

TR
CABINET-REAR VIEW
HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

but not quite reached at one extreme of BI, it may be necessary to set the horizontal hold control SLIGHTLY to one side of mid-range to obtain zero reading on the VTVM.

Remove the clip lead from Li6.

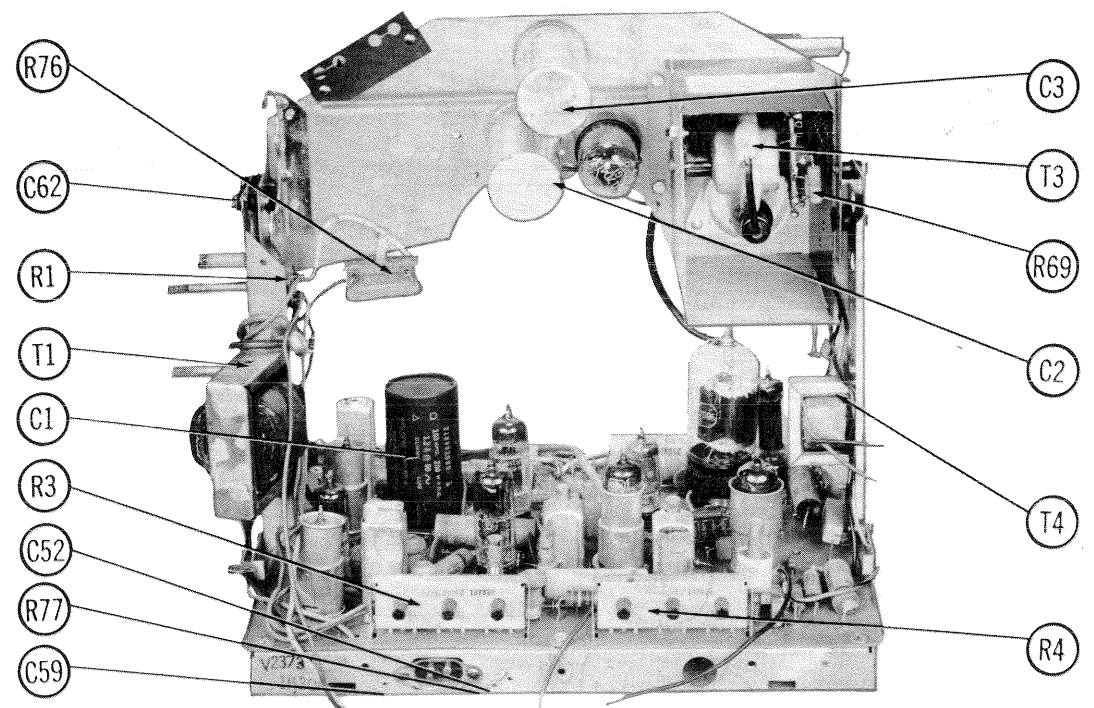
Adjust the horizontal frequency slug (B2) for zero reading on the VTVM and check the adjustment by switching off channel and back again. The receiver should pull into synchronization on all channels. If not, repeat adjustments.

Connect a short clip lead across the horizontal frequency coil (Li6). This may be done from the top of the chassis.

Set the horizontal hold control (R4C) to the center of its range.

Connect the DC probe of the VTVM to pin 7 (grid) of the 8CG7 (V9). Common to chassis.

With the receiver tuned to a TV station, adjust the horizontal multitrigger (B1) for zero reading on the VTVM. If zero can be approached



CHASSIS-REAR VIEW

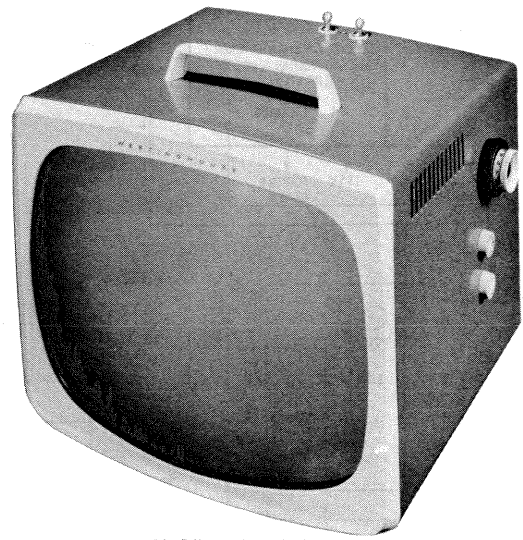
FOLDER 4
WESTINGHOUSE MODELS H-17T241 thru H-17T245, H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)

PHOTOFACT* Folder



DISASSEMBLY INSTRUCTIONS

- CHASSIS REMOVAL**
1. Remove 4 push-on type knobs from the side.
 2. Remove 6 metal screws holding the rear cover. Remove the rear cover.
 3. Remove the speaker leads and 2 hex nuts holding the speaker.
 4. Remove 2 snap-in fasteners holding the antenna terminal board.
 5. Remove the screw holding the telescoping antenna. Remove the antenna.
 6. Remove the picture tube socket, yoke clamp and HV lead.
 7. Remove 2 chassis bolts holding the vertical chassis to the top of the cabinet.
 8. Remove 4 chassis bolts from the bottom.
 9. Remove the chassis and yoke.



MODEL H-17T242 (CH. V-2373-1)

CAUTION NOTE

ONE SIDE OF AC LINE CONNECTED TO CHASSIS
Care should be exercised when connecting test equipment or physically contacting the chassis.

TRADE NAME	Westinghouse	MODELS	CHASSIS
		H-17T241, H-17T242, H-17T243, H-17T244, H-17T245	V-2373-1
		H-17TU241, H-17TU242, H-17TU243, H-17TU244, H-17TU245	V-2383-1
MANUFACTURER	Westinghouse Electric Corp., Television & Radio Div., Metuchen, N.J.		
TYPE SET	Television Receiver		
TUBES	Fifteen		
POWER SUPPLY	105-120 Volts AC, 60 Cycle		
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Inter-carrier)		
	RATING 135 Watts, 1.2 Amp. @ 117 Volts AC		

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustment of the VHF oscillator is possible by removing the rear cover and supplying power to the receiver. Set the fine tuning at the center of its range. The adjustments are accessible, one at a time, through a hole in the right side of the tuner rear cover as viewed from the rear. Adjust for best picture and sound.

SOUND IF DETECTOR BUZZ ADJUSTMENT

To eliminate audio detector buzz, adjust the quieting control for MINIMUM buzz and maximum sound. (For location, see tube placement chart).

FUSE DEVICE

A 7.5Ω fusible resistor (R77) is used for LV power supply protection. (For location, see tube placement chart).

CENTERING

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube. Rotate the two rings around the neck of the tube until the picture is properly centered.

PICTURE TUBE SAFETY GLASS CLEANING

For picture tube and safety glass cleaning, it is necessary to remove the chassis. (See disassembly instructions).

HORIZONTAL OSCILLATOR FIELD ADJUSTMENTS

For adjustment of the horizontal oscillator, it is necessary to remove the rear cover and supply power to set. Set the horizontal hold at the center of its range and adjust the horizontal frequency slug (B2) until the picture synchronizes horizontally. (For location, see tube placement chart).

