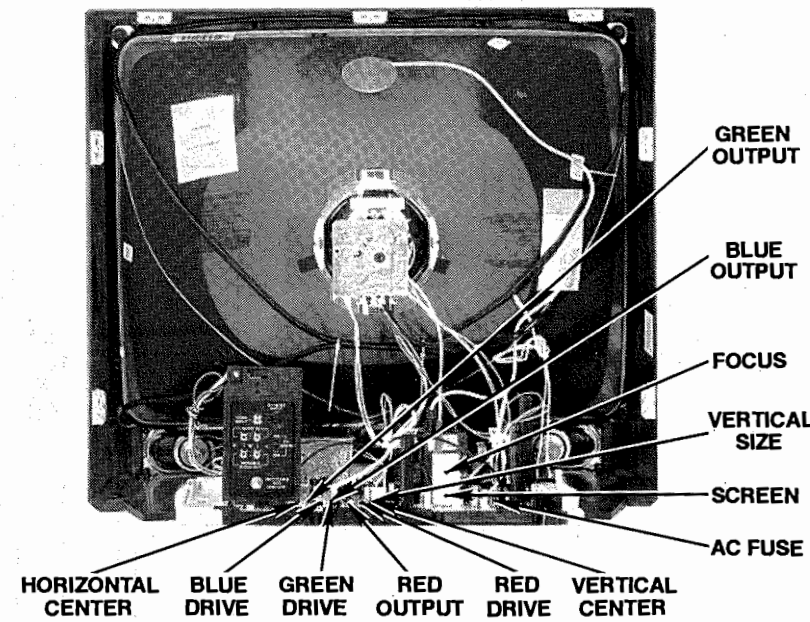


CABINET - REAR VIEW



TEST JIG HOOKUP

Function	Chek-A-Color Adapter No.	PC Board Plug	Pin	Color
CRT	B239	# J500	1, 2	Red
Yoke	D482		4, 5	Blue
Yoke Setting	YP1	# J550	1	Black
Comments	Focus Tap		3	Yellow

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by Howard W. Sams & Company as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to Howard W. Sams & Company by the manufacturers of the specific type of replacement part listed.

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PHOTOFACT® Technical Service Data

SET 2990

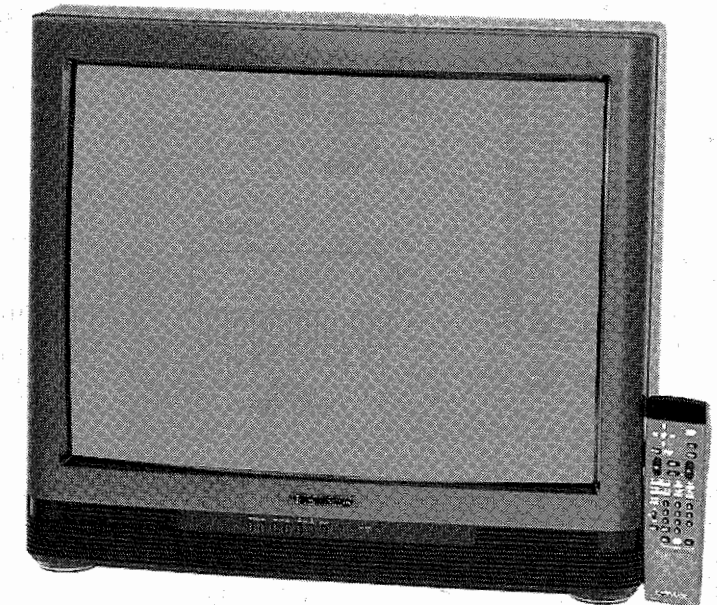
MODELS CT2720B101/2/3/4 (CHASSIS 27T107)

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Models CT2720B101/2/3/4 (Chassis 27T107)



Representative Model

Complete coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts lists
- Troubleshooting guide

Coverage includes these additional models and chassis:

MODEL	CHASSIS
CC2741P101/2/3/4	27T101
CC2742A101/2/3/4	27T101
CT2731P101/2/3/4	27T102



HOWARD W. SAMS & COMPANY

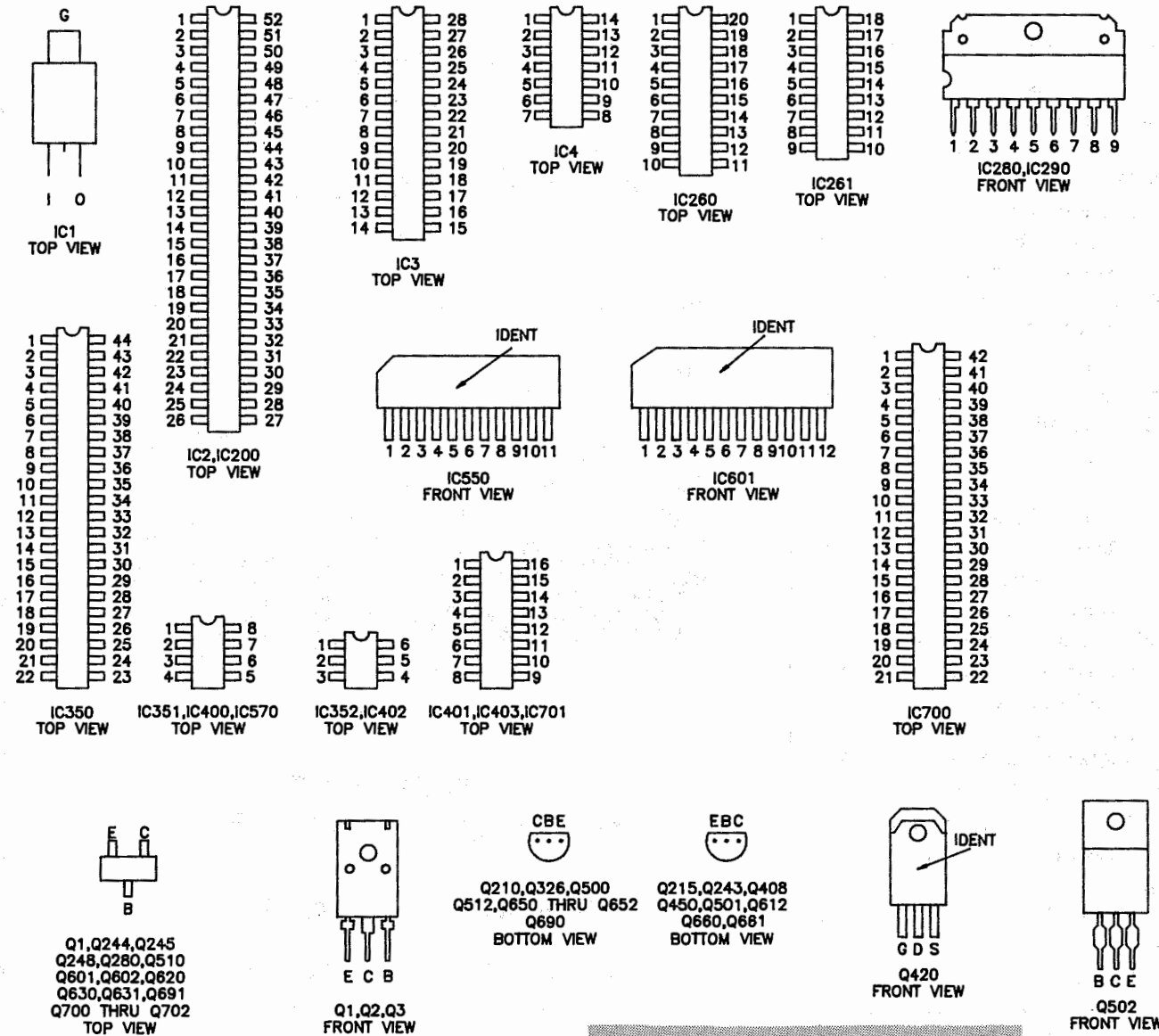
MAY 1992 SET 2990

For Supplier Address,
See PHOTOFACT Annual Index

2990

CROSLEY

TERMINAL GUIDES AND NOTES



For SAFETY use only equivalent replacement part, see parts list.

--- Circuitry not used in some versions

--- Circuitry used in some versions

Nominal value

Ground

Chassis

Common tie point

Waveforms and voltages are taken from ground, unless noted otherwise.

Waveforms: triggered scope, keyed rainbow generator. Item numbers in rectangles appear in the alignment/adjustment instructions.

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Terminal identification may not be found on unit.

Capacitors are 50 volts or less.

5% or greater unless noted.

Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.

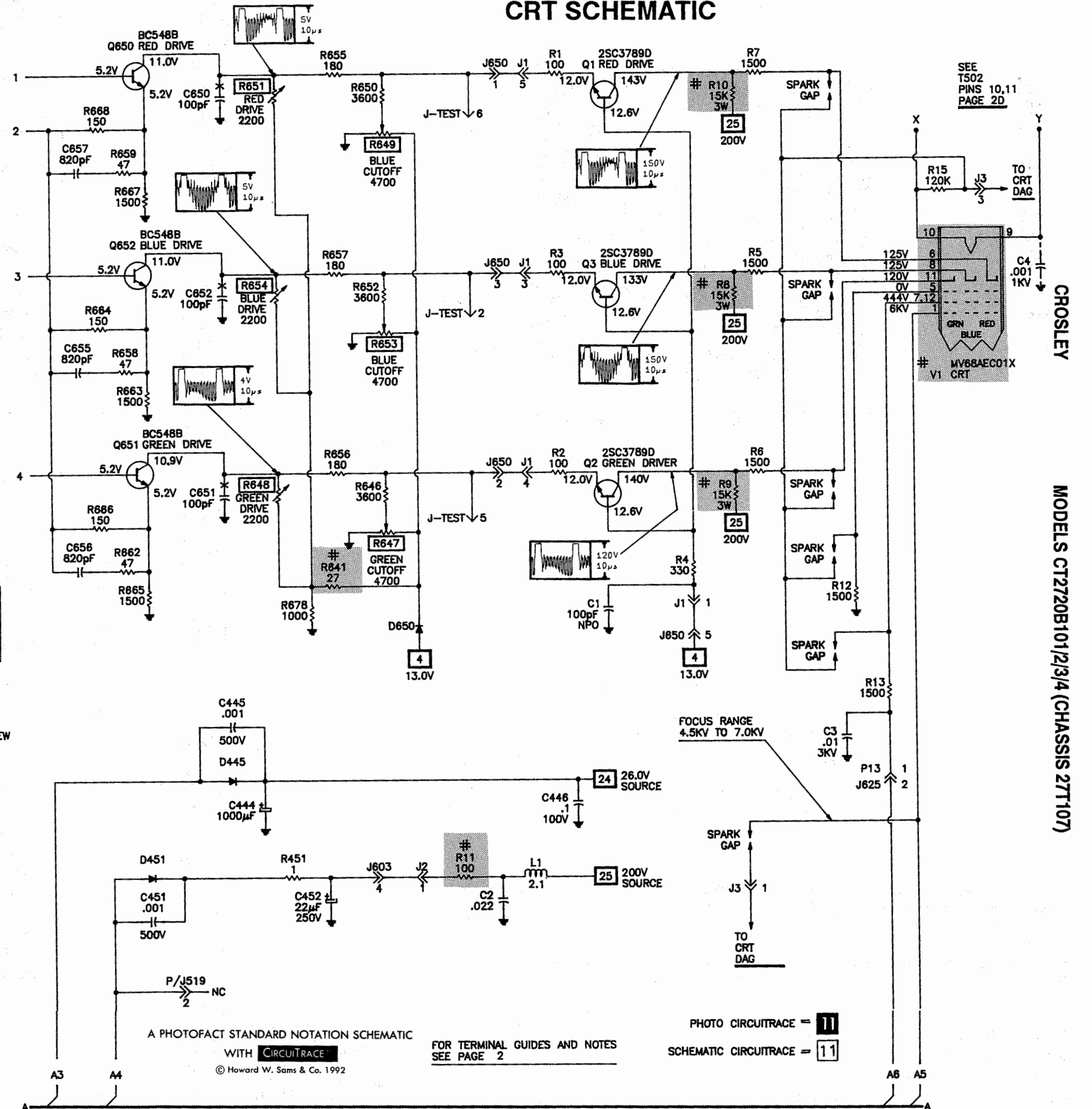
Resistors are 1/2W or less.

5% or greater unless noted.

Value in () used in some versions.

Measurements with switching as shown, unless noted.

CRT SCHEMATIC



MISCELLANEOUS ADJUSTMENTS

PRETUNING

Note: All procedures require an antenna connected and power applied to the set. Select TV/CATV. Use buttons on receiver front panel or remote transmitter.

Add or Erase Channel

- 1. Press M on remote transmitter or "Menu" on TV.
- 2. Press Menu Up or Down buttons until Channel is highlighted.
- 3. Press Channel Up or Channel Down buttons to select desired channel.
- 4. Press + or - button to add or erase the selected channel.
- 5. Press Status/Exit to clear screen.

Sleep Timer

- 1. Press Sleep on remote transmitter.
- 2. Press the + or - button to select the desired time setting.
- 3. Press Status/Exit to clear screen.

Time Set

- 1. Press M on remote transmitter or Menu on TV.
- 2. Press Menu Up or Down buttons until Timeset is highlighted.
- 3. Press the - button to set the hour.
- 4. Press the + button to set the minutes.
- 5. Press Status/Exit to clear screen.

This set employs Digital Customer Controls. Set all controls to normal viewing level unless otherwise indicated.

B+

Connect a voltmeter to TP4, low side to ground. Set Bright to Minimum. With AC line voltage at 120VAC, Adjust B+ Adjust Control (R433) for 130V.

RF AGC

Tune in a station and set all controls to normal. Adjust RF AGC Control (R207) until snow (noise) appears in the picture. Adjust in opposite direction until snow just disappears.

SUB BRIGHT

Tune in a crosshatch pattern. Set Bright and Picture to MINIMUM. Adjust Sub Bright Control (R380) for just visible highlights. Check all active channels for blooming, and readjust if necessary.

HORIZONTAL CENTERING

Tune in a crosshatch pattern. Adjust Horiz Centering Control (R514) for proper centering of pattern.

PURITY

Turn set on and allow a 15 minute warmup. Tune in a green raster pattern. Loosen the deflection yoke clamp and unlock the purity rings. Place the purity tabs at 12 o'clock position. Use a degaussing coil to demagnetize CRT and mountang brackets. Move deflection yoke back against purity magnet. Adjust purity tabs to place green bar in the center of the screen. Move the deflection yoke forward until a uniform green raster is obtained. Adjust purity correction magnets if necessary. Tighten yoke clamp and purity rings.

GRAY SCALE

Tune in a crosshatch pattern. Set Bright, Picture, Color, and Screen to MINIMUM. Set Red (R649), Blue (R653), and Green (R647) Cutoff Controls, and Red (R651), Green (R648), and Blue (R654) to Midrange. Adjust Screen Control until a faint pattern appears. Note the color of the pattern and adjust the other two cutoff controls to obtain a white pattern. Set Bright and Picture to Maximum. Adjust Drive Controls for best white in highlight areas.

CONVERGENCE

Operate the set for 15 minutes. Tune in a dot pattern. Lossen locking ring and adjust 4 pole magnets to converge the red and blue dots at the center of the screen. Adjust the 6 pole magnets to coverge the red/blue dots over the green dots at the center of the screen. Note: Rotate the two tabs of each set of magnets equally and opposite to converge vertically, and rotate both tabs in the same direction to converge horizontally. 4 and 6 pole magnets interact, repeat adjustment until center convergence is correct. Tune in a crosshatch pattern. Lossen deflection yoke clamp and remove rubber wedges. Tilt deflection yoke up or down to converge vertical lines at top and bottom of screen, and horizontal lines at left and right of screen. Tilt deflection yoke right and left to converge horizontal lines at top and bottom of screen, and vertical lines at right and left of screen, Replace rubber wedges, and tighten deflection yoke screw.

STEREO ADJUSTMENTS

Adjustments were made using a B&K Model 2009 MTS TV/Stereo Generator. Equivalent generator may be used. Unless otherwise indicated, adjustments are made with Customer Controls at normal settings.

INPUT LEVEL

Connect Generator to antenna terminals. Select Stereo mode on receiver. Select Pilot, 1kHz Audio Frequency, and L-R Modulating Signal. Connect an oscilloscope to TP25 and adjust BB Level Control (R249) for 1.0V p-p.

STEREO VCO

Connect Generator to antenna terminals. Select Stereo mode on receiver. Select Pilot, 1kHz Audio Frequency, and L+R Modulating Signal. Adjust Stereo VCO Control (R733) Counterclockwise until stereo indicator turns off, and then Clockwise until stereo indicator turns on.

