

CABINET-REAR VIEW

## DISASSEMBLY INSTRUCTIONS

### CHASSIS REMOVAL

Remove all knobs. Remove four screws securing cabinet and slide chassis out the front. Most components can be serviced without further disassembly.

### CRT REMOVAL

Follow "Chassis Removal" instructions. Lay set face down on a soft protective surface.

Disconnect CRT socket, and high-voltage anode lead. Loosen speaker bracket and remove speaker. Loosen and remove deflection yoke. Remove two screws holding right side of chassis and tilt chassis slightly.

Remove four screws holding CRT bracket and lift out CRT. Do not lift CRT by the neck.

## SERVICING IN THE FIELD

### CRT IMPLOSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished with-out CRT removal.

### FUSE DEVICES

A 1.5-amp fuse is used for low-voltage power-supply protection. (See Placement Chart.)

A .6-amp fuse is used for AC line protection. (See Placement Chart.)

### VHF TUNER

Set fine tuning at the center of its range and adjust oscillator slug (one for each channel) for best sound and picture.

### HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horizontal oscillator (hold) coil. (See photo, Cabinet-Rear View.)

### WIDTH

The width may be varied by connecting C112 to terminals 1 or 3 on horizontal output transformer. (See schematic.)

### CENTERING

Centering is accomplished by proper adjustment of two magnetic rings located on the yoke rear cover. (See photo, Cabinet-Rear View.)

SET 1559 FOLDER 2

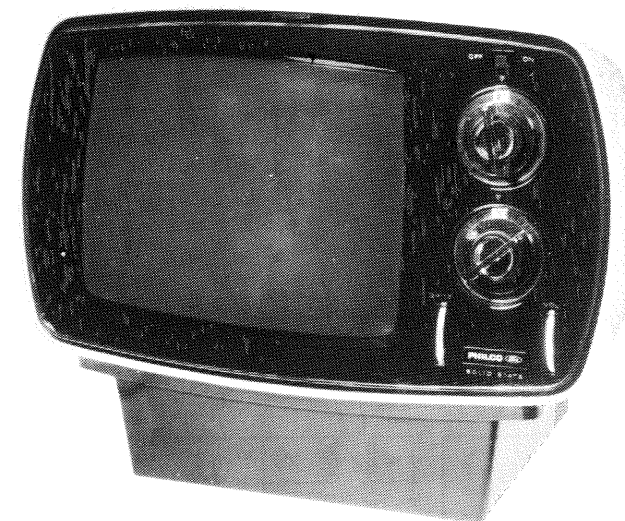
## PHOTOFACT® Folder

with CIRCUITRACE®

For Supplier Address See PHOTOFACT Index

PHILCO CHASSIS  
5B117/C, 5B118/C

MODEL	CHASSIS
B350FWH	5B117
B350FWHB	5B117
B350FWH/C	5B117/C
B350FYL	5B117
B350FYLB	5B117
B370FBL	5B117
B370FBL/C	5B117/C
B370FGR	5B117
B370FTG	5B117
B370FTG/C	5B117/C
B370FVT	5B117
B370FWH	5B117
B370FWH/C	5B117/C
B380FWH	5B118
B380FWH/C	5B118/C



MODEL B380FWH

## SAFETY PRECAUTIONS

Make sure line voltage does not exceed rating of set. Check high-voltage regulation and adjust to correct value. Be sure shields and rear cover are in place and secure.

Beware of shock from high voltage or AC line. Discharge high voltage to HV cage only.

Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain.

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HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206



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. 6PC1550

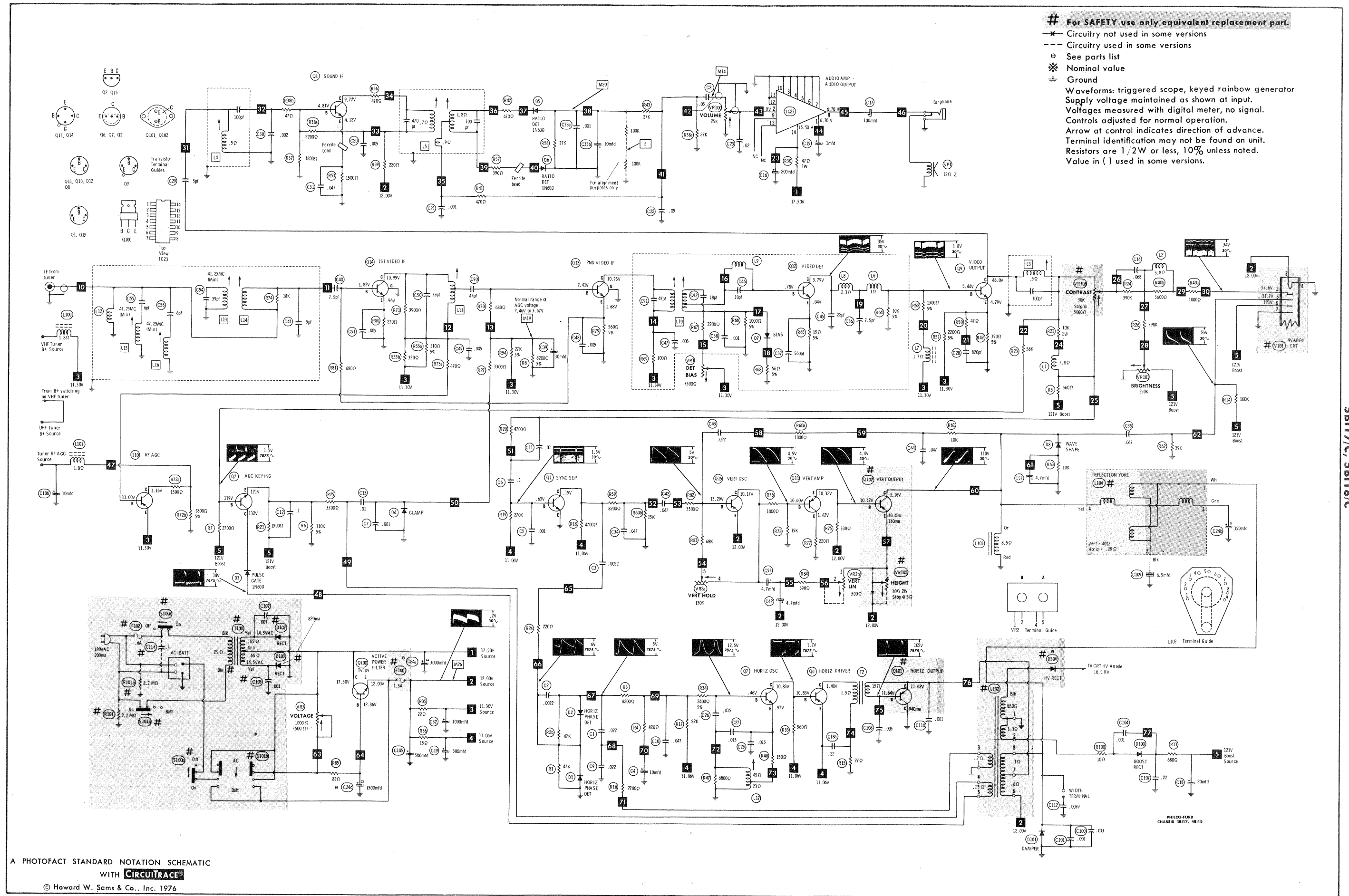
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DATE 4-76

SET 1559 FOLDER 2

PHILCO CHASSIS  
5B117/C, 5B118/C

SET 1559 FOLDER 2



## RESISTANCE MEASUREMENTS

ITEM	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9	PIN 10	PIN 11	PIN 12	PIN 13	TOP CAP
VI01	NC	200K	FIL	FIL	30K	45K	0Ω							
<b>MEASUREMENTS BELOW TAKEN WITH METER HAVING .08V MAX BETWEEN PROBE TIPS</b>														
IC23	INF	20K	0Ω	0Ω	0Ω	0Ω	0Ω	INF	NC	0Ω	0Ω	0Ω	NC	PIN 14 INF
ITEM	E	B	C		ITEM	E	B	C		ITEM	E	B	C	
Q1	0Ω	250K	4000Ω		Q9	260Ω	280Ω	55K		Q14	270Ω	1200Ω	220Ω	
Q2	47K	50K	180K		Q10	160Ω	750Ω	3000Ω		Q15	150Ω	130K	17K	
C6	160Ω	700Ω	28Ω		Q11	400Ω	15K	220Ω		Q100	150Ω	1NF	1NF	
Q7	150Ω	45K	700Ω		Q12	15Ω	780Ω	300Ω		Q101	150Ω	150Ω	0Ω	
Q8	1500Ω	1000Ω	750Ω		Q13	560Ω	7000Ω	240Ω		Q102	140Ω	400Ω	8.5Ω	

## TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptom.

**SWEEP**

No raster, has sound: Horiz Osc/Driver/Output,  
Damper, HV Rect, CRT  
No vert deflection: Vert Osc/Amp/Output  
Poor vert lin or foldover: Vert Osc/Amp/Output  
Poor horiz lin or foldover: Horiz Output, Damper  
Narrow picture: LV Rects, Horiz Osc/Driver/Output,  
Damper

