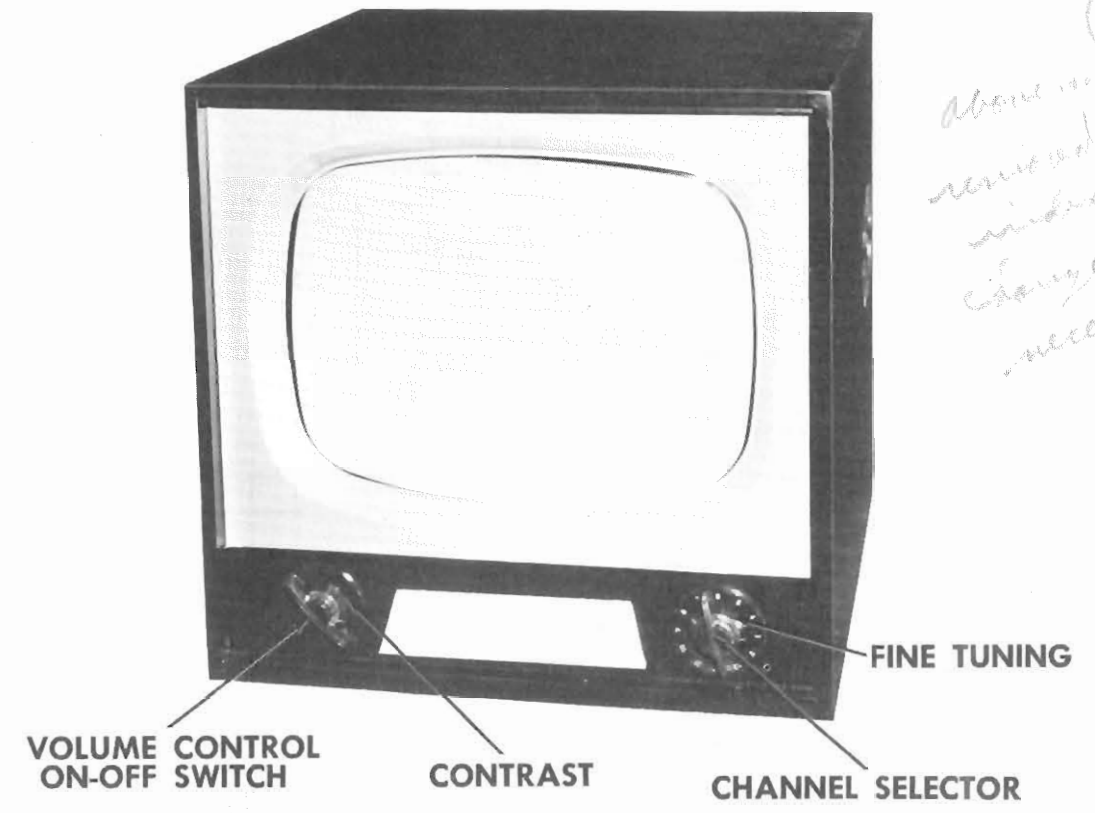


W-RESISTOR IDENTIFICATION



*above models
removed from
index for
change not
necessary*



STRATFORD MODEL 917 (Ch. 6353C)

TRADE NAME	Stratford Models	Chassis
	916, 917, 920, 921	E6353, E6353C, 6353, 6353C
	924	E6453, E6453C, 6453, 6453C
	927	6753C
	1016, 1017, 1020, 1021	E6353, E6353C, 6353, 6353C
	1024	E6453, E6453C, 6453, 6453C
	1027	6753C
MANUFACTURER	Telequip Radio Co., 2559 West 21 St. Street, Chicago 8, Illinois.	
TYPE SET	Television Receiver	
TUBES	Twenty	

POWER SUPPLY 110-120 Volts AC-60 Cycle

RATING 1.5 Amp @ 117 Volts AC

TUNING RANGE-Channels 2 thru 13, Video IF 26.1MC, Sound IF 21.6MC (Intercarrier)

INDEX

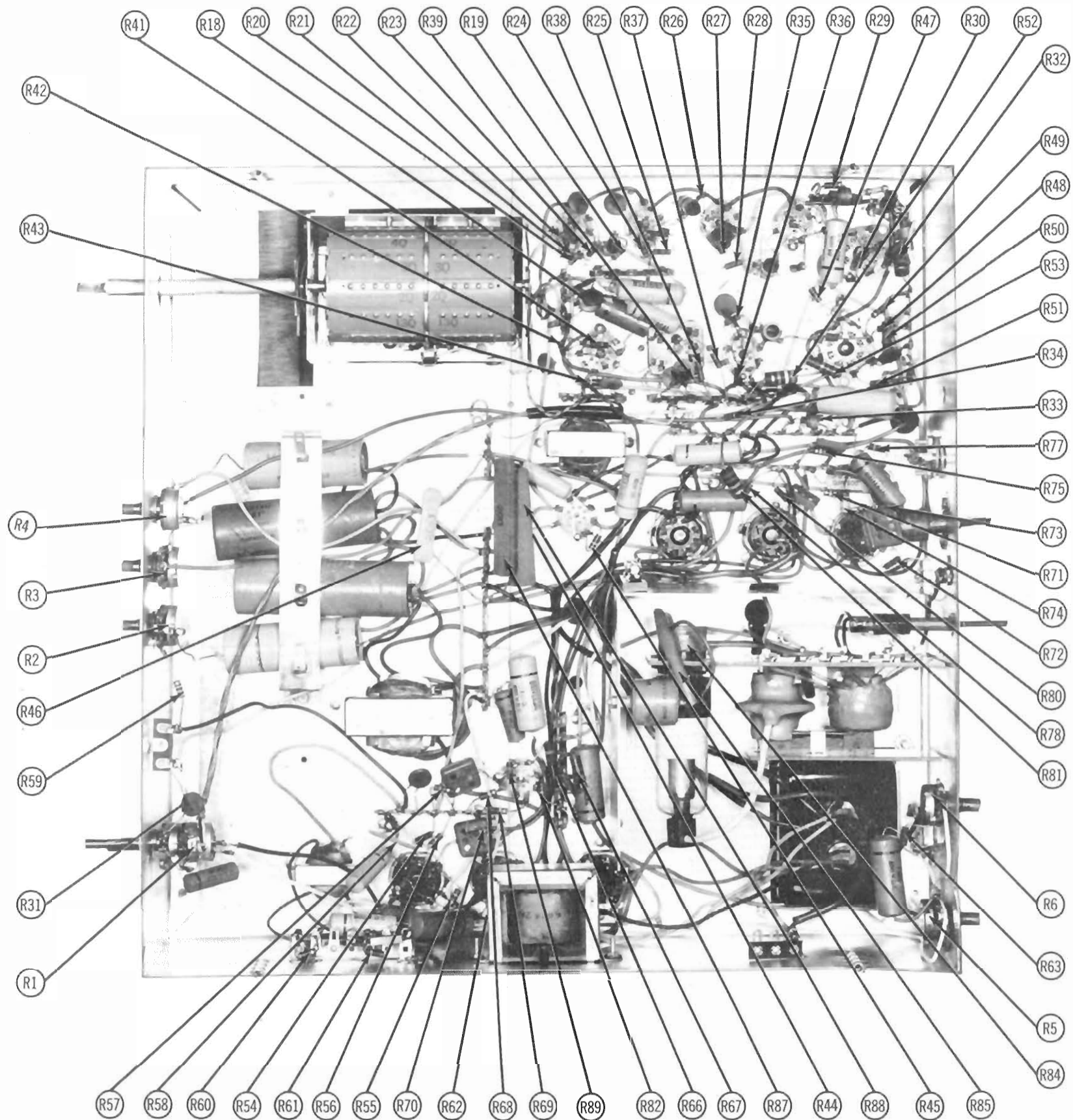
Alignment Instructions	6, 7	Photographs (Cont)	
Disassembly Instructions	18	Trans., Inductor and Alignment Identification	16
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Parts List and Descriptions	14, 15, 16	Servicing in the Field	18
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Chassis-Top View	3	Tube Failure Check Chart	5
RF Tuner	10	Tube Placement Chart (Bottom View)	8
Resistor and Identification	19, 20	Tube Placement Chart (Top View)	5

STRATFORD MODELS
916, 917, 920, 921, 924, 927,
1016, 1017, 1020, 1024, 1027 (Ch. E6353,
C, 6353, C, E6453, C, 6453, C, 6753C)

HOWARD W. SAMS & CO., INC. • Indianapolis 5, 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."

