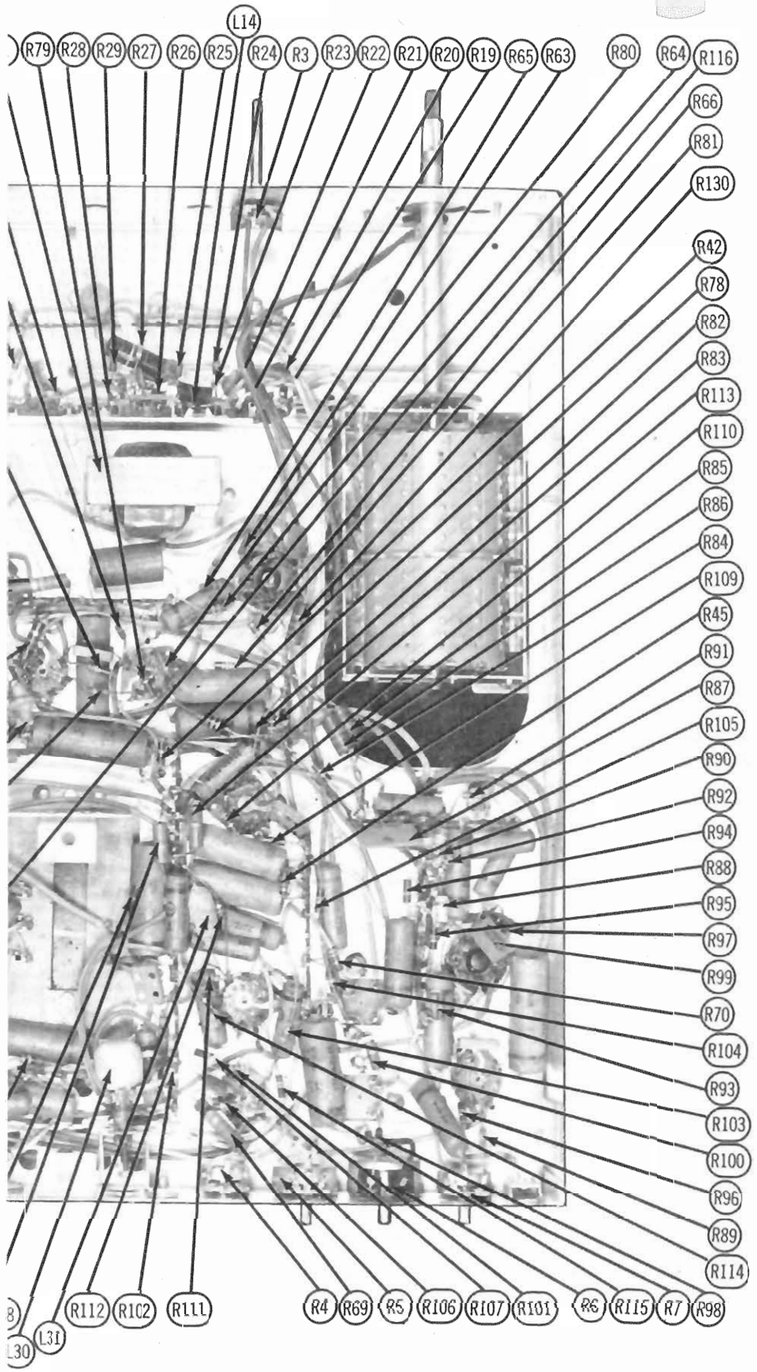
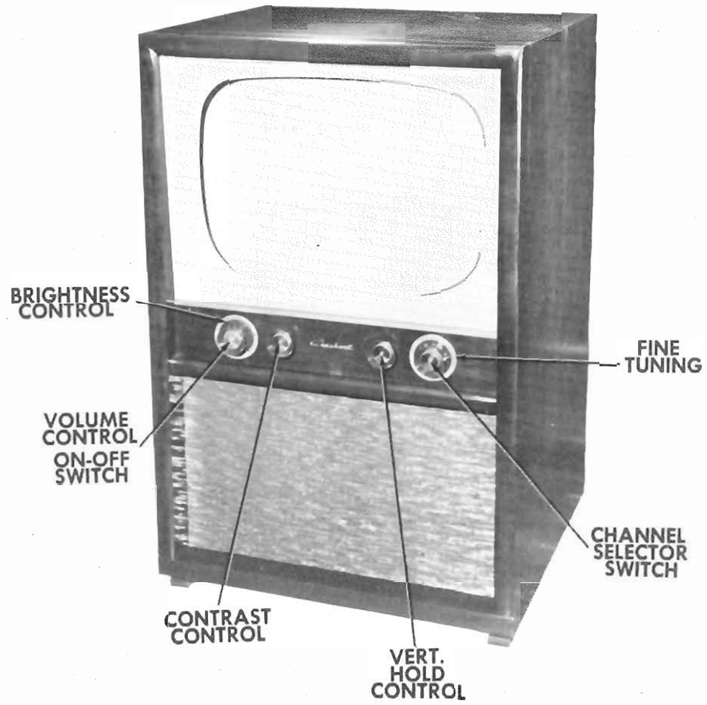


OR AND INDUCTOR IDENTIFICATION

PHOTOFACT* Folder

CAPEHART MODELS 1T172M, 2C172M (Ch. CT-52), 3C212B, M, 4H212B, M, 5F212M, 6F212B, 7F212M, 8F212B, 9F212M (Ch. CT-57)

1899



CAPEHART 3C212M

CAPEHART 3C212M

TRADE NAME	Capehart Models 1T172M, 2C172M (Ch. CT52), 3C212M, 3C212B, 4H212M, 4H212B, 5F212M, 6F212B, 7F212M, 8F212B, 9F212M (Ch. CT57) (Ch. Series CX-36)
MANUFACTURER	Capehart-Farnsworth Corp., Fort Wayne, Indiana
TYPE SET	Television Receiver
TUBES	Twenty - Six
POWER SUPPLY	110-120 Volts AC-60 Cycle RATING 2.34 Amp. @ 117 Volts AC
TUNING RANGE	Channels 2 thru 13