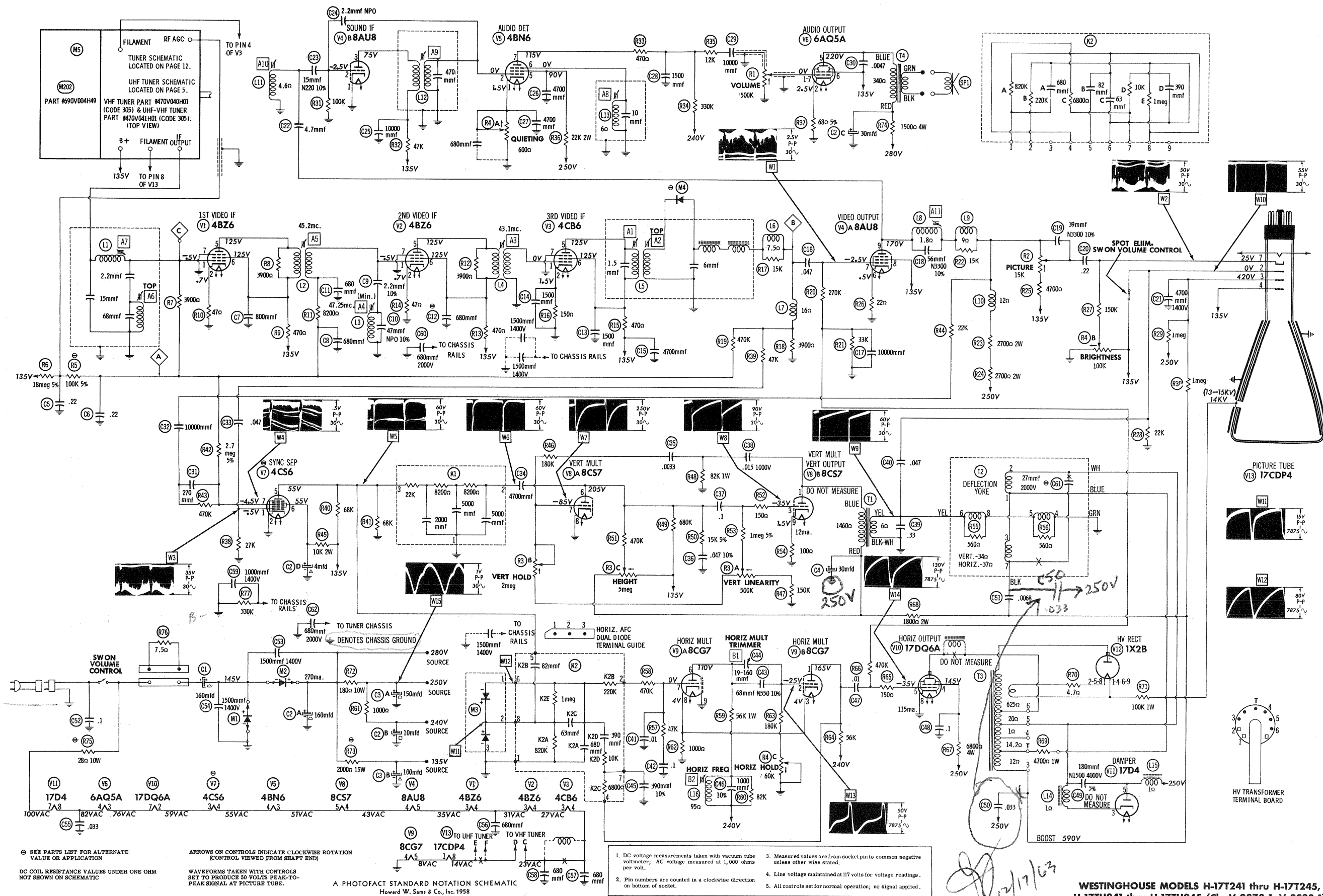
HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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WESTINGHOUSE MODELS H-17T241 thru H-17T245, H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)

FOLDER 4



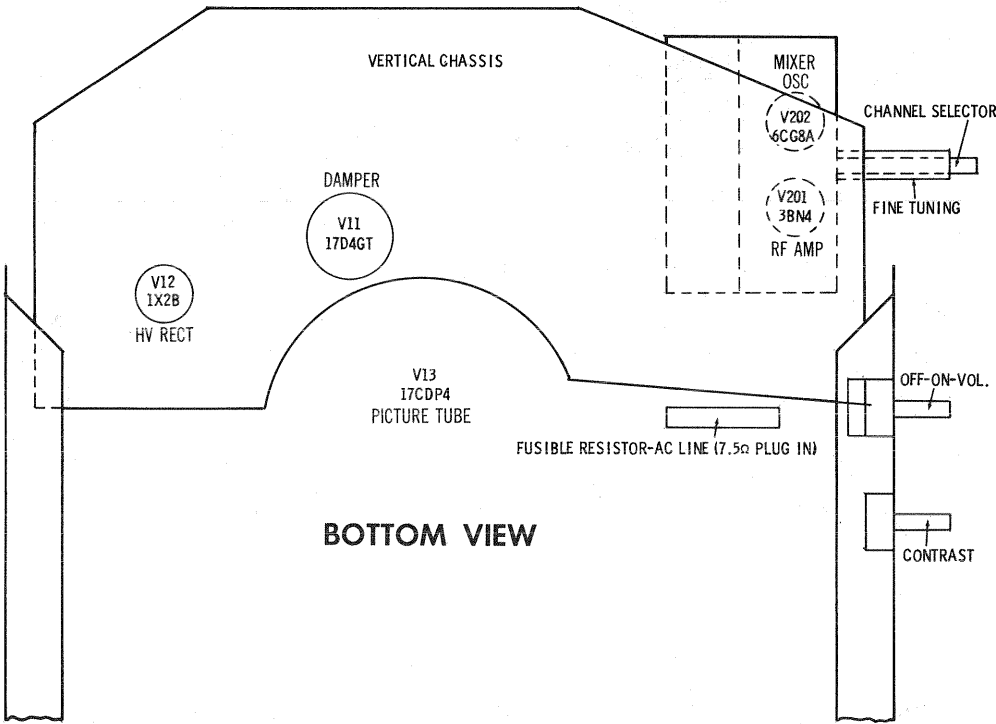
WESTINGHOUSE MODELS H-17T241 thru H-17T245,
H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)

FOLDER 4

RESISTANCE MEASUREMENTS

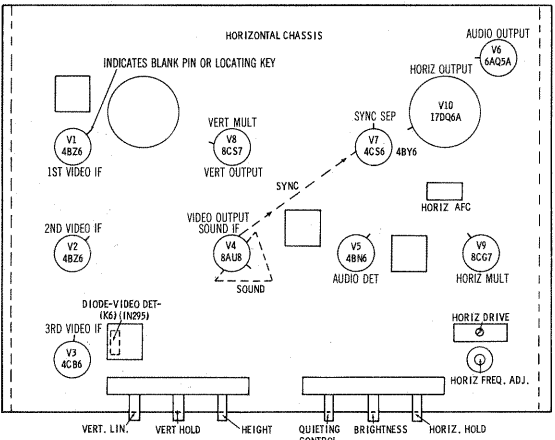
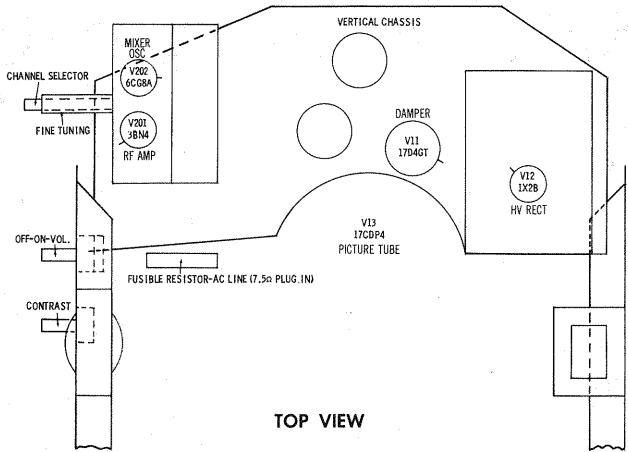
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	4BZ6	480K	47Ω	11Ω	10Ω	† 2500Ω	† 2500Ω	0Ω		
V2	4BZ6	480K	47Ω	10Ω	9Ω	† 2500Ω	† 2500Ω	0Ω		
V3	4CB6	.1Ω	150Ω	9Ω	8Ω	† 2500Ω	† 2500Ω	0Ω		
V4	8AU8	0Ω	100K	† 49K	14Ω	11Ω	22Ω	300K	† 2000Ω	† 4400Ω
V5	4BN6	• 200Ω	.2Ω	17Ω	18Ω	† 22K	6Ω	† 330K		
V6	6AQ5A	0Ω	68Ω	23Ω	25Ω	† 1840Ω	† 2000Ω	0Ω		
V7	4CS6	27K	0Ω	19Ω	18Ω	† 33K	† 12K	3.2meg		
V8	8CS7	† 3200Ω	NC	• 1.2meg	14Ω	17Ω	† 460K	• 1.1meg	0Ω	100Ω
V9	8CG7	† 57K	• 200K	1000Ω	0Ω	2.5Ω	† 57K	2.5meg	1000Ω	0Ω
V10	17DQ6A	NC	19Ω	NC	† 7000Ω	500K	NC	23Ω	0Ω	TOP CAP † 21Ω
V11	17D4GT	NC	NC	¶	NC	† 180Ω	NC	29Ω	25Ω	
V12	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE								TOP CAP † 645Ω
V13	17CDP4	2.5Ω	22K	† 500K	2000Ω	NC	NC	• 170K	5Ω	
V201	3BN4	0Ω	550K	8Ω	7Ω	† 3000Ω	0Ω	550K		
V202	6CG8A	10K	† 7600Ω	0Ω	5Ω	7Ω	† 3000Ω	† 12K	0Ω	230K

¶ THIS READING CAN VARY GREATLY, (10K MINIMUM), DUE TO THE CONDITION OF THE ELECTROLYTIC CAPACITOR CONNECTED IN THE ASSOCIATED CIRCUIT.
• THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.
† MEASURED FROM 280V SOURCE.
¶ MEASURED FROM PIN 3 OF V13.
NC NO CONNECTION.