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CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION

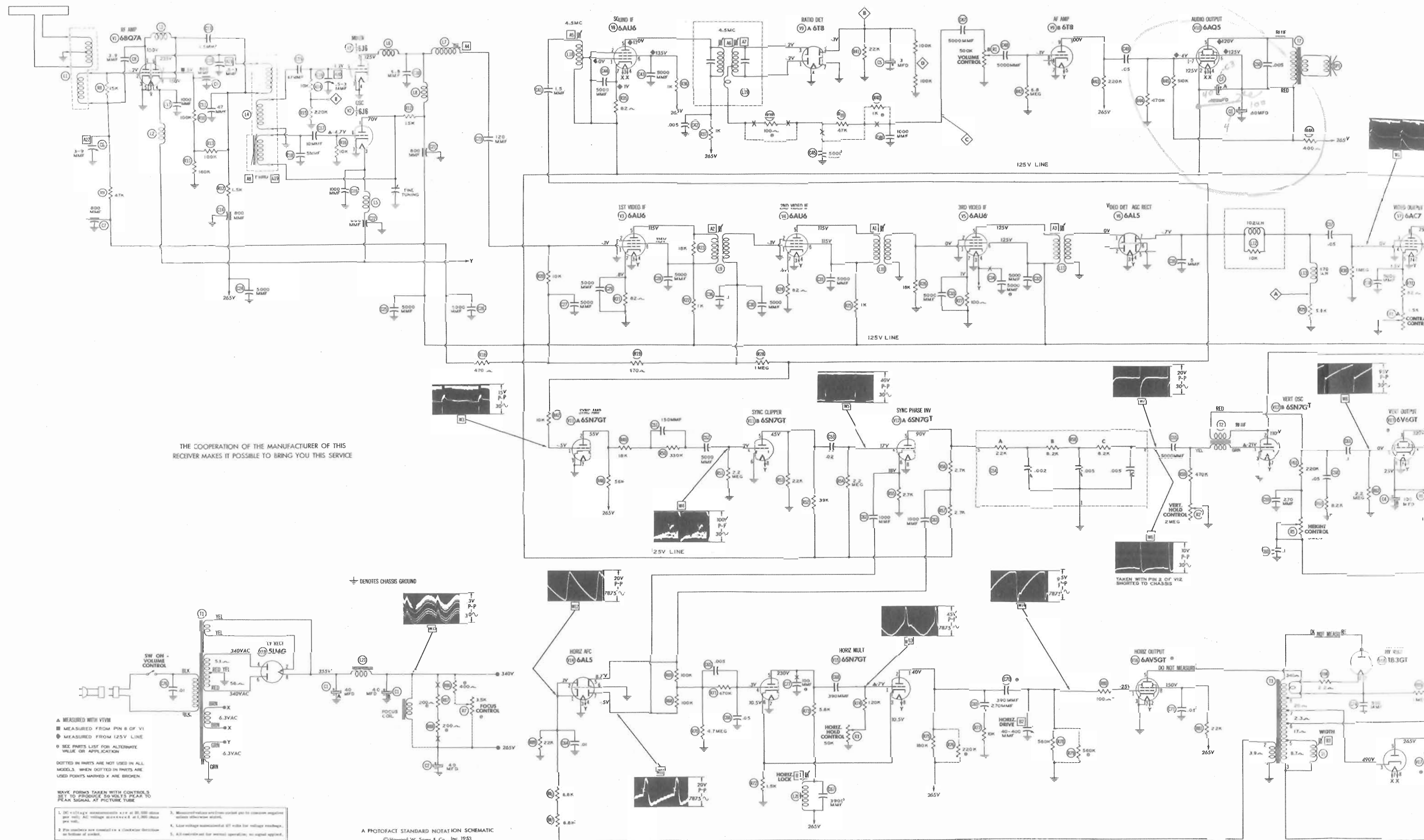
VOLUME C
ON-OFF S

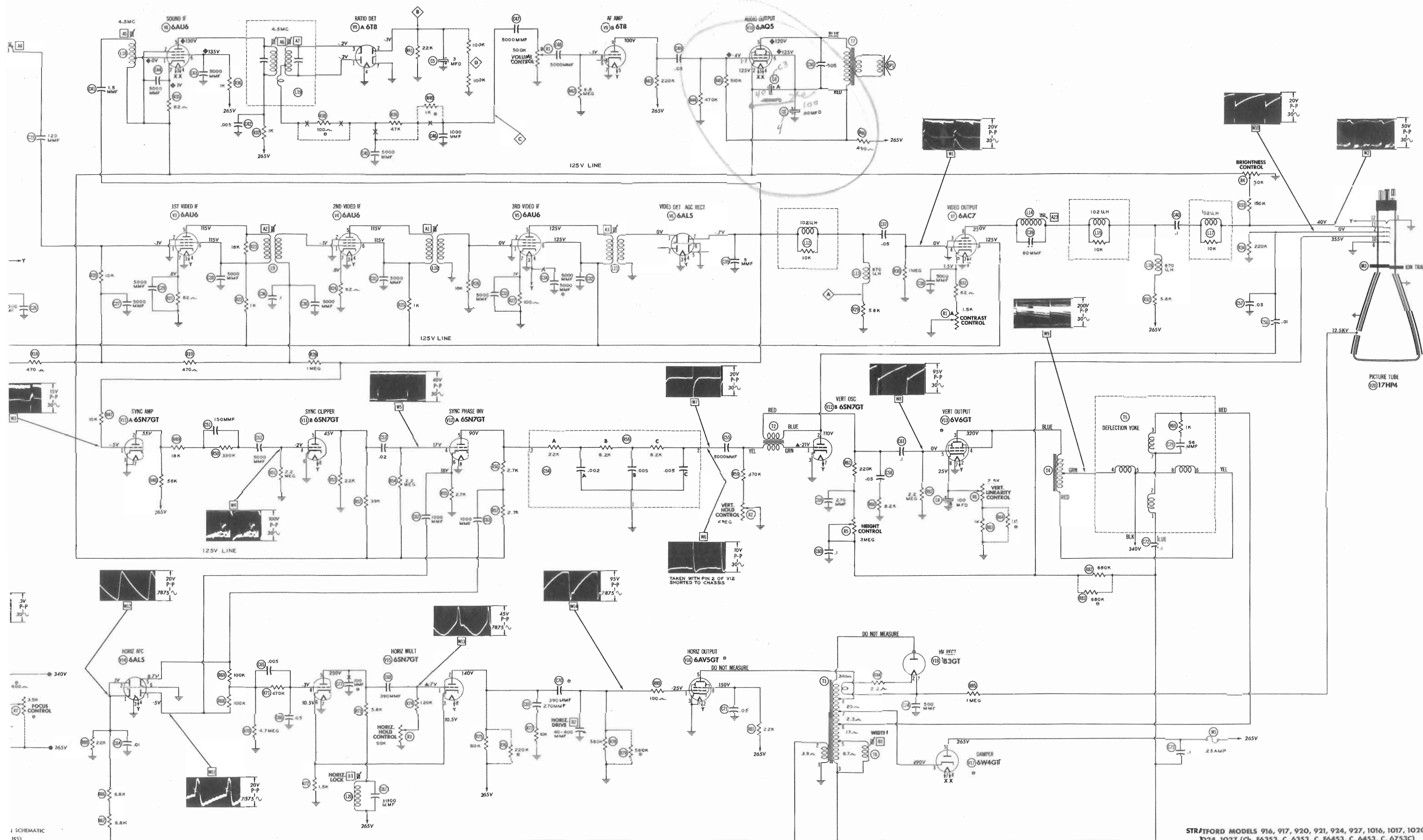
TRADE NAME	Strat
	916, 1
	924
	927
	1016,
	1024
	1027
MANUFACTURER Tel	
TYPE SET	Tele
TUBES	Two
POWER SUPPLY 110-1	
TUNING RANGE-Chan	

Alignment Instructions
Disassembly Instruction
Horizontal Sweep Circu
Parts List and Descrip
Photographs
Cabinet-Rear View
Capacitor Identifi
Chassis-Top View
RF Tuner
Resistor and Ident

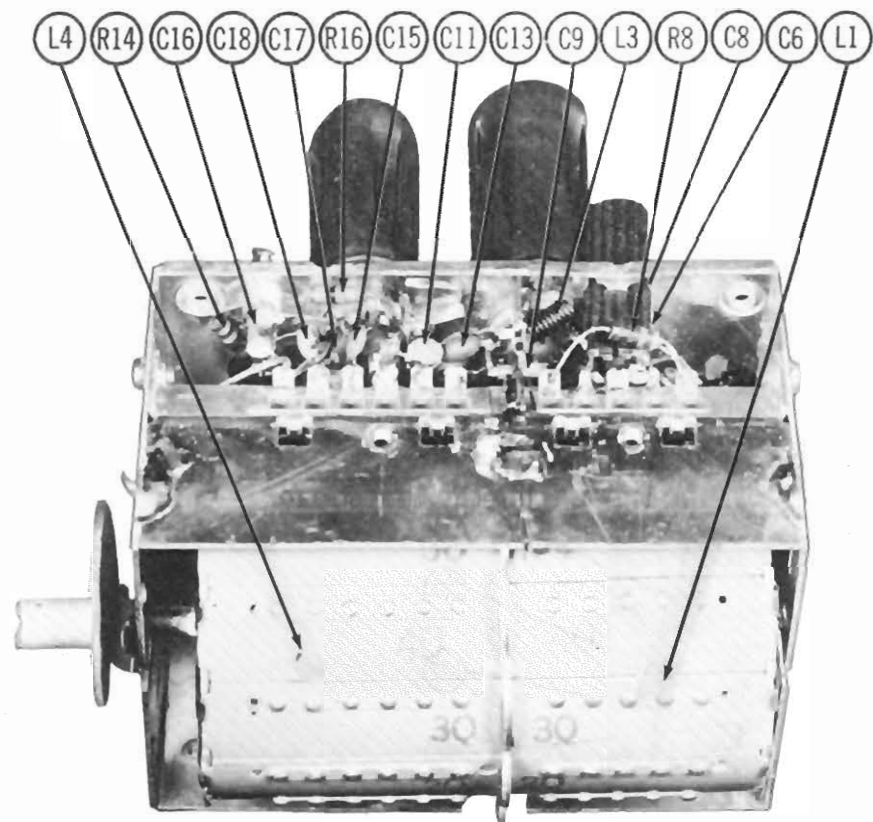
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"The listing of any available rep
case a recommendation, warrant
as to the quality and suitability o
parts have been compiled from in
Inc., by the manufacturers of the
"Reproduction or use, without e