Vert off freq: Vert Osc  
 Horiz off freq: Horiz Phase Det/Osc

**SYNC**

```
No vert sync: Vert Osc
No horiz sync: Horiz Phase Det/Osc
No vert/horiz sync: Sync Sep
```

PICTURE or SOUND

No pic, no sound, no raster: Fuses, LV Rects

No pic, no sound, has raster: Video IFs, Tuner Mixer

No pic, no sound, has snow: Tuner RF/Mixer/Osc

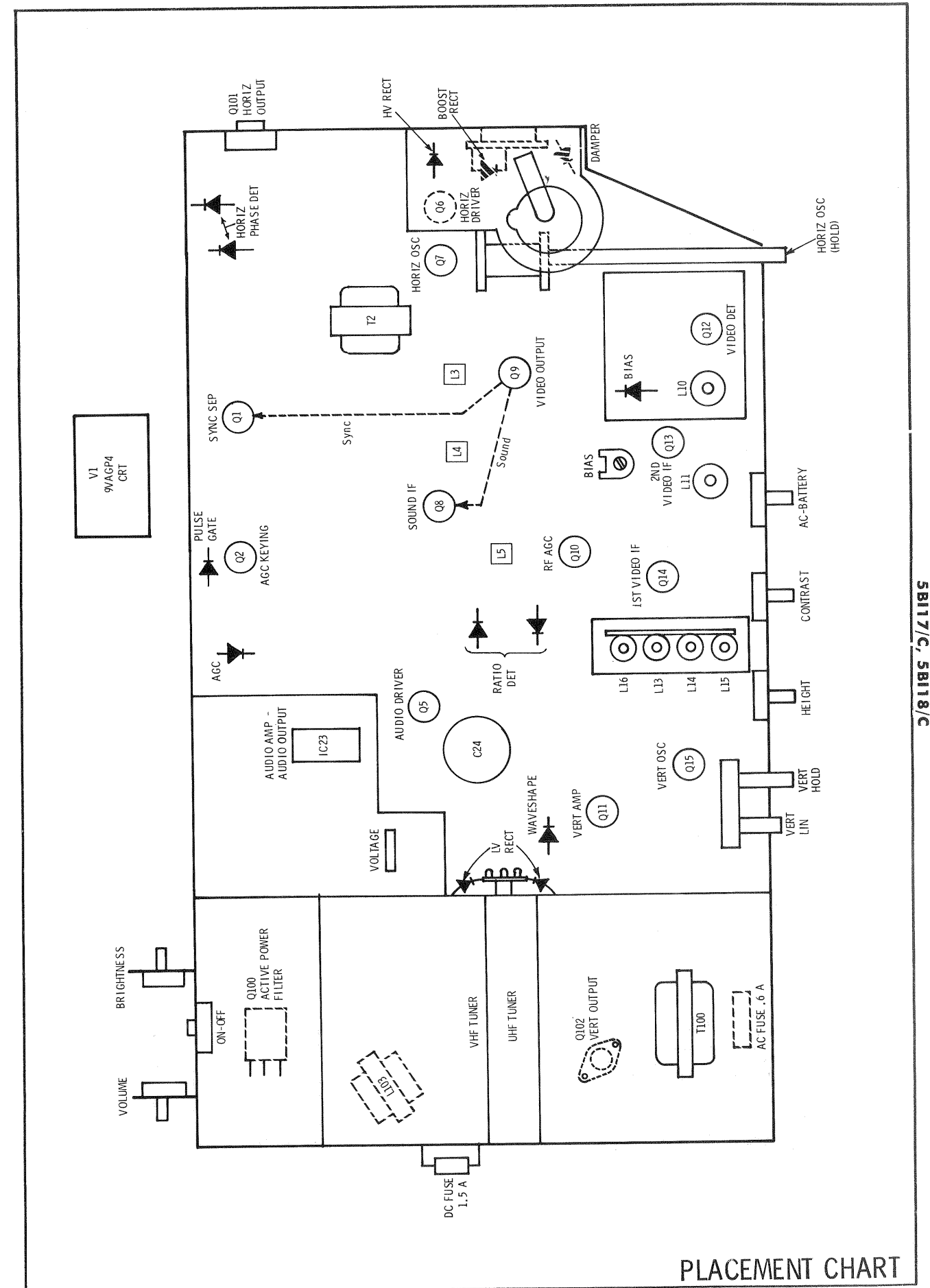
No pic, has sound, no raster: Video Output, CRT