TUBE PLACEMENT CHART

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

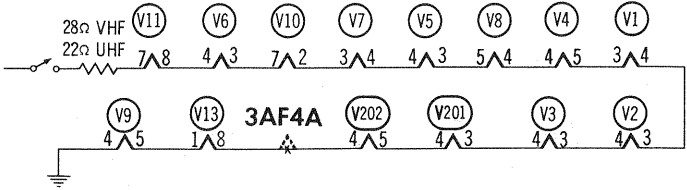
The following chart lists tubes whose failures are most likely to produce the indicated symptoms. Refer to tube placement chart for location and type of tube.

POWER SUPPLY FAILURE
No raster, no sound - Fusible Resistor (R77), Rectifier (M1, M2)
LOSS OF PICTURE OR SOUND
No pic, no sound, has raster - V1, V2, V3, Diode (M4), V4
No pic, no sound, has snow - V201, V202, V1
No pic, has sound, has raster - V4, V13
Has pic, no sound - V4, V5, V6

SYNC FAILURE
No vert. sync - V7
No horiz. sync - V7, Rectifier (M3)
No vert. or horiz. sync - V7

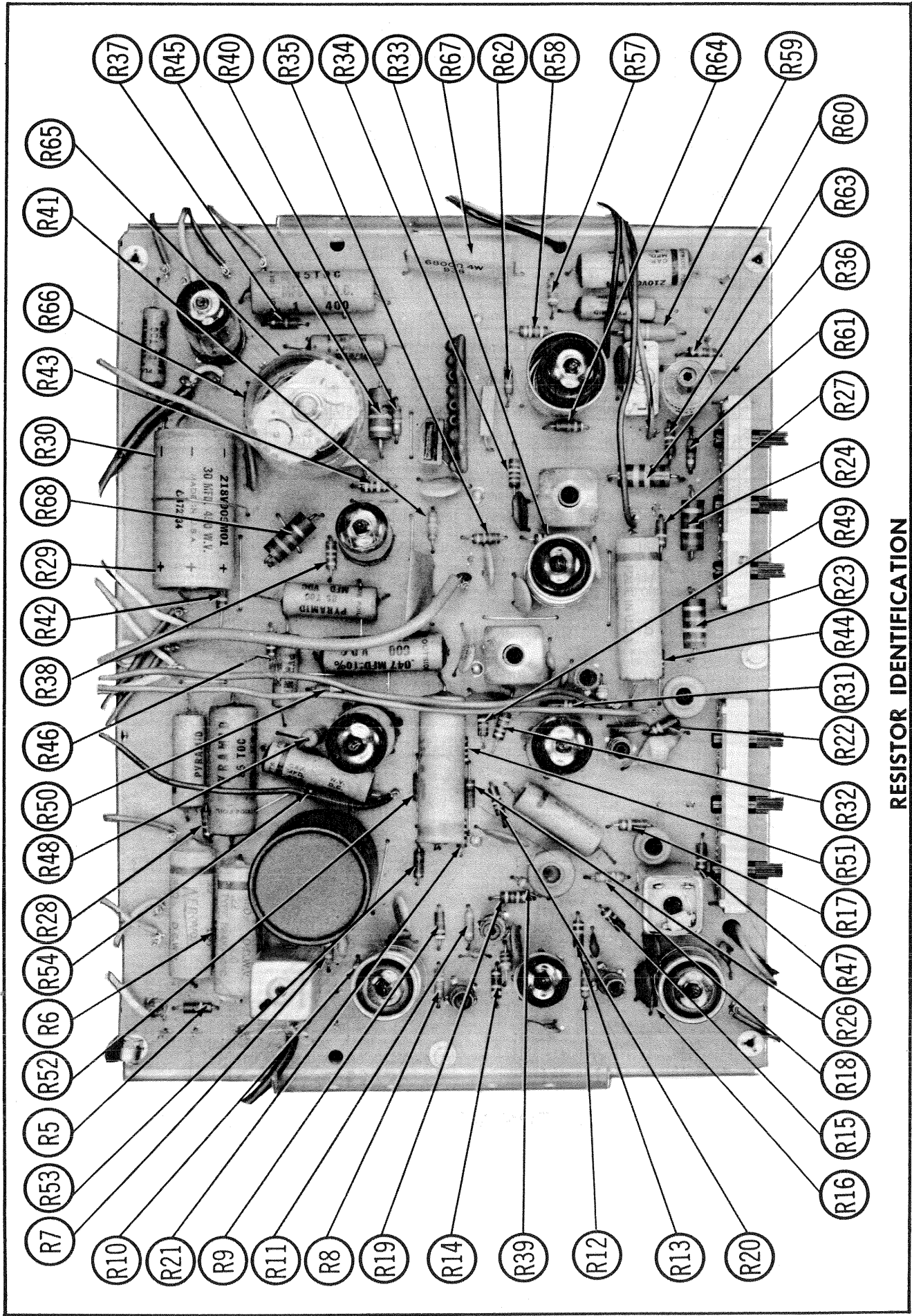
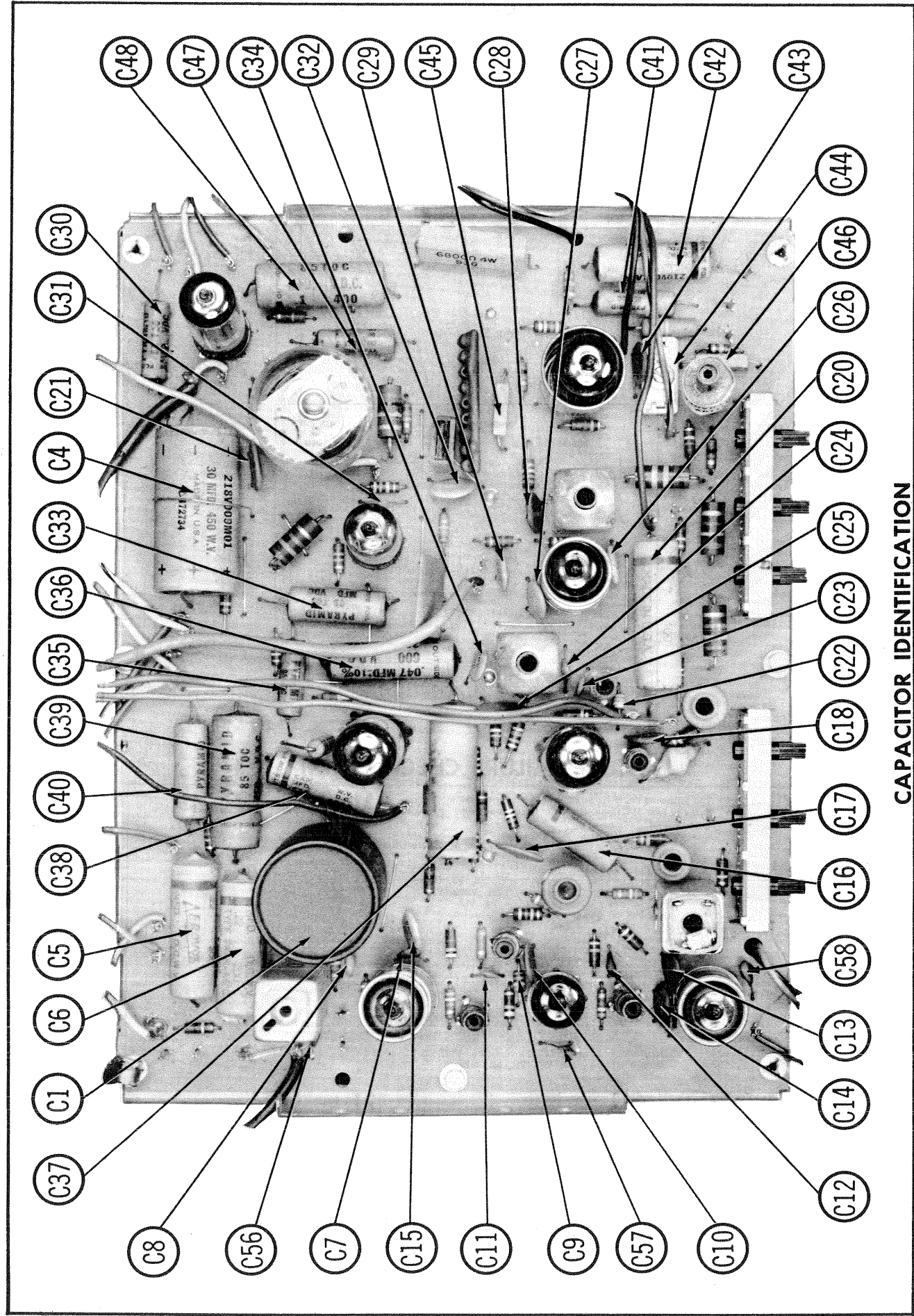
SWEEP FAILURE
No raster, has sound - M3, V9, V10, V11, V12, V13
No vertical deflection - V8
Poor vert. linearity or foldover - V8
Poor horiz. linearity or foldover - V9, V10, V11
Narrow picture - V9, V10, V11, M1, M2
Vert. off freq. - V8
Horiz. off freq. - V9