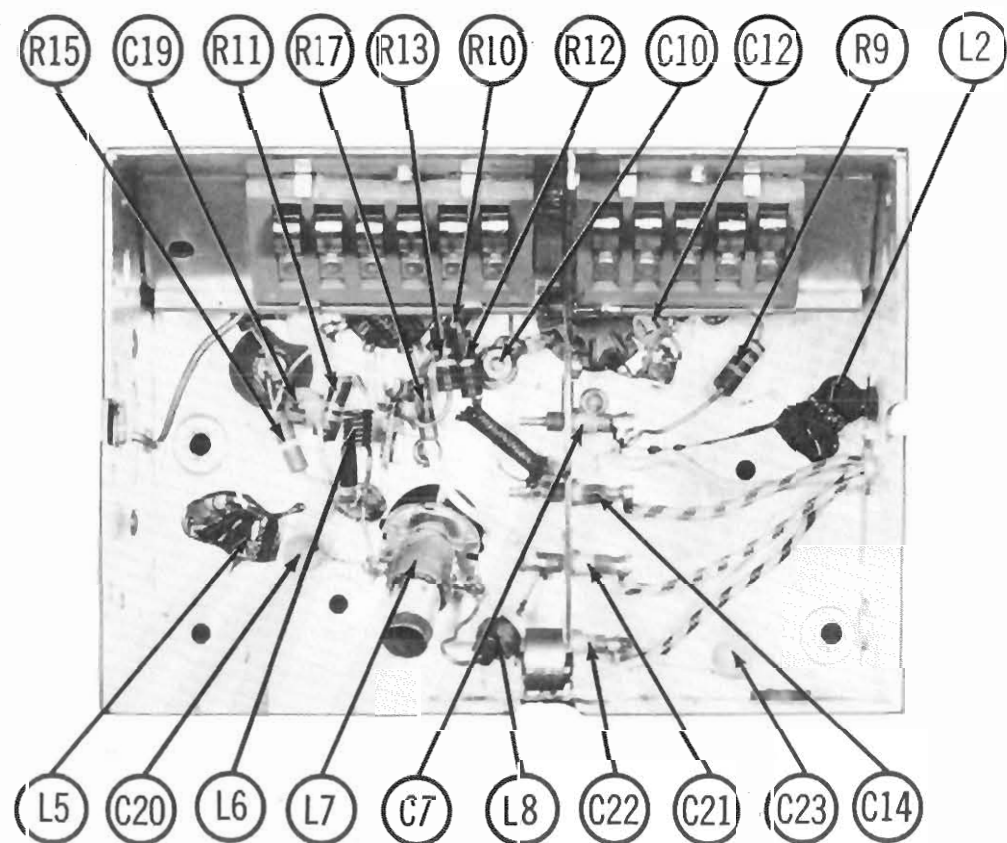




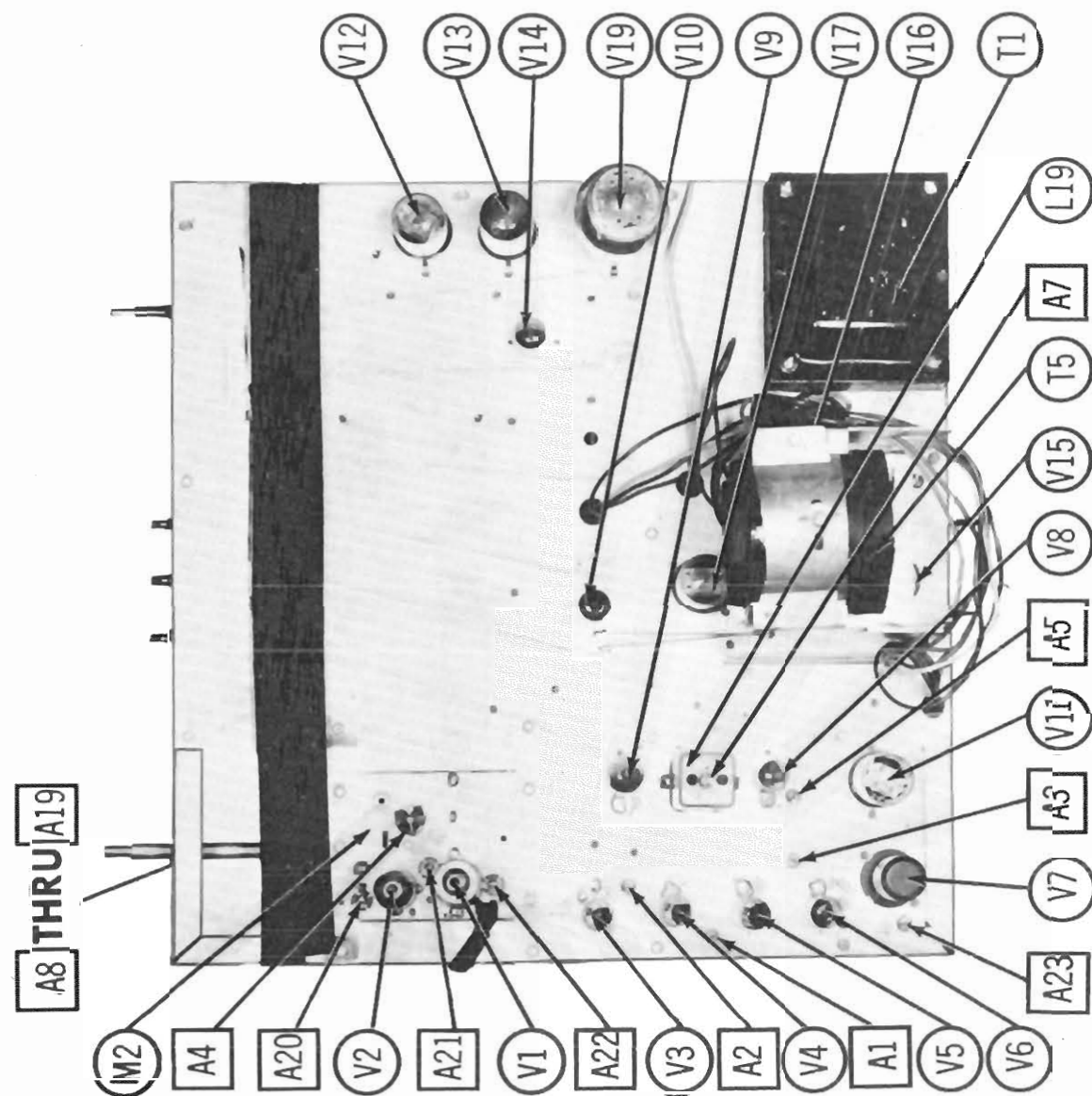
STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020,
1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)



RF TUNER-RIGHT SIDE



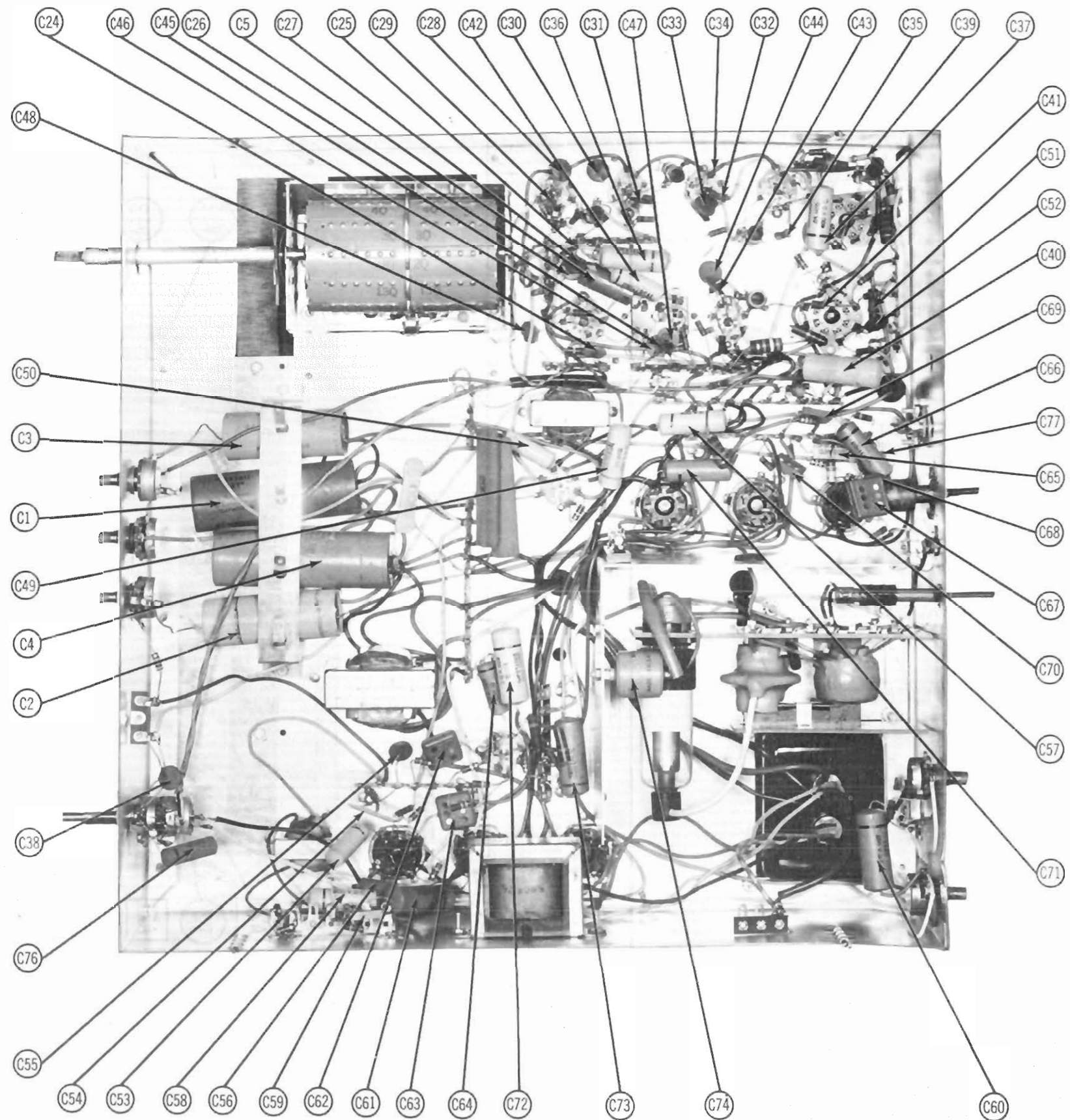
RF TUNER-BOTTOM VIEW



MAIN, DO1 SSS VHC

STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020, 1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)

STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020,
1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)

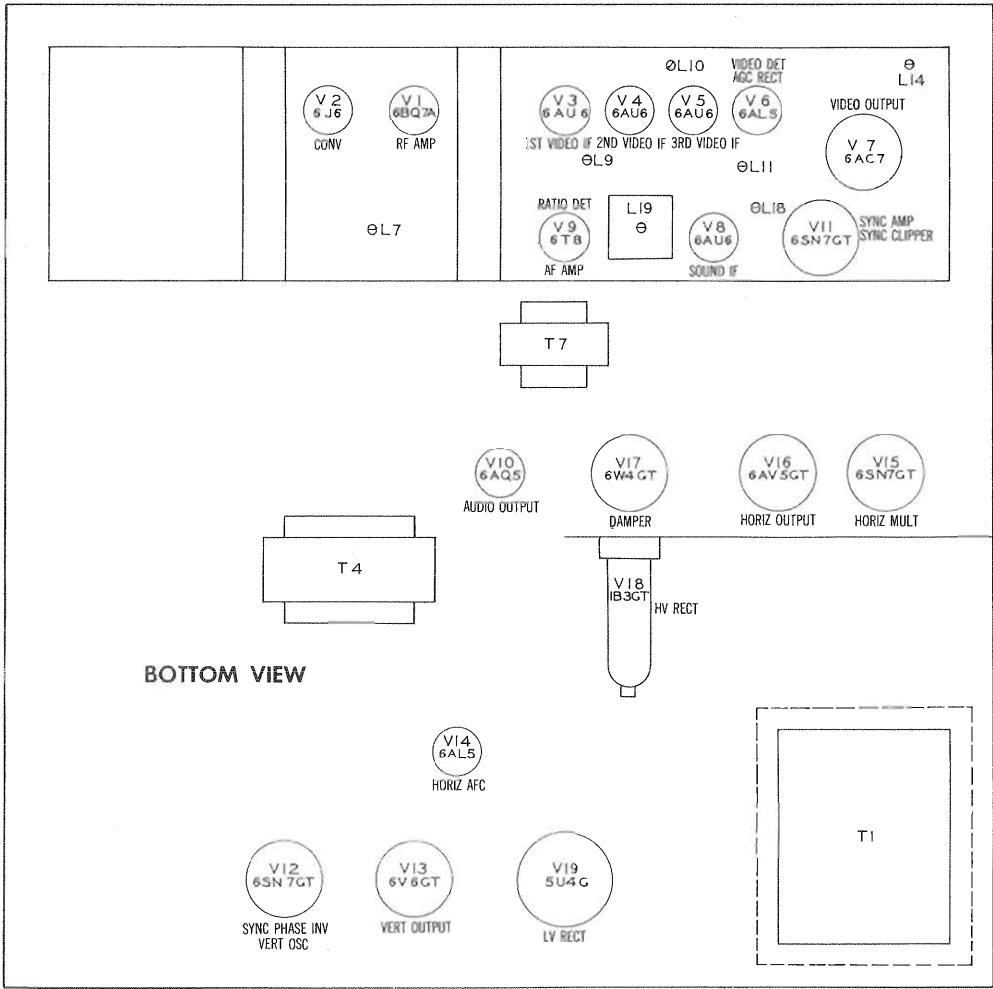


CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION

RESISTANCE MEASUREMENTS

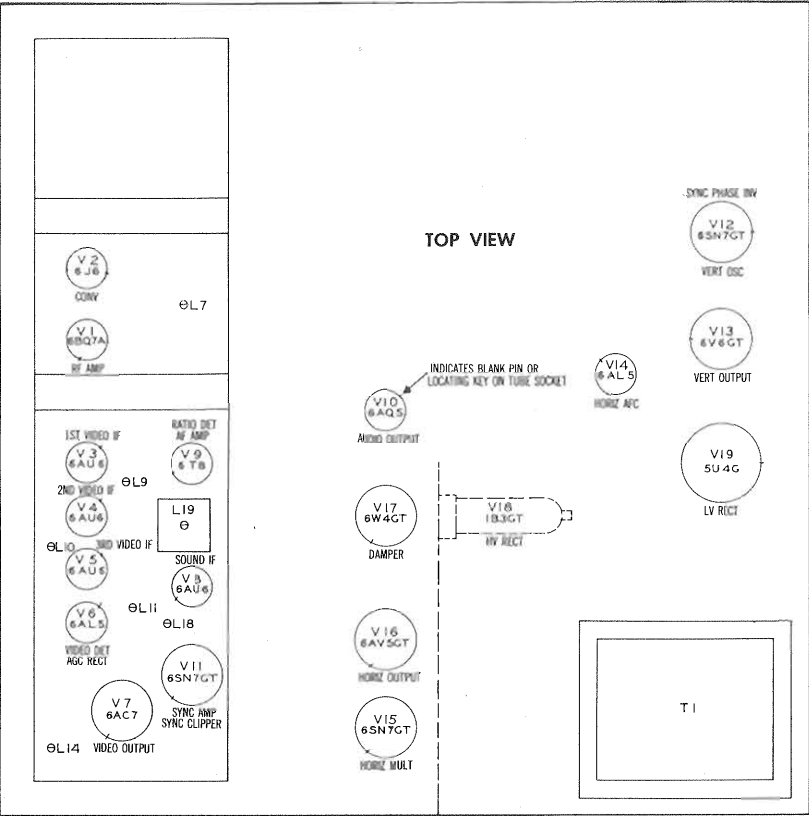
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BQ7A	INF	1 Meg	0Ω	.1Ω	0Ω	†2KΩ	†170KΩ	INF	0Ω
V 2	6J6	†15KΩ	†2.3Ω	.1Ω	0Ω	230KΩ	10KΩ	0Ω		
V 3	6AU6	1 Meg	0Ω	0Ω	.1Ω	†1KΩ	†1KΩ	82Ω		
V 4	6AU6	1 Meg	0Ω	0Ω	.1Ω	†1KΩ	†1KΩ	82Ω		
V 5	6AU6	.3Ω	0Ω	0Ω	.1Ω	†0Ω	†0Ω	100Ω		
V 6	6AL5	.3Ω	INF	0Ω	.1Ω	INF	0Ω	5.6KΩ		
V 7	6AC7	0Ω	.1Ω	0Ω	1 Meg	440Ω	†0Ω	0Ω		
V 8	6AU6	†2.4KΩ	†0Ω	INF	INF	†1.5KΩ	†1.5KΩ	†82Ω		
V 9	6T8	INF	22KΩ	INF	0Ω	.1Ω	INF	0Ω	6.8Meg	†220KΩ
V 10	6AQ5	†250KΩ	25KΩ	INF	INF	†1.1KΩ	†865Ω	†250KΩ		
V 11	6SN7GT	16KΩ	†56KΩ	0Ω	2.2Meg	†17.5KΩ	0Ω	0Ω	.1Ω	
V 12	6SN7GT	1.2Meg	†1.9Meg	0Ω	†2.2Meg	†5.4KΩ	2.7KΩ	.1Ω	0Ω	
V 13	6V6GT	0Ω	.1Ω	†1.4KΩ	†1.4KΩ	2.2Meg	220KΩ	0Ω	1.6KΩ	
V 14	6AL5	8KΩ	8KΩ	0Ω	.1Ω	4.8Meg	0Ω	4.8Meg		
V 15	6SN7GT	130KΩ	†180KΩ	1.5KΩ	5.1Meg	†6KΩ	1.5KΩ	0Ω	.1Ω	
V 16	6AV5GT	560KΩ	.1Ω	0Ω	INF	†20Ω	INF	0Ω	†22KΩ	
V 17	6W4GT	INF	INF	INF	INF	†465Ω	INF	INF	INF	
V 18	1B3GT	PINS 1 - 8 HAVE INF RESISTANCE								Top Cap †360Ω
V 19	5U4G	INF	100KΩ	†85Ω Pin 8	53Ω Pin 10	INF	56Ω Pin 11	INF	100KΩ	
V 20	17HP4	0Ω	220KΩ	0Ω	†680KΩ	170KΩ	.1Ω			

† MEASURED FROM PIN 8 OF V19.
‡ MEASURED FROM 125VDC LINE.
■ MEASURED FROM PIN 3 OF V17.



TUBE PLACEMENT CHART

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

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

- POWER SUPPLY FAILURE
No raster, no sound - V19
- LOSS OF PICTURE OR SOUND
No pic, no sound, has raster - V2, V3, V4, V5, V6, V10
No pic, no sound, has snow - V1, V2, V3
No pic, has sound, has raster - V7, V20
Has pic, no sound - V8, V9, V10
- SYNC FAILURE
No vert. sync - V12, V13
No horiz. sync - V12, V14, V15
No vert. or horiz. sync - V11, V12
- SWEEP FAILURE
No raster, has sound - V15, V16, V17, V18, V20 Fuse (M1)
No vertical deflection - V12, V13
Poor vert. linearity or foldover - V12, V13
Poor horiz. linearity or foldover - V15, V16, V17
Narrow picture - V15, V16, V17, V18, V19
Vert. off freq. - V12, V13
Horiz. off freq. - V12, V14, V15

STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020, 1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)


ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis. Do not remove the horizontal multivibrator to disable the high voltage.