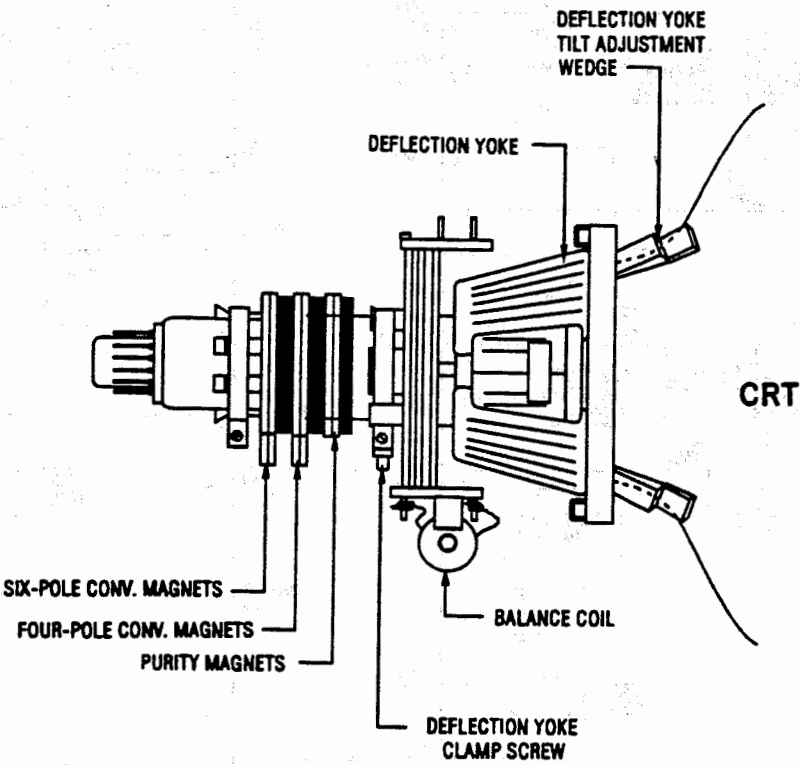
SAP FILTER

Connect Generator to antenna terminals. Select SAP mode on receiver. Select SAP, 1kHz Audio Frequency, and L-R Modulating Signal. Connect an oscilloscope to pin 4 of Multisound Decoder IC (IC700), and adjust SAP Filter Control (R731) for Maximum.

SEPARATION

Connect Generator to antenna terminals. Select Stereo mode on receiver. Select Pilot, 300Hz Audio Frequency, and Left Modulating Signal. Connect an oscilloscope to pin 17 of Multisound Decoder IC (IC700), and adjust L-R Control (R730) for MINIMUM amplitude of waveform. Set Audio Frequency to 8kHz, and adjust Separation Control (R732) for MINIMUM amplitude of waveform. Repeat until no further decrease in amplitude can be obtained.

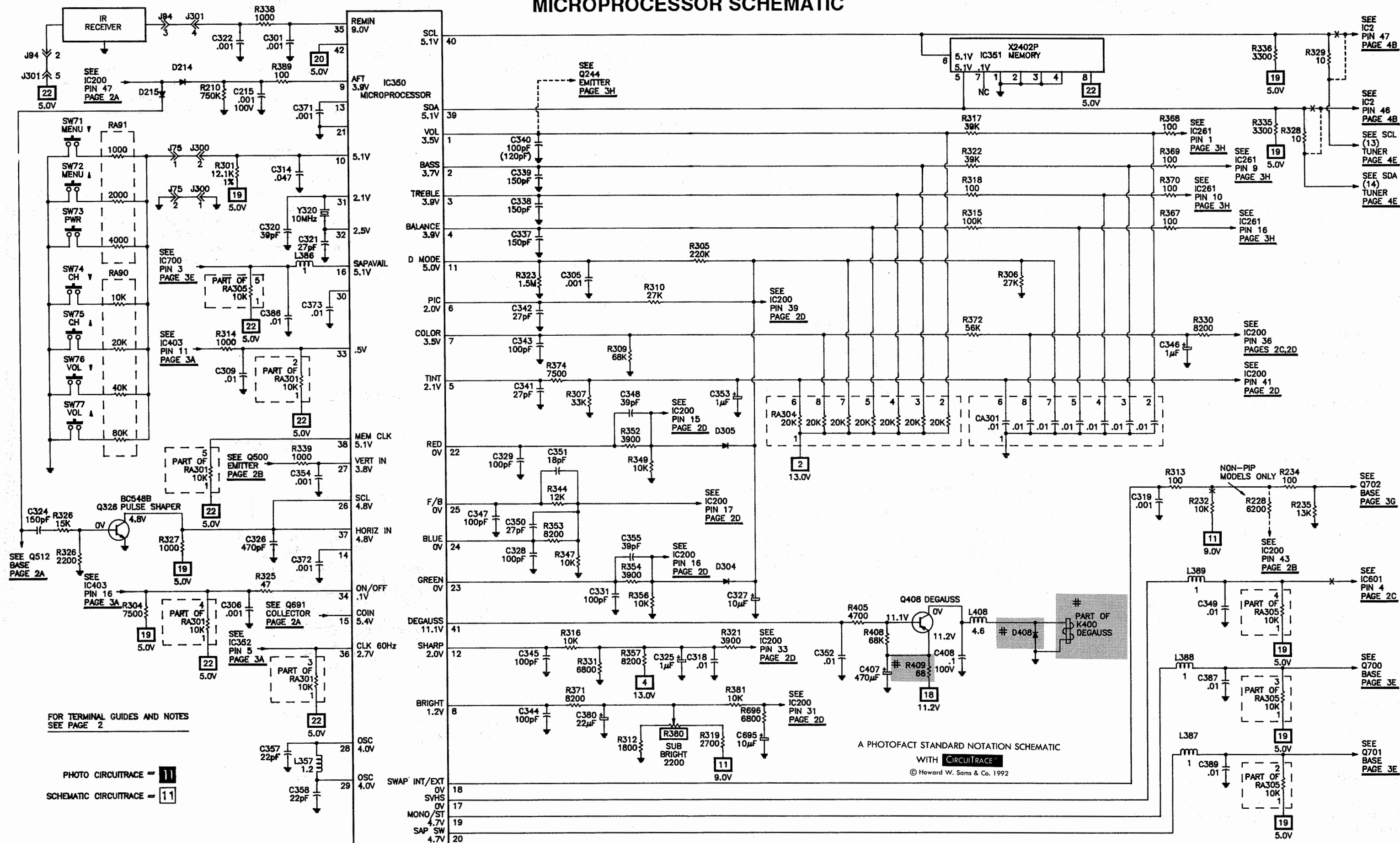
CRT NECK ASSEMBLY



CROSLLEY

MODELS CT2720B101/2/3/4 (CHASSIS 27T107)

MICROPROCESSOR SCHEMATIC



SAFETY PRECAUTIONS

SERVICE WARNING

ONLY qualified service technicians who are familiar with safety checks and guidelines should perform service work. For continued SAFETY:

- 1. Before replacing parts, disconnect power source to protect electrostatically sensitive parts.
- 2. Do not attempt to modify any circuit unless so recommended by the manufacturer.
- 3. When servicing chassis, use an isolation transformer between the line cord and power receptacle.

SERVICING HIGH VOLTAGE AND PICTURE TUBE

Use EXTREME CAUTION when servicing the High Voltage circuits.

- 1. To discharge static High Voltage, connect a 10-kilohm resistor in series with a test lead between chassis and picture tube anode lead.
- 2. DO NOT lift picture tube by the neck.
- 3. ALWAYS wear shatterproof goggles when handling picture tube to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering x-ray radiation. In solid-state receivers and monitors, the picture tube is the only potential source of x-rays.

- 1. Keep an accurate High Voltage meter available at all times. Check meter calibration periodically.
- 2. Whenever servicing a chassis, check High Voltage at various brightness levels to be sure it is regulating properly.
- 3. Keep High Voltage at rated value, NO HIGHER. Excessive High Voltage may cause x-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value.
- 4. When troubleshooting a set with excessive High Voltage, avoid close contact with picture tube. DO NOT operate set longer than necessary. To locate the cause of excessive High Voltage, use a variable AC transformer to regulate voltage.
- 5. In present chassis, many electrical and mechanical components have safety-related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

SAFETY CHECKS – FIRE AND SHOCK HAZARD

Cold Leakage Checks for Sets with Isolated Ground

- 1. Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch ON.
- 2. Use an ohmmeter to measure the resistance between the jumpered AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 200 kilohms and 5 megohms. Parts without a return path must register infinity.

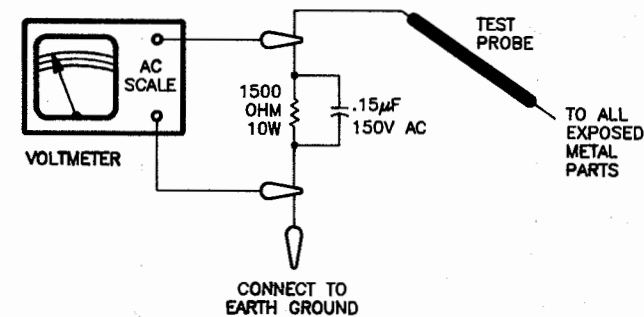
Hot Leakage Current Check

- 1. Plug the AC cord directly into AC outlet. DO NOT use an isolation transformer.
- 2. Use a 1500-ohm, 10-watt resistor in parallel with a .15-microfarad 150-volt AC capacitor to connect between any exposed metal parts on the set and a good earth ground. (See figure below.)
- 3. Use an AC voltmeter with at least 1000 ohms-per-volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point.
- 4. Voltage readings should not exceed .75 volts RMS (5 milliamps AC). Any value exceeding this limit constitutes a potential shock hazard and must be corrected.
- 5. If AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning set to customer.

- 1. Check repaired area for poorly soldered or de-soldered connections, and check entire circuit board for solder splashes.
- 2. Check inner board wiring for pinched wires or wires contacting any high-wattage resistors.
- 3. Check that all control knobs, shields, covers, grounds and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.



TROUBLESHOOTING

POWER SUPPLY

Check the AC Fuse F400.

If Fuse F400 is open:

Check voltages, waveforms and components associated with Bridge Rectifier Diodes (D402 thru D405), Capacitors C400, C406, and Electrolytics C404, C405.

Apply 120VAC and with set turned off, check for approximately 160V* at the drain of Power Reg Transistor (Q420).

If 106V* is missing:

Check voltages, waveforms and components associated with Q420, Line Filter (L400), Resistor R424, and Switch Mode Power Supply Transformer (T401).

If 160V* is present at the drain of Q420, check for 11.2V at TP12.

If 11.2V is missing at TP12:

Check voltages, waveforms and components associated with Standby Supply Transformer (T450), Standby Reg Transistor (Q450), and pins 10 thru 15 of Power Controller IC (IC401).

If 11.2V is present at TP12, turn set on and check for 130V at TP4.

If 130V is missing at TP4:

Check voltages, waveforms and components associated with Transformer T401, pins 1 thru 9 of IC401, Transistor Q420, Control Optoisolator IC (IC400), On/Off Optoisolator IC (IC402), Opto Driver Reg IC (IC403), and HUE Control IC (IC570).

If 130V is present at TP4:

Refer to the "Horizontal" section of this Troubleshooting guide.

* With Respect to isolated ground.

HORIZONTAL

Inject a Horizontal signal at the base of the Horizontal Output Transistor (Q502).

If horizontal deflection is now present:

Check voltages, waveforms and components associated with Coin Buffer Transistors (Q690, Q691), Buffer Transistor (Q510), Horiz Driver Transistor (Q501), and pins 22 thru 27 of Signal Processor IC (IC200).

If horizontal deflection is still missing:

Check voltages, waveforms and components associated with Q502, Flyback Transformer (T502), and check components associated with Diodes D451, D445, and D530 for defects.

The high voltage rectifier is part of Transformer T502 and if defective will affect the performance of the horizontal circuits.

Horizontal linearity or foldover problems may be caused by Capacitors C504, and C505 being defective.

VERTICAL

Inject a vertical drive signal at pin 28 of the Signal Processor IC (IC200).

If vertical deflection is now present:

Check voltages, waveforms and components associated with pin 28 of IC200.

If vertical deflection is still missing:

Check voltages, waveforms and components associated with Vert Out IC (IC550) and Vert Amp Transistor (Q500).

Vertical linearity or foldover problems maybe caused by vertical feedback and bias circuits:

Check Electrolytics C550, C556, C558, and C559 for defects.

IF AGC

Inject a video IF signal at the IF input and check for video on the CRT.

If video is present:

Check the Tuner, tuner control circuits, and AFC circuits.

If there is no video, check for a video waveform at TP215 (emitter of Video Amp Transistor Q215).

If video waveform is present at TP215:

Refer to the "Video" section of this Troubleshooting guide.

If video waveform is missing at TP215, apply AGC bias to pin 2 of Signal Processor IC (IC200).

If video is now present at TP215:

Check voltages, waveforms and components associated with pins 2, 8, 9, 10, and 44 thru 51 of IC200, and Q215.

A defective AGC circuit can cause an overloaded picture, excessive snow or loss of audio and video.

See AGC Voltage Chart for AGC voltages with signal.

AGC VOLTAGE CHART

IC200	
Pin 2	6.8V
Pin 49	3.8V

VIDEO

Inject a video signal at TP215 and check for video on the CRT. If video is present:

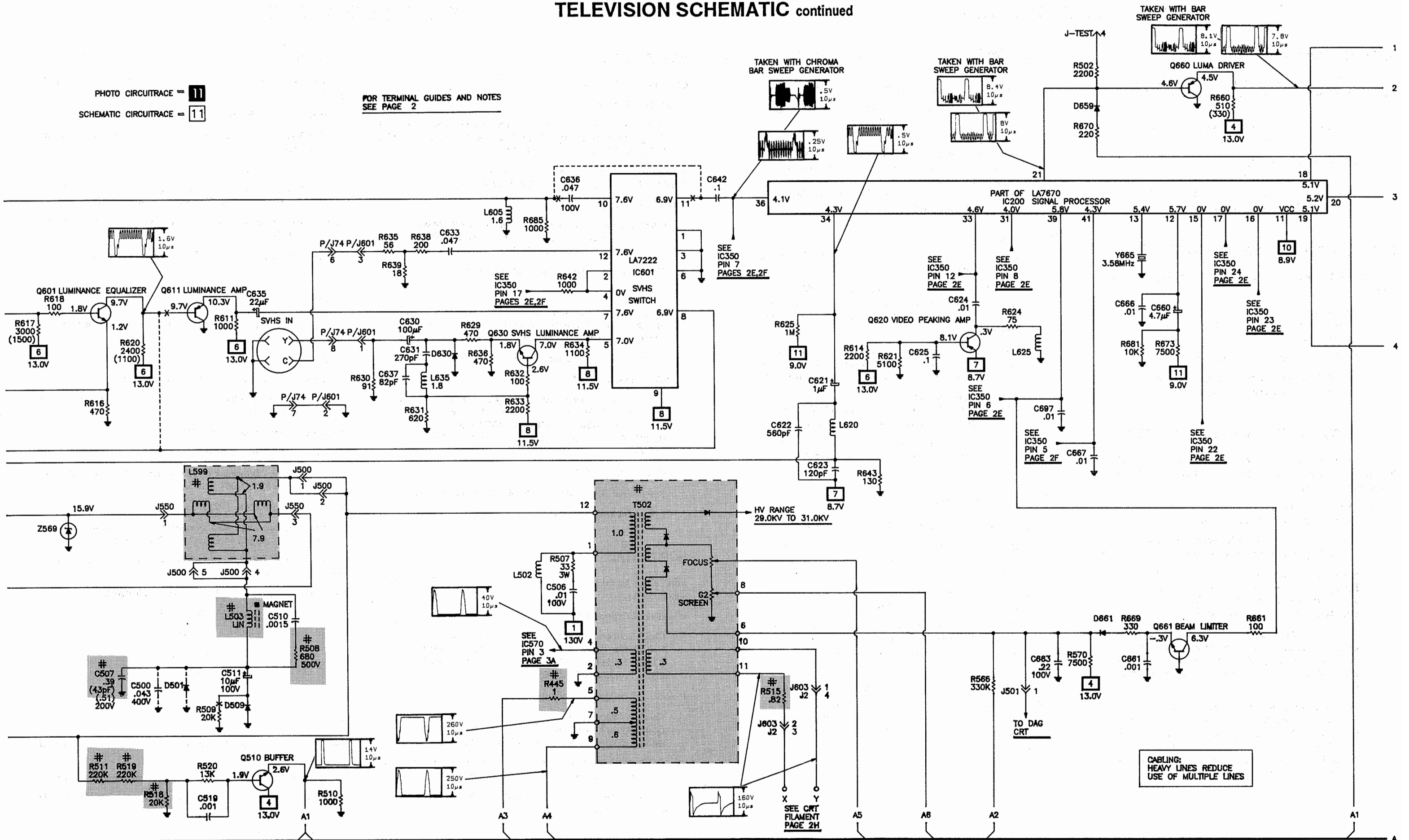
Refer to the "IF AGC" section of this Troubleshooting guide.

If there is no video on the CRT, check for a video waveform at pin 40 of Signal Processor IC (IC200).

If video is missing at pin 40 of IC200:

PHOTO CIRCUITRACE = 11
SCHEMATIC CIRCUITRACE = 11

FOR TERMINAL GUIDES AND NOTES
SEE PAGE 2



TROUBLESHOOTING continued

Check voltages, waveforms and components associated with Video Buffer Transistors (Q1, Q210), Control IC (IC2), RAM IC (IC3), and Inverter IC (IC4).

If video is present at pin 40 of IC200, check for a video waveform at pin 34 of IC200.

If waveform is missing:

Check voltages, waveforms and components associated with pins 5, 7 8 of SVHS Switch IC (IC601), Luminance Equalizer Transistor (Q601), SVHS Luminance Transistor (Q630), Luminance Amp Transistor (Q611), Video Peaking Amp Transistor (Q620), and Sync Amp Transistor (Q631).