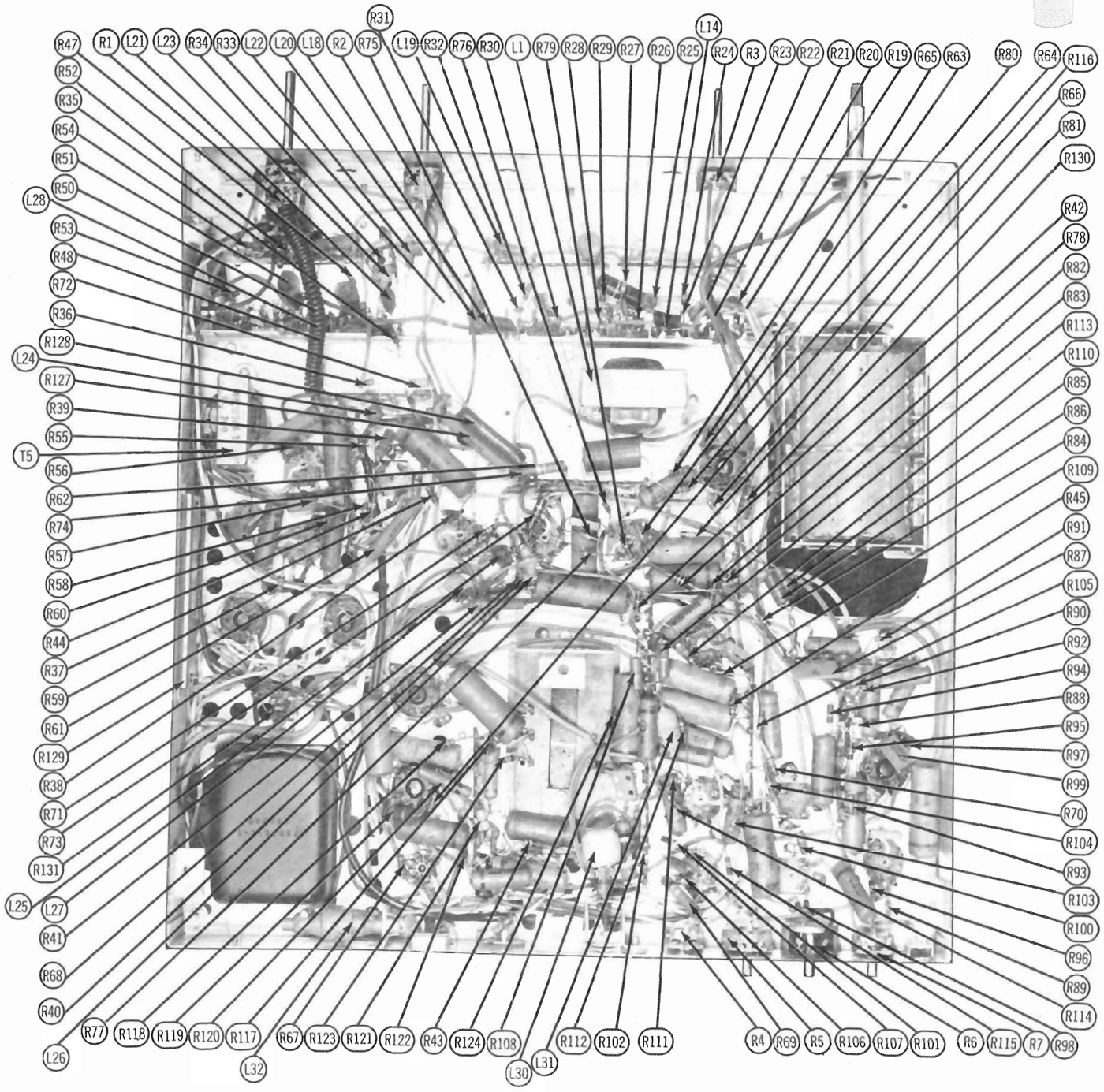
INDEX

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." "Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1952 by Howard W. Sams & Co., Inc., Indianapolis 5, Indiana, U. S. of America. Copyright under International Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America

DATE 12-52 SET 187 FOLDER 3

CAPEHART MODELS 1T172M, 2C172M (Ch. CT-52), 3C212B, M, 4H212B, M, 5F212M, 6F212B, 7F212M, 8F212B, 9F212M (Ch. CT-57)



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

PHOTOF

BRIGH
CON

VC
CO
O
S

TRADE NAME

MANUFACTURER
TYPE SET
TUBES

POWER SUPPLY
TUNING RANGE

Alignment Instructio
Disassembly Instruct
Horizontal Sweep Cir
Parts List and Descr
Photographs
Cabinet - Rear V
Capacitor and Al
Chassis - Top Vi

H

"The listing of any available r
case a recommendation, warrc
as to the quality and suitabilit
parts have been compiled from
Inc., by the manufacturers of t
"Reproduction or use, without

THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

▲ MEASURED WITH VTVM

● SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DOTTED IN PARTS ARE NOT USED IN ALL MODELS. WHEN DOTTED IN PARTS ARE USED POINTS MARKED X ARE BROKEN.

WAVE FORMS TAKEN WITH CONTROLS SET TO PRODUCE 50 VOLTS PEAK TO PEAK SIGNAL AT PICTURE TUBE

1. DC voltage measurements are at 20,000 ohms per volt; AC voltage measured at 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. All controls set for normal operation, No signal applied.

A PHOTOFACT STANDARD NOTATION SCHEMATIC

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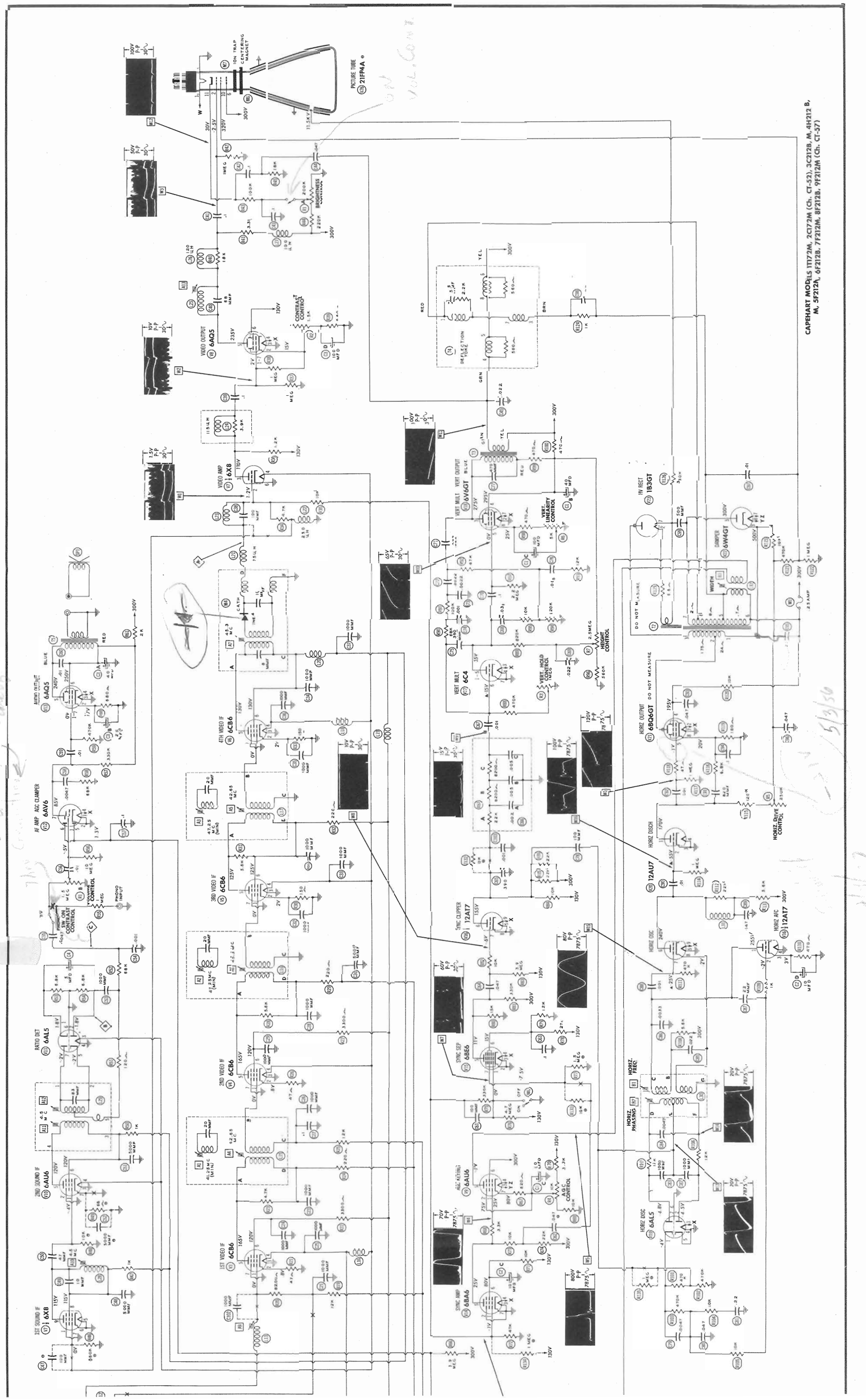
CAPEHART MODELS 1T172M, 2C172M (Ch. CT-52), 3C212B, M, 4H212B, M, 5F212M, 6F212B, 7F212M, 8F212B, 9F212M (Ch. CT-57)