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No pic, has sound, has raster: Video Det/Output
Has pic, no sound:   Sound IF, Ratio Det,
                     Audio Amp/Output

```

Overloaded picture: AGC, Video Det



TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain voltage at 120VAC.  
Allow a 20-minute warm-up period for the receiver and test equipment.  
Suggested Alignment Tools:

GC ELECTRONICS  
L11, L13, L14, L15, L16 .. 9440  
L3, L4 ..... 9293, 9294  
T2T, L5 ..... 9296, 9297, 9300

VIDEO IF ALIGNMENT

Set the channel selector to highest unused channel. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from that shown. Connect a +3.75 volt bias to test point M19, low side to ground.

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to test point M17, low side to ground.	Thru .001mfd to test point on VHF tuner, low side to ground.	44MC (10MC Sweep)	41.25MC 47.25MC	Adjust L13 for MINIMUM. Adjust L15 and L16 for MINIMUM. See Fig. 1.
"	"	"	41.25MC 42.17MC 44.00MC 45.75MC 47.25MC	Adjust L11, L14, L10 Top and Bottom, and T2T (VHF Tuner) for maximum gain and symmetry of response. T2T affects 42.17MC marker; L14 affects 45.75MC marker; L10 affects tilt of response; L11 affects flatness of response. See Fig. 2.

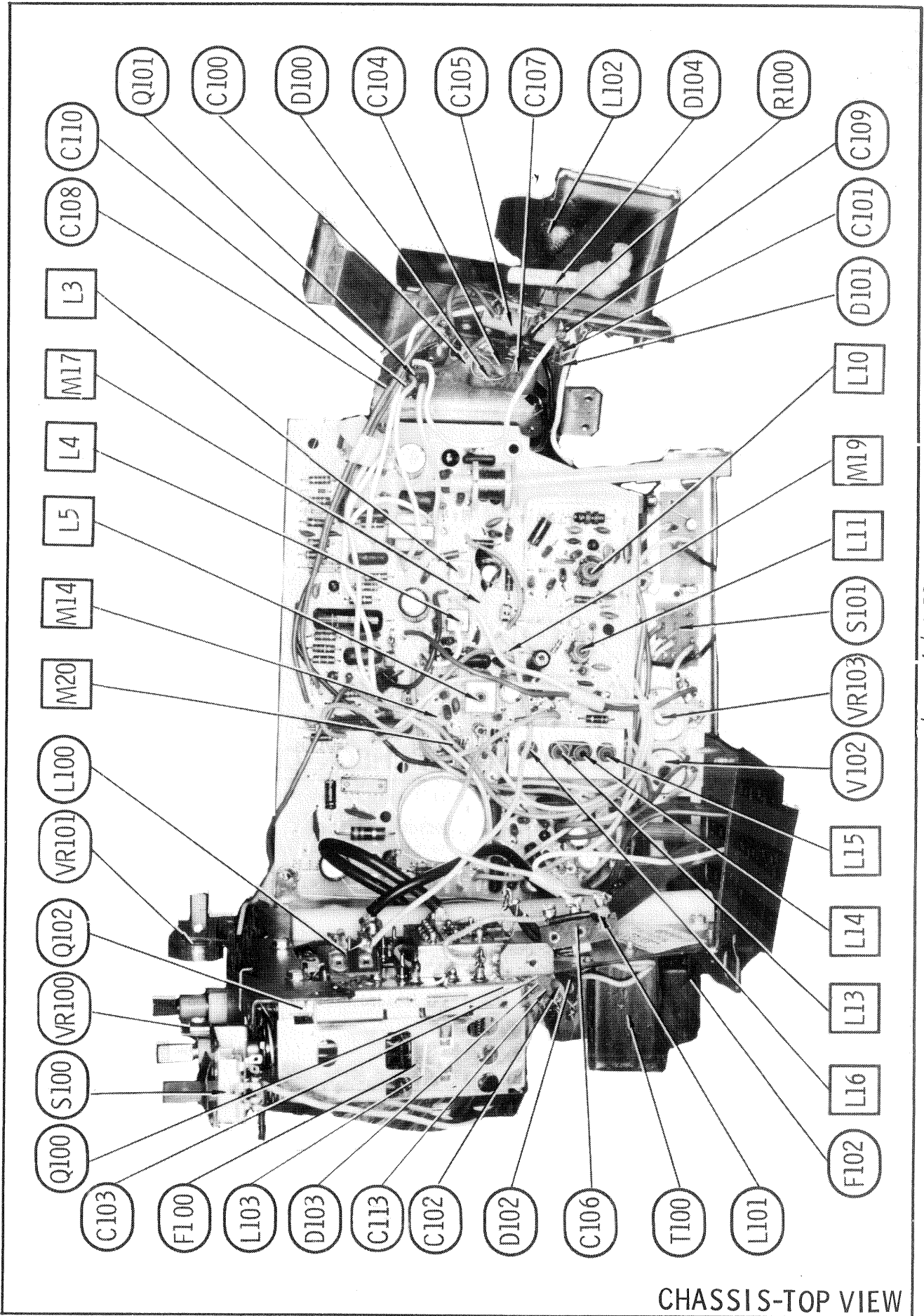
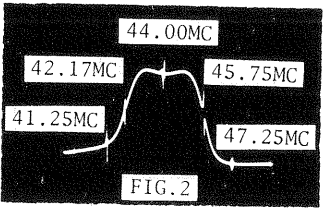
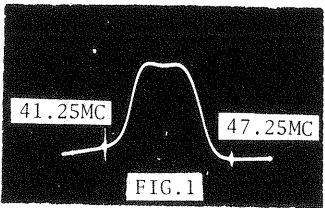
4.5MC TRAP ALIGNMENT

Tune in a strong TV signal and set the contrast at maximum. Adjust the fine tuning until a beat pattern is visible on the screen. Adjust L3 for MINIMUM beat interference.

SOUND IF ALIGNMENT

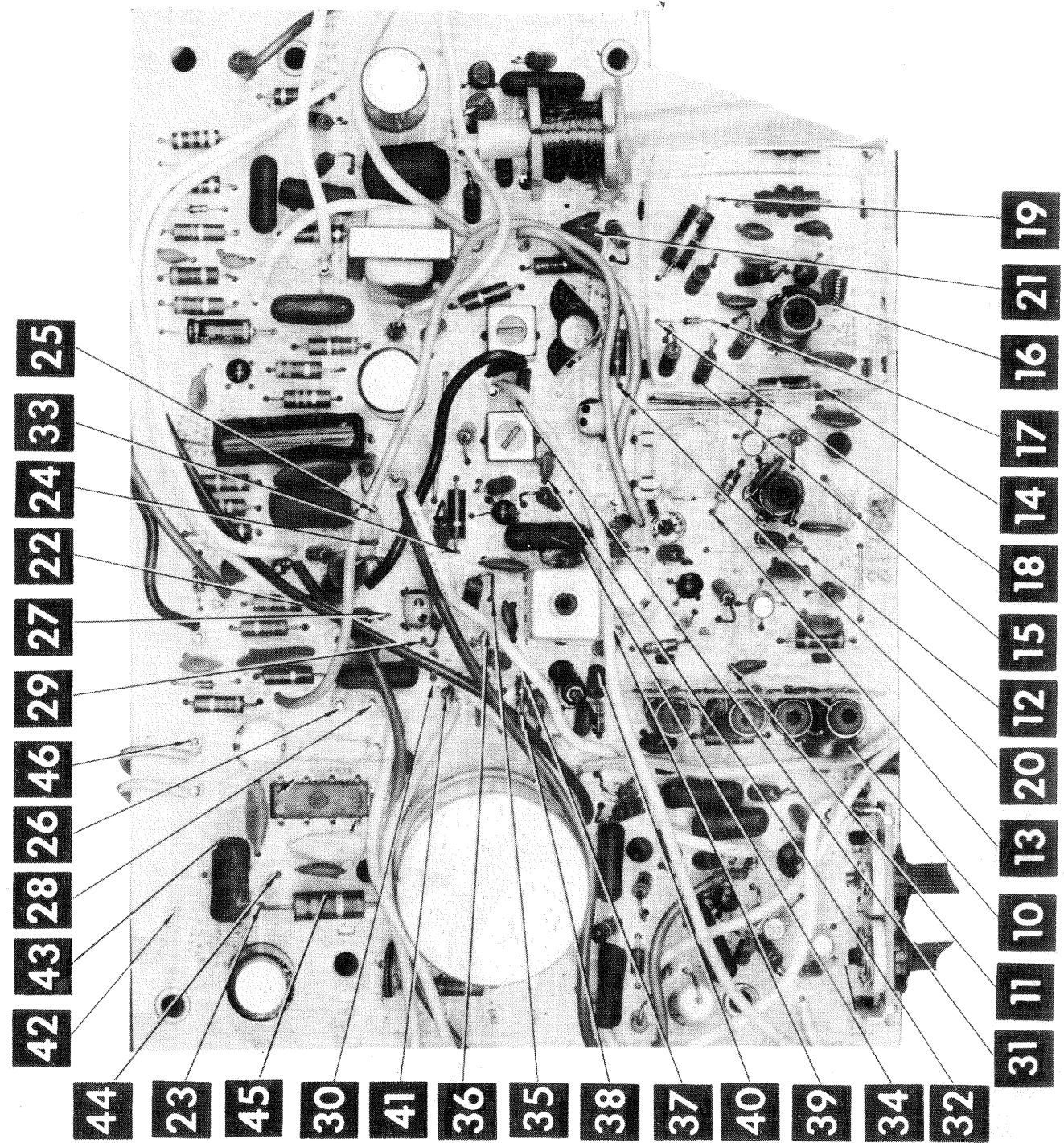
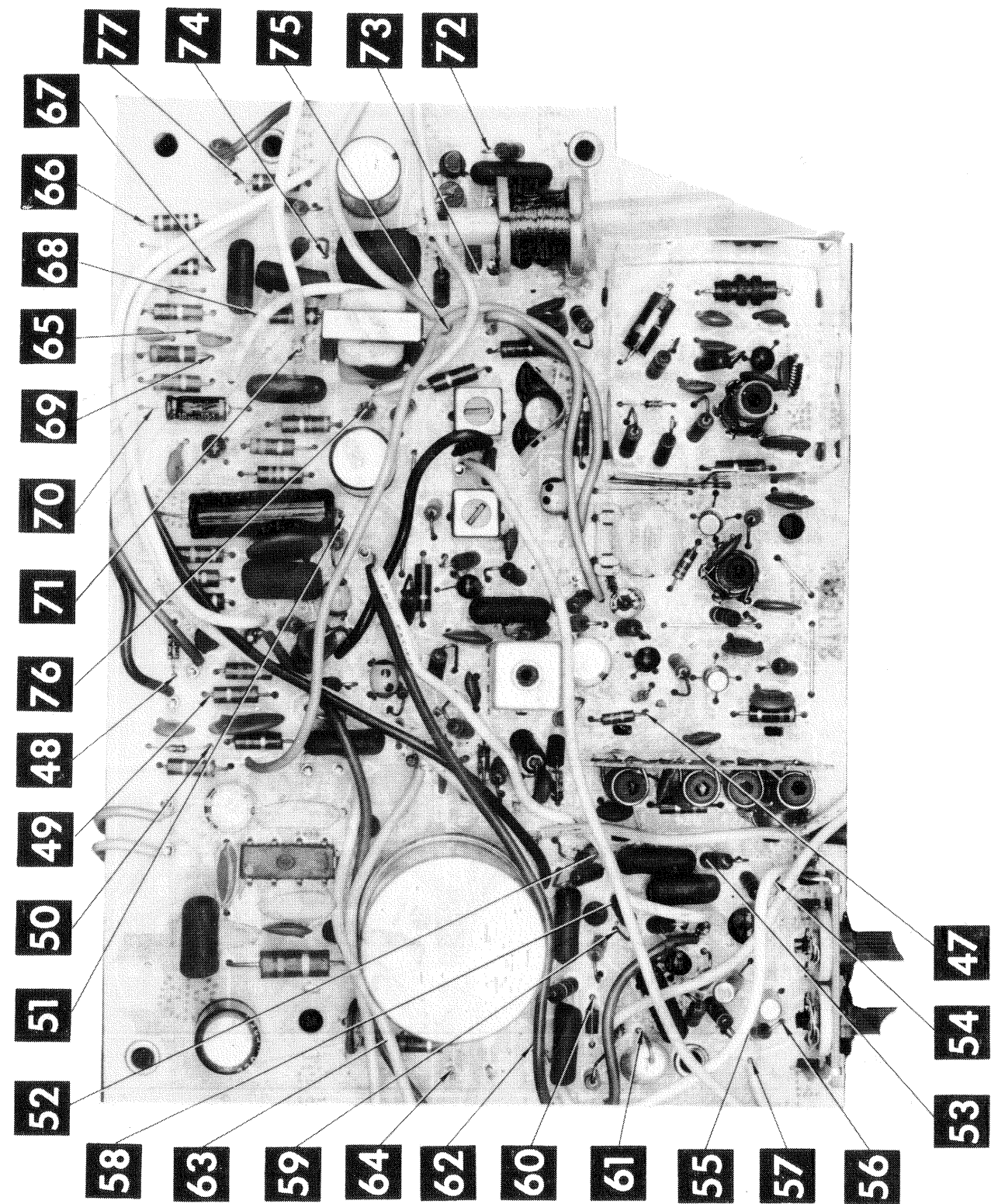
Temporarily connect two 100K resistors in series from M20 to ground (used for alignment only). Select any non-interfering channel.

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CONNECT VTVM	REMARKS
Thru .01mfd to test point M17, low side to ground.	4.5MC (Unmod.)	DC probe to test point M20, low side to ground.	Adjust L4 and L5 Bottom for maximum.
"	"	DC probe to point E, low side to test point M14	Adjust L5 Top for zero. A positive or negative reading will be obtained on either side of the correct setting. Remove the two 100K alignment resistors.



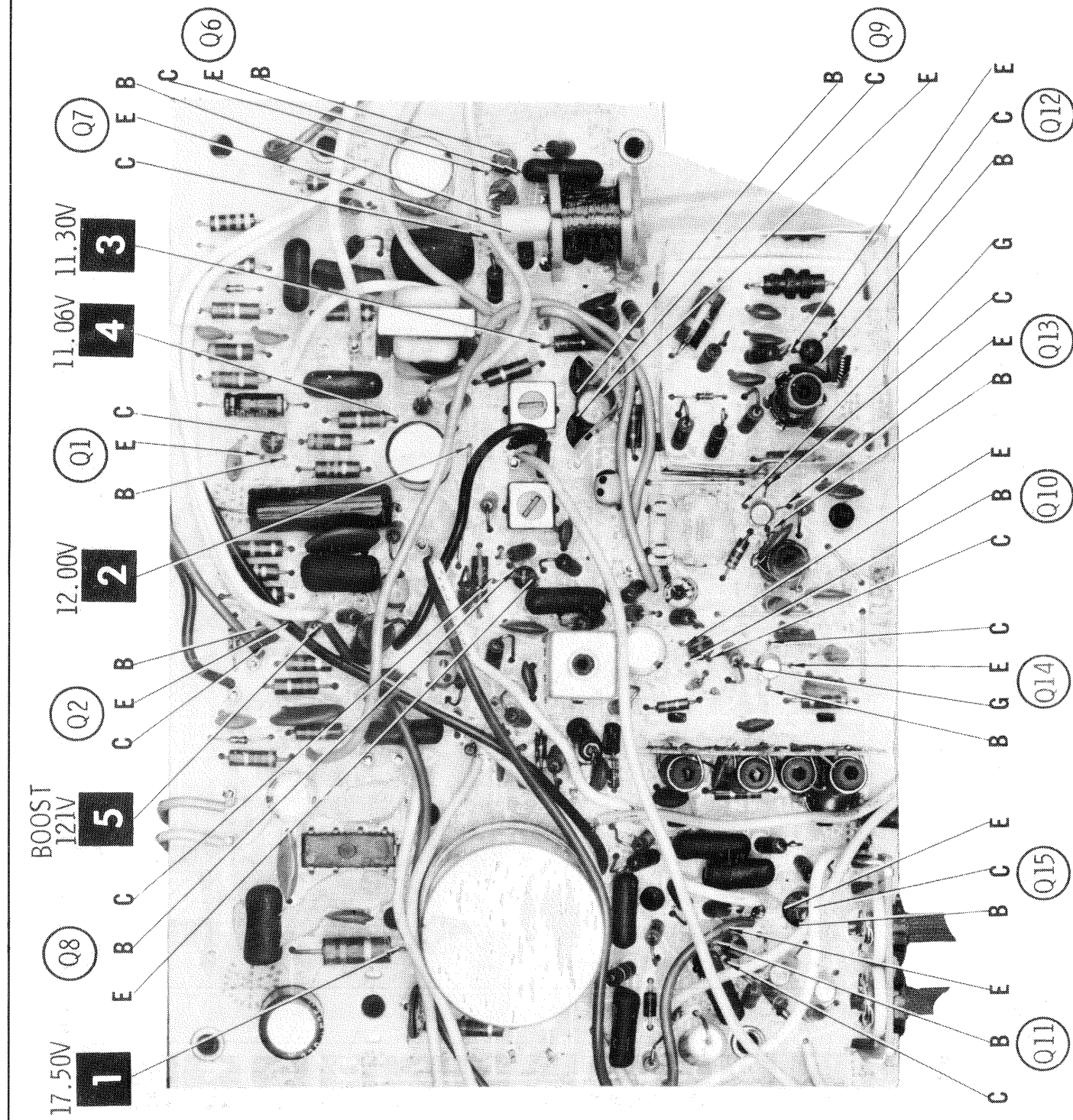


PRINTED BOARD

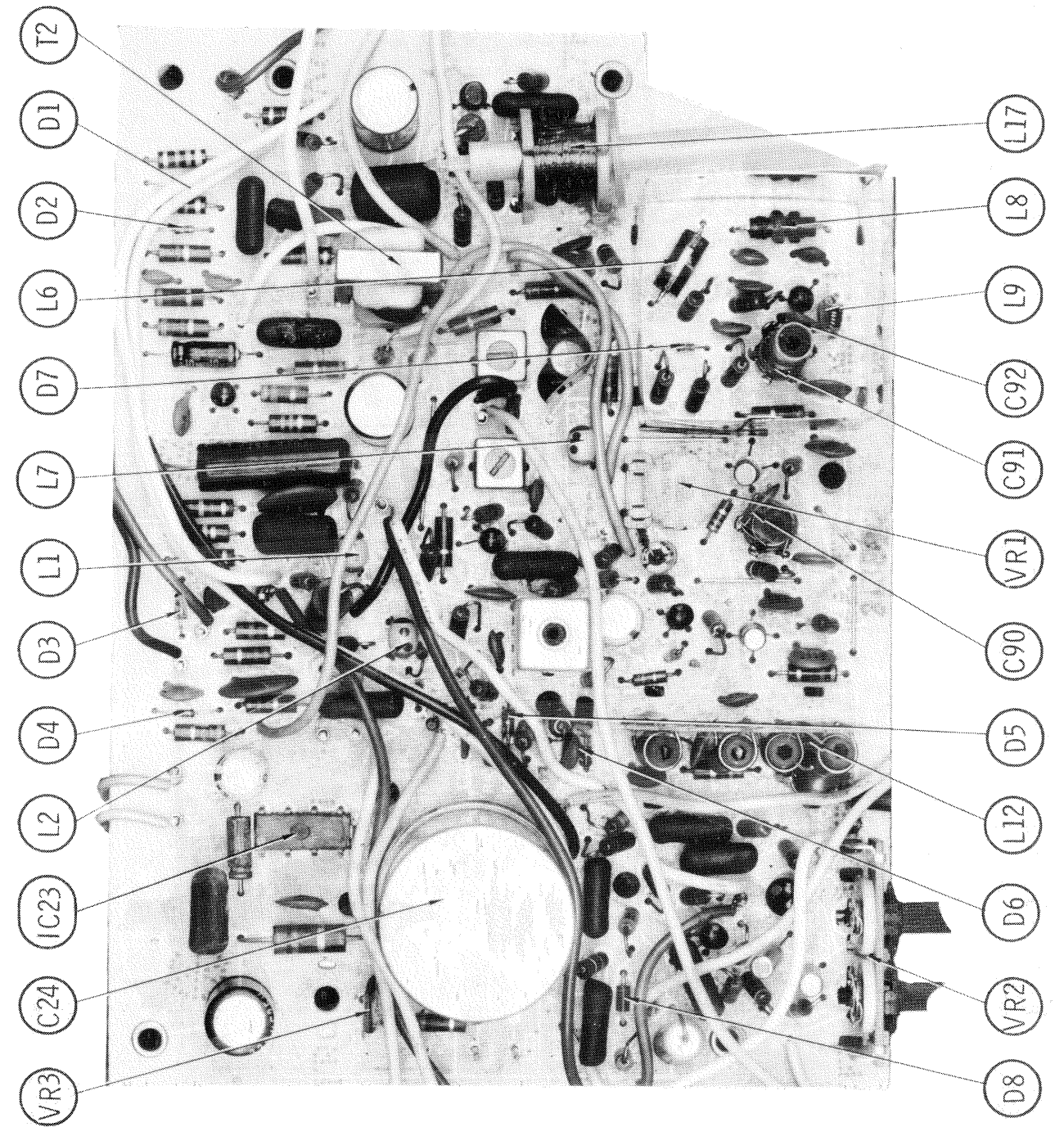


A Howard W. Sams **CIRCUITRACE** Photo PRINTED BOARD





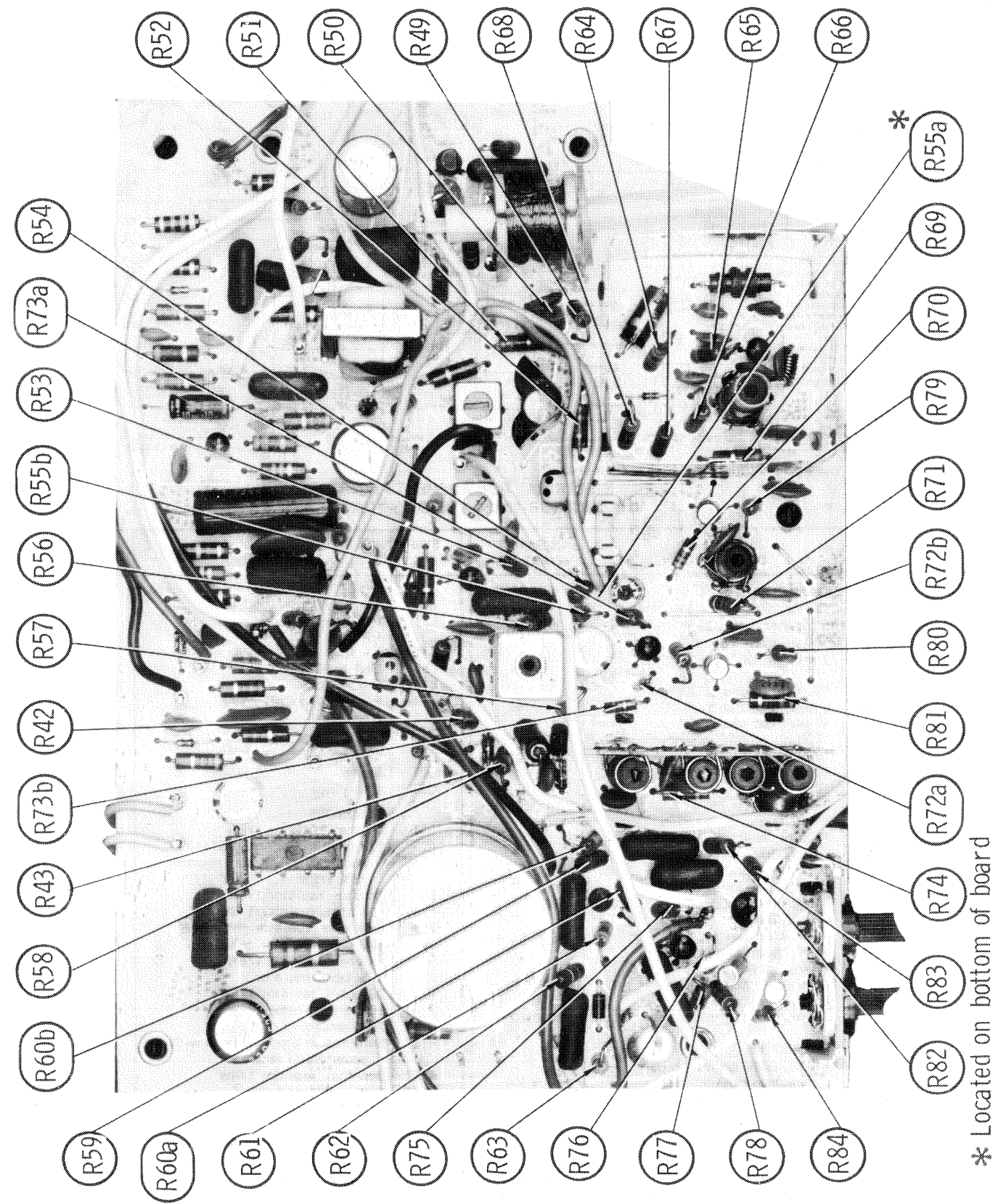
PRINTED BOARD A Howard W. Sams CIRCUITRACE® Photo



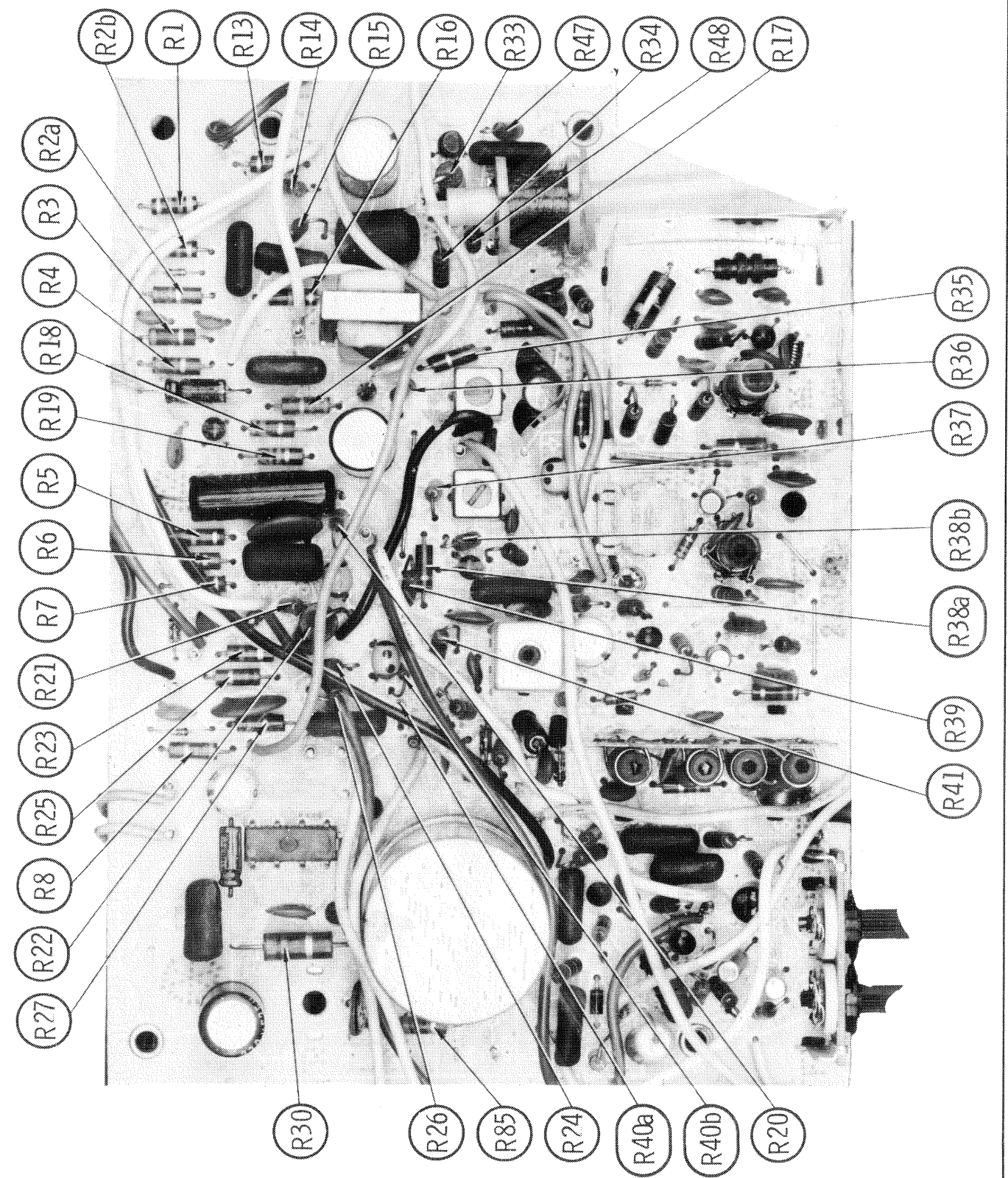
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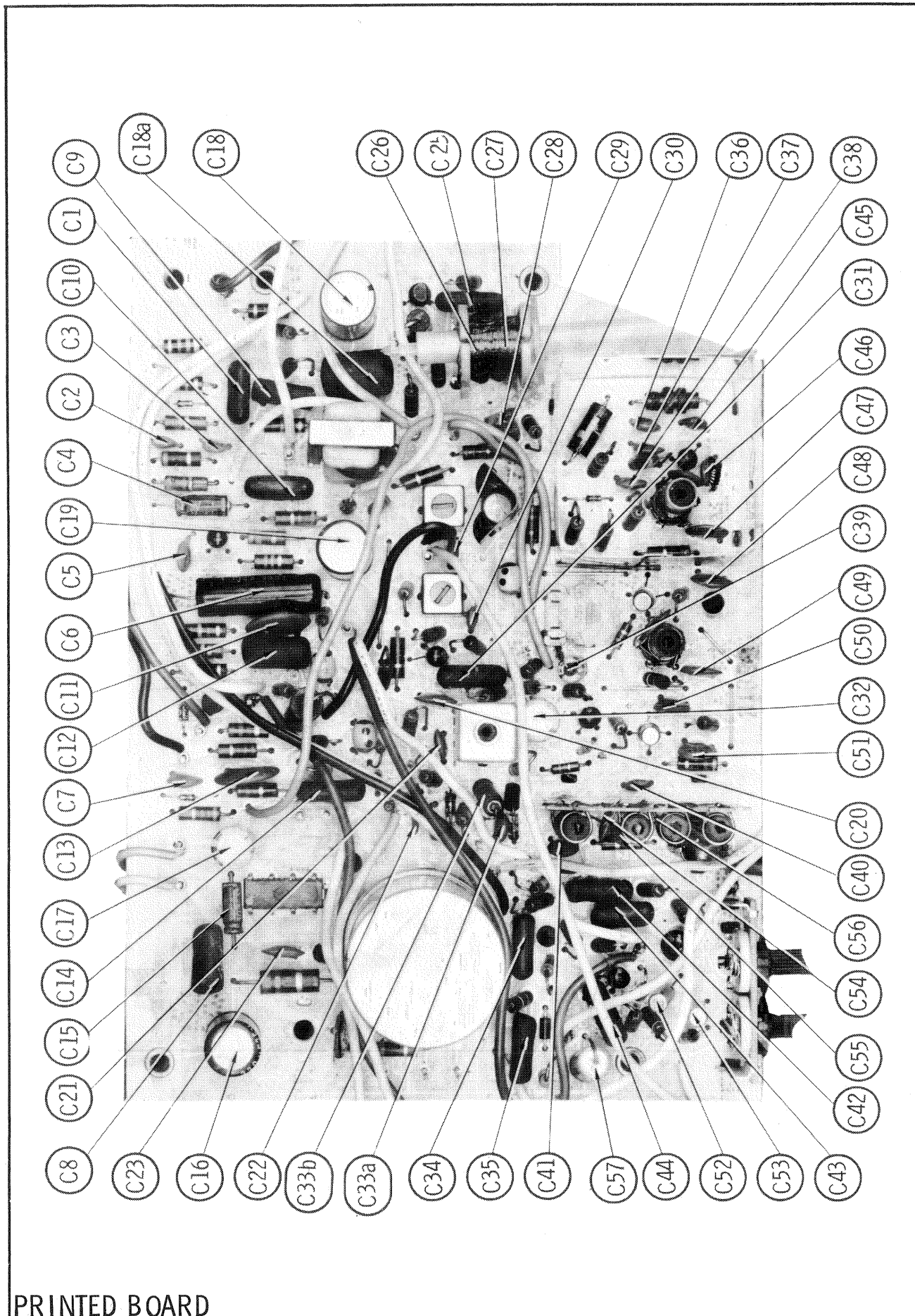


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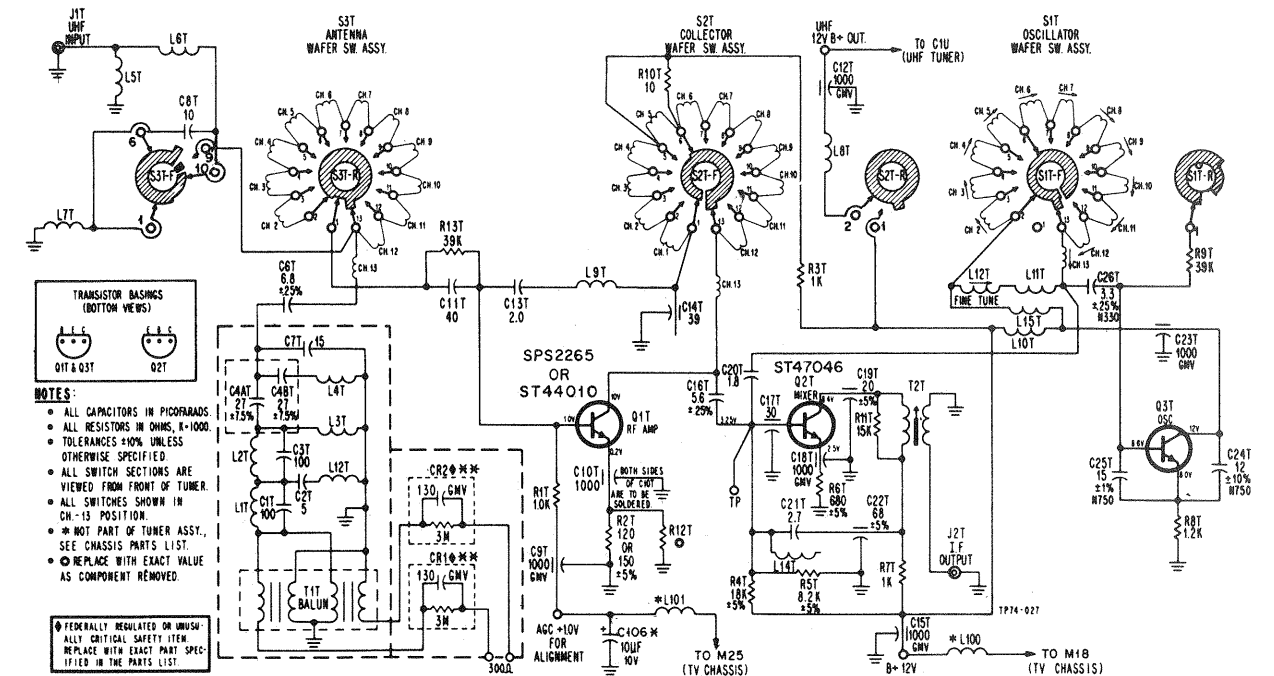
PRINTED BOARD





PRINTED BOARD

# SCHEMATIC DIAGRAM—VHF TUNER 76-14324-4 AND 76-14324-1, RUN 4



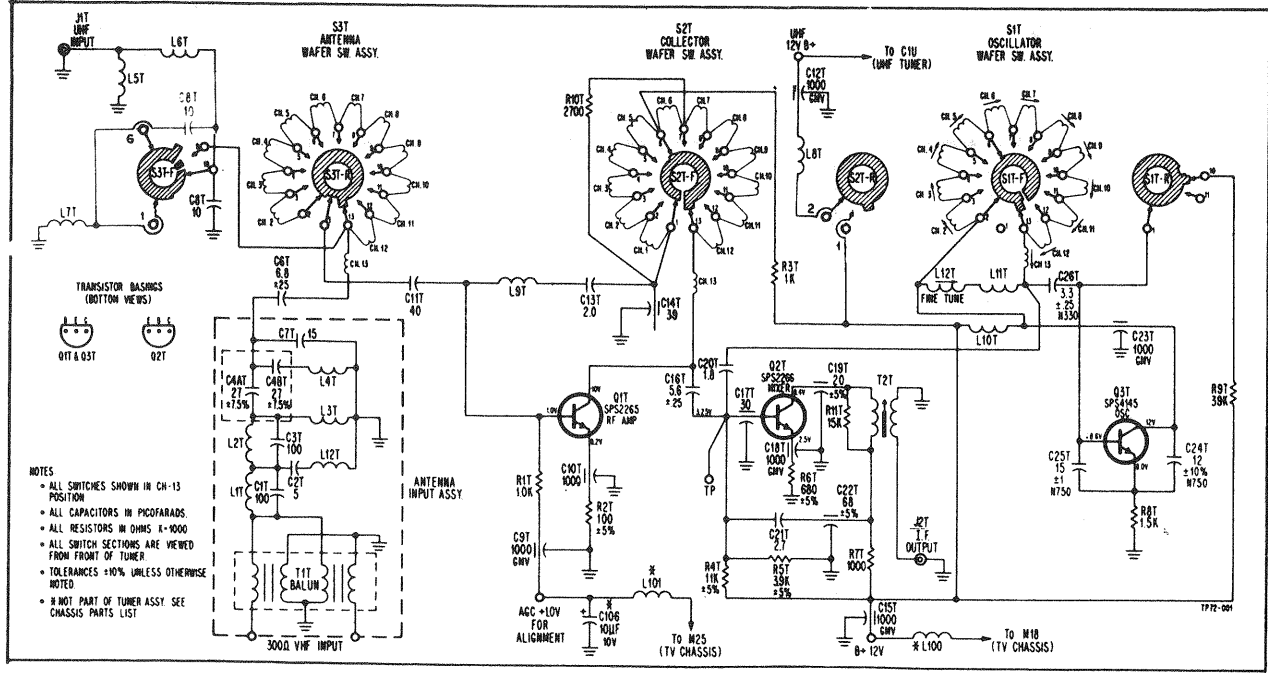
\*\* Not installed on 76-14324-1, Run 4 tuners.

## ELECTRICAL REPLACEMENT PARTS LIST VHF TUNER 76-14324-4 AND 76-14324-1, RUN 4

SYM-BOL	DESCRIPTION	SERVICE PART NO.	SYM-BOL	DESCRIPTION	SERVICE PART NO.
C1T	100 pf, disc cap ±10%	229-0180-196	L1T	I-F Trap FM	229-0180-196
C2T	5 pf, disc cap ±.25 pf		L2T	I-F Trap FM	
C3T	100 pf, disc cap ±10%		L3T	I-F Trap	
C4AT/BT	2 x 27 pf, disc cap ±7.5%		L4T	I-F Trap	
C7T	15 pf, disc cap ±.10%	229-0190-77	L8T	UHF B+ Choke	229-0185-4
C6T	6.8 pf, disc cap ±.25 pf		L10T	Osc. Choke	229-0185-5
C8T	10 pf, disc cap ±.1 pf		L12T	Fine Tuning Coil Assy.	229-0180-193
C9T	1000 pf, feedthru cap		L14	Gimmick	229-0182-32
C10T	1000 pf, feedthru cap	229-0180-43	<b>TRANSISTORS</b>		
C11T	40 pf, disc cap ±10%		Q1T	RF Amp.	229-0185-2
C12T	1000 pf, feedthru cap		Q2T	Mixer	229-0180-191