If video waveform is present at pin 34 of IC200:

Check voltages, waveforms and components associated with 31, 32, 33, 35, 39 of IC200, and Luma Drive Transistor (Q660).

If brightness is inadequate or cannot be controlled:

Check voltages, waveforms and components associated with pin 7 of CRT, Sub Bright Control (R380), and pin 31 of IC200.

CHROMA

Check for a chroma waveform at pin 36 of Signal Processor IC (IC200).

If chroma waveform is missing:

Check voltages, waveforms and components associated with pins 10, 11 and 12 of SVHS Switch IC (IC601).

If chroma waveform is present at pin 36 of IC200, check for the proper waveforms at the collectors of Red Drive Transistor (Q650), Blue Drive Transistor (Q652), and Green Drive Transistor (Q651).

If these waveforms are missing:

Check voltages, waveforms and components associated with Q650, Q651, Q652, and pins 12, 13, 18, 19, 20, 36, 39 of IC200.

Check the 3.58MHz oscillator at pin 13 of IC200.

If there is inadequate tint range:

Check voltages, waveforms and components associated with pin 41 of IC200.

If the proper waveforms are present at the collectors of Q650, Q651, Q652:

Refer to the "Raster" section of this Troubleshooting guide.

RASTER

Check the CRT, and CRT voltages.

If there is no red:

Check voltages, waveforms and components associated with Red Drive Transistor (Q1).

If there is no green:

Check voltages, waveforms and components associated with Green Drive Transistor (Q2).

If there is no blue:

Check voltages, waveforms snd components associated with Blue Drive Transistor (Q3).

If the raster has a keystone shape:

Check the Deflection Yoke (L599).

If the raster has a height or width problems:

Refer to the "Vertical", "Horizontal", and "Power Supply" sections of this Troubleshooting guide.

AUDIO

Select an active TV channel and check for an audio waveform at pin 39 of Multisound Decoder IC (IC700).

If there is no audio:

Check voltages, waveforms and components associated with Audio Amp Transistor (Q248), and pins 1, 4, 5, 6, 48 of Signal Processor IC (IC200).

If audio waveform is present at pin 39 of IC700, check for audio waveforms at pins 4, and 15 of Tone Control IC (IC261).

If audio waveforms are missing at pins 4 and 15 of IC261:

Check voltages, waveforms and components associated with IC700, Audio Swch IC (IC701), MONO Switch Transistor (Q701), Mode Switch Transistor (Q700), and EXT/INT Switch Transistor (Q702).

If audio waveforms are present at pins 4 and 15 of IC261:

Check voltages, waveforms and components associated with IC261, and Audio Power Amp IC's (IC280, IC290).

TEST EQUIPMENT

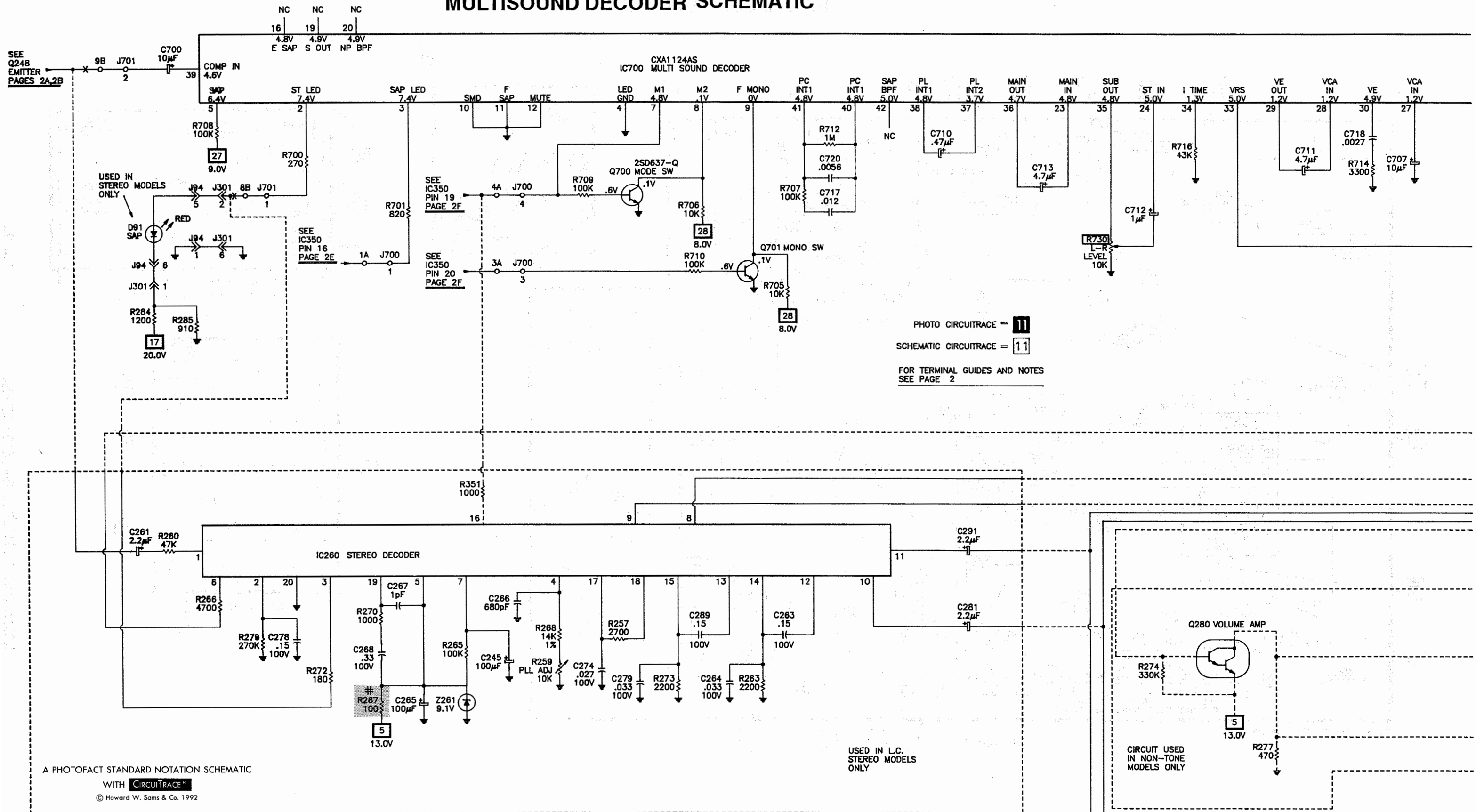
Test equipment listed by participating manufacturers illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

Equipment	B&K Precision No.	SENCORE No.
Oscilloscope	1541A, 2120, 2125, 2160, 2190, 2522	SC61
Generators		
RGB	1249A, 1260	RG67
Multiburst Signal	1251, 1260	VA62A
Color Bar	1211A, 1249A, 1251, 1260	VA62A, CG25,NT64
TV Stereo	2009	ST65, ST66
Analog VOM	114, 117, 177, 214	-
Digital VOM	377, 388HD, 2700 Series, 2831A, 2860, 2900 Series	DVM37, DVM56A, SC61
Frequency Meter	1803A, 1804A, 1805, 1822, 1851, 1855	FC71, SC61
Hi-Voltage Probe	HV-44	HP200
VOM/DMM	-	TP212
Accessory Probes	PR-28(HV)	-
Isolation Transformer	TR110, 1604, 1653, 1655	PR57
Capacitance Analyzer	810A, 815, 820, 830	LC76, LC101, LC102
CRT Analyzer	480, 490	CR70
Temperature Probe	TP-28, TP-30	-
AC Leakage Tester	1655	PR57
Logic Probe	DP21, DP51	-
Logic Pulser	DP31, DP101	-
Inductance Analyzer	875A	LC76, LC101, LC102
Flyback Yoke Tester	875A	VA62A, LC76, LC101, LC102
TV Stereo Power Monitor	-	SR68
Field Strength Meter	-	FS73, FS74
Transistor Tester	510, 520B, 530	TF46
Video Analyzer	-	VA62A
Modulator/Converter	1201	-

SEE
Q326
BASE
PAGE 2E

SEE
IC350
PIN 27
PAGE 2E

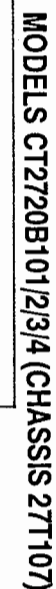
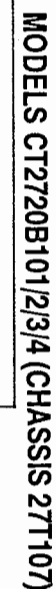
MULTISOUND DECODER SCHEMATIC