RF TUNER-RIGHT SIDE

RF TUNER-BOTTOM VIEW

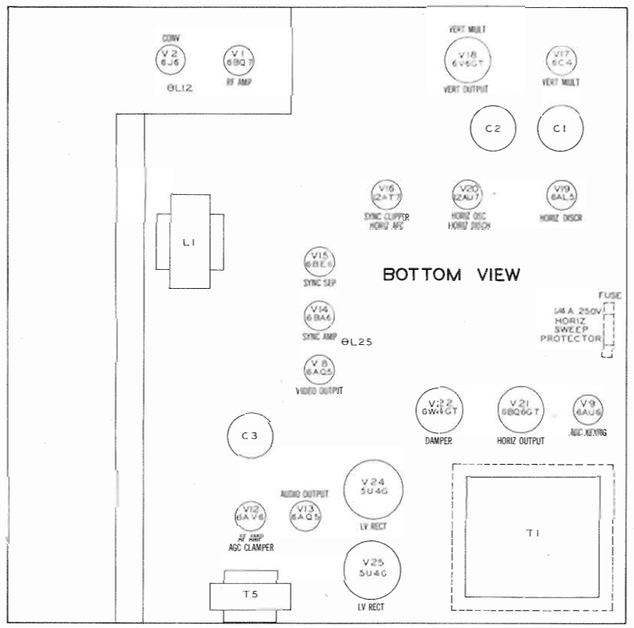
CHASSIS-TOP VIEW

CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

RESISTANCE MEASUREMENTS

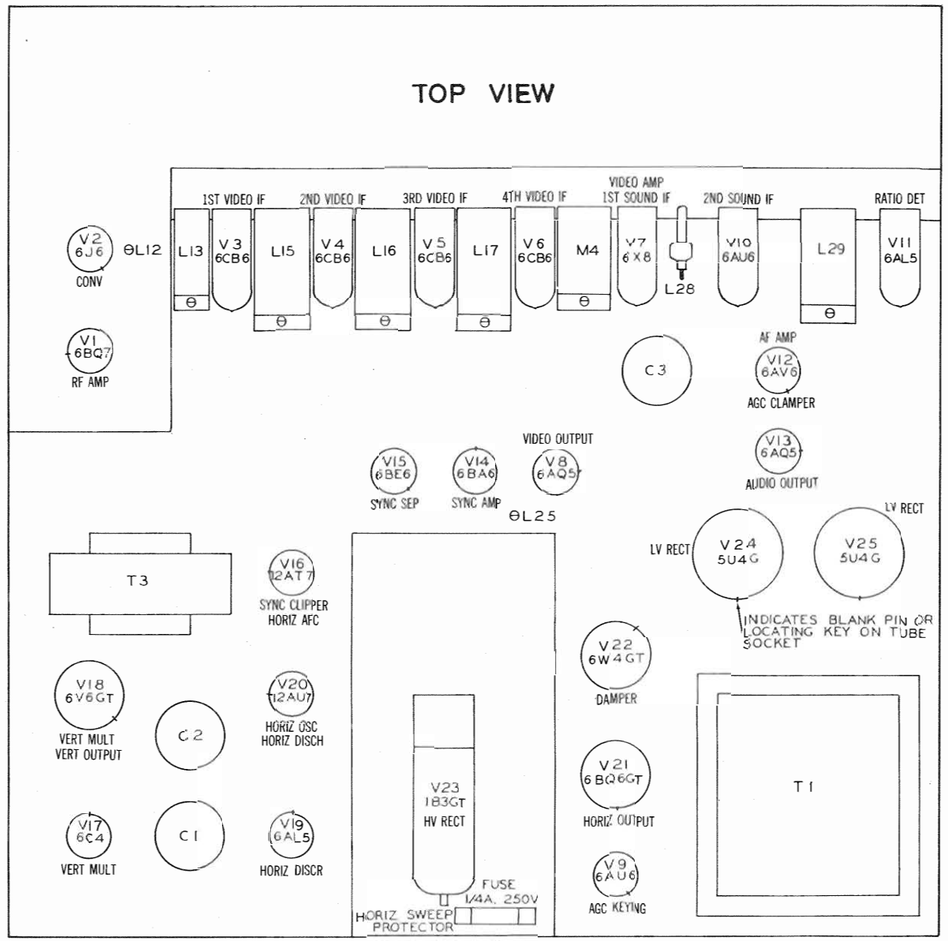
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BQ7	INF	450KΩ	33Ω	.1Ω	0Ω	†2.7KΩ	110KΩ	INF	0Ω
V 2	6J6	†6.5KΩ	†17KΩ	.1Ω	0Ω	235KΩ	10KΩ	0Ω		
V 3	6CB6	45KΩ	47Ω	0Ω	.1Ω	†3.2KΩ	†4.8KΩ	0Ω		
V 4	6CB6	45KΩ	47Ω	0Ω	.1Ω	†3.2KΩ	†4.8KΩ	0Ω		
V 5	6CB6	.1Ω	150Ω	0Ω	.1Ω	†1.8KΩ	†1.8KΩ	0Ω		
V 6	6CB6	.1Ω	150Ω	0Ω	.1Ω	†1.5KΩ	†1.5KΩ	0Ω		
V 7	6X8	0Ω	4.7KΩ	†2.7KΩ	.1Ω	0Ω	0Ω	6Ω	†2.5KΩ	†2.5KΩ
V 8	6AQ5	500KΩ	800Ω	0Ω	.1Ω	†3.3KΩ	†1.5KΩ	500KΩ		
V 9	6AU6	†35KΩ	†7.5KΩ	■0Ω	■.1Ω	180KΩ	†3ΤΩ	†8.3KΩ		
V 10	6AU6	10KΩ	0Ω	0Ω	.1Ω	†2.5KΩ	†2.5KΩ	0Ω		
V 11	6AL5	6.8KΩ	6.8KΩ	.1Ω	0Ω	INF	0Ω	INF		
V 12	6AV6	10Meg	0Ω	0Ω	.1Ω	385KΩ	385KΩ	†330KΩ		
V 13	6AQ5	470KΩ	68Ω	0Ω	.1Ω	†2.5KΩ	†2KΩ	470KΩ		
V 14	6BA6	10KΩ	0Ω	0Ω	.1Ω	†32KΩ	†11KΩ	0Ω		
V 15	6BE6	0Ω	0Ω	0Ω	.1Ω	15KΩ	8KΩ	1.5Meg		
V 16	12AT7	†5.7KΩ	1.4Meg	470Ω	0Ω	0Ω	†5.2KΩ	†3.9Meg	0Ω	.1Ω
V 17	6C4	†1.5Meg	INF	.1Ω	0Ω	†1.5Meg	800KΩ	0Ω		
V 18	6V6GT	INF	0Ω	†1.4KΩ	†500Ω	2.2Meg	†1KΩ	.1Ω	1.5KΩ	
V 19	6AL5	940KΩ	480KΩ	.1Ω	0Ω	0Ω	0Ω	480KΩ		
V 20	12AU7	#310KΩ	1 Meg	0Ω	0Ω	0Ω	†5.6KΩ	470KΩ	20Ω	.1Ω
V 21	6BQ6GT	INF	.1Ω	INF	†10KΩ	1 Meg	7KΩ	0Ω	180Ω	Top Cap #24Ω
V 22	6W4GT	INF	INF	1.5Meg	INF	†47Ω	INF	■.1Ω	■0Ω	
V 23	1B3GT	PINS 1 - 8 HAVE INF RESISTANCE								Top Cap #199Ω
V 24	5U4G	INF	7.2KΩ	INF	14.2Ω	INF	14.2Ω	INF	7.2KΩ	
V 25	5U4G	INF	7.2KΩ	INF	14.8Ω	INF	14.8Ω	INF	7.2KΩ	
V 26	21FP4A	0Ω	1 Meg	Pin 6 †37Ω	Pin 10 #480KΩ	Pin 11 120KΩ	Pin 12 .1Ω			