VIDEO IF ALIGNMENT

Remove the converter tube (V2) from its socket and replace with a 6J6 which has pin 1 removed. This will disable the local oscillator and reduce the possibility of erroneous indications. Connect the negative lead of a 1½ volt battery to the junction of R28 and C36 and the positive lead to chassis. Connect the synchronized sweep voltage from the sweep 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 an un-grounded tube shield floating over dummy converter tube. Low side to chassis.	24MC (10MC Swp)	23MC	Any	Vert. Amp. thru 10KΩ isolating resistor to point  . Low side to chassis.	A1	Adjust for maximum marker amplitude.
2.	"	"	"	25.7MC	"	"	A2	"
3.	"	"	"	26.1MC 21.6MC	"	"	A3, A4	Adjust for maximum overall response as in Fig. 1. If necessary retouch A1 thru A4.




SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100KΩ (±1%) resistors in series from point **B** to chassis. The junction of these two resistors is alignment point **D** as shown on the schematic.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4.	.01MFD	High side to point Low side to chassis. 	4.5MC (Unmod.)	Any	DC probe to point Common to chassis. 	A5, A6	Adjust for maximum deflection. If reading exceeds -8 volts, reduce generator output.
5.	"	"	"	"	DC probe to point Common to point 	A7	Adjust for zero reading. A positive and negative reading will be obtained on either side of correct setting.


SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4.	0.01MFD	High side to point  Low side to chassis.	4.5MC (450KC Swp)	4.5MC	Any	Vert. Amp. to point  Low side to chassis.	A5, A6	Disconnect stabilizing capacitor (C5). Ac- just for maximum amplitude and symmetry as in Fig. 1.
5.	"	"	"	"	"	Vert. Amp. to point  Low side to chassis.	A7	Reconnect stabilizing capacitor (C5). Ad- just A7 so that 4.5 MC occurs at center of crossover lines as in Fig. 3. SLIGHTLY retouch A6 for maximum amplitude and straightness of crossover lines.

OSCILLATOR ALIGNMENT*

Remove the dummy converter tube and replace the original 6J6 in its socket.
Remove the channel selector and fine tuning knobs. The channel oscillator adjustment screws are reached through a hole just to the right of the channel switch shaft. The correct adjustment screw is accessible through this hole as the channel switch is turned to each channel.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep 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	SWEET GENERATOR COUPLING	SWEET GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213MC (10MC Swp)	211.25MC 215.75MC	13	Vert. Amp. thru 27KΩ to point  . Low side to chassis.	A3	Adjust to place sound marker as in Fig. 4. Video marker should be at 50%.
		207MC (10MC Swp)	205.25MC 209.75MC	12		A9	
		201MC (10MC Swp)	199.25MC 203.75MC	11		A10	
		195MC (10MC Swp)	193.25MC 197.75MC	10		A11	
		189MC (10MC Swp)	187.25MC 191.75MC	9		A12	
		183MC (10MC Swp)	181.25MC 185.75MC	8		A13	
		177MC (10MC Swp)	175.25MC 179.75MC	7		A14	
		85MC (10MC Swp)	83.25MC 87.75MC	6		A15	
		79MC (10MC Swp)	77.25MC 81.75MC	5		A16	
		69MC (10MC Swp)	67.25MC 71.75MC	4		A17	
		63MC (10MC Swp)	61.25MC 65.75MC	3		A18	
		57MC (10MC Swp)	55.25MC 59.75MC	2		A19	

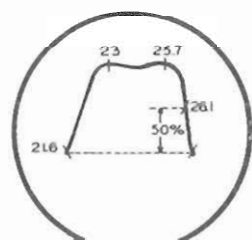


FIG. 1

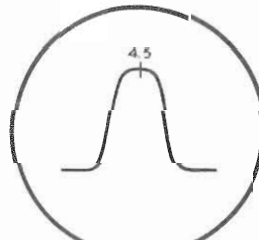


FIG. 2

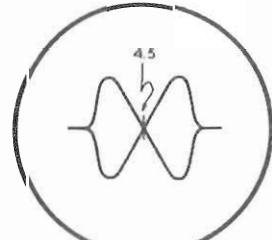


FIG. 3

ALIGNMENT INSTRUCTIONS (cont)

RF AND MIXER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. 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
7. Two 120Ω Carbon Resistors	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.	A20 A21 A22	Adjust for response curve similar to Fig. 6. with markers above 90%.
8. "	"	213MC (10MC Swp) 201MC (10MC Swp) 198MC (10MC Swp) 182MC (10MC Swp) 182MC (10MC Swp) 177MC (10MC Swp) 85MC (10MC Swp) 79MC (10MC Swp) 58MC (10MC Swp) 53MC (10MC Swp) 57MC (10MC Swp)	211.25MC 215.75MC 199.25MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC 83.25MC 87.75MC 77.25MC 81.75MC 67.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	13 11 10 9 8 7 6 5 4 3 2	"	"	"

4.5MC TRAP ALIGNMENT

Tune in a TV station and examine the picture for evidence of 4.5MC interference. If any is noted, adjust A23 to minimize it.

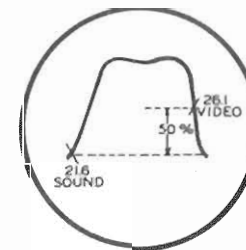


FIG. 4

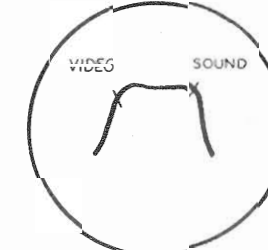


FIG. 5

STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020, 1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustments of the RF Tuner Oscillator Circuit may be accomplished by removal of the Channel Selector and Fine Tuning knobs. The adjustments are accessible, one at a time, through the small hole in the cabinet to the right of the Channel Selector shaft.

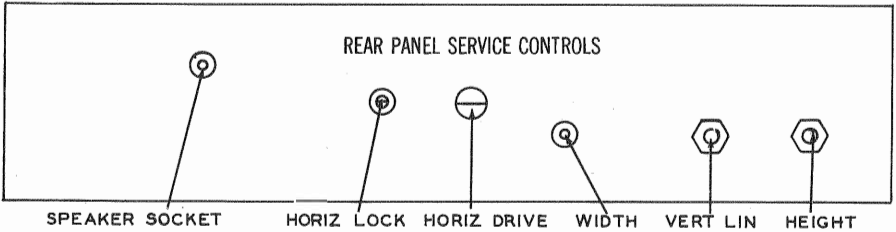
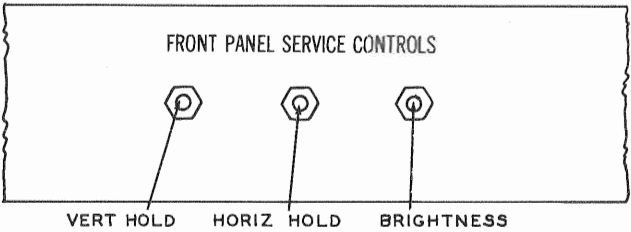
PICTURE TUBE SAFETY GLASS CLEANING

To clean safety glass remove 3 wood screws holding wood strip at top of cabinet. Remove wood strip and safety glass. Use extreme caution when removing safety glass.

PICTURE TUBE REMOVAL

For picture tube removal it is necessary to remove chassis. (See disassembly instructions).

SERVICE ADJUSTMENT LOCATION



HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Adjustment of the Horiz. Oscillator Circuit can be made from the rear panel of the chassis set the Horiz. Hold Control at the mid-position of its range and adjust the Horiz. Lock slug until the picture synchronizes horizontally.

SOUND IF DETECTOR BUZZ ADJUSTMENT

To eliminate Sound IF Detector Buzz, Adjust the Ratio Detector Secondary L19, located on top of chassis. (See tube placement chart).

FUSES

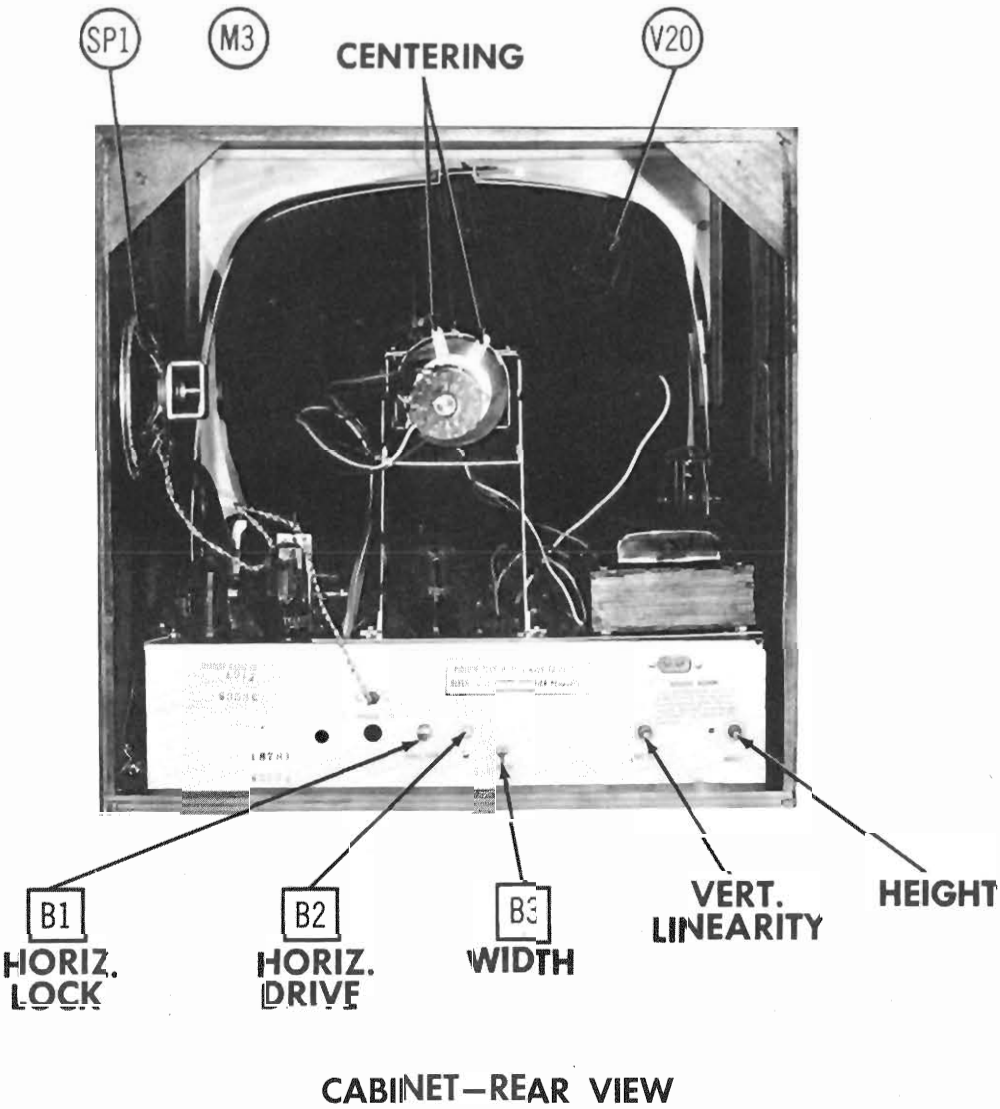
One fuse is used for Horiz. Sweep Circuit protection. (For location, see tube placement chart).