CROSLEY

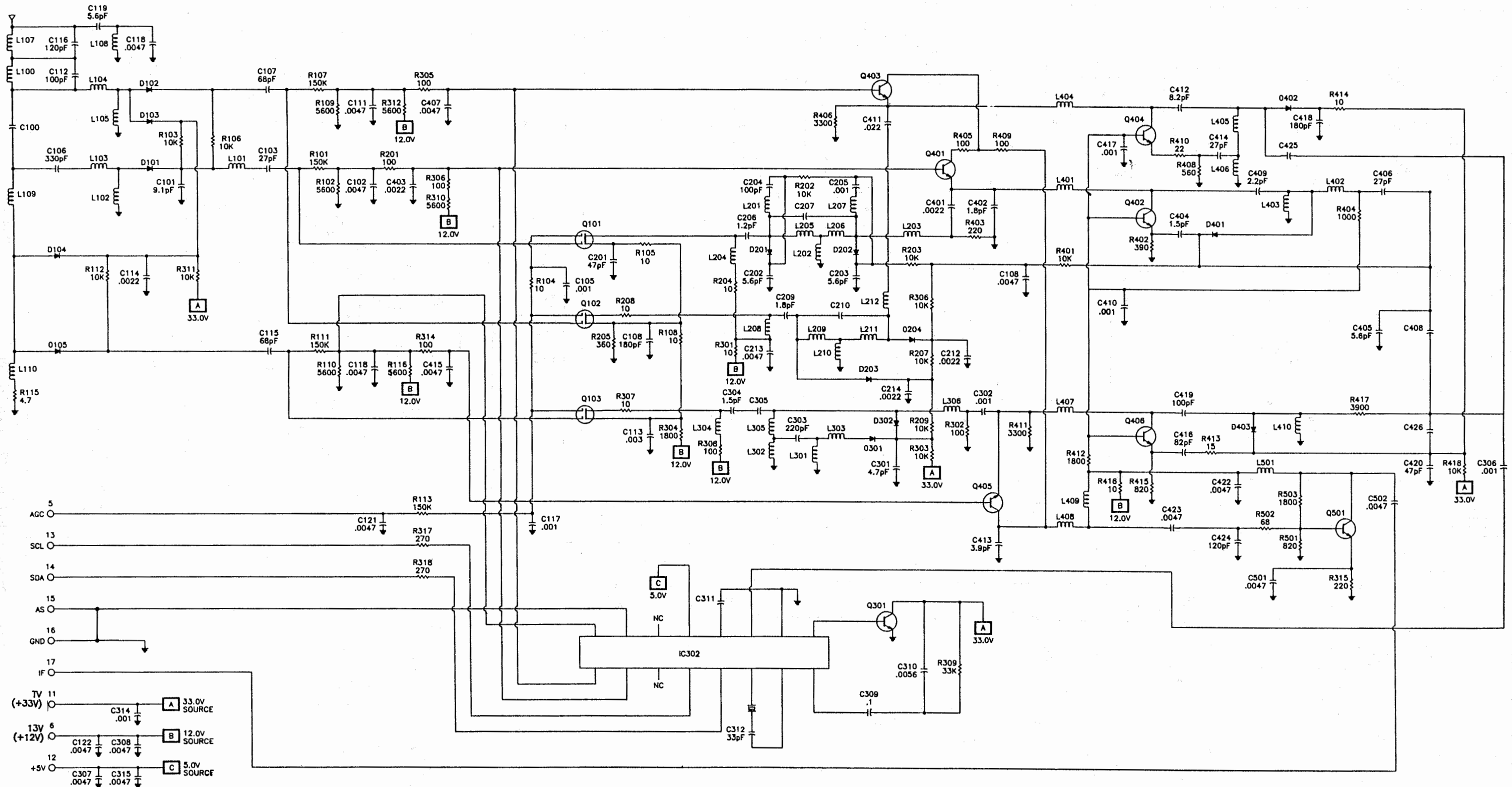
SET 2990 Page 4

CROSLEY **MODELS CT2720B101/2/3/4 (CHASSIS 27T107)**



H

UHF/VHF TUNER (003403130002) SCHEMATIC

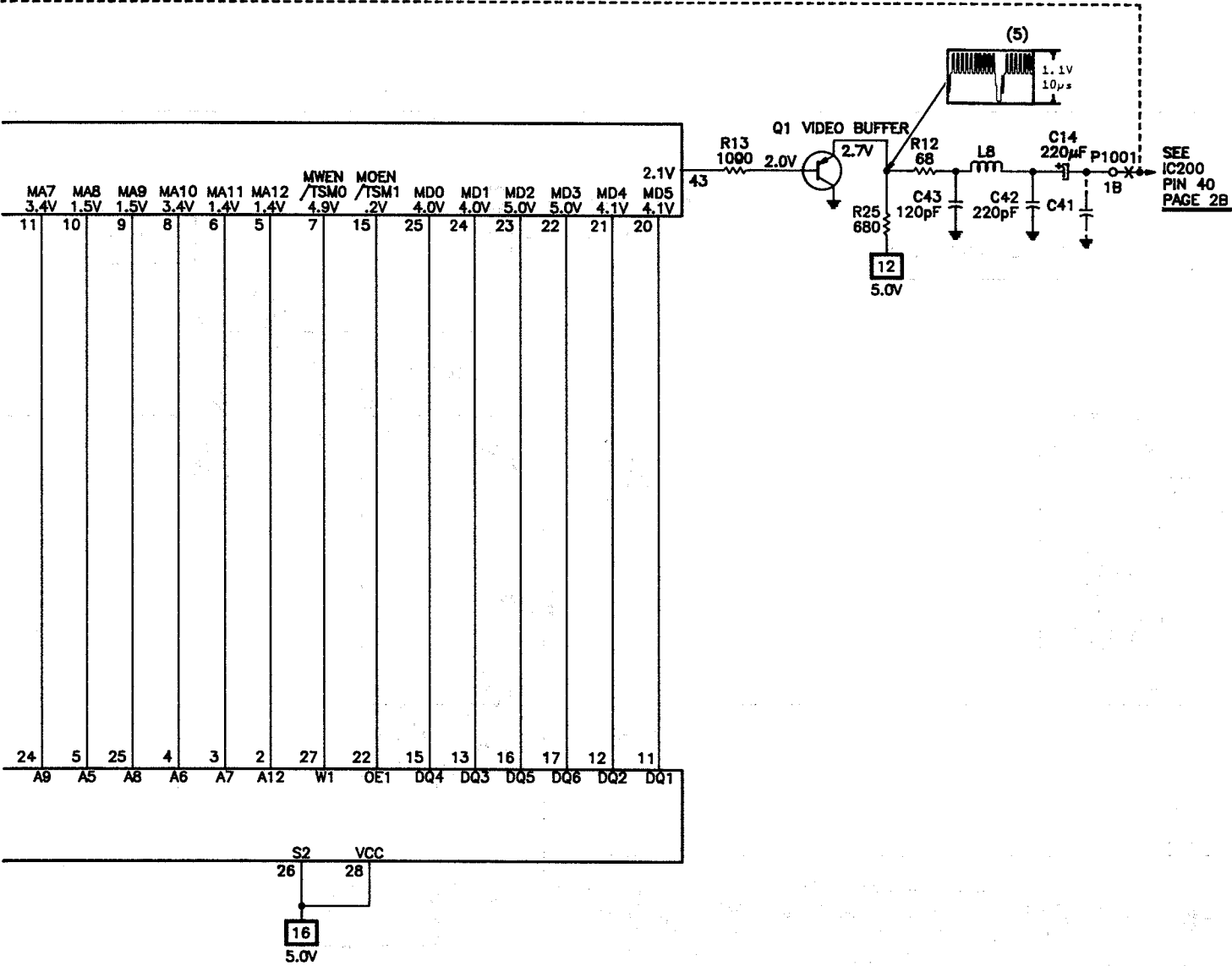


A PHOTOFAC STANDARD NOTATION SCHEMATIC

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C
PIP SCHEMATIC continued

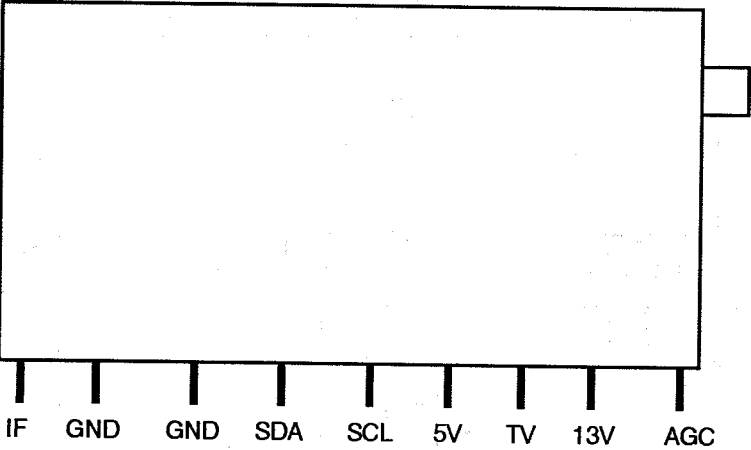


TUNER INFORMATION

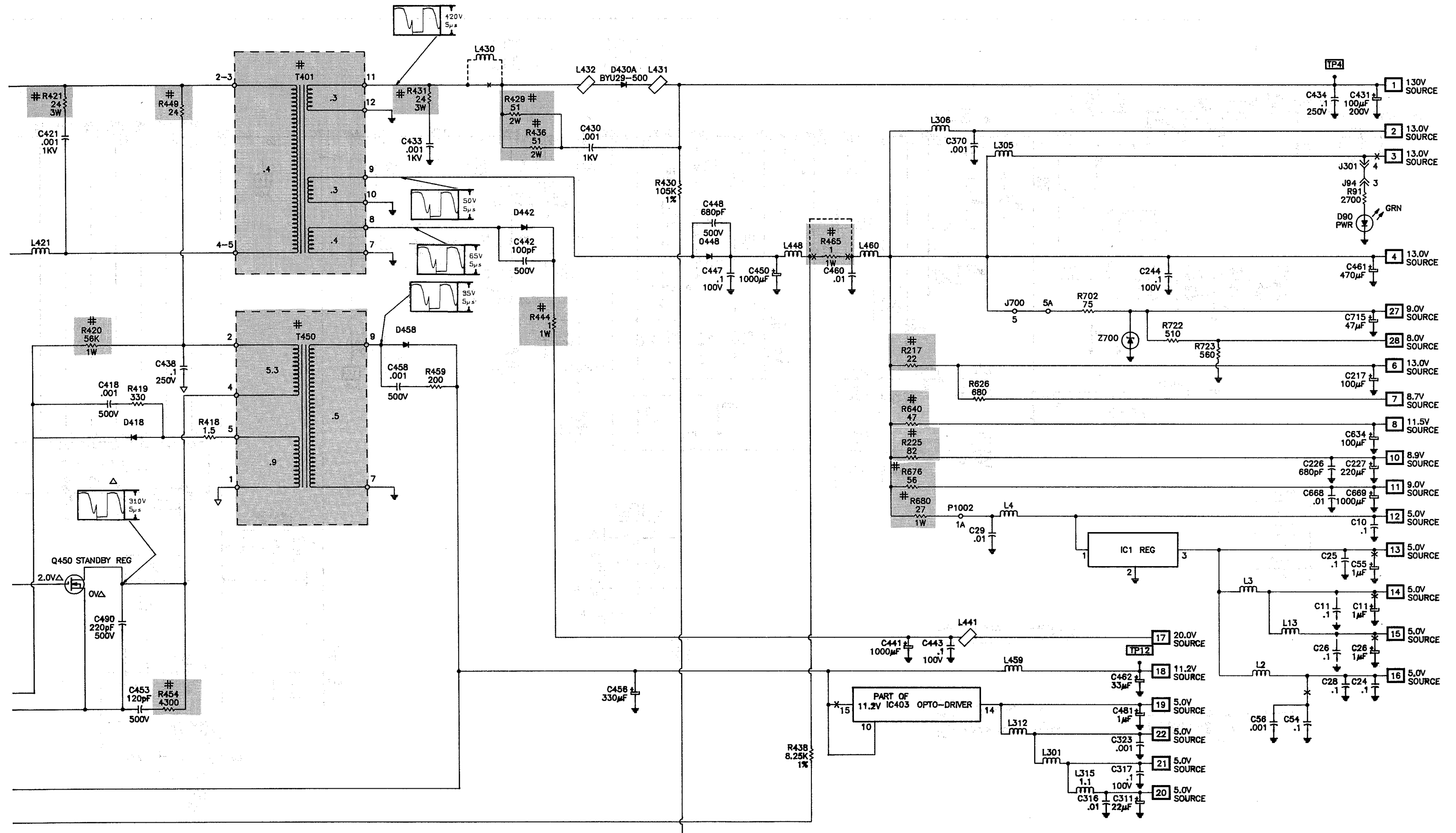
TUNER VOLTAGE CHART			
	VHF Low Band	VHF High Band	UHF Band
AGC	7.7V	7.8V	7.8V
13V	12.0V	12.0V	12.0V
TV	.6V	1.3V	1.2V
5V	5.0V	5.0V	5.0V
SCL	5.0V	5.0V	5.0V
SDA	5.0V	5.0V	5.0V

Note: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14.

TUNER TERMINAL GUIDE



D



VIDEO IN

P70 EXT VIDEO IN

P/J74 P/J601

R671 39

P1001

L9 C46 120pF

L10 C47 330pF

C48 300pF

R27 100

C18 1μF

3.8V

4.7V 0V 2.1V

IC2 M52682SP CONTROL

2.8V 3.4V 2.7V 0V 3.5V .1V 2.5V

1.7V 4.5V 3.8V 4.9V 5.0V

5.0V 5.0V 1.8V .7V 1.7V 4.9V 1.9V

2.6V MA0 3.4V MA1 3.4V MA2 3.4V MA3 3.4V MA4 1.7V MA5 3.0V MA6 1.7V

19 18 17 16 14 13 12

10 9 21 8 7 23 6

A0 A1 A10 A2 A3 A11 A4

IC3 FCB61C65L-70P RAM

GND S1 DQ7 4.8V DQ8 4.8V

14 20 1 18 19

NC NC NC

74HCU04A PART OF IC4

0V NC 0V NC 0V NC 0V NC

1 2 13 12 11 10 9 8

16 5.0V

74HCU04A PART OF IC4

2.7V 5 6

R17 1M R18

C23 22pF

Y2 48.8MHz FILTER

74HCU04A PART OF IC4

2.5V 3 4 2.5V

14 7 16 5.0V

C21 27pF

L1

C22 27pF

R36 51

FOR TERMINAL GUIDES AND NOTES SEE PAGE 2

A PHOTOFAC STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE

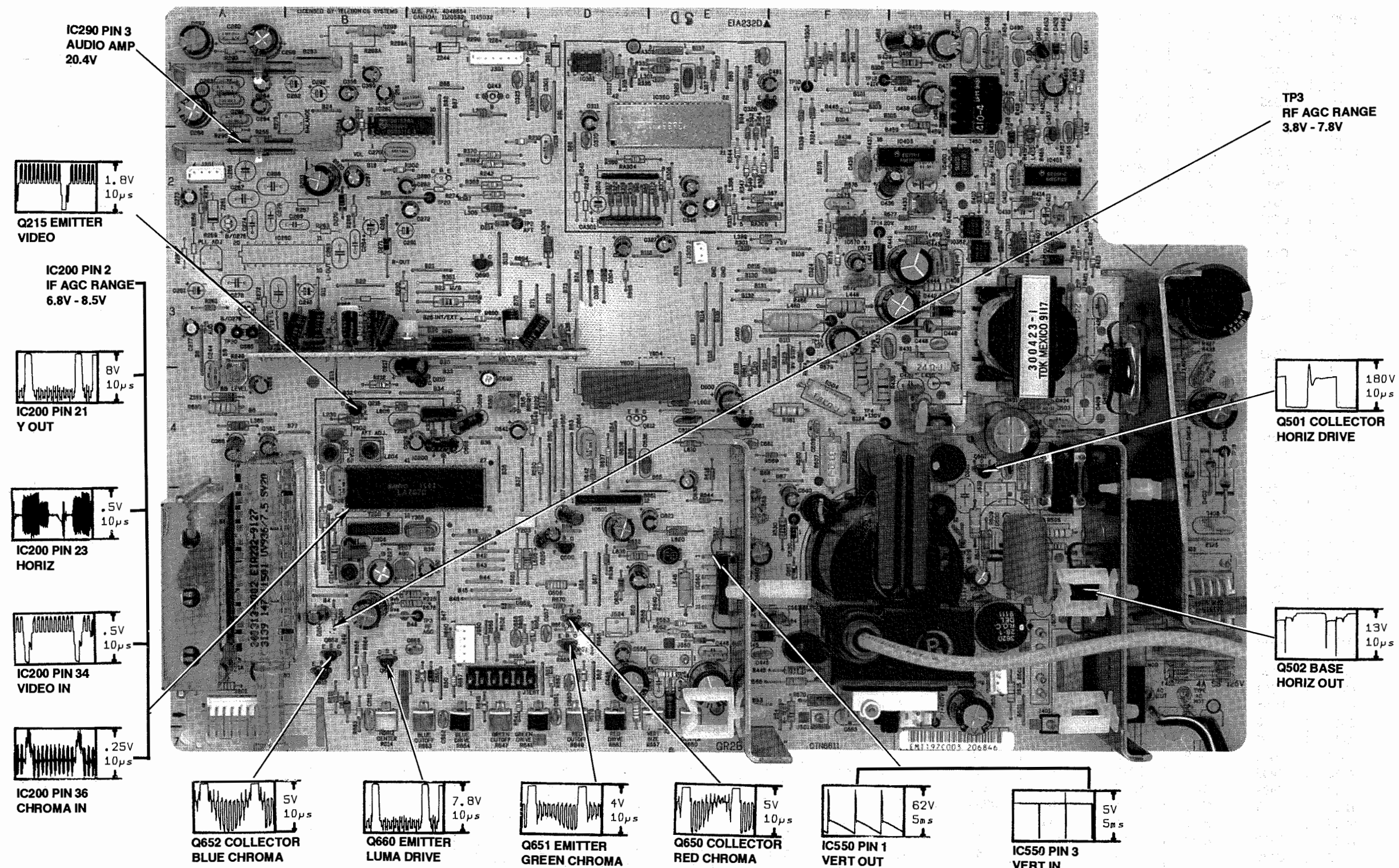
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SCHEMATIC CIRCUITRACE = 11

PHOTO CIRCUITRACE = 11
SCHEMATIC CIRCUITRACE = 11

MAIN BOARD - TOP VIEW



A HOWARD W. SAMS QUICK-CHECKS™ PHOTO

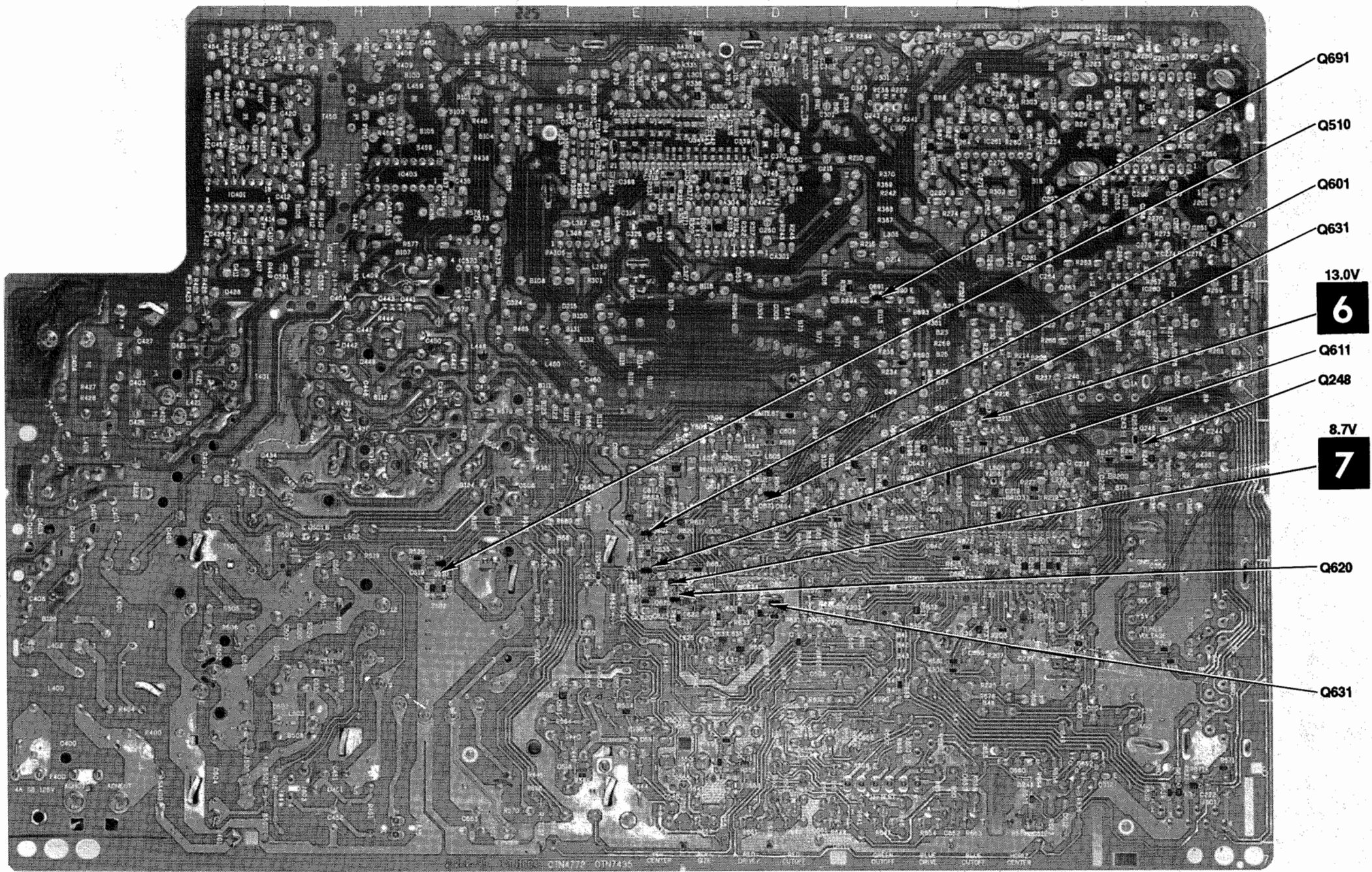
MAIN BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C204	L-3	C404	F-20	C512	N-14	D509	J-15	K405	H-19	R287	C-4	R423	G-18	R573	E-13	Y200	J-4
C205	K-4	C405	H-20	C530	I-12	D512	M-4	L409	E-14	R290	A-2	R424	H-19	R574	G-12	Y202	H-4
C207	J-8	C406	J-19	C546	M-10	D530	J-12	L421	G-17	R295	C-2	R426	E-17	R576	D-13	Y203	J-7
C210	I-4	C407	A-15	C550	K-12	D550	K-11	L422	D-17	R298	A-4	R427	G-19	R577	D-14	Y206	H-5
C214	K-4	C408	E-15	C551	L-12	D551	L-10	L423	C-16	R299	A-6	R428	G-19	R578	E-13	Y320	B-10
C215	C-8	C410	D-16	C556	L-9	D630	K-9	L425	G-18	R301	E-11	R429	G-13	R579	G-13	Y600	G-9
C217	G-5	C411	E-17	C558	M-9	D650	M-5	L431	H-15	R302	D-5	R430	E-15	R580	I-12	Y665	J-5
C220	J-8	C412	D-16	C559	K-12	D659	L-7	L432	H-15	R304	B-12	R431	G-15	R615	H-10	Z361	H-2
C222	M-2	C413	D-17	C563	J-11	D661	K-12	L441	E-14	R305	D-10	R432	D-15	R616	I-11	Z569	M-10
C227	K-5	C418	C-16	C571	E-13	F400	M-19	L448	F-13	R313	D-11	R433	D-15	R633	J-9		
C228	I-5	C420	B-16	C572	F-13	IC200	J-4	L452	C-17	R314	B-13	R436	H-14	R636	K-9		
C234	C-4	C421	F-18	C573	D-13	IC261	C-4	L459	B-14	R315	D-9	R437	D-13	R637	I-9		
C244	G-1	C423	B-17	C600	H-11	IC280	C-2	L460	F-12	R317	D-9	R438	C-13	R640	K-10		
C251	D-19	C424	G-20	C610	H-10	IC290	B-2	L502	I-15	R318	D-9	R444	F-13	R641	M-7		
C252	F-19	C425	G-19	C621	J-10	IC350	C-9	L503	L-16	R322	D-9	R445	M-12	R642	I-8		
C255	B-5	C426	D-17	C630	K-9	IC351	B-8	L505	K-7	R324	C-12	R446	B-13	R644	J-10		
C258	H-2	C427	F-19	C634	J-9	IC352	E-16	L546	K-10	R326	B-11	R449	E-16	R646	M-6		
C262	D-5	C430	H-14	C635	I-10	IC400	C-15	L602	H-10	R327	B-11	R450	B-17	R647	N-7		
C269	B-5	C431	H-16	C636	I-9	IC401	D-16	L605	H-9	R330	H-6	R451	M-15	R648	N-7		
C270	C-5	C432	D-14	C641	H-7	IC402	D-15	L606	H-5	R335	B-10	R452	B-17	R649	N-9		
C272	D-5	C433	G-14	C643	H-6	IC403	C-14	L610	I-10	R336	B-10	R453	A-17	R650	M-8		
C273	D-1	C434	H-17	C650	M-8	IC550	K-11	L620	J-10	R338	B-7	R454	A-16	R651	N-9		
C277	F-1	C435	D-13	C651	N-8	IC570	E-13	L625	K-10	R339	C-12	R455	C-17	R652	M-5		
C280	A-2	C436	D-14	C652	N-6	IC601	J-8	L635	K-9	R344	C-11	R456	B-17	R653	N-5		
C283	B-2	C438	A-16	C655	L-5	J201	D-2	Q210	G-5	R347	D-11	R457	C-17	R654	N-6		
C284	B-2	C441	E-14	C656	L-7	J300	E-10	Q215	H-4	R349	D-11	R458	A-17	R655	L-8		
C287	A-1	C442	F-15	C657	L-8	J301	B-6	Q326	B-12	R352	C-11	R459	C-14	R656	M-7		
C288	B-1	C443	E-15	C660	K-5	J401	N-17	Q408	A-14	R353	C-12	R465	F-12	R657	M-6		
C293	B-2	C444	M-11	C661	I-11	J402	K-19	Q420	G-18	R354	C-11	R501	K-7	R658	M-4		
C294	B-2	C445	L-12	C663	N-13	J500	L-17	Q450	A-17	R356	D-12	R502	L-7	R659	L-8		
C295	C-2	C446	L-11	C664	I-8	J501	N-13	Q500	J-8	R360	L-4	R503	I-16	R660	L-6		
C297	D-4	C447	F-13	C669	L-4	J603	M-16	Q501	I-16	R361	H-12	R504	H-13	R661	G-11		
C298	D-3	C448	G-15	C695	G-7	J625	N-14	Q502	J-18	R367	D-7	R505	J-17	R662	L-7		
C299	A-2	C450	F-14	C698	I-6	J650	L-6	Q512	M-3	R368	D-7	R506	J-17	R663	N-4		
C301	B-8	C451	M-15	C699	H-6	J801	M-2	Q650	L-8	R369	C-7	R507	I-13	R664	M-4		
C306	A-12	C452	N-15	CA301	D-9	J-TEST	M-6	Q651	L-8	R370	C-7	R508	K-15	R665	L-7		
C311	C-8	C453	A-16	D214	E-7	K400	J-19	Q652	L-4	R371	D-10	R509	J-16	R666	L-8		
C317	B-9	C454	A-17	D215	E-12	L200	I-4	Q660	M-5	R372	D-10	R511	J-15	R667	M-8		
C323	B-7	C455	C-17	D270	D-4	L204	I-4	Q661	H-11	R380	H-7	R514	N-5	R668	L-7		
C324	E-13	C456	B-15	D271	E-5	L214	K-4	Q690	E-6	R388	H-19	R515	M-16	R669	I-12		
C325	D-11	C457	C-17	D304	F-9	L230	H-4	R207	K-5	R399	C-9	R516	M-4	R670	L-8		
C327	E-10	C458	C-14	D305	F-8	L301	B-10	R209	J-4	R400	L-19	R519	I-15	R676	L-5		
C346	D-10	C460	G-11	D390	E-16	L305	D-7	R210	C-7	R404	L-19	R530	J-12	R678	N-9		
C353	E-9	C462	A-14	D402	I-20	L306	E-8	R212	H-5	R407	E-16	R537	J-11	R680	H-2		
C356	B-4	C481	B-12	D404	I-19	L312	A-7	R215	D-7	R408	A-14	R549	H-7	R690	F-6		
C359	B-4	C490	A-16	D405	I-19	L315	B-9	R222	H-8	R409	B-14	R550	I-7	R694	E-7		
C360	M-2	C502	H-17	D408	I-19	L357	B-10	R225	K-5	R410	D-16	R553	L-10	R695	F-9		
C361	I-2	C503	H-17	D418	C-16	L365	H-2	R230	F-5	R411	C-16	R555	M-10	RA301	A-10		
C365	I-2	C504	M-17	D428	E-17	L386	D-11	R237	G-4	R412	D-16	R557	N-10	RA304	D-9		
C370	C-8	C505	K-17	D429	A-17	L387	D-12	R249	G-2	R414	D-16	R560	K-11	RA305	D-12		
C380	D-10	C506	H-13	D430	H-15	L388	D-12	R255	C-2	R415	D-17	R561	M-9	R-TEST	M-12		
C381	E-16	C507	J-16	D442	F-15	L389	E-12	R261	F-1	R418	B-16	R562	L-10	SA400	M-18		
C400	L-19	C508	K-8	D445	L-12	L390	C-6	R269	F-6	R419	C-16	R563	J-11	T401	G-16		
C401	I-19	C509	I-16	D448	F-15	L400	K-19	R276	D-1	R420	B-17	R564	L-12	T450	B-15		
C402	A-15	C510	K-16	D451	M-15	L401	G-19	R284	A-7	R421	F-17	R566	M-12	T501	I-17		
C403	G-19	C511	K-16	D458	C-15	L402	H-19	R286	D-4	R422	E-17	R570	M-13	T502	K-14		