ALL CONTROLS SET FOR NORMAL OPERATION, NO SIGNAL APPLIED
NOISE LIMITING SWITCH IN OFF POSITION
† MEASURED FROM PINS 8 OF V24 & V25
# MEASURED FROM PIN 3 OF V22
■ MEASURED FROM 130VDC LINE



TUBE PLACEMENT CHART

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

The following chart lists tube 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 - V24, V25

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster - V2, V3, V4, V5, V6
No pic, no sound, has snow - V1, V2, V3
No pic, has sound, has raster - V7, V8, V26
Has pic, no sound - V7, V10, V11, V12, V13
Overloaded picture - V9, V12

SYNC FAILURE
No vert. sync - V16, V17, V18
No horiz. sync - V16, V19, V20
No vert. or horiz. sync - V14, V15, V16

SWEEP FAILURE
No raster, has sound - V20, V21, V22, V23, V26, Fuse (M1)
No vertical deflection - V18
Poor Vert. linearity or foldover - V17, V18
Narrow Picture - V20, V21, V22, V23, V24, V25
Vert. Off freq. -V16, V17, V18
Horiz. Off Freq. - V16, V19, V20
Poor Horiz. linearity or foldover -V20, V21, V22

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage shock hazard can be eliminated by removing the horizontal oscillator tube (V20).

VIDEO IF ALIGNMENT

Remove the converter tube (V2) 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 3 volt battery to pin 3 of the IF power socket. Connect the positive lead to chassis.
Remove the AGC keying tube (V9) from its socket.
To adjust A7 in step 4 remove the contrast control from the front panel. The adjustment can then be made through this hole, using a thin blade alignment tool.
In step 5 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 ungrounded tube shield floating over dummy converter tube. Low side to chassis.	Not used.	41.25MC (Unmod)	Any	Use VTVM DC probe to point (A) Common to chassis.	A1	Adjust for MINIMUM deflection.
2.	"	"	"	47.25MC	"	"	A2, A3	"
3.	"	"	"	42.65MC	"	"	A4, A5	Adjust for maximum deflection.
4.	"	"	"	45.3MC	"	"	A6, A7	"
5.	"	"	43MC (10MC Swp)	42.25MC 45.0MC 45.75MC	"	Vert. amp thru 10KΩ to point (A). Low side to chassis.	A8, A9	Adjust for curve similar to fig. 1.

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6.	Direct	High side to an ungrounded tube shield floating over dummy converter. tube. Low side to chassis.	43MC (10MC Swp)	41.25MC 42.25MC 45.0MC 45.75MC 47.25MC	Any	Vert. amp thru 10KΩ to point (A). Low side to chassis.		Check for response similar fig. 2. If necessary, retouch A4 thru A9 for desired response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
7.	.001MFD	High side to point (A). Low side to chassis.	4.5MC (Unmod)	Any	DC probe to point (B) Common to chassis.	A10, A11	Remove volume control from front panel. All is accessible thru mounting hole. Adjust for maximum deflection.
8.	"	"	"	"	DC probe to point (C) Common to chassis.	A12	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

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

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
7.	.001MFD	High side to point (A). Low side to chassis.	4.5MC (450KC Swp)	4.5MC	Any	Vert. amp to point (B). Low side to chassis.	A10, A11	Remove volume control from front panel. All is accessible thru the mounting hole. Disconnect stabilizer capacitor C4. Adjust for curve of maximum amplitude and symmetry as in fig. 3.
8.	"	"	"	"	"	Vert. amp to point (C). Low side to chassis.	A12	Reconnect capacitor C4. Adjust so that 4.5MC occurs at center of crossover lines as in fig. 4. SLIGHTLY retouch All for maximum amplitude and straightness of crossover lines.

4.5MC TRAP ALIGNMENT

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
9.	.001MFD	High side to point (A). Low side to chassis.	Not used.	4.5MC (400~Mod)	Any	Vert. amp thru detector (fig. 5) to pin 2 of picture tube. Low side to chassis.	A13	Adjust for MINIMUM 400~ indication on scope.

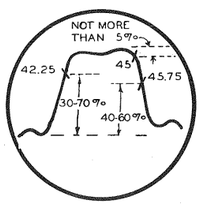


FIG.1

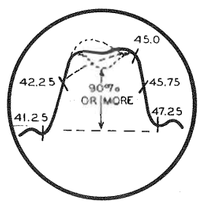


FIG.2

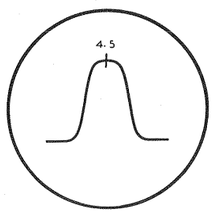


FIG. 3

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT

Remove the dummy converter tube and replace the original 6J6 in its socket.
The individual 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 signal 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	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10	Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213MC (10MC Swp)	215.75MC	13	Vert. amp to point A Low side to chassis.	A14	Adjust to place marker in trap notch on low frequency side of response curve.
			207MC (10MC Swp)	209.75MC	12		A15	
			201MC (10MC Swp)	203.75MC	11		A16	
			195MC (10MC Swp)	197.75MC	10		A17	
			189MC (10MC Swp)	191.75MC	9		A18	
			183MC (10MC Swp)	185.75MC	8		A19	
			177MC (10MC Swp)	179.75MC	7		A20	
			85MC (10MC Swp)	87.75MC	6		A21	
			79MC (10MC Swp)	81.75MC	5		A22	
			69MC (10MC Swp)	71.75MC	4		A23	
			63MC (10MC Swp)	65.75MC	3		A24	
			57MC (10MC Swp)	59.75MC	2		A25	

RF AND MIXER ALIGNMENT

Connect bias battery as in Video IF Alignment.
Connect the synchronized sweep voltage from the signal 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
11.	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 D Low side to chassis.	A26, A27 A28	Adjust for response as shown in fig. 6.
12.	"	"	213MC (10MC Swp)	211.25MC 215.75MC	13	"		Check for response as in fig. 6. If markers fall below 70% on any channel make compromise adjustment of A26, A27 and A28 with channel switch set to that channel, then check all other channels to see that they have not been seriously affected.
			201MC (10MC Swp)	199.25MC 203.75MC	11			
			195MC (10MC Swp)	193.25MC 197.75MC	10			
			189MC (10MC Swp)	187.25MC 191.75MC	9			
			183MC (10MC Swp)	181.25MC 185.75MC	8			
			177MC (10MC Swp)	175.25MC 179.75MC	7			
			85MC (10MC Swp)	83.25MC 87.75MC	6			
			79MC (10MC Swp)	77.25MC 81.75MC	5			
			69MC (10MC Swp)	67.25MC 71.75MC	4			
			63MC (10MC Swp)	61.25MC 65.75MC	3			
			57MC (10MC Swp)	55.25MC 59.75MC	2			

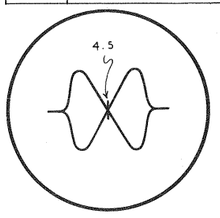


FIG.4

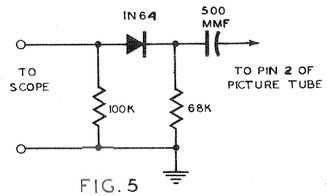


FIG. 5

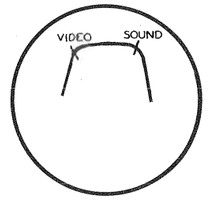


FIG.6

PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	RATINGS: TOTAL DIRECT CURRENT	RATINGS: D. C. RESISTANCE	RATINGS: INDUCTANCE (0 CURRENT 1000 ∿)	REPLACEMENT DATA: CAPEHART PART No.	REPLACEMENT DATA: STANCOR PART No.	REPLACEMENT DATA: MERIT PART No.	REPLACEMENT DATA: CHICAGO PART No.	REPLACEMENT DATA: TRIAD PART No.
L1	.340A	37.4Ω	1HY	650567C-1	C-2328		TR-1733 ①	C-17X ①

① Drill one new mounting hole.