C13T	2 pf, disc cap ±10%		Q3T	Oscillator	229-0151-3
C14T	39 pf, feedthru cap ±10%	229-0180-44	<b>RESISTORS</b>		
C15T	1000 pf, feedthru cap		R1T	1K ohm, resistor 1/8W	
C16T	5.6 pf, disc cap ±.25 pf		R2T	120 ohm or 150 ohm, (ST44010 and SPS2265, resp.) resistor ±5% 1/8W	
C17T	30 pf, feedthru cap ±10%		R3T	1K ohm, resistor 1/8W	
C18T	1000 pf, feedthru cap	229-0182-112	R4T	18K ohm, resistor 1/8W	
C19T	20 pf, disc cap ±5%		R5T	8.2K ohm, resistor ±5% 1/8W	
C20T	1.8 pf, disc cap ±.25 pf		R6T	680 ohm, resistor ±5% 1/8W	
C21T	47 pf, disc cap ±10%		R7T	1K ohm, resistor 1/8W	
C22T	68 pf, feedthru cap	30-6068-1	R8T	1.2K ohm, resistor	
C23T	1000 pf, feedthru cap		R9T	39K ohm, resistor 1/8W	
C24T	12 pf, disc cap ±10%		R10T	10 ohm, resistor 1/8W	
C25T	15 pf, disc cap ±1 pf		R11T	22K, resistor 1/8W	
C26T	3.3 pf, disc cap ±10%		R12T	Selected in prod. replace with same value removed	
CR1*	130 pf, GMV shunted by 3 megohm resistor	30-6068-1	R13T	39K ohm, resistor 1/8W	
CR2*	130 pf, GMV shunted by 3 megohm resistor	30-6068-1	R14T	5.6K, resistor 1/8W	
J1T	UHF Input	57-0690-5	<b>WAFER SWITCHES</b>		
J2T	I-F Output	57-0690-5	S1T	Oscillator (with coils)	229-0180-194
			S2T	Collector (with coils)	229-0185-9
			S3T	Antenna (with coils)	229-0180-195
			<b>TRANSFORMERS</b>		
			T1T	Balun	229-0180-78
			T2T	I-F Coil Assy.	229-0180-192
				VHF Tuner Complete	76-14324-4

◊ Federally regulated or unusually critical safety item. Replace with exact part specified in the parts list.  
 \* May be omitted on 4B117 & /C, 4B118, 5B115, 5B117 & /C and 5B118 & /C chassis. If so, wire straps are substituted for the Capristors.  
**WARNING:** Tuners without capristors must not be installed in line connected sets. Courtesy of the Manufacturer





SCHEMATIC DIAGRAM—VHF TUNER 76-14324-1

ELECTRICAL REPLACEMENT PARTS LIST  
VHF TUNER 76-14324-1

SYM-BOL	DESCRIPTION	SERVICE PART NO.	SYM-BOL	DESCRIPTION	SERVICE PART NO.
C1T	<b>CAPACITORS</b>		J2T	I-F output	57-0590-5
C2T	100 pf ± 10%, N330, ant. input	Part of	L1T	<b>COILS</b>	
C3T	5 pf ± .25 pf, N330, ant. input	Ant.	L2T	I-F trap, FM	Part of
C4T/	100 pf ± 10%, N330, ant. input	Input	L3T	I-F trap, FM	Ant.
BT	2 x 27 pf ± 7.5%, ant. input	Assy.	L4T	I-F trap	Input
C6T	6.8 pf ± .25 pf, N330, ant. cplg.	—	L8T	I-F trap	Assy.
C7T	15 pf ± 10%, N470, ant. cplg.	—	L10T	UHF B+ choke	229-0185-4
C8T	10 pf ± .1 pf, N470, UHF input	—	L12T	Osc. choke	229-0185-5
C9T	1000 pf, GMV, feedthru, AGC	—		Fine tuning coil assy.	229-0185-8
C10T	1000 pf, GMV, feedthru, RF emit.	—	<b>TRANSISTORS</b>		
C11T	40 pf ± 10%, N330, RF base	—	Q1T	SPS2265, RF amp.	229-0185-2
C12T	1000 pf, GMV, feedthru, UHF B+	—	Q2T	SPS2266, mixer	229-0185-3
C13T	2.0 pf ± 10%, RF neutralizer	—	Q3T	SPS4145, oscillator	229-0151-3
C14T	39 pf ± 10%, N330, feedthru, collector wafer	—	<b>RESISTORS</b>		
C15T	1000 pf, GMV, feedthru, B+	—	R1T	1K ± 10%, 1/8W, RF AGC	—
C16T	5.6 pf ± .25 pf, N330, mixer cplg.	—	R2T	100 ohms, ± 5%, 1/8W, RF emit.	—
C17T	30 pf ± 10%, N330, feedthru, mixer base	—	R3T	1K ± 10%, 1/8W, B+ damping	—
C18T	1000 pf, GMV, mixer emit.	—	R4T	11K ± 5%, 1/8W, mixer base	—
C19T	20 pf ± 5%, N330, mixer coll.	—	R5T	3.9K ± 5%, 1/8W, mixer base	—
C20T	1.8 pf ± .25 pf, NPO, injection cplg.	—	R6T	680 ohms, ± 5%, 1/8W, mixer emit.	—
C21T	2.7 pf ± 10%, mixer base	—	R7T	1K ± 10%, 1/8W, mixer B+	—
C22T	68 pf ± 10%, N330, feedthru, I-F coil	—	R8T	1.5K ± 10%, 1/2W, osc. emit.	—
C23T	1000 pf, GMV, N330, feedthru, osc. coll.	—	R9T	39K ± 10%, 1/8W, osc. B+	—
C24T	12 pf ± 10%, N750, osc. emit. to coll.	—	R11T	15K ± 10%, 1/8W, mixer coll.	—
C25T	15 pf ± 1 pf, N750, osc. emit. to base	—	<b>WAFER SWITCHES</b>		