CROSLEY

MODELS CT2720B101/2/3/4 (CHASSIS 27T107)

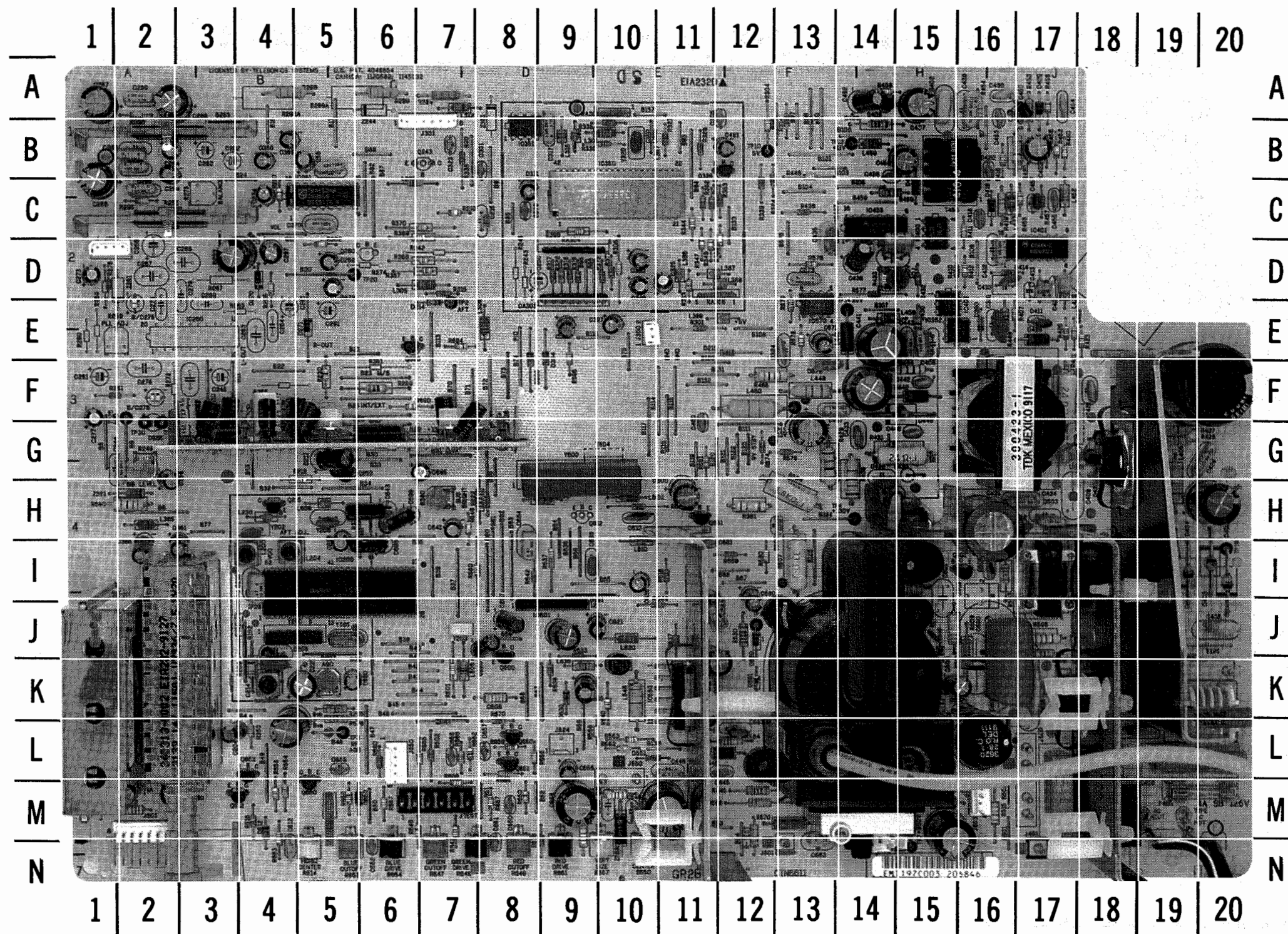
MAIN BOARD - BOTTOM VIEW



NOTE: ARROWS ON TRANSISTORS INDICATE BASE UNLESS NOTED

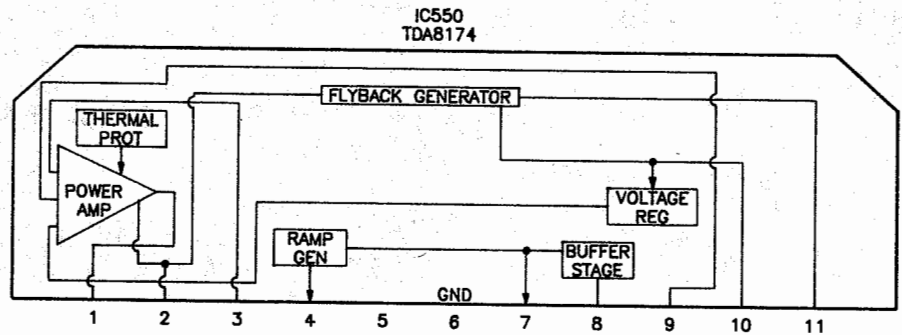
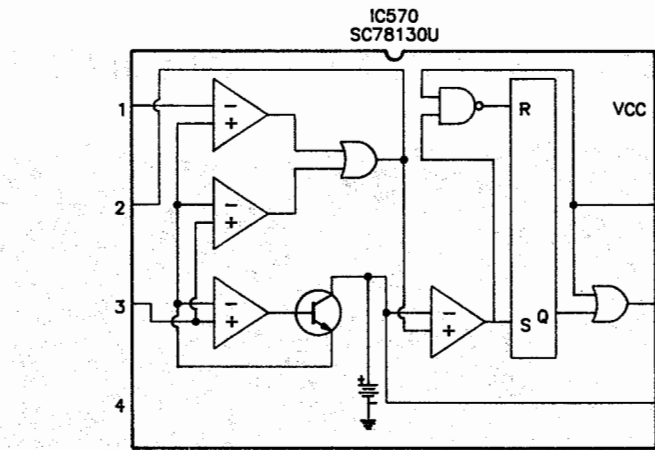
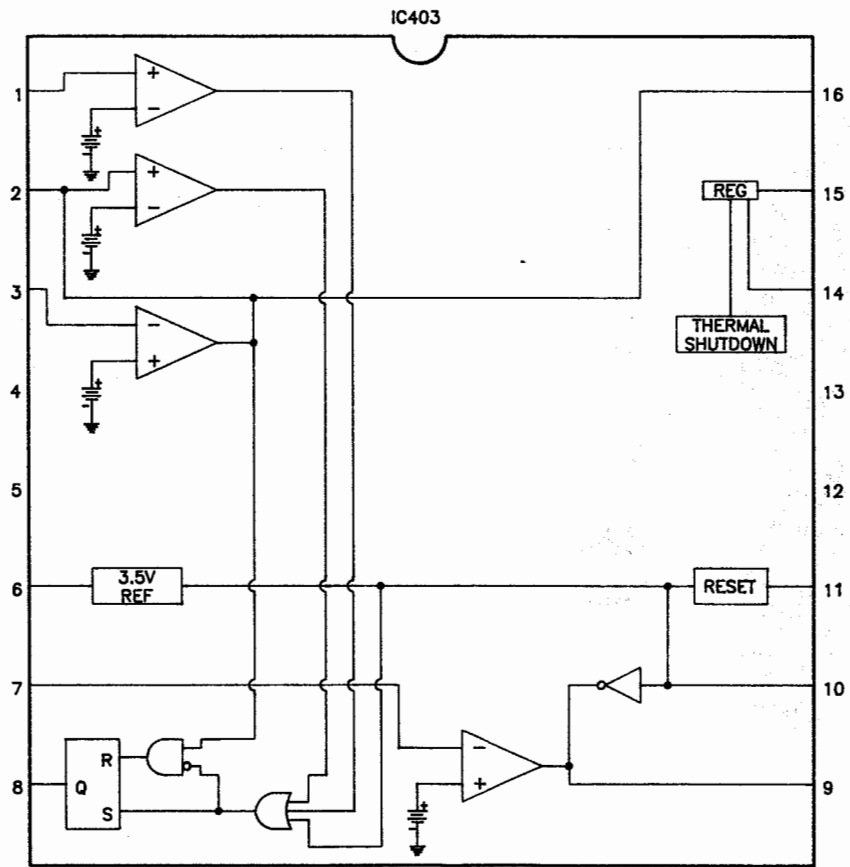
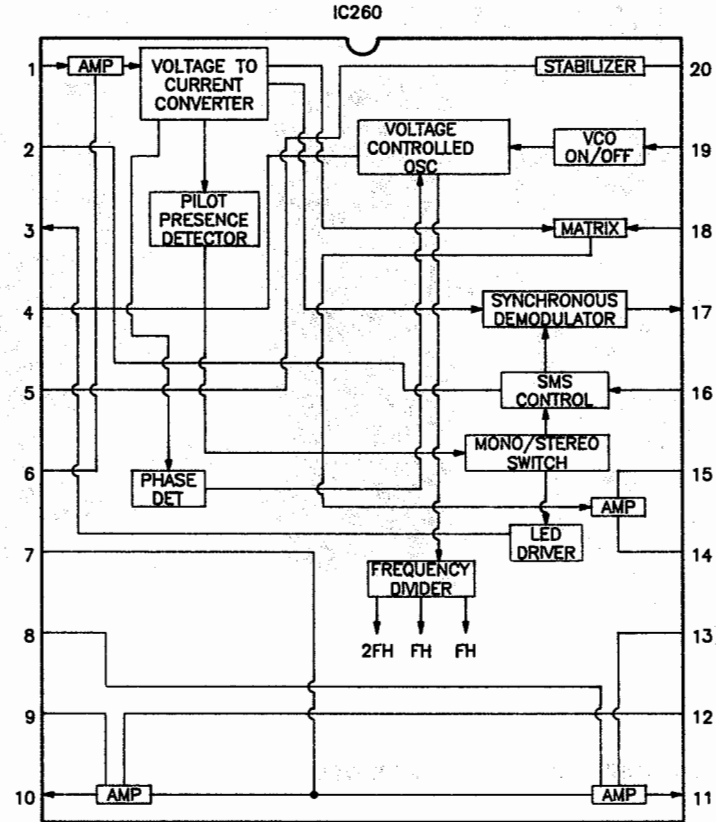
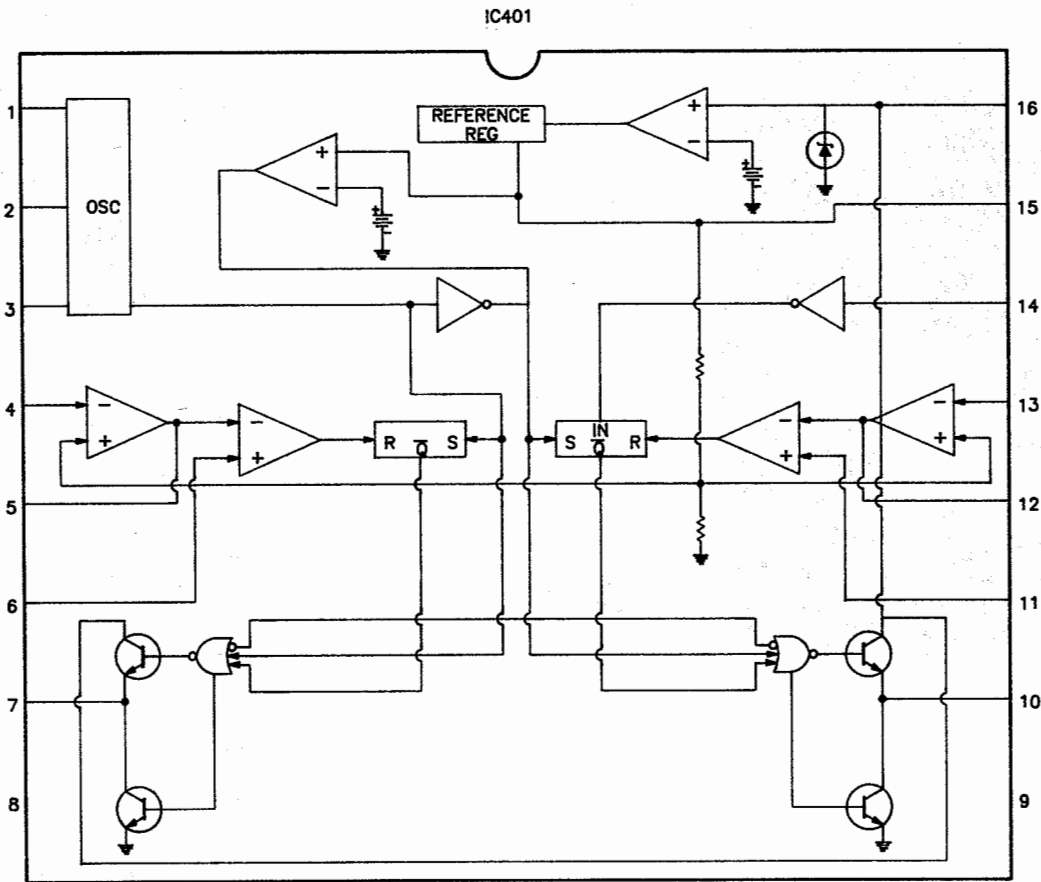
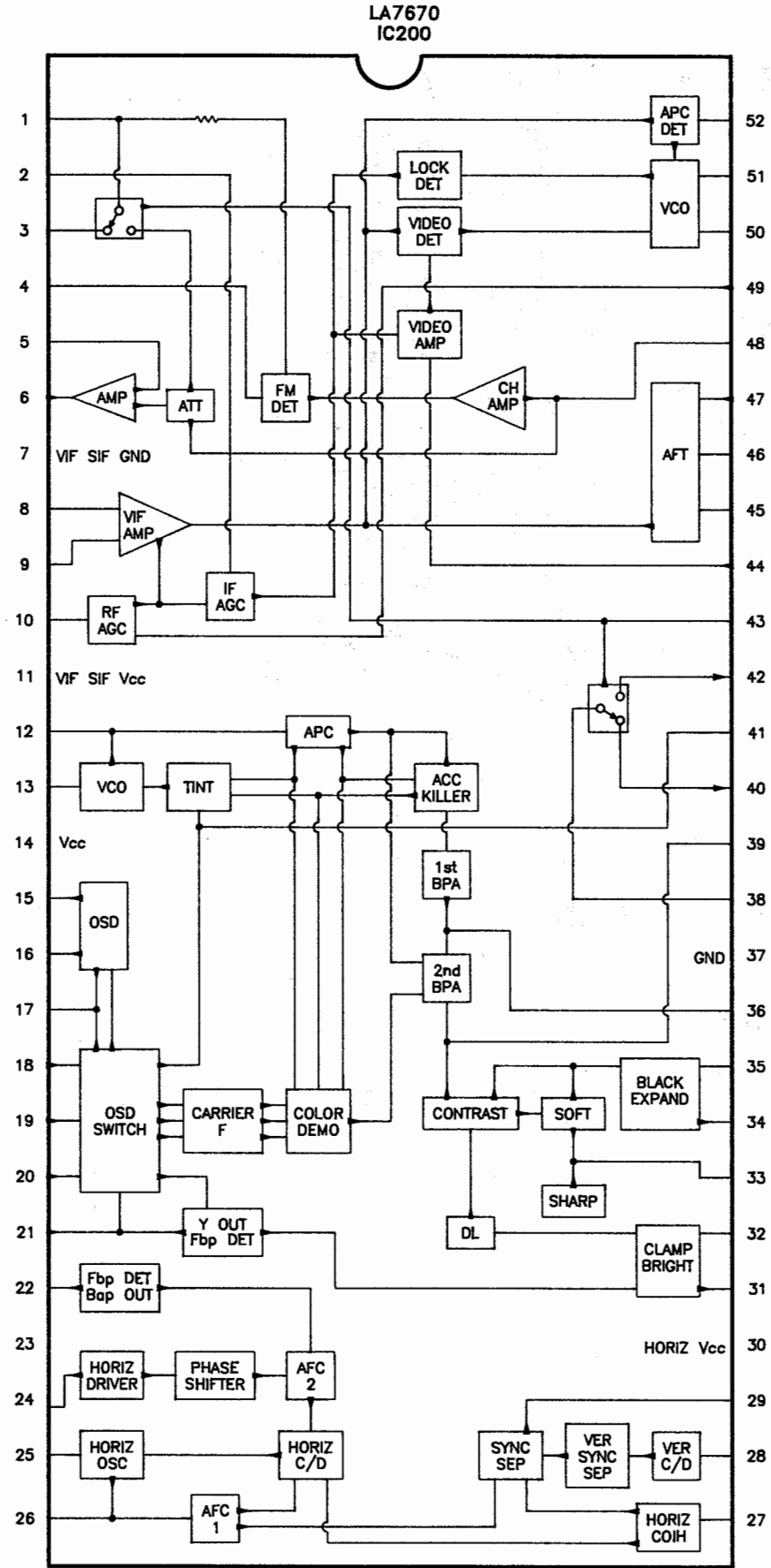
A HOWARD W. SAMS CIRCUITRACE[®] PHOTO