CENTERING

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube, located flush against the deflection yoke. Rotate the two rings around the neck of the tube until the picture is properly centered.

DISASSEMBLY INSTRUCTIONS

1. Remove 4 push on type control knobs from front panel.
2. Remove 2 screws. Remove antenna bracket from rear cover.
3. Remove 4 wood screws. Remove rear cover.
4. Disconnect speaker. Remove 2 wood screws. Remove speaker.
5. Remove 4 chassis bolts. Remove chassis.



HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

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

Turn the horizontal hold control to its mid-range setting. Adjust the horizontal lock slug (B1) until the picture syncs horizontally.

Turn the horizontal drive control (B2) counter clockwise as far as possible without the presence of vertical white lines or compression in the center of the picture.

Adjust the width slug (B3) for a picture slightly wider than necessary to fill the mask horizontally.

STATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020, 1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)

TROUBLE SHOOTING AIDS

SWEEP

HORIZONTAL	VERTICAL								
<p><u>LOSS OF SWEEP</u></p> <p>See "Loss of High Voltage"</p> <p><u>INSUFFICIENT SWEEP</u></p> <p>Check by substitution V15, V16, V17 and V19. Check adjustment of width (B3) and horiz. drive (B2). Check waveform at W14.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check C71, C72, C73, T3, T5A and other associated components.</td><td>Check C68, C69, C70 and other associated components.</td></tr> </table> <p><u>DRIVE LINES</u></p> <p>Check by substitution V15, V16 and V17. Check adjustment of horiz. drive (B2). Check C69, C70, C72, C73, T3, T5A and other associated circuit components.</p> <p><u>COMPRESSED LEFT SIDE</u></p> <p>Check by substitution V15, V16 and V17. Check adjustment of width (B3) and horiz. drive (B2). Check C71, T3, T5A and other associated components.</p> <p><u>FOLDS</u></p> <p>Check by substitution V15, V16 and V17. Check C72, C73, C71, T3, T5A and other associated components.</p> <p><u>XMAS TREE EFFECT</u></p> <p>Check by substitution V15. Check C67, C68 and L20.</p>	If Satisfactory	If Unsatisfactory	Check C71, C72, C73, T3, T5A and other associated components.	Check C68, C69, C70 and other associated components.	<p><u>LOSS OF SWEEP</u></p> <p>Check by substitution V12 and V13. Check waveform W8.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check T4, T5B and other associated components.</td><td>Check T2, C58, C59, C61, C60 and other associated components.</td></tr> </table> <p><u>INSUFFICIENT SWEEP</u></p> <p>Check by substitution V12 and V13. Check adjustment of height and vertical linearity controls. Follow procedure outlined under "Loss of Sweep".</p> <p><u>COMPRESSED AT BOTTOM</u></p> <p>Check adjustment of height and vertical linearity controls. If sufficient sweep is obtained and picture is compressed, recenter raster and readjust height and vertical linearity controls. If Bottom is compressed and not enough sweep is present substitute V12 and V13. Check associated circuit components.</p> <p><u>COMPRESSED AT TOP</u></p> <p>Check adjustment of height and vertical linearity controls. Recenter raster if necessary. Check by substitution V12 and V13. Check components associated with V12B and V13.</p> <p><u>FOLDS</u></p> <p>Check by substitution V12 and V13. Check circuit components especially T2, T4 and T5B.</p>	If Satisfactory	If Unsatisfactory	Check T4, T5B and other associated components.	Check T2, C58, C59, C61, C60 and other associated components.
If Satisfactory	If Unsatisfactory								
Check C71, C72, C73, T3, T5A and other associated components.	Check C68, C69, C70 and other associated components.								
If Satisfactory	If Unsatisfactory								
Check T4, T5B and other associated components.	Check T2, C58, C59, C61, C60 and other associated components.								

SYNC

HORIZONTAL	VERTICAL				
<p><u>LOSS OF SYNC</u></p> <p>Check by substitution V14 and V15. Check waveform at W11.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check C64, R66, R67 and T3. Check other components associated with V14.</td><td>Check C62, C63, R68, R69 and other associated components.</td></tr> </table> <p><u>CRITICAL HOLD</u></p> <p>Check by substitution V14 and V15. Check components associated with these stages.</p> <p><u>PULLING PICTURE</u></p> <p>Check by substitution V14, V15 and V16. Check C65, C66 and other associated components. Check sync stages for 60 cycle modulation. Check AGC network for improper operation.</p>	If Satisfactory	If Unsatisfactory	Check C64, R66, R67 and T3. Check other components associated with V14.	Check C62, C63, R68, R69 and other associated components.	<p><u>LOSS OF SYNC</u></p> <p>Check by substitution V11 and V12. Check vertical integration network and all sync coupling capacitors.</p> <p><u>CRITICAL HOLD</u></p> <p>Follow procedure outlined under "Loss of Sync".</p> <p><u>TRIGGERING</u></p> <p>Check by substitution V11 and V12. Check circuit near these stages for filament lead dress. Dress all filament leads away from grid load resistors and coupling capacitors.</p>
If Satisfactory	If Unsatisfactory				
Check C64, R66, R67 and T3. Check other components associated with V14.	Check C62, C63, R68, R69 and other associated components.				

VIDEO

<p><u>LOSS OF VIDEO</u></p> <p>Substitute V7. Check associated circuit components especially L15, L16, L17, C40, R32 and R31. Check picture tube.</p> <p><u>SOUND BARS</u></p> <p>Check local oscillator alignment. Check adjustment of 4.5 MC trap (A23).</p> <p><u>NEGATIVE PICTURE</u></p> <p>Check by substitution V6 and V7. Check components associated with these stages for failure or change of value. Check video IF stages for weak tubes and/ or component failure. Check AGC network.</p>	<p><u>POOR CONTRAST</u></p> <p>Check by substitution V6 and V7. Check associated components especially bypass and coupling capacitors.</p> <p><u>SMEAR</u></p> <p>Check by substitution V6 and V7. Check C37 and C40. Check R31 and R32 for change of value. Check L12 and L15. Check picture tube and other associated components.</p> <p><u>ONE WIDE BLACK BAR ACROSS PICTURE</u></p> <p>Check tuner, video IF, video detector and video amplifier tubes for heater to cathode leakage.</p>
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TROUBLE SHOOTING AIDS (cont)

AUDIO

<p><u>WEAK OR NO SOUND</u></p> <p>Check by substitution V8, V9 and V10. Check stages of V9B and V10 using audio signal generator. Apply audio signal across R42.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check ratio detector and audio IF alignment and components.</td><td>Check components associated with V9B and V10 especially C49 and T7.</td></tr> </table> <p><u>BUZZ</u></p> <p>Adjust ratio detector secondary (A7) for minimum buzz. If buzz is still objectionable substitute V9 and realign ratio detector (A6 and A7). Check associated circuit components.</p>	If Satisfactory	If Unsatisfactory	Check ratio detector and audio IF alignment and components.	Check components associated with V9B and V10 especially C49 and T7.	<p><u>DISTORTED</u></p> <p>Check by substitution V8, V9 and V10. Check stages of V9B and V10 using audio signal generator and scope. Apply audio signal across R42. Connect scope across secondary of T7.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check ratio detector and audio IF alignment and components.</td><td>Check components of the stage where distortion occurs.</td></tr> </table>	If Satisfactory	If Unsatisfactory	Check ratio detector and audio IF alignment and components.	Check components of the stage where distortion occurs.
If Satisfactory	If Unsatisfactory								
Check ratio detector and audio IF alignment and components.	Check components associated with V9B and V10 especially C49 and T7.								
If Satisfactory	If Unsatisfactory								
Check ratio detector and audio IF alignment and components.	Check components of the stage where distortion occurs.								