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

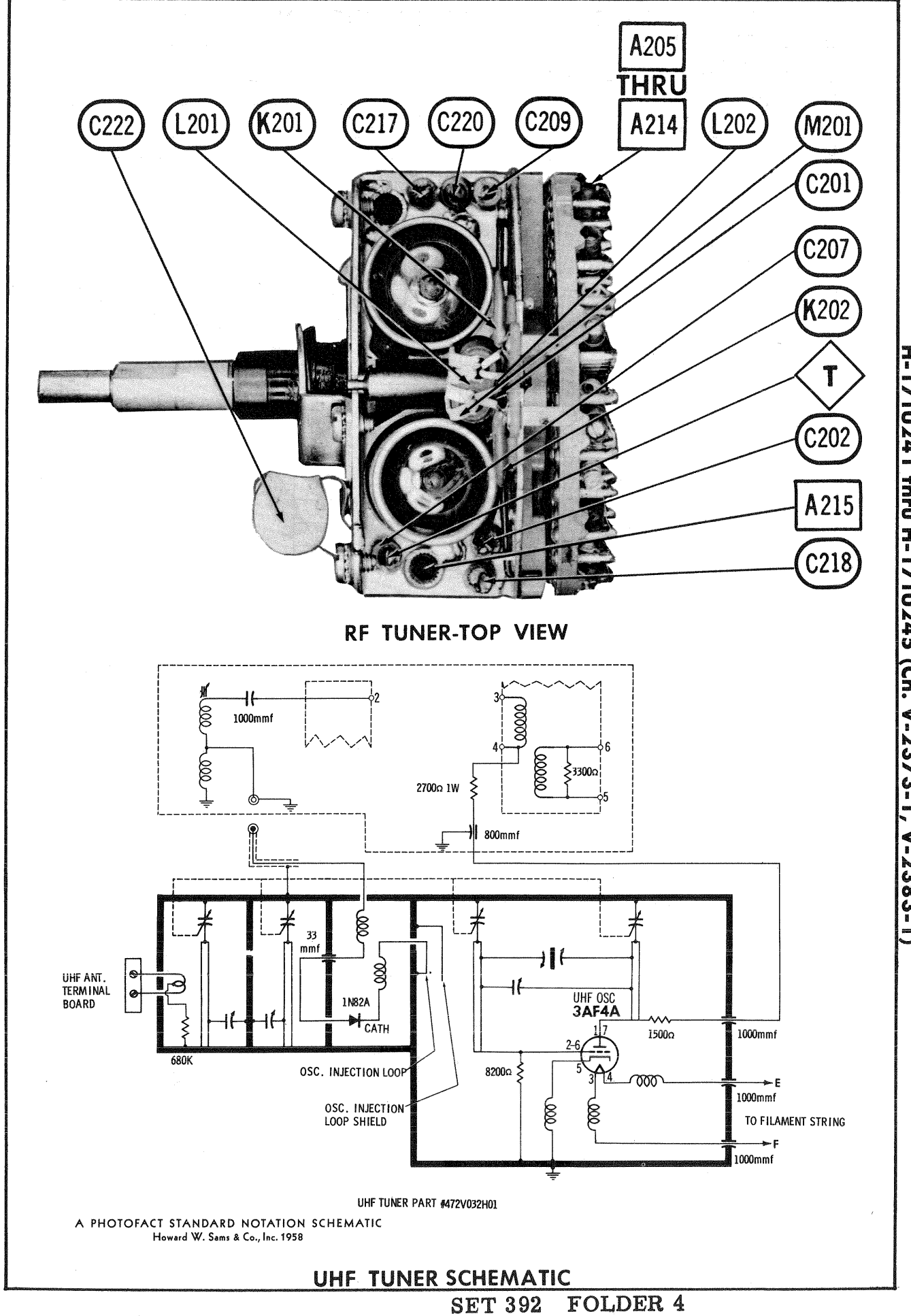
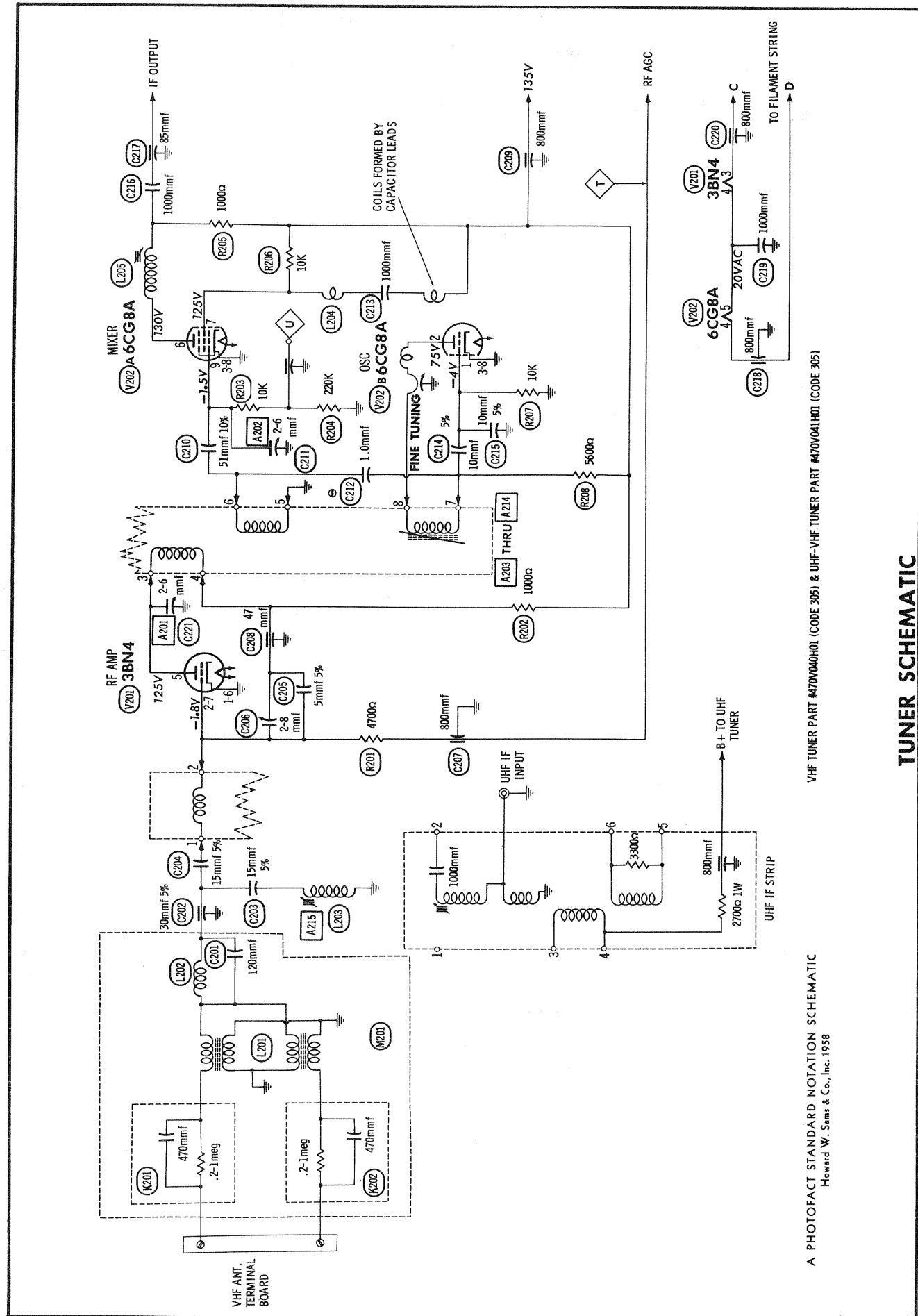