MAIN BOARD - TOP VIEW

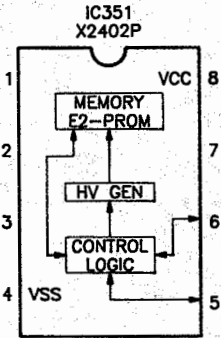
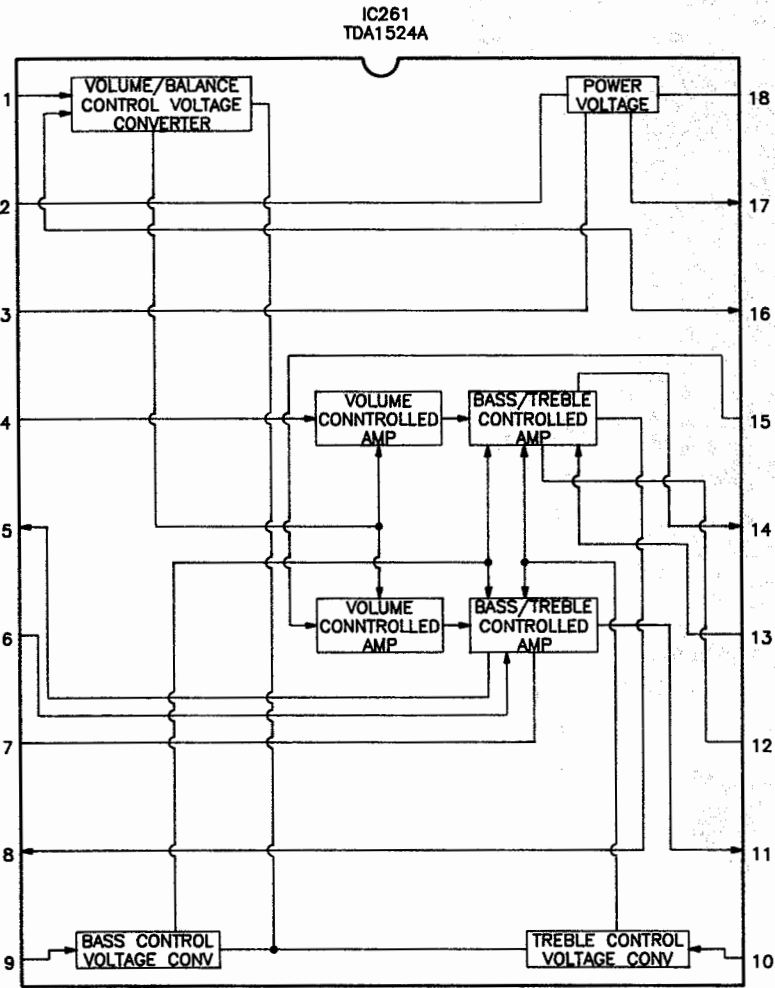
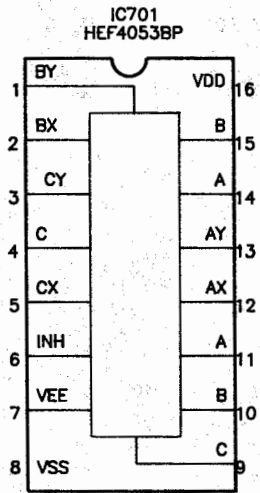
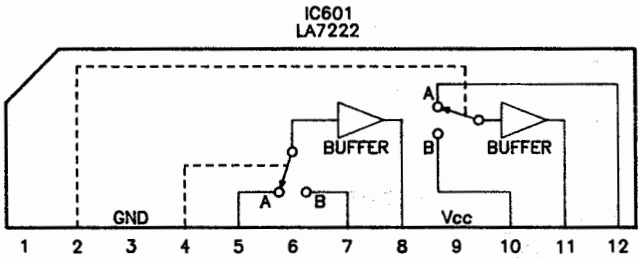
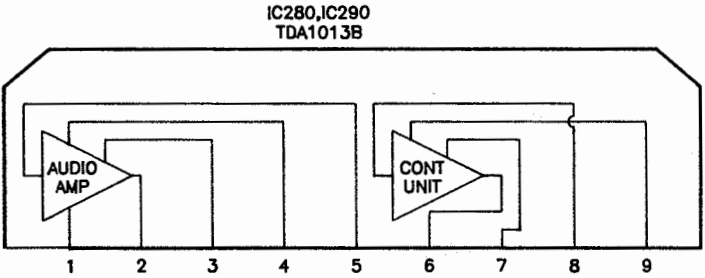


A HOWARD W. SAMS GRIDTRACE™ PHOTO

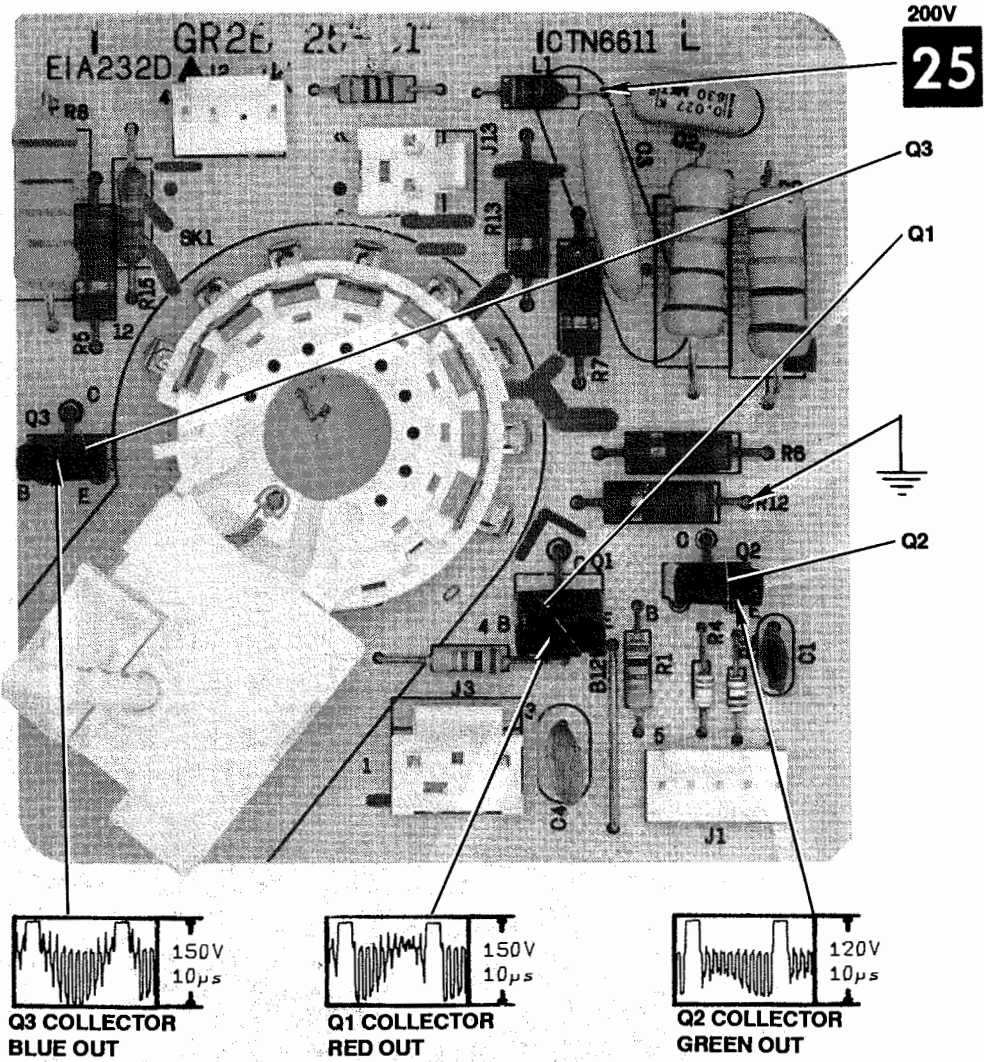
IC FUNCTIONS



IC FUNCTIONS continued

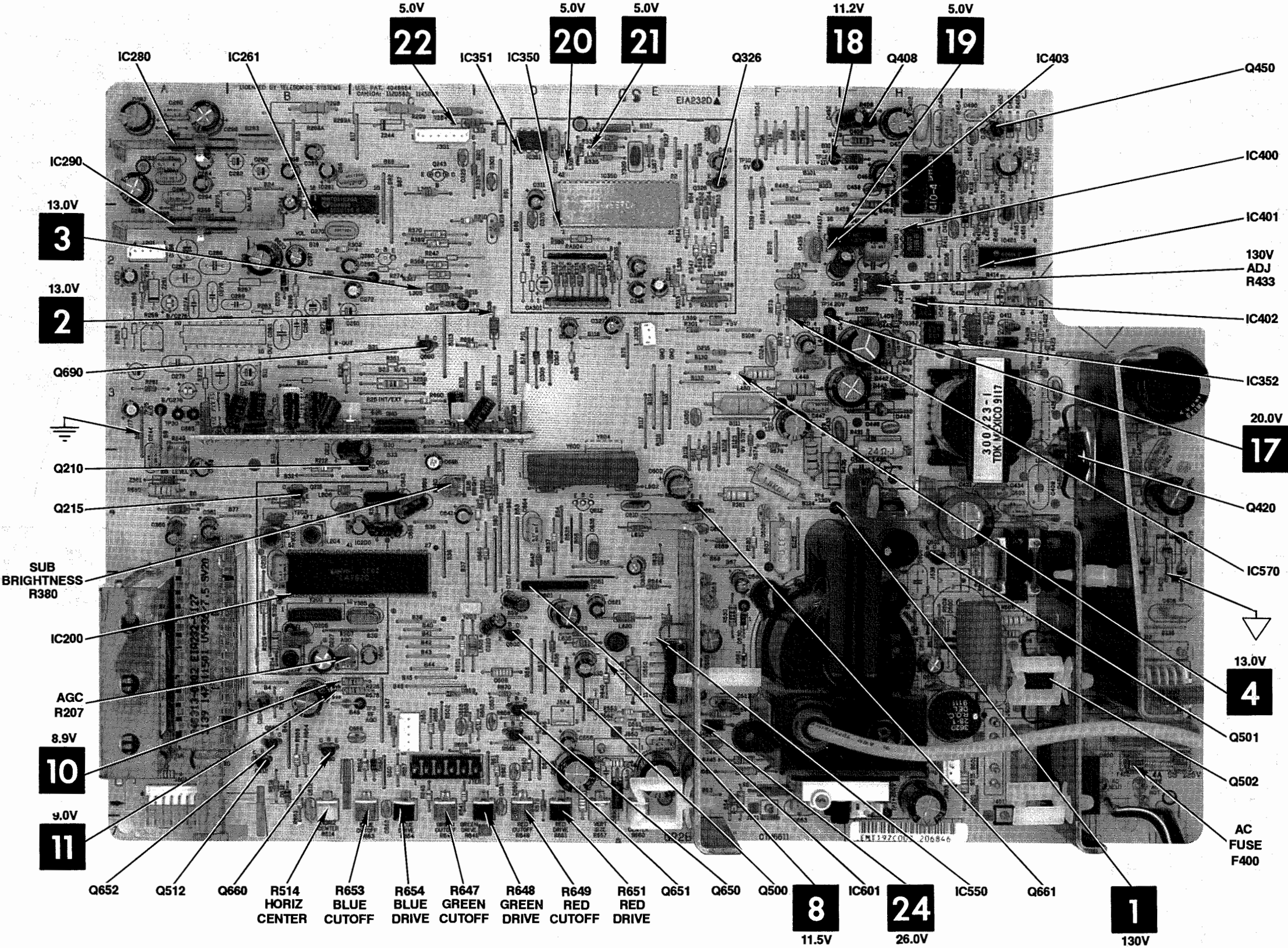


CRT BOARD



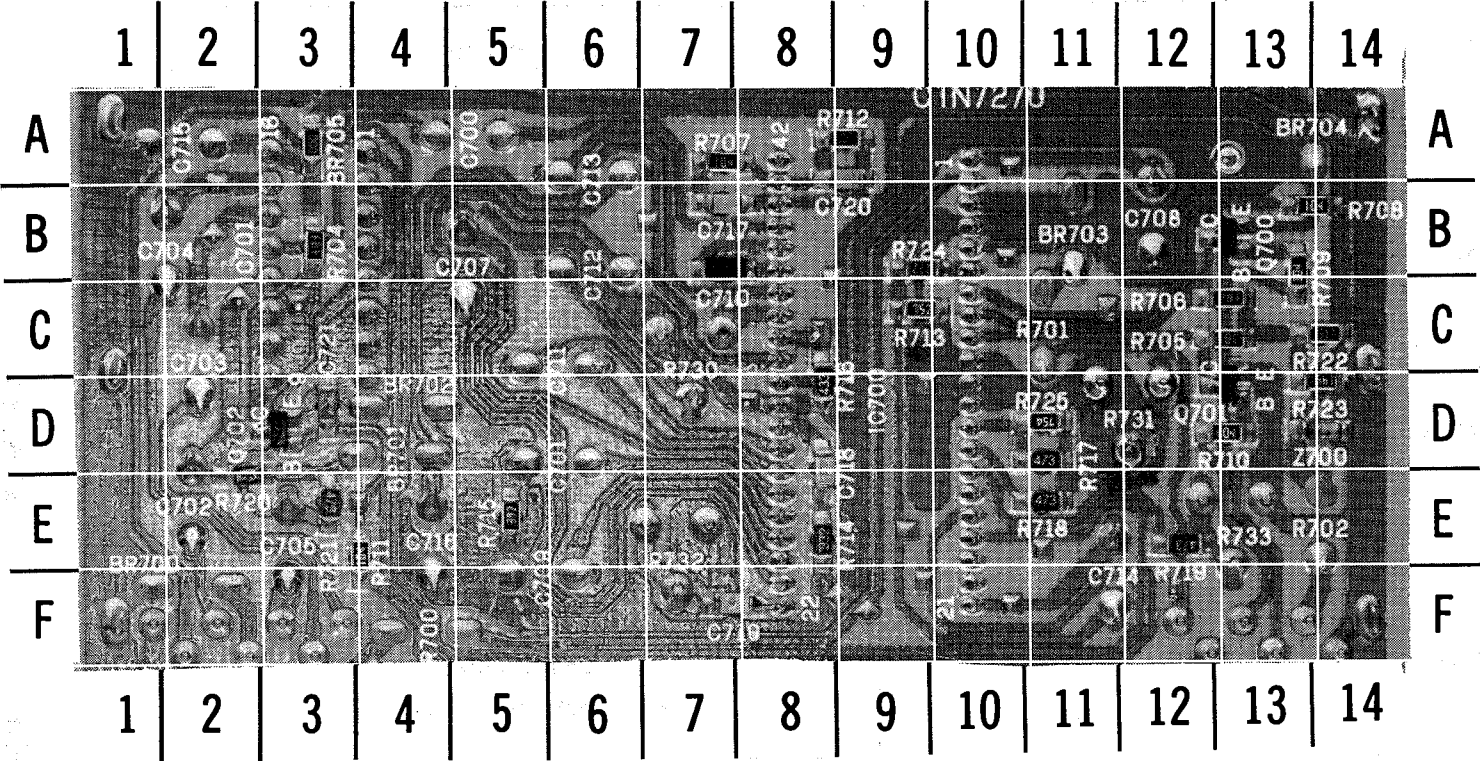
A HOWARD W. SAMS QUICK-CHECKS™ PHOTO

MAIN BOARD



TAKEN FROM COMMON TIE POINT
NOTE: ARROWS ON IC'S INDICATE PIN 1 UNLESS NOTED.