POWER

<p><u>DEAD SET</u></p> <p>Check AC interlock assembly. Check switch on volume control. Check T1.</p>	<p><u>SMALL AND/ OR DIM RASTER</u></p> <p>Substitute V19. Check B+ filter and decoupling network.</p>
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HIGH VOLTAGE

<p><u>LOSS OF HIGH VOLTAGE</u></p> <p>Check by substitution V15, V16, V17 and V18. Check waveform at W14.</p> <table> <tr> <td>If Satisfactory</td><td>If Unsatisfactory</td></tr> <tr> <td>Check R84, R85, C74, T3, T5A, C71 and other associated components.</td><td>Check C68, C69, C70 and other associated components.</td></tr> </table>	If Satisfactory	If Unsatisfactory	Check R84, R85, C74, T3, T5A, C71 and other associated components.	Check C68, C69, C70 and other associated components.	<p><u>INSUFFICIENT SWEEP</u></p> <p>Check by substitution V15, V16, V17, V18 and V19. Proceed as outlined under "Loss of High Voltage". Check picture tube.</p> <p><u>BLOOMING</u></p> <p>Check V15, V16, V17, V18 and V19. Check R84, R85, C74, T3, T5A and other associated circuit components. Check picture tube.</p>
If Satisfactory	If Unsatisfactory				
Check R84, R85, C74, T3, T5A, C71 and other associated components.	Check C68, C69, C70 and other associated components.				

GENERAL

<p><u>RASTER SOUND NO PICTURE</u></p> <p>Substitute V7. Check associated circuit components. Check picture tube.</p> <p><u>RASTER NO SOUND NO PIX</u></p> <p>Check V1, V2, V3, V4, V5, V6 and V10. Check associated circuit components.</p> <p><u>NO RASTER NO SOUND NO PIX</u></p> <p>Follow procedure outlined under "Dead Set". Check B+ network.</p>	<p><u>TOTAL LOSS OF SYNC</u></p> <p>Check by substitution V11 and V12. Check associated components.</p> <p><u>INTERMITTENT STREAKS</u></p> <p>Check high voltage section for corona discharge and arcing.</p>
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Symptoms shown are assumed and are not indicative of the quality and workmanship of this receiving equipment.

STRATFORD MODELS 916, 917, 920, 921, 924, 927, 1016, 1017, 1020, 1024, 1027 (Ch. E6353, C, 6353, C, E6453, C, 6453, C, 6753C)

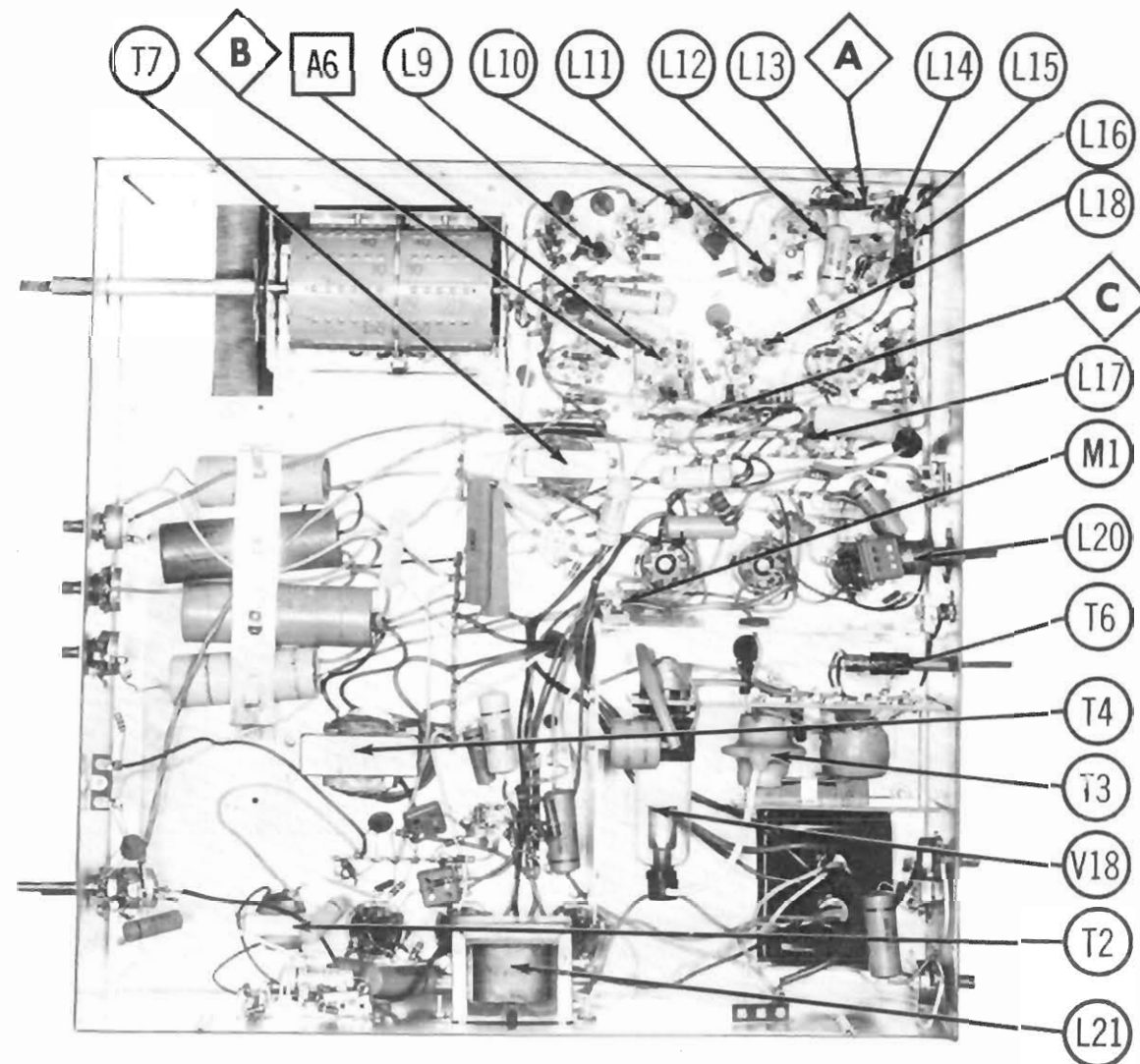
PARTS LIST AND DESCRIPTIONS (Continued)

FUSES

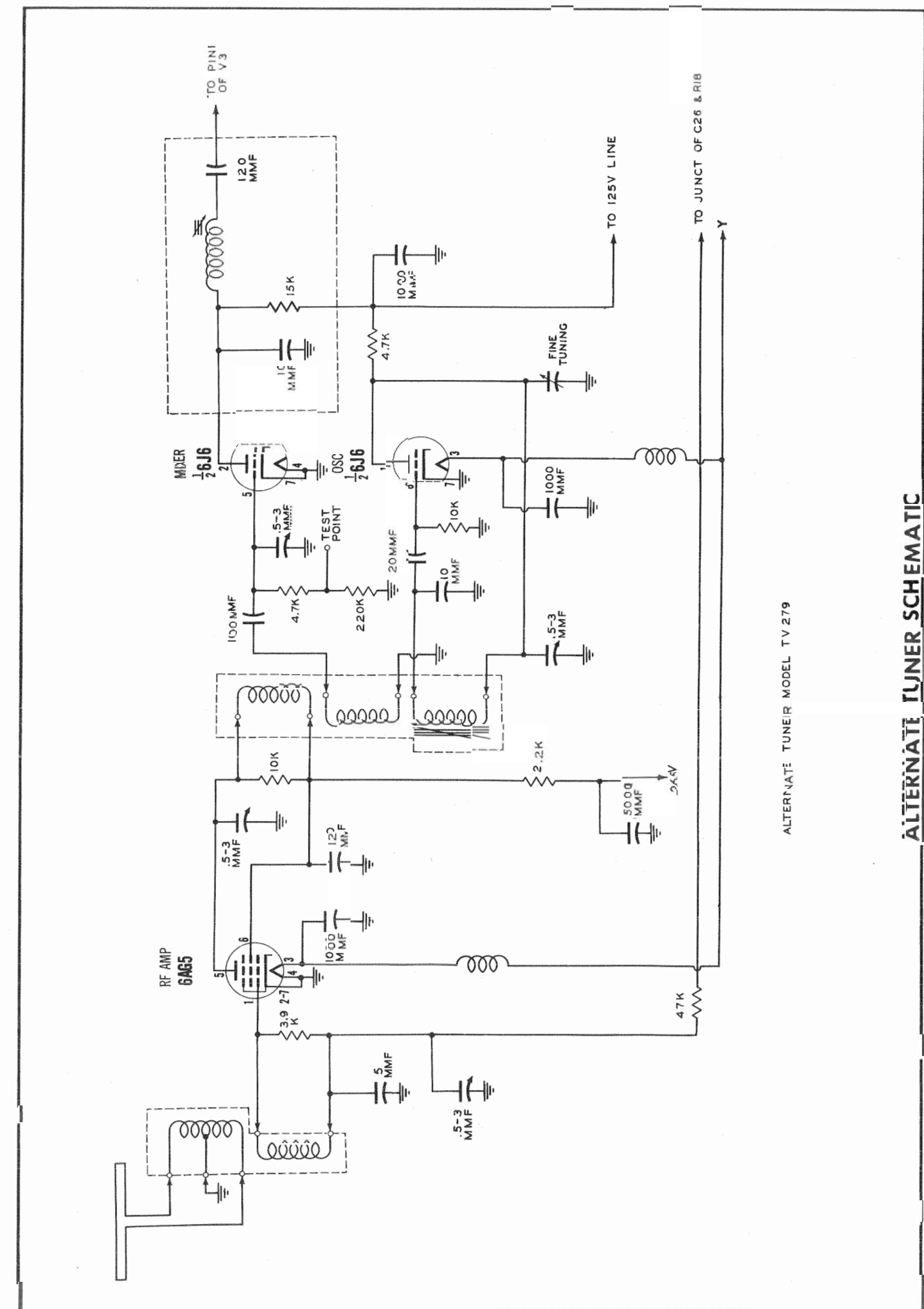
ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			STRATFORD PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M1	3AG	1/4A. 250V.			312,250	357001	AGC 1/4	4405