WESTINGHOUSE MODELS H-17T241 thru H-17T245,
H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)

FOLDER 4



WESTINGHOUSE MODELS H-17T241 thru H-17T245,
H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)
NOTIFICATION



WESTINGHOUSE MODELS H-17T241 thru H-17T245,
H-17TU241 thru H-17TU245 (Ch. V-2373-1, V-2383-1)

TUNER 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.

VHF OSCILLATOR ALIGNMENT

Set the fine tuning to the center of its range. The adjustment slugs are accessible one at a time thru a hole in the right side of the tuner rear cover when viewed from the rear. As the channel selector is rotated, adjust for best picture and sound.

VHF RF AND MIXER ALIGNMENT

Connect the negative lead of a 2.5 volt bias supply to point ①. Positive to chassis.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Use only enough sweep generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.

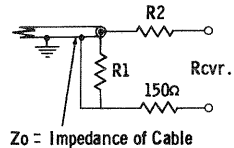
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Fig. 201	Across antenna terminals matching network (Fig. 201).	207MC	205.25MC 209.75MC	12	Vert. Amp. thru 10K to point ①. Low side to chassis.	A201, A202	Adjust A201 and A202 for maximum amplitude and symmetry with markers as shown in Fig. 202.
2. "	"	213MC	211.25MC 215.75MC	13	"	A203	Adjust for maximum amplitude of response similar to Fig. 202. Adjust by expanding or compressing coil turns. Coils A203 thru A214 are accessible thru the rectangular hole on left side of tuner rear cover when viewed from rear.
		207MC	205.25MC 209.75MC	12	"	A204	
		201MC	199.25MC 203.75MC	11	"	A205	
		195MC	193.25MC 197.75MC	10	"	A206	
		189MC	187.25MC 191.75MC	9	"	A207	
		183MC	181.25MC 185.75MC	8	"	A208	
		177MC	175.25MC 179.75MC	7	"	A209	
		85MC	83.25MC 87.75MC	6	"	A210	
		79MC	77.25MC 81.75MC	5	"	A211	
		69MC	67.25MC 71.75MC	4	"	A212	
		63MC	61.25MC 65.75MC	3	"	A213	
		57MC	55.25MC 59.75MC	2	"	A214	

44MC TRAP

An antenna trap adjusted by A215 is normally set at the factory at 44MC. However, A215 may be adjusted to attenuate any interference between 40 and 46MC.

UHF ALIGNMENT

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.



Zo	R1	R2
50Ω	56Ω	120Ω
75Ω	82Ω	110Ω

FIG. 201

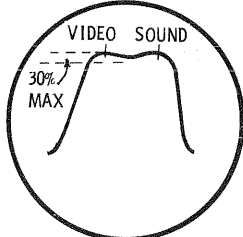
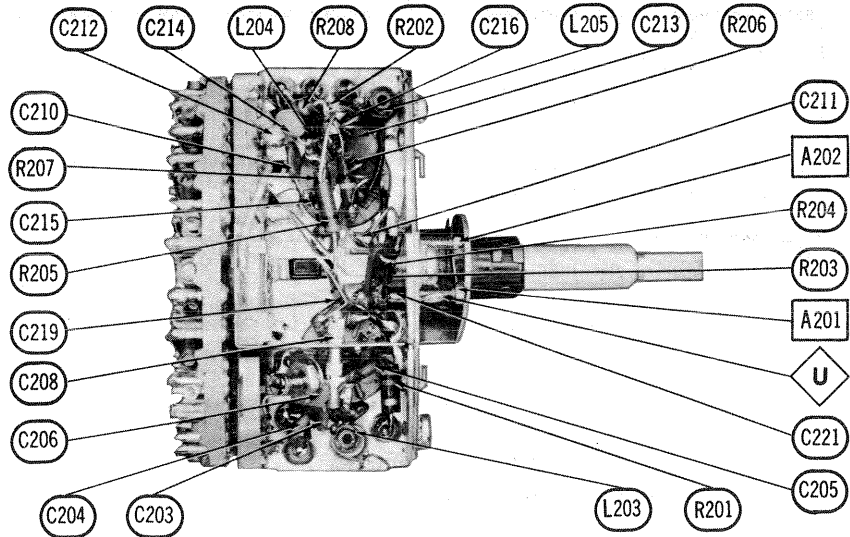


FIG. 202



RF TUNER—BOTTOM VIEW

TUNER PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V201	RF Amplifier	3BN4	

ITEM No.	USE	TYPE	NOTES
V202	Mixer—Osc.	6CG8A	

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		REPLACEMENT DATA							NOTES
	CAP.	VOLT	Westinghouse PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C201	120		690V004H17	BPD-00012	DD-121	L10T12	ED-120	UC-5312	5GA-T12	5%
C202	30		690V004H18							5%
C203	15		R1CC20C0G150J		TCZ-15	C10Q15C	TCO-15		5TCC-Q15	5%
C204	15		R1CC20C0G150J		TCZ-15	C10Q15C	TCO-15		5TCC-Q15	5%
C205	5		690V004H21	NPO-DI 5	TCZ-4R7	C10V5C	TCO-5	ZT-555	5TCCB-V5	5%
C206	2-8		690V004H24							
C207	800		R2CC61Z5Z801P							
C208	47		690V004H25							
C209	800		R2CC61Z5Z801P							
C210	51		V-8685	NPO-DI 50	TCZ-51	C10Q51C	TCO-51	ZT-545	5TCC-Q5	10%
C211	2-6		690V004H36							
C212	1.0		V-8686	NPO-SI 1.0	TCZ-1		TCO-1		5TCCB-V1	①
C213	1000		690V004H29	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C214	10		V-19015-1	NPO-DI 10	TCZ-10	C10Q1C	TCO-10	ZT-541	5TCC-Q1	5%
C215	10		V-19015-1	NPO-DI 10	TCZ-10	C10Q1C	TCO-10	ZT-541	5TCC-Q1	5%
C216	1000		690V004H27	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C217	85		690V007H01							
C218	800		R2CC61Z5Z801P							
C219	1000		690V004H27	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C220	800		R2CC61Z5Z801P							
C221	2-6		690V004H36							

① Some versions may use 1.5mmf in this application.