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA: CAPEHART PART No.	REPLACEMENT DATA: MERIT PART No.	IRC PART No.	NOTES
L2	IF Trap	0Ω					Wound on 68 MMF capacitor.
L3	IF Trap	0Ω					Wound on 68 MMF capacitor.
L4	Ant. Coils	0Ω					
L5	IF Trap	1.1Ω					
L6	Neutralizing Coil	0Ω					
L7	Fil. Choke	0Ω					
L8	RF Mixer Grid & Osc. Coils	0Ω					
L9	Fil. Choke	0Ω					
L10	Feedback Coil	.8Ω					
L11	RF Choke	0Ω					
L12	Conv. Plate	0Ω	0Ω				
L13	1st Video IF	.3Ω		650590B-1			
L14	Fil. Choke	0Ω		4522667B-1			.8 Microheneries.
L15	2nd Video IF	.1Ω	.1Ω	750349B-1			Includes Trap
L16	3rd Video IF	.1Ω	.1Ω	750349B-1			Includes Trap
L17	4th Video IF	.1Ω	.1Ω	750349B-1			Includes Trap
L18	Fil. Choke	0Ω		452667B-1			.8 Microheneries.
L19	RF Choke	1.8Ω		450338A-4		CLA	2.2Microheneries.
L20	RF Choke	1.8Ω		450338A-4		CLA	2.2Microheneries
L21	Series Peaking Coil	3.6Ω		650585A-1	TV-181		75Microheneries
L22	Shunt Peaking Coil	6Ω		650585A-3	TV-185		250Microheneries.
L23	4.5MC Trap	1.4Ω		453225A-1	TV-151■		11.2Microheneries.
L24	Series Peaking Coil	4.6Ω		650585A-8	TV-181 *		115 Microhenries, wound on 3.9KΩ resistor
L25	4.5MC Trap	2.3Ω		650591A-2	TV-151		
L26	Series Peaking Coil	4Ω		650585A-9	TV-181		120 Microheneries
L27	Shunt Peaking Coil	4.3Ω		650585A-4	TV-181		100Microheneries
L28	Sound IF	4.6Ω		650591A-3	TV-151		
L29	Ratio Det.	5.5Ω	1.8CT	650584A-1	TV-115		Tertiary Winding-.6Ω
L30	Horiz. Osc. Coil	95Ω	75Ω	750352B-1			Sec. tap ② 36Ω, feedback winding 20Ω
L31	Horiz. Ring Coil	12Ω					
L32	Width Coil	.8Ω	94Ω	650589B-1			11 Millihenries

* Parallel with 3.3KΩ resistor
■ Drill mounting hole.

FUSES

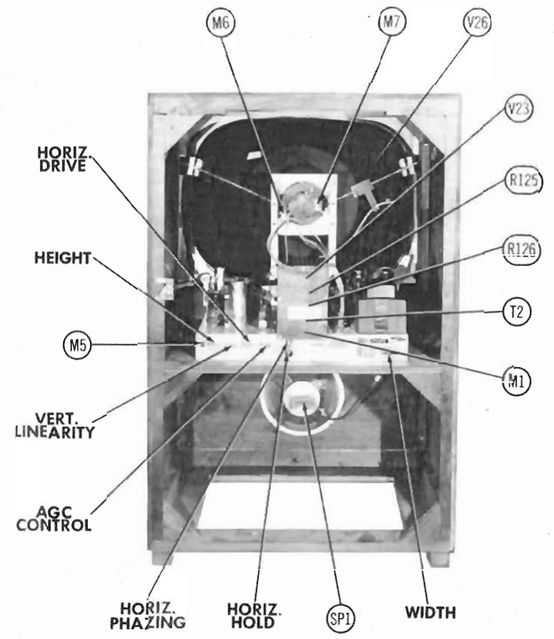
ITEM No.	TYPE	RATING	REPLACEMENT DATA: CAPEHART PART No. FUSE	CAPEHART PART No. HOLDER	LITTELFUSE PART No. FUSE	LITTELFUSE PART No. HOLDER	BUSS PART No. FUSE	BUSS PART No. HOLDER
M1	3AG Pigtail	1/4A. 250V.	450183A-1		318.250		GJV-1/4	

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA: CAPEHART PART No.		NOTES
M2	Bayonet	6-8	.15	Brown	600093A-8		Type #47

MISCELLANEOUS

ITEM No.	PART NAME	CAPEHART PART No.	NOTES
M3	RF Tuner	850222B-1	
M4	5th. Video IF Capacitor		8MMF
	Crystal		1N64
	Capacitor		10 MMF
	RF Choke		36 Microhenries
	RF Choke		4 Microhenries
			Video Det. Assembly Complete Part #750350B-1
M5	Switch	453166A-1	Noise Limiting
M6	Centering Magnet	650417A-2	
M7	Ion Trap	650276A-4	
	Knob	650594B-2	Channel Selector
	Knob	650593B-1	Fine Tuning
	Knob	650593B-2	Brightness
	Knob	650592B-1	Vert. Hold
	Knob	650592B-2	Contrast
	Knob	650594B-1	Off/on Volume
	Back Cover	453143A-G1	Models 1T172M & 2C172M
	Back Cover	453139A-G1	Models 3C212M & 3C212B
	Back Cover	453176A-G3	Models 4H212M, 4H212B, 5F212M, 6F212B, 7F212M, 8F212B 9F212M
	Mask	453174A-G5	Models 1T172M & 2C172M
	Mask	453174A-G6	Model 3C212M
	Mask	950159A-1	Model 3C212B
	Mask	453174A-G7	Models 4H212M, 5F212M, 7F212M & 9F212M
	Mask	950159A-3	Models 4H212B, 6F212B & 8F212B
	Safety Glass	850223A-1	Models 1T172M & 2C172M
	Safety Glass	850223A-2	Models 3C212M & 3C212B
	Safety Glass	850223A-3	Models 4H212M, 4H212B, 5F212M, 6F212B, 7F212M, 8F212B & 9F212M



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

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

If horizontal hold is unsatisfactory make the follow adjustments:

1. Remove the horizontal discriminator tube (V19) from its socket and adjust the horizontal frequency slug (B1) until picture moves slowly from side to side with one vertical blanking bar.
2. Replace V19 and picture should fall into sync as soon as tube reaches operating temperature.
3. Check the horizontal phasing. By means of the centering control move the raster to the left so that the right hand edge of the raster is visible. Reduce the contrast and increase the brightness until the blanking bar is visible at the right hand edge of picture. The bar should be approximately 3/16 inch to 1/4 inch in width. If necessary, adjust the horizontal phasing slug (B2) for this condition. If considerable adjustment of B2 is required it may be necessary to readjust B1 as in step 1, above.