C26T	3.3 pf ± .25 pf, N330, osc. base	—	S1T	Oscillator (with coils)	229-0185-7
J1T	<b>JACKS</b>		S2T	Collector (with coils)	229-0185-9
	UHF input	57-0590-5	S3T	Antenna (with coils)	229-0185-10
			<b>TRANSFORMERS</b>		
			T1T	Balun, antenna input	229-0164-45
			T2T	I-F Coil Assy.	229-0185-6
			<b>VHF TUNER</b>		76-14324-1

♦ Federally regulated or unusually critical safety item.  
Replace with exact part specified in parts list.

Courtesy of the Manufacturer

MISCELLANEOUS ADJUSTMENTS

B+ ADJUSTMENT

Tune in a strong TV station and adjust contrast and brightness to maximum.

Preset B+ Adjust control, VR3, to fully counterclockwise position. Connect VTVM to test point, M26, low side to ground. Adjust line voltage for 120 volts AC and allow a ten-minute warm-up period.

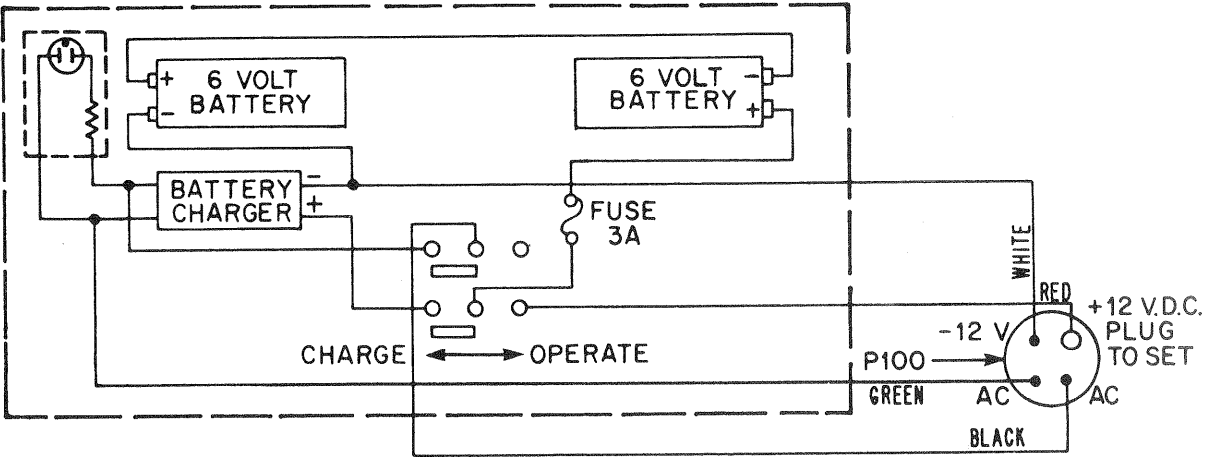
Adjust VR3 to obtain +12 volts DC.

DETECTOR BIAS ADJUSTMENT

Tune in a TV station and turn brightness and contrast controls to maximum. Connect a +4 volts DC bias to test point, M19, low side to ground. Connect a VTVM to the Collector of Q9 (heat sink), low side to ground. Adjust line voltage for 120 volts AC and allow a ten-minute warm-up period.

Adjust VR1 to obtain +15 to 17 volts DC on VTVM.

BATTERY AND CHARGER BASE (B380F SERIES ONLY)



Courtesy of the Manufacturer

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

PICTURE TUBE

Table with 5 columns: ITEM No., REPLACEMENT DATA (MFR. PART No., GENERAL ELECTRIC PART No., RCA PART No., SYLVANIA PART No.), and NOTES. Row 1: V101, 9VAGP4 #, # For SAFETY use only equivalent replacement part.

SEMICONDUCTORS (Select replacement transistor for best results)

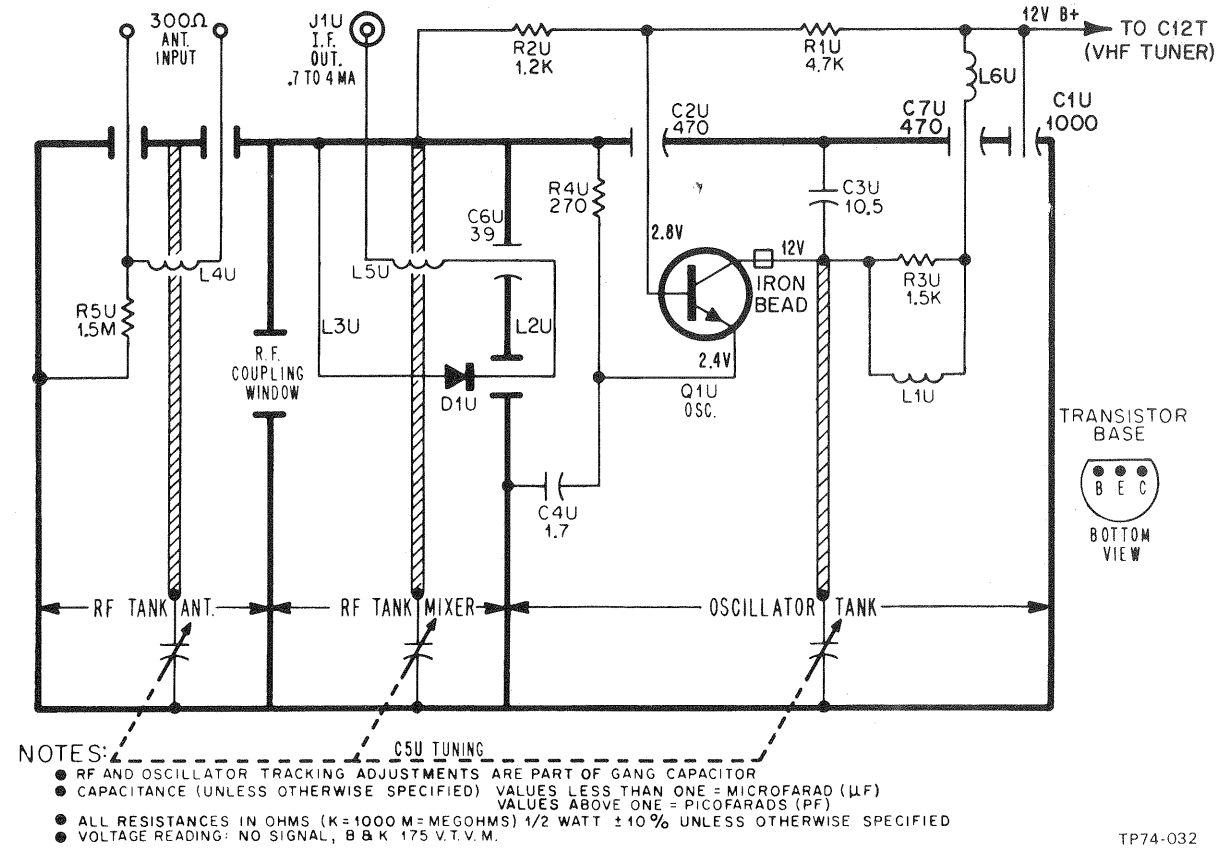
Table with 11 columns: ITEM No., TYPE No., MFR. PART No., and various replacement data columns (GENERAL ELECTRIC, INTERNATIONAL RECTIFIER, MALLORY, MOTOROLA, RAYTHEON, RCA, SPRAGUE, SYLVANIA). Rows include various diodes, transistors, and rectifier assemblies.

# For Safety use only equivalent replacement part.  
(1) Used in some versions.  
(6) Matched pair.  
(7) Two required - select matched pair.  
(10) HV Rect Assembly.

ELECTROLYTIC CAPACITORS

Table with 8 columns: ITEM No., RATING, and various replacement data columns (MFR. PART No., ARCO PART No., CENTRALAB PART No., CORNELL-DUBILIER PART No., MALLORY PART No., SPRAGUE PART No.). Rows include various electrolytic capacitors.

SCHEMATIC DIAGRAM—UHF TUNER 76-14363-2 AND 76-14363-4



NOTES:  
• RF AND OSCILLATOR TRACKING ADJUSTMENTS ARE PART OF GANG CAPACITOR  
• CAPACITANCE (UNLESS OTHERWISE SPECIFIED) VALUES LESS THAN ONE = MICROFARAD (μF) VALUES ABOVE ONE = PICO FARADS (PF)  
• ALL RESISTANCES IN OHMS (K=1000 M=MEGOHMS) 1/2 WATT ±10% UNLESS OTHERWISE SPECIFIED  
• VOLTAGE READING: NO SIGNAL, B & K 175 V.T.V.M.

REPLACEMENT PARTS LIST\*  
UHF TUNER 76-14363-2 AND 76-14363-4

Table with 6 columns: SYM-BOL, DESCRIPTION, SERVICE PART NO., SYM-BOL, DESCRIPTION, SERVICE PART NO. It lists various components like capacitors, resistors, diodes, and mechanical parts with their respective part numbers.

♦ Federally regulated or unusually critical safety item. Replace with exact part specified in the parts list.  
\*NOTE: UHF Tuner 76-14363-4 is the same as the 76-14363-2 except for the position of the mounting holes which prevents their interchange.

Courtesy of the Manufacturer

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	PART No.	PART No.	PART No.	PART No.
	MODEL B350FWH	MODEL B350FWHB	MODEL B350FWH/C	MODEL B350FYL	MODEL B350FYLB
Cabinet Back	27-14506-9	27-14506-9	27-14506-9	27-14506-10	27-14506-10
Cabinet Front, Mask	27-14505-4	27-14505-5	27-14505-4	27-14505-4	27-14505-5