RESISTORS

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

ITEM No.	RATING		Westinghouse PART No.	NOTES
	OHMS	WATT		
R201	4700Ω		250V224A72	
R202	1000Ω		250V221A02	
R203	10K		250V221A03	
R204	220K		250V222A24	

ITEM No.	RATING		Westinghouse PART No.	NOTES
	OHMS	WATT		
R205	1000Ω		250V221A02	
R206	10K		250V221A03	
R207	10K		250V221A03	
R208	5600Ω		250V225A62	

COILS (RF-IF)

ITEM No.	USE	Westinghouse PART No.	NOTES
L201	Ant. Trans.	690V004H41	
L202	IF Trap Coil	690V004H37	
L203	IF Trap Coil	690V004H38	

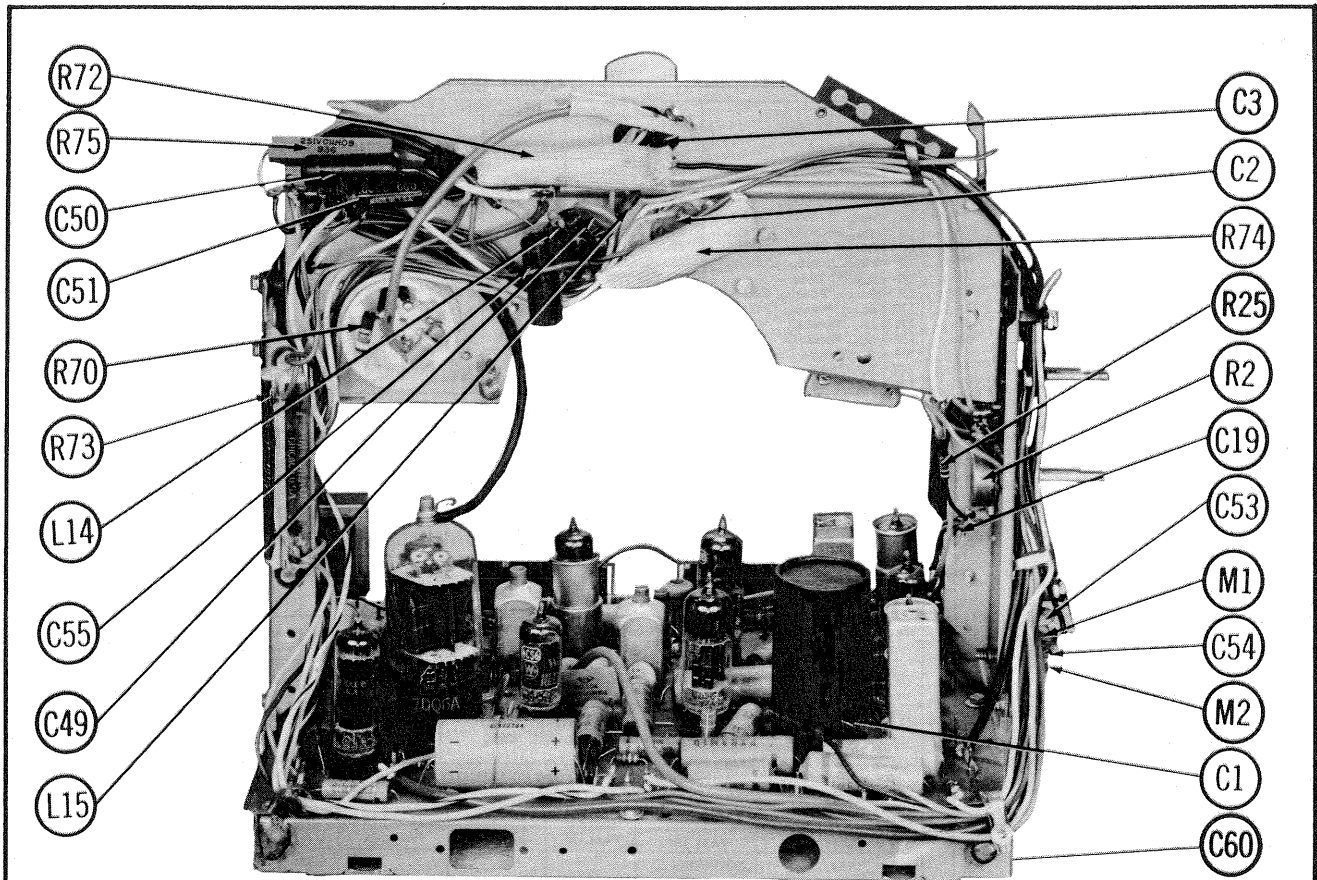
ITEM No.	USE	Westinghouse PART No.	NOTES
L204	RF Choke	690V004H39	
L205	Mixer Plate Coil	690V004H40	

COMPONENT COMBINATIONS

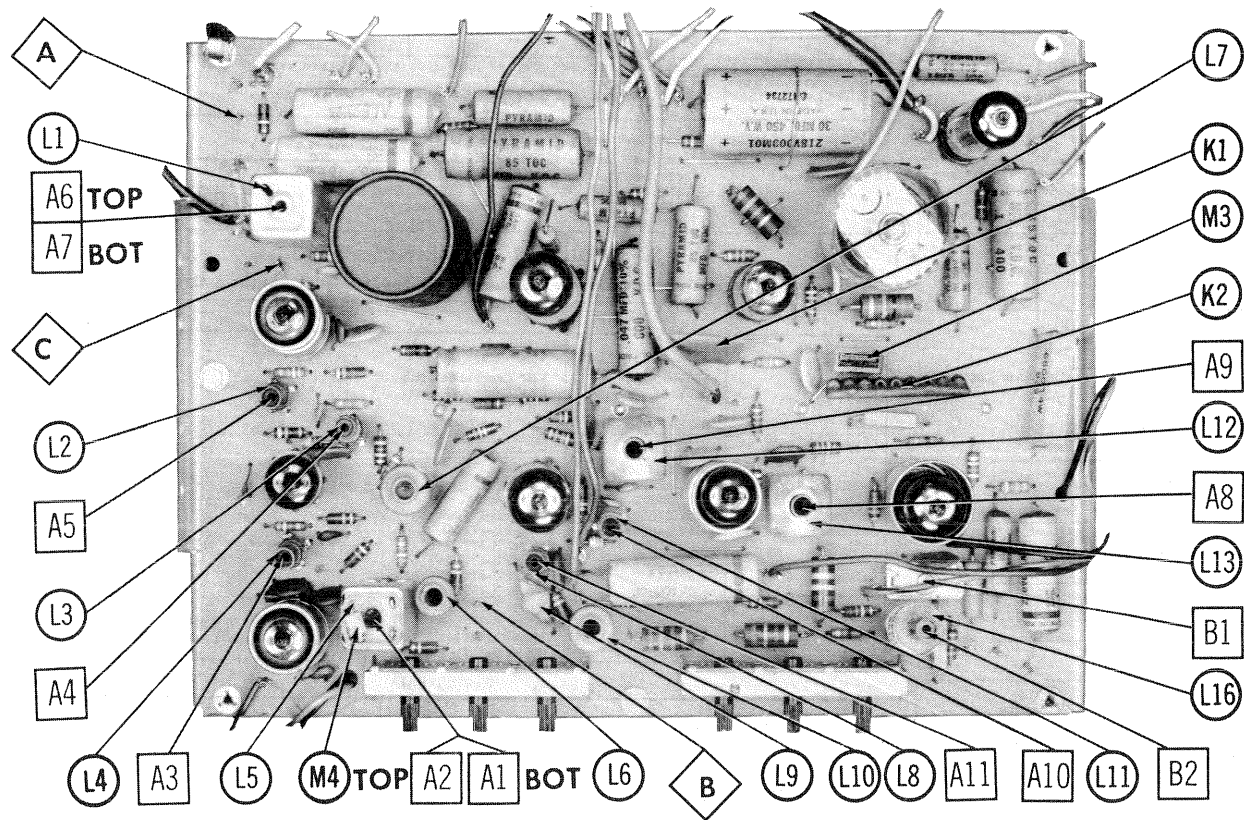
ITEM No.	USE	DESCRIPTION	Westinghouse PART No.	REPLACEMENT DATA
K201	Antenna Isolation	470mmf, .2-1meg	690V004H42	Centralab RC-471
K202	Antenna Isolation	470mmf, .2-1meg	690V004H42	Sprague R-9197

MISCELLANEOUS

ITEM No.	PART NAME	Westinghouse PART No.	NOTES
M201	Ant. Network	690V004H51	Includes K201, K202, L201, L202, C201
M202	Cover Assy.	690V004H49	Includes components & contacts



CHASSIS FRONT VIEW



INDUCTOR & ALIGNMENT IDENTIFICATION

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.