MISCELLANEOUS

ITEM No.	PART NAME	STRATFORD PART No.	NOTES
M2 M3 B2	RF Tuner Ion Trap Trimmer Cap.	TV-2231	Horiz. Drive 40-400MMF



CHASSIS BOTTOM VIEW-TRANS., INDUCTOR & ALIGN. IDENTIFICATION



TUBES (SYLVANIA, GENERAL ELECTRIC or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		STRATFORD PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	6BQ7A	6BQ7A	9AJ	
V2	Converter	6J6	6J6	7BF	
V3	1st. Video IF Amp.	6AU6	6AU6	7BK	
V4	2nd. Video IF Amp.	6AU6	6AU6	7BK	
V5	3rd. Video IF Amp.	6AU6	6AU6	7BK	
V6	Video Detector-AGC Rectifier	6AL5	6AL5	6BT	
V7	Video Output	6AC7	6AC7	8N	
V8	Sound IF Amp.	6AU6	6AU6	7BK	
V9	Ratio Detector-AF Amplifier	6T8	6T8	9E	
V10	Audio Output	6AQ5	6AQ5	7BZ	
V11	Sync Amplifier	6SN7GT	6SN7GT	8BD	
V12	Sync Phase Inv.-Vert. Oscillator	6SN7GT	6SN7GT	8BD	
V13A	Vert. Output	6V6GT	6V6GT	7S	
V13B	Vert. Output	6V6GT	6V6GT	7S	
V14	Horiz. AFC	6AL5	6AL5	6BT	
V15	Horiz. Mult.	6SN7GT	6SN7GT	93D	
V16A	Horiz. Output	6AV5GT	6AV5GT	6CK	
V16B	Horiz. Output	6CD6G	6CD6G	5BT	
V17A	Damper	6W4GT	6W4GT	4CG	
V17B	Damper	6AX4GT	6AX4GT	4CG	
V17C	Damper	6U4GT	6U4GT	4CG	
V18	HV Rectifier	1B3GT	1B3GT	3C	
V19	LV Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	STRATFORD PART No.	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		SYLVANIA PART No.	GENERAL ELECTRIC PART No.		
V20	17HP4	17HP4	17HP4	12C	

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							NOTES
		STRATFORD PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1A	40		PRS450/40		BBRD4446	2N537	TVA-2740		Ret
C1B	40		PRS450/40		BR4046A	TC78	TVA-1712		Ret
C2	40		PRS450/40		BR4046A	TC78	TVA-1712		
C3	40		PRS450/40		BO60	2N523	R1389		
C4A	100								
C4B	100								
C5	3		PRS150/4		BBR-3-50T	TC30	TVA-1402		Ret
C6	3-9			329-10					
C7	800		CN-1-001	MFT-1000				503C-D1	
C8	3-9								
C9	800		CN-1-001	MFT-1000				503C-D1	
C10	5-3								
C11	47		BPD-000047	D6-470	TM5D1	GPIK-470	UC-5447	5GA-Q47	
C12	1000		BPD-001	DD-100		801-001	DC-521	5HK-D1	
C13	1.5		SIL-5NPK	TCZ-1.5		NPOK-R5	5TCCB-V15		
C14	800		CN-1-001	MFT-1000				503C-D1	
C15	47		BPD-000047	D6-470		GPIK-470	UC-5447	5GA-Q47	
C16	5-3								
C17	10		SILNPK	TCZ-10		NPOK-100	5TCCB-Q1		
C18	5		SILNPK	TCZ-5		N750K-150	5TCCB-V5		
C19	900		BPD-001	DD-100	TM5D1	801-001	DC-521	5HK-D1	
C20	6.8		SIL-5NPK	TCZ-6.8		5TCCB-V55			
C21	800		CN-1-001	MFT-1000		NPOK-0R8	5TCCB-V55		
C22	800		CN-1-001	MFT-1000				503C-D1	
C23	100		BPD-00002	D6-121	TM5T12	GP2K-121	UC-5312	5GA-T12	
C24	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C25	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C26	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C27	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C28	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C29	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C30	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C31	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C32	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C33	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C34	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C35	5		SIL5	TCZ-4.7	5W5V5	GPIK-050			
C36	1	400	P488-1	DF-104	PTE4P1	PT401	4TM-P1		
C37	15	400	P488-05	DF-503	PTE4S5	PT405	4TM-S5		
C38	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C39	50								
C40	1	600	P688-1	DF-104	PTE6P1	PT601	6TM-P1		
C41	1.5		SIL-5NPK	TCZ-1.5		NPOK-R5	5TCCB-V5		
C42	305	600	P688-005	D6-502	PTE6D5	GP2-133-502	PT625	6TM-D5	
C43	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C44	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C45	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C46	1000		BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C47	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C48	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C49	0.5	600	P688-05	DF-503	PTE6S5	PT605	6TM-S5		
C50	0.305	600	P688-005	D6-502	PTE6D5	GP2-333-502	PT625	6TM-D5	
C51	150		SIL50	D6-151	TM5T15	GP2K-151	UC-5315	5GA-T15	
C52	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	
C53	0.2	400	P488-02	DF-203	PTE4S2	PT412	4TM-S2		
C54A	0.002		P688-002		PTE6D2		PT622		
C54B	0.005		P688-005		PTE6D5		PT625		
C54C	0.005		P688-005		PTE6D5		PT625		
C55	5000		BPD-005	MD-502	TM5D5	811-005	DC-525	5HK-D5	

PARTS LIST AND DESCRIPTIONS

CAPACITORS (cont)

ITEM No.	RATING	REPLACEMENT DATA							NOTES
		STRATFORD PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C56	0.1		P688-01	D6-103	PTE6S1	GP2-333-103	PT601	6TM-S1	
C57	0.05		P688-05	DF-503	PTE6S5		PT605	6TM-S5	
C58	0.05		P688-05	DF-503	PTE6S5		PT605	6TM-S5	
C59	275								
C60	1		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C61	1		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C62	1000			D6-102					
C63	1000			D6-102					
C64	0.01		P688-01	D6-103	PTE6S1	GP2-333-103	PT601	6TM-S1	
C65	0.005		P688-005	D6-502	PTE6D5	GP2-333-502	PT625	6TM-D5	
C66	0.5		P688-05	DF-503	PTE6S5		PT605	6TM-S5	
C67	3900		1464-0004		1464-0004			MS-24	
C68	390				2R5T4			MS-34	
C69	275								
C70	390								
C71	0.5		P688-05	DF-503	PTE6S5		PT605	6TM-S5	
C72	1		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C73	1		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C74	500		6892X-01	TV3-502	MM-C2075	413-501	HV20035A	20DK-T5	
C75	56	20000							
C76	0.1	600			PJ6S1		PT601	6TM-S1	
C77	100	500	1469-0001		5R5T1		MC235	MS-31	

Note 1. Not used in all Models.

Note 2. Chassis 6453, 6453C and 6753C use 3900MMF in this application.

Items C54A, C54B, C54C, R58A, R58B, R58C are combined in one unit.

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA					INSTALLATION NOTES
		STRATFORD PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	
R1A	1500Ω	W-3312	QJ-487 *	RTV-232	SBB-664-S	WF152	Contrast Panel
B	100KΩ					UR55A	Volume-Rear
C	Switch					US-26	Attach to RIB
R2A	2Meg	W-3256	QJL-139	AG-83-S	AB-75	SU-56	Vert. Hold
B	Shaft	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R2A
R3A	50KΩ	W-3257	QJL-123	AG-44-S	AB-31	SU-35	Horiz. Hold
B	Shaft	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R3A
R4A	50KΩ	W-3257	QJL-123	AG-44-S	AB-31	SU-35	Brightness
B	Shaft	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R4A
R5A	3Meg	W-3445	QJL-140	AG-84-S	AB-84	SU-59	Height
B	Shaft	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R5A
R6A	2500Ω	W-3258	QJL-112	AG-15-S	AB-7	SU-8	Vert. Linearity
B	Shaft	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R6A
R7	3500Ω						Focus-wire wound-see note

Note: Not used in all Models.

* CONCENTRIT EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS R17-109 & P1-120 (Panel)

R13-133 & R2-119 (Rear) & SWITCH 76-1.

RESISTORS

ITEM No.	RATING	REPLACEMENT DATA		NOTES
		STRATFORD PART No.	IRC PART No.	
R8	15KΩ			
R9	47KΩ			
R10	100KΩ			
R11	160KΩ			
R12	1500Ω			
R13	100KΩ			
R14	10KΩ			
R15	220KΩ			
R16	10KΩ			
R17	15KΩ			
R18	470Ω			
R19	470Ω			
R20	10KΩ			
R21	82Ω			
R22	1000Ω			
R23	18KΩ			
R24	82Ω			
R25	1000Ω			
R26	18KΩ			
R27	100Ω			
R28	1Meg			
R29	5000Ω			
R30	1Meg			
R31	82Ω			
R32	5000Ω			
R33	150KΩ			
R34	220KΩ			
R35	82Ω			
R36	1000Ω			
R37	1000Ω			
R38	100Ω			
R39	47KΩ			
R40	1000Ω			
R41	22KΩ			
R42	6.8Meg			
R43	220KΩ			
R44	470KΩ			
R45	510KΩ			
R46	400Ω			
R47	10KΩ			
R48	56KΩ			
R49	18KΩ			

Note 1. Not used in all Models.

Note 2. Use only in Ch. 6753C, 6453 and 6453C.

Items R58A, R58B, R58C, C54A, C54B, C54C are combined in one unit.

TRANSFORMER (POWER)

ITEM No.	USE	RATING		
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