STEREO/SAP/DBX BOARD - BOTTOM VIEW

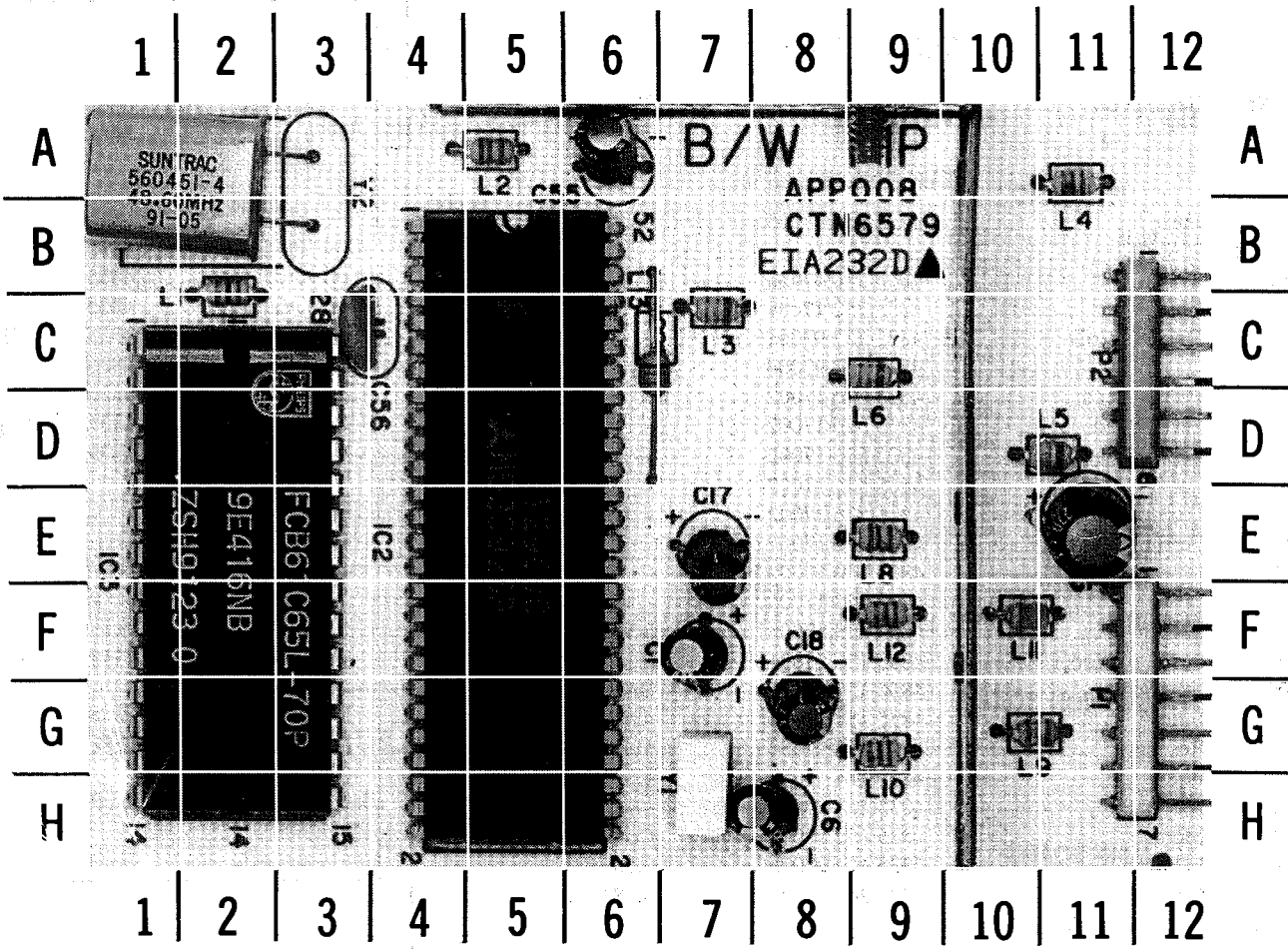


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STEREO/SAP/DBX BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C710	B-7	Q701	D-13	R709	B-13	R716	D-8	R723	D-14
C717	B-7	Q702	D-3	R710	D-13	R717	D-11	R724	B-9
C718	E-8	R704	B-3	R711	E-4	R718	E-11	R725	D-11
C719	F-7	R705	C-13	R712	A-9	R719	E-12	Z700	D-14
C720	B-9	R706	C-13	R713	C-9	R720	E-2		
C721	D-3	R707	A-7	R714	E-8	R721	E-3		
Q700	B-13	R708	B-13	R715	E-5	R722	C-14		

PIP BOARD - TOP VIEW



A HOWARD W. SAMS GRIDTRACE™ PHOTO

PIP BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C1	F-7	C55	A-6	L2	A-5	L8	E-9	L13	C-6
C6	H-8	C56	C-3	L3	C-7	L9	G-10	P1	E-12
C14	E-11	IC2	B-4	L4	A-11	L10	G-9	P2	B-12
C17	E-7	IC3	C-1	L5	D-11	L11	F-10	Y1	H-7
C18	G-8	L1	B-2	L6	C-9	L12	F-9	Y2	A-2

PARTS LIST continued

MISCELLANEOUS

Item No.	Description	Mfr. Part No.	Notes
MAIN Module			
# F400	Fuse	4835 253 97095	-
	4Amp 125V AC	-	-
# K400	Relay	4835 280 47033	-
# L400	Line Filter	4835 152 17001	-
# L400A	Degauss Coil	4835 157 97031(1)	-
		4835 157 97004	-
L401	Ferrite Bead	4835 526 17002	-
L402	Ferrit Bead	4835 526 17002	-
L425	Ferrite Bead	4835 526 17002	-
L431	Ferrite Bead	4835 526 17002	-
L432	Ferrite Bead	4835 526 17002	-
L441	Ferrite Bead	4835 526 17001	-
# L503	Linearity	4835 150 57002	-
P1	Cord, AC	4835 321 17005	-
S550	Switch	4835 273 57003	3 Way Rotary
SA400	Surge Absorber	4835 116 97001	-
Y200	Filter	4835 153 97022	SAW
Y202	Filter	4835 157 57341	4.5Mhz
Y203	Resonator	4835 153 97004	503kHz
Y206	Filter	4835 154 17001	4.5MHz trap
Y320	Resonator	4835 157 57595	-
Y600	Module	4835 152 87001	Comb Filter
Y604	LC Trap	4835 154 97025	3.58MHz
Y665	Crystal	4835 242 77022	3.58MHz
# V1 CRT	MVA68AEC01X	-	-
	Convergence	4835 150 27004	-
	Remote Transmitter	M1430B-BA02	-

For SAFETY use only equivalent replacement part.
(1) Used in Models CT2720B101, 102, 103, 104
CT2731P101,102,103,104

MISCELLANEOUS continued

Item No.	Description	Mfr. Part No.	Notes
CRT BOARD			
	Board	4835 219 57334(1)	
	Socket	0018 179 80001(2)	For CRT
	Socket	0018 179 80001(3)	
CUSTOMER SWITCH BOARD			
SW71-77	Switch	4835 276 57003	-
AUDIO/VIDEO JACK PANAL			
S1	Switch	4835 277 27006	Slide
PIP MODULE			
Y1	Resonator	4835 153 97003	489kHz
Y2	Crystal	4835 242 771412	48.6MHz

(1) Contact PTS Electronics Corporation for replacement; order by manufacturer's part number.
(2) For 25", 26", 27" Versions
(3) For 27", 31" Versions.

CAPACITORS

Item	Rating	Mfr. Part No.
MAIN BOARD		
# C400	.22 125V	4835 121 47094
# C401	.0047 250V 20%	4835 122 97023
# C402	470 250V 20%	4835 122 97022
# C406	470 250V 20%	4835 122 97022
C427	470 N750 50V 5%	4835 122 47404
# C504	.0091 1.5KV	4835 121 47197
# C505	820 2KV 10%	4835 122 57004
# C507	.39 200V	4835 121 47098
C509	22 NPO 500V 10%	4835 122 47073
C610	150 NPO 50V 5%	4835 122 47042
CA301	Cap Network	4835 122 97049
	.01 x 7	

CRT BOARD

C1	100 NPO 50V 5%	4835 122 47014
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For SAFETY use only equivalent replacement part.

SPEAKERS

Item No.	Description	Mfr. Part No.	Number On Unit	Quam Part No.
SP1, SP2	2 1/4" x 5" 16 Ohms	4835 240 27007(1)	582500-1003	-
	3" x 5"	4835 240 37005(2)	-	35C1Z16

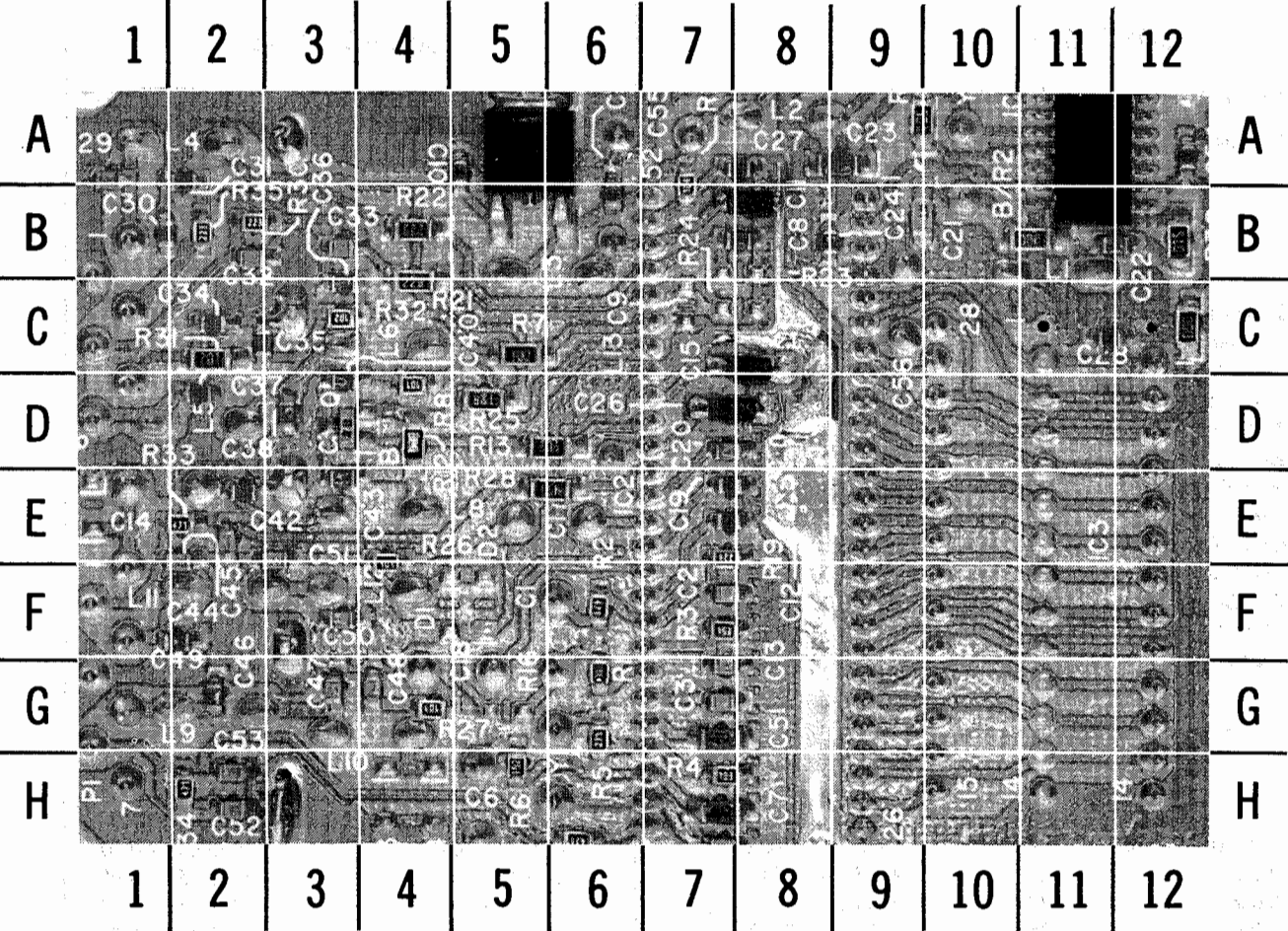
(1) Used in Models CT2720B101, B102, B103, B104
(2) Used in Models CC2731P101/P102/P103/P104
CC22741P101/P102/P103/P104
CC2742A101/A102/A103/A104



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B. Smith, J. Watson

PIP BOARD - BOTTOM VIEW



PARTS LIST continued

COILS (RF-IF)

Item No.	Rating	Mfr. Part No.
PIP BOARD		
L1	Coil 1.0uH	4835 157 67015
L2	Coil 1.2uH	4835 157 67016
L3	Coil 1.2uH	4835 157 67016
L4	Coil 2.2 uH	4835 157 67024
L5	Coil 6.8uH	4835 157 67022
L6	Coil 6.8uH	4835 157 67022
L8	Coil 1.2uH	4835 157 67016
L9	Coil 1.8uH	4835 157 67017
L10	Coil 2.2uH	4835 157 67024
L11	Coil 1.8uH	4835 157 67017
L12	Coil 2.2uH	4835 157 67024

CRT BOARD

L1	Coil 47uH	4835 157 57066
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MAIN BOARD

L204	AFT	4835 157 57594
L214	Sound Disc	4835 157 57113
L230	Coil 27uH	4835 157 57119
L301	Coil 3.3uH	4835 157 57154
L305	Coil 3.3uH	4835 157 57154
L306	Coil 3.3uH	4835 157 57154
L312	Coil 12uH	4835 157 57048
L315	Coil 12uH	4835 157 57056
L357	Coil 27uH	4835 157 57119
L365	Coil 12uH	4835 157 57048
L386	Coil 3.3uH	4835 157 57266
L387	Coil 3.3uH	4835 157 57266
L388	Coil 3.3uH	4835 157 57266
L389	Coil 3.3uH	4835 157 57266
L405	Suppression	4835 152 27029
L409	Coil 100uH	4835 157 57047
L421	Suppression	4835 152 27032
L422	Coil 2.2 uH	4835 157 57051
L423	Coil .68uH	4835 157 57596
L430	Suppression	4835 152 27032
L448	Suppression	4835 152 27002
L452	Coil 2.2uH	4835 157 57051
L459	Coil 10uH	4835 157 57093
L460	Coil 42uH	4835 157 57063
L502	Suppression	4834 157 57336
L505	Coil 100uH	4835 157 57047
L546	Suppression	4835 154 97002

COILS (RF-IF) continued

Item No.	Rating	Mfr. Part No.
MAIN BOARD		
L602	Coil 10uH	4835 157 57093
L605	Coil 15uH	4835 157 57073
L606	Coil 4.76uH	4835 157 67011
L610	Coil 10uH	4835 157 57006
	Coil 18uH	4835 157 57084
L620	Coil 2.7uH	4835 157 57098
L625	Coil 10uH	4835 150 57004
L635	Coil 18uH	4835 157 57447

ELECTROLYTIC CAPACITORS

Item	Rating	Mfr. Part No.
MAIN BOARD		
# C530	22 50V	4835 124 47051
# For SAFETY use only equivalent replacement part.		