VIDEO IF ALIGNMENT

Connect the negative lead of a 3 volt bias supply to point \diamond . Positive to chassis.
Preset A7 fully counter clockwise.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Connect a 470mmf capacitor across the input leads of the scope and the VTVM.
Use only enough generator output to provide a usable indication on VTVM.
Use only enough sweep generator output to provide a usable pattern on scope.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. .001mfd	High side to pin 1 (grid) of 4CB6 (V3). Low side to chassis.	44MC (10MC Swp)	43.9MC	Any non-interfering channel	Vert. Amp. thru 47K to point \diamond . Low side to chassis.	A1, A2	Adjust A1 for maximum amplitude of response. Adjust A2 to correct tilt.
2. "	High side to point \diamond . Low side to chassis.	Not used	43.1MC	"	USE VTVM. DC probe thru 47K to point \diamond . Common to chassis.	A3	Adjust for maximum deflection.
3. "	"	"	47.25MC	"	"	A4	Adjust for MINIMUM deflection.
4. "	"	"	45.2MC	"	"	A5	Adjust for maximum deflection.
5. "	"	44.0MC (10MC Swp)	41.25MC 42.25MC 43.0MC 44.0MC 45.0MC 45.75MC 47.25MC	"	Vert. Amp. thru 47K to point \diamond . Low side to chassis.		Retouch A1, A2, A3 and A5 if necessary for response similar to Fig. 1. NOTE: If excessive tilt is present adjust A1 and A2 to 44.5MC.
6. "	High side to tuner test point. Low side to chassis.	Not used	41.25MC	"	USE VTVM. DC probe thru 47K to point \diamond . Common to chassis.	A6	Adjust for MINIMUM deflection.
7. Fig. 201	Across antenna terminals thru matching network (See Fig. 201 in tuner alignment).	"	59.75MC	2	"	Fine tuning	Adjust for MINIMUM deflection.
8. "	"	57MC (10MC Swp)	55.25MC 59.75MC	"	Vert. Amp. thru 47K to point \diamond . Low side to chassis.	A7, Mixer Plate Coil	Adjust for maximum gain and symmetry of response similar to Fig. 2 with markers as shown. Adjust A7 for maximum gain, Mixer Plate Coil for proper tilt.

SOUND IF ALIGNMENT

1. Connect a high impedance AC voltmeter or scope across the volume control to serve as an indicator.
2. Set quieting control (R4A) to the center of its range.
3. Apply a 4.5MC FM signal (15KC sweep) to point \diamond . Connect low side to chassis.
4. Using a strong signal, adjust A8 for maximum deflection.
5. Reduce the signal strength to the lowest point that will provide an indication. Adjust A9 and A10 for maximum deflection.
6. Replace the FM signal with a 4.5MC AM signal (30% Mod.) and adjust the generator for a strong output.
7. Adjust the quieting control (R4A) for MINIMUM response or output.

ALTERNATE SOUND IF ALIGNMENT USING AIR SIGNAL

1. Tune the receiver to a TV station and connect an adjustable attenuator between the antenna terminals and lead-in so that the signal strength may be varied from strong to weak.
2. Set the quieting control (R4A) at the center of its range.
3. Apply a strong signal to the receiver and adjust A8 for maximum sound. If peaks occur at two widely separated positions, use the one which occurs with the slug farthest counter clockwise. If two peaks occur within a narrow range of adjustment, sufficient signal is not being applied and will have to be increased, or the quieting control is not set at the correct position.
4. Reduce the signal until a hiss is heard in the sound. Adjust A9 and A10 for maximum sound. If more than one peak occurs, use the one with the slug most counter clockwise.

4.5MC TRAP ALIGNMENT

Tune in a TV station and adjust all controls for a normal picture. Turn fine tuning to obtain a grainy effect (4.5MC beat pattern) in the picture. Adjust A11 for MINIMUM grain in the picture.

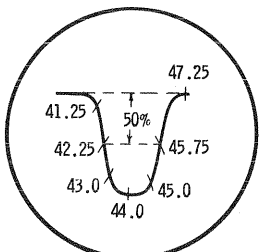


FIG. 1

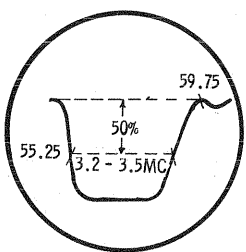


FIG. 2

WESTINGHOUSE MODELS H-171241 thru H-171245,
H-171241 thru H-171245 (Ch. V-2373-1, V-2383-1)

FOLDER 4

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	1st. Video IF Amp.	4BZ6		V7	Sync Sep.	4CS6	4BY6 *
V2	2nd. Video IF Amp.	4BZ6		V8	Vert. Mult. -Vert. Output	8CS7	
V3	3rd. Video IF Amp.	4CB6		V9	Horiz. Mult.	8CG7	
V4	Video Output-Sound IF Amp.	8AU8		V10	Horiz. Output	17DQ6A	
V5	Audio Det.	4BN6		V11	Damper	17D4GT	
V6	Audio Output	6AQ5A		V12	HV Rectifier	1X2B	

* Alternate

PICTURE TUBE

ITEM No.	REPLACEMENT DATA	NOTES
	Westinghouse PART No. GENERAL ELECTRIC PART No. RCA PART No. SYLVANIA PART No.	
V13	17CDP4	① Silverama

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA	NOTES
	CAP. VOLT.	Westinghouse PART No. AEROVOX PART No. CORNELL-DUBILIER PART No. MALLORY PART No. PYRAMID PART No. SANGAMO PART No. SPRAGUE PART No.	
C1	160	218V025H03	AFH1-25-75
C2A	160	218V025H01	AFH4-56-95
C2B	160		XD0695
C3	300		FP419.65
C4	300		TC79
C5A	150	218V025H02	AFH3-26
C5B	150		C0734.3
C6	300		FP227.7
C7	450	218V009H01	PRS450V30
C8			BR3045
C9			TC77
C10			FMT-165
C11			TD-40-350
C12			MT-4550
C13			TVA-1711

* Non-catalog item.

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	REPLACEMENT DATA	NOTES
	CAP. VOLT.	Westinghouse PART No. AEROVOX PART No. CENTRALAB PART No. CORNELL-DUBILIER PART No. ERIE PART No. MALLORY PART No. SPRAGUE PART No.	
C5	.22	210V042A24	P288N-22
C6	.22	210V042A24	P288N-22
C7	.800	215V300H18	BPD-0008
C8	.680	215V116A81	BPD-00088
C9	2.2	217V012A29	NPO-SI 2.2
C10	.47	215V300H06	NPO-SI 4.7
C11	.680	215V116A81	BPD-00088
C12	.680	215V116A81	BPD-00088
C13	1500	215V300H28	BPD-0015
C14	1500	215V300H28	BPD-0015
C15	4700	215V104A72	BPD-0047
C16	.047	210V004A73	P288N-047
C17	10000	215V111A03	BPD-01
C18	.56	215V015A60	
C19	.39	215V013A90	
C20	.22	210V052A24	P288N-22
C21	4700	215V300H01	DAC-8
C22	4.7	217V014A79	NPO-SI 4.7
C23	.15	215V011A50	
C24	2.2	215V000H09	NPO-SI 2.2
C25	10000	215V111A03	BPD-01
C26	4700	215V104A72	BPD-0047
C27	4700	215V104A72	BPD-0047
C28	1500	215V300H28	BPD-0015
C29	10000	215V101A03	BPD-01
C30	.0047	210V004A73	P288N-047
C31	.270	215V300H26	BPD-0027
C32	10000	215V101A03	BPD-01
C33	.047	210V004A73	P288N-047
C34	4700	215V104A72	BPD-0047
C35	.0083	210V110H01	P688N-0033
C36	.047	210V102H02	
C37	.1	210V081A04	P688N-1
C38	.015	210V071A53	P1088N-015
C39	.33	210V003A34	P288N-33
C40	.047	210V004A73	P288N-047
C41	.01	210V051A03	P488N-01
C42	.1	210V041A04	P288N-1
C43	.68	215V016A80	
C44	18-160	217V501H01	
C45	390	213V013A91	
C46	1000	213V071A02	
C47	.01	210V051A03	P488N-01
C48	.1	210V051A04	P488N-1
C49	180	215V300H30	
C50	.033	210V213A33	P688N-033
C51	.0068	210V216A82	P688N-0068
C52	.1	210V211A04	P688N-1
C53	1500	215V201A52	DAC-2
C54	1500	215V201A52	DAC-2
C55	.033	210V213A33	P688N-033
C56	.680	215V116A81	BPD-00088
C57	.680	215V116A81	BPD-00088
C58	.680	215V116A81	BPD-00088
C59	1000	215V300H02	DAC-2
C60	.680	215V300H19	HVD-30-680
C61	.27	2000	
C62	.680	2000	

① Some versions may use 470mmf (Part #215V300H07) in this application.