Disc, VHF Indicator	27-15080-1	27-15080-1	27-15080-1	27-15080-1	27-15080-1
Handle	424-9575-8	424-9575-8	424-9575-8	424-9663-1	424-9663-1
Indicator, UHF Dial	27-15082-1	27-15082-1	27-15082-1	27-15082-1	27-15082-1
Knob, UHF Channel Selector	424-9654-1	424-9654-1	424-9669	424-9654-1	424-9654-1
Knob, VHF Channel Selector	424-9654-1	424-9654-1	424-9669	424-9654-1	424-9654-1
Knob, UHF Fine Tuning	424-9615-3	424-9615-3	424-9615-3	424-9615-3	424-9615-3
Knob, VHF Fine Tuning	424-9615-2	424-9615-2	424-9615-2	424-9615-2	424-9615-2
Knob, Volume/Brightness	27-14515-2	27-14515-2	424-9575-1	27-14515-2	27-14515-2
Window, Tinted	27-14518-5	27-14518-5		27-14518-5	27-14518-5
	MODEL B370FBL	MODEL B370FBL/C	MODEL B370FGR	MODEL B370FTG	MODEL B370FTG/C
Cabinet Back	27-14506-11	27-14506-11	27-14506-16	27-14506-7	424-9594
Cabinet Front, Mask	27-14505-5	27-14505-5	27-14505-5	27-14505-5	27-14505-5
Disc, VHF Indicator	27-15080-1	27-15080-1	27-15080-1	27-15080-1	27-15080-1
Handle	424-9663	27-14518-6	424-9681	424-9596	424-9582
Indicator, UHF Dial	27-15082-1	27-15082-1	27-15082-1	27-15082-1	27-15082-1
Knob, UHF Channel Selector	424-9654-1	424-9669	424-9654-1	424-9654-1	424-9669
Knob, VHF Channel Selector	424-9654	424-9669	424-9654	424-9654	424-9669
Knob, UHF Fine Tuning	424-9615-3	424-9615-3	424-9615-3	424-9615-3	424-9615-3
Knob, VHF Fine Tuning	424-9615-2	424-9615-2	424-9615-2	424-9615-2	424-9615-2
Knob, Volume/Brightness	27-14515-2	424-9575-1	27-14515-2	27-14515-2	424-9575-1
Window, Tinted	27-14518-5	27-14518-5	27-14518-5	27-14518-5	27-14518-5
	MODEL B370FVT	MODEL B370FWH	MODEL B370FWH/C	MODEL B380FWH	MODEL B380FWH/C
Cabinet Back	27-14506-17	424-9579-9	424-9575-9	27-14506-12	27-14505-12
Cabinet Front	27-14505-5	27-14505-5	27-14505-5	27-14505-5	27-14505-5
Handle	424-9681-1	424-9575-8	424-9575-8	424-9575-8	424-9575-8
Indicator, UHF Dial	27-15082-1	27-15082-1	27-15082-1	27-15082-1	27-15082-1
Knob, UHF Channel Selector	424-9654-1	424-9654-1	424-9669	424-9654-1	424-9669
Knob, VHF Channel Selector	424-9654	424-9654	424-9669	424-9654	424-9669
Knob, UHF Fine Tuning	424-9615-3	424-9615-3	424-9615-3	424-9615-3	424-9615-3
Knob, VHF Fine Tuning	424-9615-2	424-9615-2	424-9615-2	424-9615-2	424-9615-2
Knob, Volume/Brightness	27-14515-2	27-14515-2	424-9575-2	27-14515-2	424-9575-2
Window, Tinted	27-14518-5	27-14518-5	27-14518-5	27-14518-5	27-14518-5

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Charger and Base (B96)	40-11168	
Battery, 6V (B97) (2 used)	76-14360-1 (12) #	
Battery Charger (B95)	76-14349-2 (12) #	
Battery Housing	27-14521-2 (12) #	
Cable Assembly (AC & Batt.)	41-4457-1 (12) #	
Connector, 12V Battery Input	27-14811-1 (12) #	
Cover Plate, 5 W, and Charger	27-14812-1 (12)	
DC Cable, Cigarette Lighter	41-4454-1 #	
Earphone	36-1682-7	
Fuse, 3 Amp Fast-blow	45-2069-18 (12) #	
Pilot Lite Assembly	41-4355-12 (12)	
Switch, Batt. or Charge	42-2186-11 (12) #	Used in Models B380FWH, B380FWH/C.

# For SAFETY use only equivalent replacement part.  
(12) Part of optional battery, charger, and base (battery case) B96 (40-11168).

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869 (17 KV)
Shielded Hook-up Wire	Use BELDEN No. 8401 or 8421 (Single-Conductor) 8208 (Two-Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8528 (Solid) Available in 12 Colors 8522 (Stranded) Available in 12 Colors
Power Cord	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft. 17109 (Plastic) or 17129 (Rubber) - 9 Ft.
300-Ohm Tuner Input Lead	Use BELDEN No. 8225
300-Ohm 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

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	.022 100V		1DP-1-223		DPMS6S22	EWFA1A122	225P22391WD3
C2	.0022		CCD-222	DD-222	GP2200	GP222	10TS-D22