Adjust the horizontal drive control for maximum scan. If vertical white lines appear at center of picture, back off the horizontal drive control, slightly, to eliminate them.

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

AGC ADJUSTMENT

This control is factory adjusted to provide 100 volt peak to peak signal at the output of the sync amplifier, and should give satisfactory reception under most conditions. If advanced too far clockwise, overloading of the video amplifier may occur or, on strong signals, blocking may occur when the Noise Limiting Switch is in the "ON" position.

DISASSEMBLY INSTRUCTIONS

1. Remove 6 push on type control knobs from front panel.
2. Remove 7 wood screws . Remove rear cover.
3. Disconnect built-in antenna and speaker.
4. Remove 2 wood screws. Remove antenna bracket.
5. Remove 6 chassis bolts. Remove chassis.
6. Remove 4 speaker nuts. Remove speaker.

NOTE: FOR PICTURE TUBE REMOVAL IT IS NECESSARY TO REMOVE CHASSIS AS OUTLINED ABOVE.

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: CAPEHART PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amplifier	6BQ7	6BQ7	9AJ	
V 2	Converter	6J6	6J6	7BF	
V3	Ist. Video IF Amp.	6CB6	6CB6	7CM	
V4	2nd. Video IF Amp.	6CB6	6CB6	7CM	
V5	3rd. Video IF Amp.	6CB6	6CB6	7CM	
V6	4th. Video IF Amp.	6CB6	6CB6	7CM	
V7	Video Amplifier Ist. Sound IF Amp.	6X8	6X8	9AK	
V8	Video Output	6AQ5	6AQ5	7BZ	
V9	AGC Keying	6AU6	6AU6	7BK	
V10	2nd. Sound IF Amp.	6AU6	6AU6	7BK	
V11	Ratio Detector	6AL5	6AL5	6BT	
V12	AF Amplifier - AGC Clamper	6AV6	6AV6	7BT	
V13	Audio Output	6AQ5	6AQ5	7BZ	
V14	Sync Amplifier	6BA6	6BA6	7BK	
V15	Sync Separator	6BE6	6BE6	7CH	
V16	Sync Clipper - Horiz. AFC	12AT7	12AT7	9A	
V17	Vert. Mult.	6C4	6C4	6BG	
V18	Vert. Mult. - Vert. Output	6V6GT	6V6GT	7AC	
V19	Horiz. Disc	6AL5	6AL5	6BT	
V20	Horiz. Oscillator - Horiz. Discharge	12AU7	12AU7	9A	
V21	Horiz. Output	6BQ6GT	6BQ6GT	6AM	
V22	Damper	6W4GT	6W4GT	4CG	
V23	HV Rectifier	1B3GT	1B3GT	2C	
V24	LV Rectifier	5U4G	5U4G	5T	
V25	LV Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA: CAPEHART PART No.	REPLACEMENT DATA: SYLVANIA PART No.		RTMA BASE TYPE	NOTES
V26A	21FP4A	21FP4A		12C	① Circuit changes necessary
B	17LP4	21FP4 ①		12C	
		17LP4		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: CAP.	RATING: VOLT	REPLACEMENT DATA: CAPEHART PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C1A	▲80	400	750090B-34	AFH2-64		UPB445		FP266	TVL-2675	
B	■40	400		PRS50/100		BRH501		TC3501	TVA-1310	
C	▲100	50								
C2A	▲80	400	750090B-33	AFH3-46		UPT84245		FP378	TVL-4659	
B	■40	350		PRS25/10		BR102A		TC22		
C	▲10	350								
D	10	25								
C3A	▲40	350	750090B-36	AFH3-140		UPT4145-V10		FP385	TVL-4606	
B	25	25		PRS25/25		BR252A		TC26		
C	■10	350								
D	▲100	25								
C4	5	150	650228A-10	PRS150/4		BR415		TC40	TVA-1402	
C5	2	150	650228A-11	PRS150/4		BR245		TC40	TVA-1402	
C6	3-8				829-10					
C7	3-8				829-10					
C8	10			SII0	D6-100	TM5QI	GP1K-100	UC-541	5GA-Q1	Note 1
C9	.5-3				829-3			CT565A		
C10	120			SII20	D6-121	TM5TI2	GP2K-121	UC-5312	5GA-T12	Note 2
C11	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C12	2.2				TCZ-2.2		NP0K-2R2		5TCCB-Y22	Note 7
C13	47			SI47	D6-470		GP1K-470	UC-5447	5GA-Q47	
C14	.5-3				829-3			CT565A		
C15	10			SII0NP0	TCZ-10		NP0K-100	ZT-541	5TCC-Q1	Note 3
C16	5			SI5	TCZ-4.7		GP1K-050	ZT-555	5GA-Q5	Note 1
C17	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C18	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C19	6.8			SI6.8NP0	TCZ-6.8		NP0K-6R8	ZT-5568	5TCCB-V68	Note 1
C20	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C21	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C22	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C23	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C24	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C25	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C26	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C27	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C28	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C29	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C30	5000		450469A-1	BPD-005	DD-502	TM5D5	811-005	DC-525	5HK-D5	
C31	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C32	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C33	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C34	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C35	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C36	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C37	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C38	100			SI100N75	TCN-100			NT-531	5TCU-T1	
C39	.1	600	2248-1040	P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C40	68		650030A-15				N150L-680			
C41	.1	600	2248-1040	P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C42	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C43	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C44	.047	600	2248-4730	P688-047	DF-503	PTE6S47		PT6147	6TM-S47	
C45	.022	800	2248-2230	P688-022	DF-203	PTE6S22		PT6122	6TM-S22	
C46	.01	600	2248-1030	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C47	100		650030A-14	SII00	D6-101	TM5T1	GP1K-101	UC-531	5GA-T1	Note 7
C48	5000		450469A-1	BPD-005	DD-502	TM5D5	811-005	DC-525	5HK-D5	
C49	10		650030A-16				N150K-100			
C50	47		650030A-17	SI47N750	TCN-47			NT-5447	5TCU-Q47	
C51	5000		450469A-1	BPD-005	DD-502	TM5D5	811-005	DC-525	5HK-D5	

CAPACITORS (CONT.)