② Not used in some versions.

PARTS LIST AND DESCRIPTIONS

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA	INSTALLATION NOTES
	RESISTANCE WATTS	Westinghouse PART No. CENTRALAB PART No. CLAROSTAT PART No. IRC PART No. MALLORY PART No.	
R1A	500K	270V037H02	B-80
R2A	15K	270V003H06	Not Req.
R3A	500K	270V040H02	Not Req.
R4A	600K	270V040H01	Not Req.
R5A	60K		Not Req.

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA	NOTES
	OHMS WATT	Westinghouse PART No.	
R5	100K 5%	250V211A04	Note 1
R6	18meg 5%	250V211A86	
R7	3900Ω	259V003H02	
R8	3900Ω	259V003H02	
R9	470Ω	250V234A71	
R10	47Ω	250V224A70	
R11	8200Ω	259V003H08	
R12	3900Ω	259V003H02	
R13	470Ω	250V234A71	
R14	47Ω	250V224A70	
R15	470Ω	250V234A71	
R16	150Ω	250V221A51	
R17	15K	250V221A53	
R18	3900Ω	259V003H02	
R19	470K	250V221A04	
R20	270K	250V222A74	
R21	33K	250V223A33	
R22	15K	250V221A53	
R23	2700Ω	250V422A72	
R24	2700Ω	250V422A72	
R25	4700Ω	250V224A72	
R26	22Ω	250V222A20	
R27	150K	250V221A54	
R28	22K	250V222A23	
R29	1meg	250V221A05	
R30	1meg	250V221A05	
R31	100K	250V221A04	
R32	47K	250V224A73	
R33	470Ω	250V234A71	
R34	330K	250V223A34	
R35	12K	250V221A23	
R36	22K	250V422A23	
R37	68Ω 5%	250V216A80	
R38	27K	250V222A73	
R39	47K	250V224A73	
R40	68K	250V226A83	
R41	68K	250V226A83	

Note 1. Some versions use a 470K 5% (Part #250V214A74) in this application.

Note 2. UHF versions use a 1800Ω 15W (Part #251V017H06) in this application.

Note 3. UHF versions use a 22K 10W (Part #251V011H01) in this application.

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA	NOTES
		Westinghouse PART No. Halldorson PART No. Merit PART No. Ram PART No. Stancor PART No. Thordarson PART No. Triad PART No.	
T1	Vert. Output	430V005H04	Z1900 ①
T2A	Yoke-Horiz. (19MH)	490V006H01	MDF-III
T2B	Yoke-Vert. (32MH)		V312 ②
M6	Rear Cover & Centering Device	781V101H01	28854 ②
T3	Yoke Clamp	788V014H03	A-109X
T4	Horiz. Output	493V004H07	D-95*

① Use 18 to 1 turns ratio.

② Remove green lead of yoke from ground. Connect green lead of yoke and green lead of vert. output transformer to junction of R68 and C4. Connect red lead to yellow lead of yoke.

*HORIZONTAL OUTPUT TRANSFORMER CONNECTION DATA

Use Original Width Coil Unless Replacement Type is Listed

	ORIGINAL TERMINAL CONNECTIONS	Halldorson Replacement Connections	Merit Replacement Connections	Ram Replacement Connections	Stancor Replacement Connections	Thordarson Replacement Connections	Triad Replacement Connections
6							
5							
T							
3							

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA	NOTES
	PRI. SEC.	Westinghouse PART No. Halldorson PART No. Merit PART No. Ram PART No. Stancor PART No. Thordarson PART No. Triad PART No.	
T4	7000Ω 3-4Ω	430V041H01	Z1113

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA	NOTES
	SIZE FIELD V. C. IMP.	Westinghouse PART No. QUAM PART No.	
SP1	4" PM 3-4Ω	570V015H01	4A07

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA	NOTES
		Westinghouse PART No. Meissner PART No. Merit PART No. Miller PART No. Ram PART No.	
L1	1st. Video IF	235V003H01	
L2	2nd. Video IF	235V020H01	
L3	47.25MC Trap	230V030H01	
L4	3rd. Video IF	235V020H01	
L5	4th. Video IF	235V005H02	
L6	Series Peaking Coil	230V034H03	19-3125
L7	Shunt Peaking Coil	230V034H04	19-3500
L8	4.5MC Trap	230V030H02	
L9	Series Peaking Coil	230V019H12	19-3250
L10	Shunt Peaking Coil	230V034H01	
L11	1st. Sound IF	230V030H06	
L12	2nd. Sound IF	235V020H02	
L13	Quadrature Coil	230V031H01	
L14	RF Choke	230V019H10	19-1008
L15	RF Choke	230V019H10	19-1008

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.	REPLACEMENT DATA	NOTES
	PRI. SEC.	Westinghouse PART No. Meissner PART No. Merit PART No. Miller PART No. Ram PART No. Thordarson PART No.	
L16	95Ω	230V032H01	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Westinghouse PART No.	REPLACEMENT DATA
K1	Vert. Integrator	2000mmf, 5000mmf, 5000mmf, 22K, 8200Ω, 8200Ω	219V003H01	Aerovox Centralab Cornell-Dubilier Erie Sprague
K2	Horiz. AFC	82mmf, 390mmf, 680mmf, 63mmf, 6800Ω, 10K, 220K, 1meg, 820K	219V002H02	Erie 709-10

RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA	NOTES
	CURRENT (Measured)	Westinghouse PART No. FEDERAL PART No. GENERAL ELECTRIC PART No. INTERNATIONAL PART No. SARKES TARZIAN PART No.	
M1	.270A	295V006H01 ①	M500 ① ① Silicon
M2	.270A	295V006H01 ①	350A ② ② Selenium
M3		296V004H01 ②	M500 ① ③ Two required.

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA	NOTES
		Westinghouse PART No. CBS PART No. SYLVANIA PART No.	
M4	K6 *	1N80	1N80 Video Detector (Pigtail)

* Some versions may use either 1N295 or 1N84 (Part #V-10916-3) in this application.

MISCELLANEOUS

ITEM No.	PART NAME	Westinghouse PART No.	NOTES
M5	Tuner	470V040H01	VHF (Code 305) Ch. V-2373-1
M6	Tuner	470V041H01	VHF (Code 305) Ch. V-2383-1
M6	Tuner	472V032H01	UHF - Ch. V-2383-1
M6	Centering Device	781V101H01	Includes yoke cover

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Safety Glass	639V004H02	
Mask	610V009H01	
Knob	550V032H11	VHF Channel Selector
Knob	550V032H02	UHF Channel Selector
Knob	550V031H03	VHF Fine Tuning
Knob	550V050H01	UHF Fine Tuning
Knob	550V054H01	On-off-volume
Knob	550V054H02	Contrast
Dial	550V029H05	UHF
Handle	558V093H01	
Antenna	318V002H01	Telescoping
Cabinet	510V014H05	Model H-17T242
Cabinet	510V014H03	Model H-17T241
Cabinet	510V014H04	Model H-17T242
Cabinet	510V014H06	Model H-17T243
Cabinet	510V014H07	Model H-17T243
Cabinet	510V014H08	Model H-17T243
Cabinet	510V014H11	Model H-17T244
Cabinet	510V014H12	Model H-17T244
Cabinet	510V014H13	Model H-17T245
Cabinet	510V014H14	Model H-17T245

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) - 8 Conductor