C3	.0022		CCD-222	DD-222	GP2200	GP222	10TS-D22
C5	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C6	.1 200V		2DP-3-104		DPMS2P1	EWFA2010	2PS-P10
C7	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C8	.05		CCD-503	CK-503	MGPO5	TA150	TG-S50
C9	.022 100V		1DP-1-223		DPMS6S22	EWFA1A122	225P22391WD3
C10	.047 100V		1DP-2-473		DPMS6S47	EWFA1A147	225P47391WD3
C11	.01		CCD-102	DD-102	GP1000	GP210	10TS-D10
C12	.1 100V		1DP-2-104		DPMS2P1	EWFA1A010	225P10491WD3
C13	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C14	.068 100V		4DP-3-683		DPMS6S68	EWFA168	4PS-S68
C18a	.22 75V		4DP-5-224		DPMS4P22	EWFA022	4PS-P22
C20	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C21	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C22	.05		CCD-503	CK-503	MGPO5	TA150	TG-S50
C23	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C25	.015 100V 10%		1DP-1-153	DD-153	DPMS6S15	EWFA1A115	225P15391WD3
C26	.015 100V 10%		1DP-1-153	DD-153	DPMS6S15	EWFA1A115	225P15391WD3
C27	.015 100V 10%		1DP-1-153	DD-153	DPMS6S15	EWFA1A115	225P15391WD3
C28	820 100V 10%		DM-19-821		CD19F821J500	SK382	MS-382
C29	5 NPO ±.25	30-1293-45					
C30	.0022		CCD-222	DD-222	GP2200	GP222	10TS-D22
C31	.047 100V		1DP-2-473		DPMS6S47	EWFA1A147	225P47391WD3
C33a	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C34	.047 100V		1DP-2-473		DPMS6S47	EWFA1A147	225P47391WD3
C35	.047 100V		1DP-2-473		DPMS6S47	EWFA1A147	225P47391WD3
C36	7.5 NPO ±.1	30-1293-31					
C37	560		CCD-561	DD-561	GP560	GP356	10TS-T56
C38	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C40	7.5 NPO ±.25	30-1293-78					
C41	5 NPO						
C42	.047 100V		1DP-2-473		NPO5	EWFA1A147	10TCC-V50
C43	.022 100V		1DP-1-223		DPMS6S22	EWFA1A122	225P22391WD3
C44	.047 100V		1DP-2-473		DPMS6S47	EWFA1A147	225P47391WD3
C45	22		CCD-220	DTZ-22	NPO22	CN0422	10TCC-Q22
C46	10		CCD-100	DTZ-10	NP010	CN0410	10TCC-Q10
C47	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C48	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C49	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C50	33		CCD-330	DTZ-33	NP033	CN0433	10TCC-Q33
C51	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C54	39 N330 10%		*			*	10TCS-Q39
C55	6						10TCC-V56
C56	6						10TCC-V56
C90	47 N330		*			*	10TCS-Q37
C91	47		CCD-470	DTZ-47	NP047	CN0447	10TCC-Q47
C92	18 NPO		CCD-180		NP018	CN0418	10TCC-Q18
C100	.033		4DP-2-333		DPMS6S33	EWFA133	4PS-S33
C101	.001	30-1294-25 #	CCD-102	DD-102	GP1000	GP210	10TS-D10
C102	.001	30-1294-25 #	CCD-102	DD-102	GP1000	GP210	10TS-D10
C103	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C104	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C107	.22 200V		4DP-5-224		DPMS4P22	EWFA022	4PS-P22
C108	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C110	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C112	.0039		CCD-392	DD-392	GP1000	JF239	10TS-D39

# For SAFETY use only equivalent replacement part.  
\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR1	Detector Bias	7500	33-5628-10	T-7500 (3) or TSV-10K (3)	C-103 (3)	MTIC14L4 (3)	X201R752B (3)
VR2A	Vert Linearity	500	33-5627-5				
VR3	Vert Hold	130K					
	B+ Voltage	1000	33-5650-10	TSV-1K (4) or T-1000 (4)	C-102 (4)	MTIC13L1 (4)	X201R102B (4)
	B+ Voltage	500	33-5650-6 (6)	TSV-500 (4) or T-500 (4)	C-501 (4)	MTIC52L1 (4)	X201R501B (4)
VR100	Volume	25K	33-5658-2	F2-25K,SN100	A47-25K-W,RN-3, TT-2 or [NP-25K-Z, NML-A-300,TT-2]	RU253L,SL37,SN750 or [UA253A,SN750]	BU11,CF92,SS6A
VR101	Brightness	250K	33-5658-1	F1-250K,SN100	B47-250K-S or [NP-250K-S, NML-A-300,TT-2]	RU254L,SL37,SN750 or [UA254L,SN750]	BU11,CF15,SS6A
VR102	Height	30 2W Stop @ 5	33-5620-9 #				
VR103	Contrast	30K Stop @ 5000	33-5624-14 #				