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT DATA: CAPEHART PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C52	5000		450469A-1	BPD-005	DD-502	TM5D5	811-005	DC-525	5HK-D5	Note 7
C53	1000	500	650263A-12	1464-001		ZR5D1		MCB255	MS-21	
C54	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C55	.0047	600	2248-4720	P688-0047	D6-472	PTE6D47	GP2-333-472	PT6247	6TM-D47	
C56	.01	600	2248-1030	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C57	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C58	.0047	600	2248-4720	P688-0047	D6-472	PTE6D47	GP2-333-472	PT6247	6TM-D47	
C59	.01	600	2248-1030	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C60	.01	600	2248-1030	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C61	100	500	2272-21101	1468-0001	D6-101	5W5T1	GP1K-101	MC235	1FM-31	
C62	.047	600	2248-4730	P688-047	DF-503	PTE6S47		PT6147	6TM-S47	Note 4
C63	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C64	.047	600	2248-4730	P688-047	DF-503	PTE6S47		PT6147	6TM-S47	
C65	390	500	2272-21391	1469-0004		5R5T4		MCB243	MS-34	
C66A	.002			P688-002		PTE6D2		PT622		
B	.005		●453214A-1	P688-005	●PC-100	PTE6D5	●1405-01	PT625	●101C1	
C	.005			P688-005		PTE6D5		PT625		
C67	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C68	.033	600	2248-3339							
C69	.022	600	2248-2230	P688-022	DF-203	PTE6S22		PT6122	6TM-S22	
C70	.1	600	2248-1040	P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C71	.022	600	2248-2230	P688-022	DF-203	PTE6S22		PT6122	6TM-S22	
C72	.0022	1000	2249-2220	P1088-0022		PTE16D22		PT16222	MB-D22	
C73	.0022	600	2248-2220	P688-0022	D6-222	PTE6D22	GP2-333-222	PT6222	6TM-D22	
C74	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C75	390	500	2272-21391	1469-0004		5R5T4		MCB243	MS-34	
C76	.068	200	2246-6839							
C77	470	1000	2272-61471					MCK347		
C78	100	500	2272-23101	1468-0001	D6-101	5W5T1	GP1K-101	MC235	1FM-31	
C79	.0047	600	2248-4720	P688-0047	D6-472	PTE6D47	GP2-333-472	PT6247	6TM-D47	
C80	.047	200	2246-4730	P488-047	DF-503	PTE4S47		PT4147	2TM-S47	
C81	.22	200	2246-2240	P488-22		PTE4P22		PT4025	2TM-P22	
C82	1000		450469A-7	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C83	1000		450469A-7	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	
C84	.0047	600	2248-4725							
C85	.022	600	2248-2230	P688-022	DF-203	PTE6S22		PT6122	6TM-S22	
C86	.0033	600	2248-3325							
C87	22	500	2272-23220	1469-000025		5R5Q25		MCB220	MS-425	
C88	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C89	.047	600	2248-4730	P688-047	DF-503	PTE6S47		PT6147	6TM-S47	
C90	.01	600	2248-1030	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C91	820	500	2272-41821							
C92	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C93	.047	600	2248-4730	P688-047	DF-503	PTE6S47		PT6147	6TM-S47	
C94	.1	200	2246-1040	P288-1	DF-104	PJ2P1		PT401	2TM-P1	
C95	.22	600	2247-2240	P488-22		PTE4P22		PT4025	4TM-P22	
C96	.047	600	2248-4730	P688-047		PTE6S47		PT6147	6TM-S47	
C97	.01	600	2248-1020	P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C98	.22	600	2247-2240	P488-22		PTE4P22		PT4025	4TM-P22	
C99	500	20000	650153B-2	HV20C	TV3-502	MM-C20T5	413-501		20DK-T5	
C100	500		450469A-2	BPD-0015	DD-152	TM5D15	801-0015	DC-5215	5HK-D15	
C101	1500		450469A-2	BPD-0015	DD-152	TM5D15	801-0015	DC-5215	5HK-D15	
C102	1000		450469A-5	BPD-001	DD-102	TM5D1	801-001	DC-521	5HK-D1	Note 6
C103	.001	600	2248-1020	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	Note 8
C104	5000		450469A-1	BPD-005	DD-502	TM5D5	811-005	DC-525	5HK-D5	

Note 1. Some Models use 10MMF in this application.
Note 2. Some Models use 47MM F in this application.
Note 3. Some Models use 20MMF in this application.
Note 4. Deflection chassis coded D1 or D2 use .01MFD in this application (Part #2248-1030)
Note 5. Used in deflection chassis coded D1 or D2 when vert. integrator unit is part #452265A-1
Note 6. Used in early production only
Note 7. Not used in all Models
● Items C66A, C66B, C66C, R87A, R87B, R87C are combined in one unit.

CONTROLS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: CAPEHART PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	INSTALLATION NOTES
R1A	200KΩ		453117C-1	QJ-373*			JF284L	Brightness - Panel
B	1.5Meg						JR26A	Volume - Rear
C	Switch						JS-27	Attach to R1B
R2A	1500Ω		453116B-2	Q17-109	AC-11-S	B-6-S	U-6	Contrast
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R2A.
C	Switch		Not Req.	76-2	SWB-2	Not Req.	US-27	Attach to R2A.
R3A	1Meg		453115B-1	Q11-137	AC-61-S	B-69	U-54	Vert. Hold
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R3A.
R4A	10KΩ		453137A-1	Q11-116	AC-27-S	AB-14	SU-20	ACC
B	Shaft		Not Req.	RQ	FKS-1/4	Not Req.	Not Req.	Attach to R4A.
R5A	250KΩ		453114A-1	Q11-130	AC-55-S	AB-30	SU-46	Horiz. Drive
B	Shaft		Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R5A.
R6A	5000Ω	2	450893A-1	W-5000	A43-5000		R5000L	Vert. Linearity-Wire Wound
B	Shaft		Not Req.	Not Req.	FKS-1/4		Not Req.	Attach to R6A
R7A	2.5Meg		452733A-1	Q11-239	AC-84-S	AB-83	SU-565	Height
B	Shaft		Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Attach to R7A.

* CONCENTRIKIT EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFT B11-129 & P1-118 (Panel), B13-139 & R2-204 (Rear) & SWITCH 76-2.

RESISTORS

ITEM No.	RATING: OHMS	RATING: WATT	REPLACEMENT DATA: CAPEHART PART No.	IRC PART No.	NOTES
R8	15KΩ			BTS-15K	
R9	47KΩ				
R10	33Ω				
R11	220KΩ			BTS-220K	
R12	180KΩ			BTS-180K	
R13	470Ω			BTS-470	
R14	15KΩ			BTS-15K	
R15	220KΩ				
R16	15KΩ				
R17	10KΩ			BTS-10K	
R18	4700Ω			BTS-4700	
R19	12KΩ		3229-123	BTS-12K	
R20	680Ω		3229-822		
R21	47Ω		3229-470		
R22	3300Ω		3229-332	BTS-3300	
R23	4700Ω		3229-472	BTS-4700	
R24	220Ω		3229-221	BTS-220	

ITEM No.	RATING: OHMS	RATING: WATT	REPLACEMENT DATA: CAPEHART PART No.	IRC PART No.	NOTES
R25	12KΩ		3229-123	BTS-12K	
R26	47Ω		3229-470		
R27	3300Ω		3229-332	BTS-3300	
R28	5600Ω		3229-562		
R29	220Ω		3229-221	BTS-220	
R30	150Ω		3229-151	BTS-150	
R31	5600Ω		3229-562		
R32	220Ω		3229-221	BTS-220	
R33	150Ω		3229-151	BTS-150	
R34	4700Ω		3229-472	BTS-4700	
R35	10KΩ		3229-103	BTS-10K	
R36	1200Ω		3229-122	BTS-1200	
R37	1Meg		3229-105	BTS-1Meg	
R38	1Meg		3229-105	BTS-1Meg	
R39	680Ω	1	3232-681	BTA-680	
R40	18KΩ		3229-183	BTS-18K	
R41	3300Ω	2	3235-332	BTB-3300	

RESISTORS (CONT.)