# For SAFETY use only equivalent replacement part.  
(3) For horizontal mounting, bend the two outside terminals to fit PC board. Use jumper to connect center terminal to PC Board.  
(4) Modify terminals to fit PC board.  
(6) Alternate part, may be used in some versions.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFR. PART No.
R101	2.2Meg 1/2W Carbon	CA-2.2Meg	33-1394-5 (1) #

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFR. PART No.
R101A	2.2Meg 1/2W Carbon	CA-2.2Meg	33-1394-5 (1) #

# For SAFETY use only equivalent replacement part.  
(1) Used in some versions.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Peaking (470uH)	32-4902-15		72F474AP	
L2	Peaking (220uH)	32-4902-11		72F224AP	
L3	4.5MHz Trap	32-4901-1			
L4	Sound Take-off	32-4901-1			
L5	Ratio Detector	32-4906-1			
L6	RF Choke	32-4645-7		73F336AP	
L7	Peaking (100uH)	32-4902-7		4632	
L8	RF Choke (22uH)	32-4837-1		72F225AP	
L9	RF Choke (8 Turns)	32-4652-102			
L10	2nd Video IF	32-4939-2			
L11	1st Video IF	32-4893-4			
L12	RF Choke (13 Turns)	32-4652-103			
L13	41.25MHz Trap	32-4652-80			
L14	Input IF	32-4652-79			
L15	47.25MHz Trap	32-4652-78			
L16	47.25MHz Trap	32-4652-78			
L100	Peaking (100uH)	32-4902-27		4632	
L101	Peaking (100uH)	32-4902-27		4632	

COILS & TRANSFORMERS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA				
		MFR. PART No.	OTHER IDENTIFICATION	MILLER PART No.	THORDARSON PART No.	TRIAD PART No.
L17	Horiz Osc (Hold)	32-4938-2				
L102	Horiz Output	32-10202-1 #				
L103	Vert Output Choke	32-10173-1				
L104	Yoke 90° Horiz 120uH	32-10201-1 #			Y120 (1)	YT-112 (1)
	Vert 72mH					
T2	Horiz Driver	32-10104-1				

# For SAFETY use only equivalent replacement part.  
(1) See Component Connection data chart.

SWEEP COMPONENT CONNECTION DATA

ORIGINAL →	HORIZONTAL OUTPUT										VERTICAL OUTPUT									
REPLACEMENT ↓	Original Connections										Original Connections									
THORDARSON																				
TRIAD																				
ORIGINAL →	YOKE										YOKE PLUG									
REPLACEMENT ↓	Original Connections																			
	WHT	BLK	YEL	GRN							TO YOKE TERMINALS									
THORDARSON	3	4	1	2 (1)																
TRIAD	1	2	3	4 (2)																

(1) Remove jumper between yoke terminal 2 and 3.  
(2) Remove jumper between yoke terminal 1 and 3.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T100	120V AC @ .185A AC	26V AC CT @ .84A DC	32-10159-2 #			# For SAFETY use only equivalent replacement part.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFR. PART No.	QUAM PART No.	
SP1	3" PM, 12 Ohms 3" PM, 12 Ohms	36-1722-1 38-11015	30A05RZ12	Assembly

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER
F100	1.5A @ 250V Pigtail, Quick-acting	45-2069-7 #		GJV1 1/2		31801.5	
F102	.6A @ 250V Pigtail, Quick-acting	45-2069-8 #		GJV6/10		318.600	

# For SAFETY use only equivalent replacement part.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
	VHF Antenna	76-14073-6	
	UHF Antenna	76-13797-3	
	AC Power Cord	41-4375-18 (1) #	
	AC Power Cord	41-4375-24 (2) #	
	VHF Tuner	76-14324-1 #	
	VHF Tuner	76-14324-4 #	
	UHF Tuner	76-14363-2 #	
S100	Switch	42-2186-11 #	On-Off (Slide), Chassis 5B1117, 5B1118.
	Switch	42-2186-5 #	On-Off (Slide), Chassis 5B1117/C, 5B1118/C.
S101	Switch	42-2180-5 #	Function (Batt., Auto/AC), Chassis 5B1118.
	Switch	42-2180-12 #	Function (Batt., Auto/AC), Chassis 5B1118/C.
	Cable	41-4412-4 #	CRT
	Printed Circuit Board	38-10423	VIF Trap, With Components

# For SAFETY use only equivalent replacement part.  
(1) Used in Models: B350FWH, B350FVH, B350FYL, B370FBL, B370FGR, B370FTG, B370FVT, B370FWH, B380FWH.  
(2) Used in Models: B350FWH/C, B370FBL/C, B370FTG/C, B370FWH/C, B380FWH/C.