ITEM No.	RATING: OHMS	RATING: WATT	REPLACEMENT DATA: CAPEHART PART No.	IRC PART No.	NOTES
R42	1Meg		3229-105	BTS-1Meg	
R43	100KΩ		3229-104	BTS-100K	
R44	220KΩ		3229-224	BTS-220K	
R45	18KΩ		3229-183	BTS-18K	
R46	680KΩ		3229-684	BTS-680K	Note 1.
R47	1000Ω		3229-102	BTS-1000	
R48	10KΩ		3229-103	BTS-10K	Note 2.
R49	68Ω		3229-680		Note 1.
R50	1000Ω		3229-102	BTS-1000	
R51	120Ω 5%		3228-121	BTS-120 5%	
R52	68KΩ		3229-683	BTS-68K	
R53	6800Ω		3229-682	BTS-6800	
R54	6800Ω		3229-682	BTS-6800	
R55	1Meg		3229-105	BTS-1Meg	
R56	10Meg		3229-106	BTS-10Meg	
R57	330KΩ		3229-334	BTS-330K	
R58	68KΩ		3229-683	BTS-68K	
R59	470KΩ		3229-474	BTS-470K	
R60	680Ω	1	3232-681	BTA-680	
R61	2000Ω	7	650101A-23	1-3/4A-2000	
R62	1000Ω		3229-102	BTS-1000	
R63	33KΩ		3229-333	BTS-33K	
R64	270KΩ 5%		3228-274	BTS-270K 5%	
R65	150KΩ 5%		3228-154	BTS-150K 5%	
R66	3.9Meg		3229-393	BTS-3.9Meg	
R67	820Ω		3229-821	BTS-820	
R68	3300Ω		3229-332	BTS-3300	
R69	100Ω	2	3235-102	BTB-100	
R70	3300Ω		3229-332	BTS-3300	
R71	10KΩ		3229-103	BTS-10K	
R72	47KΩ		3229-473	BTS-47K	
R73	10KΩ	1	3232-103	BTA-10K	
R74	22KΩ	2	3235-223	BTB-22K	
R75	330KΩ		3229-334	BTS-330K	
R76	4.7Meg		3229-475	BTS-4.7Meg	
R77	1.5Meg		3229-155	BTS-1.5Meg	Note 5.
R78	27KΩ	2	3235-273	BTB-27K	
R79	12KΩ		3229-123	BTS-12K	
R80	15KΩ		3229-153	BTS-15K	
R81	330KΩ		3229-334	BTS-330K	
R82	10KΩ		3229-103	BTS-10K	
R83	3.9Meg		3229-395	BTS-3.9Meg	
R84	10KΩ		3229-103	BTS-10K	
R85	22KΩ	2	3235-223	BTB-22K	
R86	22KΩ	2	3235-223	BTB-22K	
R87A	22KΩ			BTS-22K	
B	8200Ω		● 453214A-1	BTS-8200	
C	8200Ω			BTS-8200	

ITEM No.	RATING: OHMS	RATING: WATT	REPLACEMENT DATA: CAPEHART PART No.	IRC PART No.	NOTES
R88	470KΩ		3229-474	BTS-470K	
R89	820KΩ		3229-824	BTS-820K	
R90	68KΩ		3229-683	BTS-68K	
R91	100KΩ		3229-104	BTS-100K	
R92	47KΩ		3229-473	BTS-47K	
R93	12KΩ		3229-123	BTS-12K	
R94	120KΩ 5%		3228-124	BTS-120K 5%	
R95	10KΩ		3229-103	BTS-10K	
R96	560KΩ		3229-564	BTS-560K	
R97	2.2Meg		3229-225	BTS-2.2Meg	
R98	470Ω		3229-471	BTS-470	
R99	470Ω		3229-471	BTS-470	
R100	470Ω		3229-471	BTS-470	
R101	470KΩ		3229-474	BTS-470K	
R102	470KΩ		3229-474	BTS-470K	
R103	470KΩ		3229-474	BTS-470K	
R104	10KΩ		3229-103	BTS-10K	
R105	10KΩ		3229-103	BTS-10K	
R106	12KΩ		3229-123	BTS-12K	
R107	12KΩ		3229-123	BTS-12K	
R108	5600Ω	1	3232-562	BTA-5600	
R109	1000Ω		3229-102	BTS-1000	
R110	470Ω		3229-471	BTS-470	
R111	470KΩ		3229-474	BTS-470K	
R112	22KΩ		3229-223	BTS-22K	
R113	5600Ω	1	3232-562	BTA-5600	
R114	1Meg		3229-105	BTS-1Meg	
R115	120KΩ		3229-124	BTS-120K	
R116	6800Ω		3229-682	BTS-6800	
R117	1Meg		3229-105	BTS-1Meg	
R118	47Ω		3229-470		
R119	180Ω	2	3233-181	BW-2-180	
R120	10KΩ	2	3233-103	BTB-10K	
R121	470KΩ		3229-474	BTS-470K	
R122	1Meg		3229-105	BTS-1Meg	
R123	10KΩ		3229-102	BTS-10K	
R124	1000Ω		3229-102	BTS-1000	
R125	6.8Ω		650101A-22		
R126	330KΩ		3229-334		
R127	3500Ω	7	650101A-24	1 3/4A-3500	
R128	15KΩ	10	400106A-6	1 3/4A-15K	
R129	17.5Ω	20	750288A-7	2D-1750	
R130	2200Ω	2	3235-222	BTB-2200	
R131	1 Meg		3229-105	BTS-1 Meg	
R132	10KΩ		3229-103	BTS-10K	Note 3
R133	10KΩ		3229-103	BTS-10K	Note 4
R134	1 Meg		3229-105	BTS-1 Meg	Note 4
R135	1 Meg		3229-105	BTS-1 Meg	Note 4

● Items R87A, R87B, R87C, C66A, C66B, C66C are combined in one unit.
Note 1. Not used in all models .
Note 2. Some models use a 100KΩ resistor in this application.
Note 3. Used in deflection chassis coded D1 or D2 when vert. intergrator unit is part no. 452265A-1.
Note 4. Used only in deflection chassis coded D1 or D2.
Note 5. Deflection chassis coded D1 or D2 used a 3.9 Meg resistor in this application.

TRANSFORMER (POWER)

ITEM No.	RATING: PRI.	RATING: SEC. 1	RATING: SEC. 2	RATING: SEC. 3	REPLACEMENT DATA: CAPEHART PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.
T1	117VAC @ 2.34A	600VCT .340ADC	5VAC @ 6A	6.3VAC @ 1.2A SEC 4 6.3VAC @ 8A	750358C-1				

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING: DC RESISTANCE PRI	RATING: DC RESISTANCE SEC	REPLACEMENT DATA: CAPEHART PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.	NOTES
T2	990Ω Tap @ 24Ω	10.7Ω Tap .7Ω, 8.7Ω SEC #2 6Ω	850220D-1					Horiz. Output Trans.
T3	440Ω	18Ω	750354B-1	A-8115 ① DY-9 ②	A-3038 MDF-70 ②	TSO-5 TY-3 ②	A-99X Y-17 ②	Vert. Output Trans.
T4A	20Ω		850221B-1					Horiz. Deflection Coils.
B	48Ω							Vert. Deflection Coils.

① Drill new mounting holes.
② Drill one new mounting hole.
③ Use original deflection network.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING: IMPEDANCE PRI.	RATING: IMPEDANCE SEC.	RATING: DC RES PRI.	RATING: DC RES SEC.	REPLACEMENT DATA: CAPEHART PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.	NOTES
T5	10KΩ	3.2Ω	435Ω	.49Ω	650216A-1	A-3879 ①	A-2900 ①	RO-16 ①	S-11X ①	① Drill one new mounting hole.

SPEAKER

ITEM No.	RATINGS: SIZE	RATINGS: FIELD	RATINGS: V. C. IMP.	REPLACEMENT DATA: CAPEHART PART No.	JENSEN PART No.	JUAM PART No.	NOTES
SP1	8"	PM	3.4Ω	50151A-3	ST-115 Mod. P8-V	1A21	

CAPEHART MODELS 1T172M, 2C172M (Ch. CT-52), 3C212B, M, 4H212B, M, 5F212M, 6F212B, 7F212M, 8F212B, 9F212M (Ch. CT-57)