CONTROLS

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

Item No.	Function	Resistance	Mfr. Part No.
MAIN BOARD			
R207	RF/AGC	10K	4835 100 17015
R249	Base Band Level	2200	4835 100 17027
R259	PLL Adjust	10K	4835 100 17015
R275	Tone Adjust	10K	4835 100 17015
R380	Sub-Bright	2200	4835 100 17027
R433	130V Adjust	470	4835 100 17024
R514	Horiz Centering Adj	10K	4835 100 17029
R557	Vert Height	220K	4835 100 17034
R647	Green Cutoff	4700	4835 100 17022
R648	Green Drive	2200	4835 100 17021
R649	Red Cutoff	4700	4835 100 17022
R651	Red Drive	2200	4835 100 17021
R653	Blue Cutoff	4700	4835 100 17022
R654	Blue Drive	2200	4835 100 17021

STEREO/SAP/DBX BOARD

R730	Left-Right Level	10K	4835 100 97032
R731	Filter	22K	4835 100 97041
R732	Separation	4700	4835 100 97039
R733	VCO	47K	4835 100 97033

COILS & TRANSFORMERS

Item No.	Function	Mfr. Part No.	On-Unit No.	Russell Part No.
# L599	Yoke 100° Horiz 1.43mh Vert 17.1mh	4835 150 17042	362075-7	-
# L503	Linearity	4835 150 57002	362028-1	-
# T401	Switch Mode Power Supply	4835 140 67056	300423-1	-
# T450	Stand-By Supply	4835 148 87251	410-4	-
T501	Driver	4835 142 47012	9126-7	-
# T502	Flyback	4835 140 67058(1)	00364058-001	FBT-280

For SAFETY use only equivalent replacement part.
(1) Focus and Screen Controls are part of Horizontal Output Transformer #T501.

CABINET PARTS

MODELS CT2720B101/B102/B103/B104

Item	Part No.
Cabinet, Back	4835 432 97295
Keypad, 7 Pushbutton	4835 410 37033
Cabinet Front	4835 430 62029

MODELS CT2731P101/P102/P103/P104

Item	Part No.
Cabinet Back	4835 432 97266
Caster (4 Used)	4835 528 77019
Caster Socket (4 Used)	4835 528 77018
Header	4835 432 17147
Keypad, 7 Pushbutton	4835 410 37121

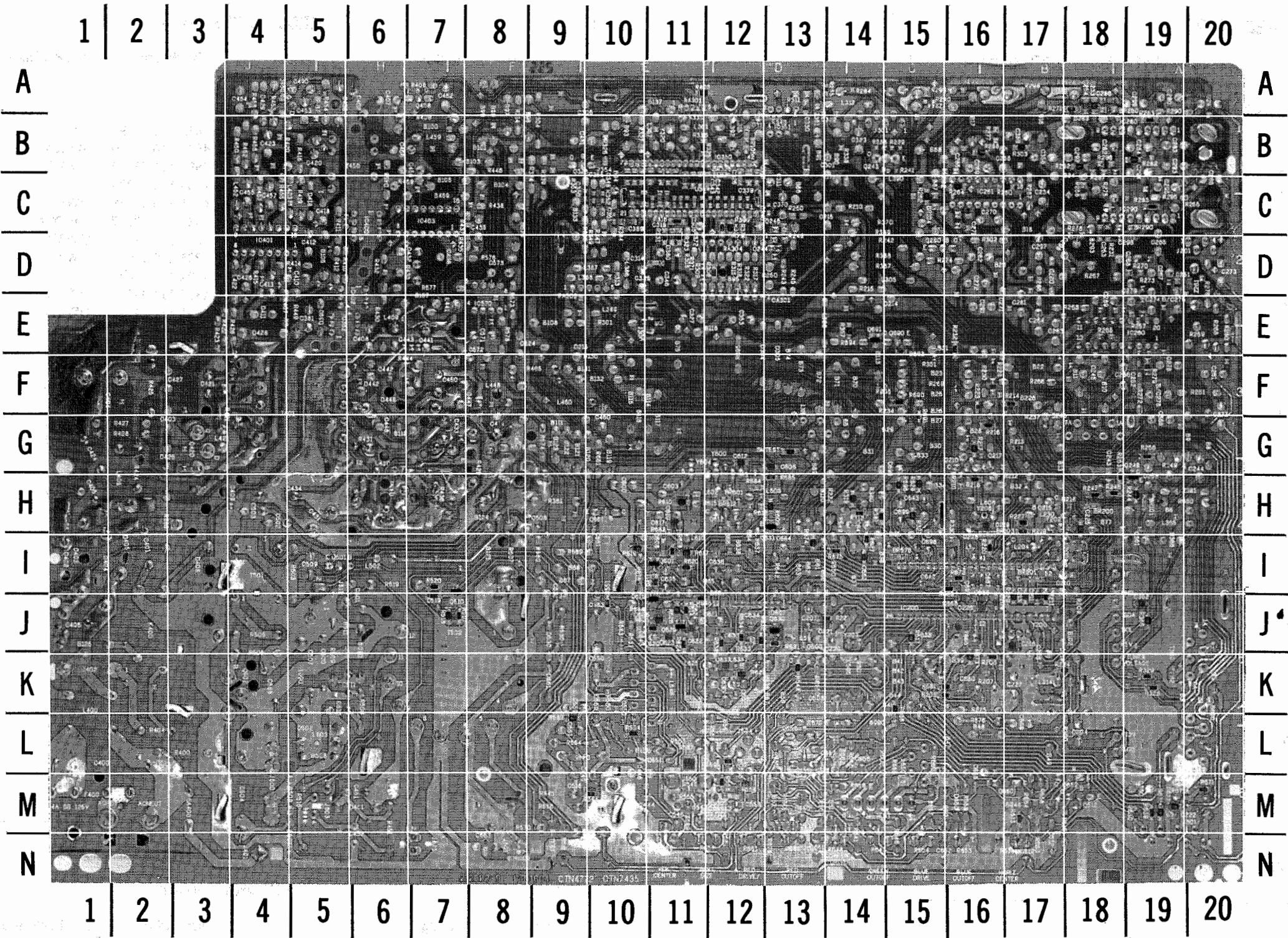
MODELS CC2741P101/P102/P103/P104

Item	Part No.
Base Support Assy	4835 402 57053
Cabinet Back	4835 432 97298
Bracket Support-Left	4835 402 57008
Bracket Support-Right	4835 402 57009
Front Base and Drawer	4835 432 97198
Grille-Bottom	4835 459 47007
Grille-Top	4835 459 47008
Knob(2Used)	4835 412 97001
Keypad, 7 Pushbutton	4835 410 37121
Mask	4835 432 77015
Caster	4835 528 77019

MODELS CC2742A101/A102/A103/A104

Item	Part No.
Cabinet Back	4835 432 97304
Foot, Base Stop (2 Used)	4835 462 47017
Front Base and Drawers	4835 432 97135
Grille Cloth(2 Used)	4835 445 57001
Keypad, 7 Pushbutton	4835 410 37121
Mask	4835 432 77015
Swivel	4835 432 17136

MAIN BOARD - BOTTOM VIEW



PARTS LIST continued

RESISTORS			
Item No.	Rating	Mfr. Part No.	NTE Replacement
MAIN BOARD			
# R217	22 5% 1/4W Mtl Flm	4835 111 37077	QW022
# R225	82 5% 1/4W Mtl Flm	4835 116 67093	QW082
# R267	100 5% 1/3W Mtl Flm	4835 116 87002	-
R268	14K 1% 1/8W Mtl Flm	4835 116 57055	-
# R269	39 5% 1/3W Mtl Flm	4835 116 57293	-
# R290	2.2 5% 1/8W Cbn Flm	4835 110 67081	EW2D2
# R295	2.2 5% 1/8W Cbn Flm	4835 110 67081	EW2D2
# R298	1.8 5% 3W Mtl Flm	4835 116 67101	3W1D8
# R299	1.8 5% 1W Mtl Flm	4835 116 67095	1W1D8
R301	12.1K 1% 1/8W Mtl Flm	4835 110 67187	-
# R360	15 5% 1/8W Cbn Flm	4835 110 67076	EW015
# R361	18K 5% 1W Mtl Flm	4835 116 57036	1W318
# R400	4.7 5% 1/2W Mtl Flm	4835 116 57009	HW4D7
# R404	12.7 Cold PTC	4835 116 47001	-
# R409	68 5% 1/3W Mtl Flm	4835 116 57292	-
R414	5760 1% 1/8W Mtl Flm	4835 116 57033	-
# R420	56K 5% 1W Mtl Flm	4835 116 57039	1W356
# R421	24 5% 3W Mtl Flm	4835 116 57043	3W024
# R424	.27 5% 1W Mtl Flm	4835 116 57056	1WD27
# R425	.27 5% 1W Mtl Flm	4835 116 67096	1WD27
# R427	.2 5% 1W Mtl Flm	4835 116 67096	-
#	.2 5% 1W Mtl Flm	4835 116 57054	-
# R428	.2 5% 1W Mtl Flm	4835 116 57054	-
# R429	51 5% 2W Mtl Flm	4835 110 57258	2W051
R430	105K 1% 1/4W Mtl Flm	4835 116 57287	-
# R431	24 5% 3W Mtl Flm	4835 116 57043	3W024
R432	2740 1% 1/8W Mtl Flm	4835 110 67188	-
R435	1300 2% 1/4W Mtl Flm	4835 111 37302	QW213
# R436	51 5% 2W Mtl Flm	4835 110 57258	2W051
R437	3001 1% 1/8W Mtl Flm	4835 116 57029	-
R438	8250 1% 1/8W Mtl Flm	4835 110 67189	-
# R444	1 5% 1W Mtl Flm	4835 116 67094	1W010
# R445	1 5% 1/3W Mtl Flm	4822 111 30483	-
# R449	24 5% 1/3W Mtl Flm	4835 116 57019	-
# R454	4300 5% 1/2W Mtl Flm	4835 116 57289	HW243
R456	2430 1% 1/8W Mtl Flm	4835 116 57028	-
# R465	1.6 5% 1W Mtl Flm	4835 110 57203	1W1D6
	1 5% 1W Mtl Flm	4835 116 57117	1W1D0
	2.2 5% 1W Mtl Flm	4835 116 67098	1W2D2
# For SAFETY use only equivalent replacement part.			

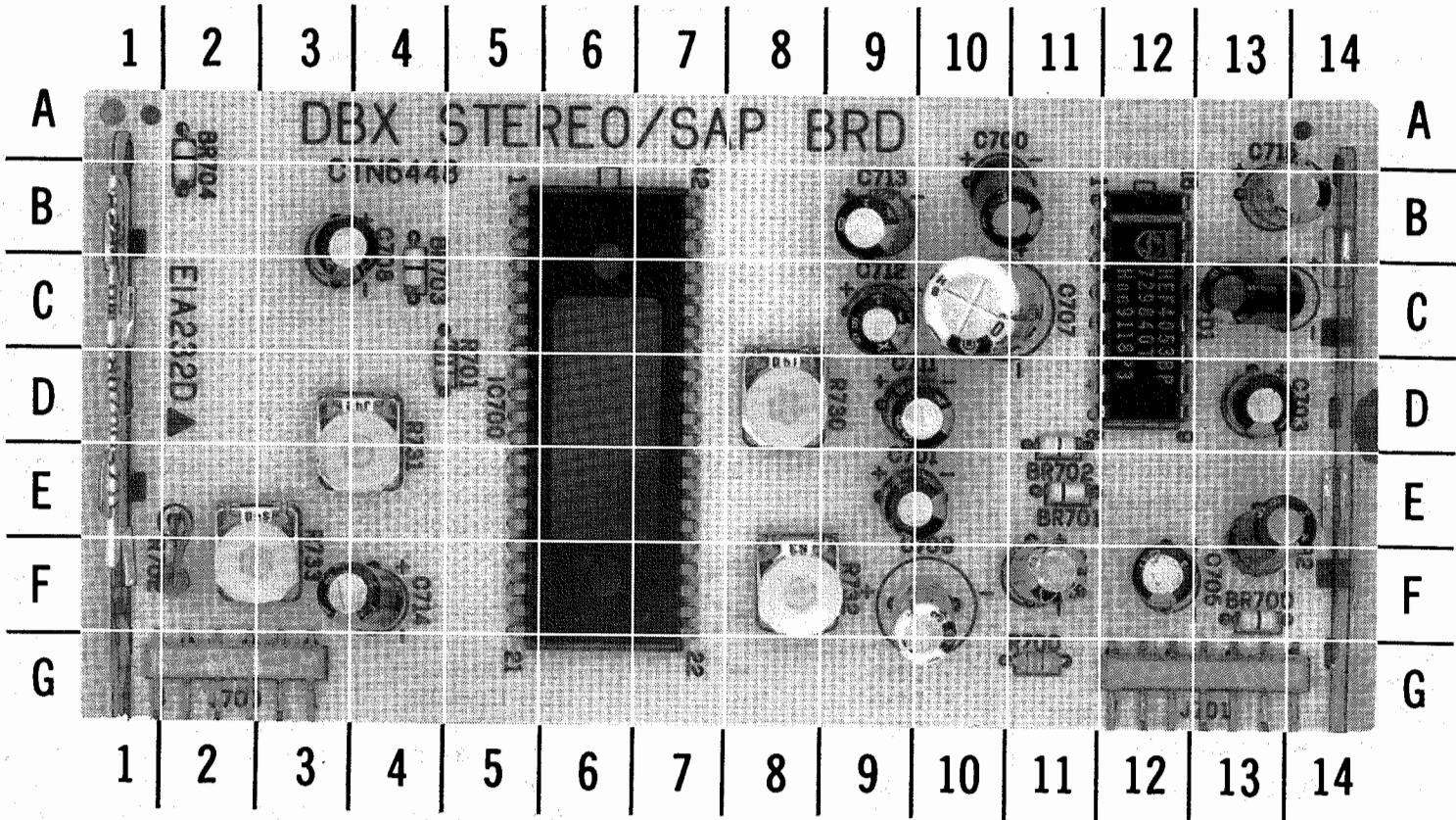
RESISTORS continued			
Item No.	Rating	Mfr. Part No.	NTE Replacement
MAIN BOARD			
# R504	1800 5% 3W Mtl Flm	4835 116 67099	3W218
	2400 5% 3W Mtl Flm	4835 116 67019	3W224
R507	33 5% 3W Mtl Flm	4835 116 67102	3W033
# R508	680 5% 1/3W Mtl Flm	4835 116 57288	-
# R511	220K 5% 1/2W Mtl Flm	4835 116 57018	HW422
# R515	.82 5% 1/2W Mtl Flm	4835 116 67007	HWD82
# R518	20K 5% 1/4W Mtl Flm	4835 111 37069	QW320
# R519	200K 5% 1/2W Mtl Flm	4835 116 57018	HW420
# R530	1 5% 1/3W Mtl Flm	4822 111 30483	-
R558	3300 2% 1/4W Mtl Flm	4835 111 37327	QW233
R559	1200 2% 1/4W Mtl Flm	4835 111 37299	QW212
# R563	2.2 5% 1/4W Mtl Flm	4835 111 37076	QW2D2
R568	2430 1% 1/8W Mtl Flm	4835 116 57028	-
# R574	2000 2% 1/8W Cbn Flm	4835 110 67156	EW220
# R579	10K 2% 1/8W Cbn Flm	4835 110 67179	EW310
# R580	2200 2% 1/8W Cbn Flm	4835 110 67184	EW222
# R609	47 5% 1/4W Mtl Flm	4835 111 37107	QW047
# R640	47 5% 1/8W Cbn Flm	4835 110 67004	EW047
# R641	27 5% 1/8W Cbn Flm	4835 110 67083	EW027
# R676	56 5% 1/2W Mtl Flm	4835 116 67091	HW056
# R680	27 5% 1W Mtl Flm	4835 116 57204	1W027
RA301	Resistor NetWork 10K x 4	4835 111 97021	-
RA304	Resistor NetWork 20K x 7	4835 122 97051	-
RA305	Resistor NetWork 10K x 4	4835 111 97001	-
CRT BOARD			
# R8	15K 5% 3W Mtl Flm	4835 116 67018	3W315
# R9	15K 5% 3W Mtl Flm	4835 116 67018	3W315
# R10	15K 5% 3W Mtl Flm	4835 116 67018	3W315
# R11	100 5% 1/2W Mtl Flm	4835 110 67191	HW110
# For SAFETY use only equivalent replacement part.			

RESISTORS continued			
Item No.	Rating	Mfr. Part No.	NTE Replacement
CUSTOMER SWITCH BOARD			
RA90	Resistor NetWork 4K, 2K, 1K	4835 111 97023	-
RA91	Resistor NetWork 80K, 40K, 20K, 10K	4835 111 97022	-

MAIN BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C209	J-16	C347	C-11	Q510	I-7	R285	A-14	R611	I-11
C211	J-17	C348	C-10	Q601	I-11	R288	B-16	R614	J-11
C213	J-17	C349	C-11	Q620	J-11	R292	B-18	R617	I-11
C216	J-17	C350	C-10	Q630	J-13	R293	C-19	R618	I-11
C218	H-18	C351	C-10	Q631	H-13	R303	B-17	R619	I-10
C219	H-16	C354	C-11	Q691	E-14	R306	D-12	R620	I-11
C221	J-14	C355	C-10	R206	K-16	R307	D-12	R621	J-11
C225	H-18	C357	C-11	R208	K-16	R310	C-12	R624	J-11
C226	J-16	C358	C-11	R211	J-17	R312	H-14	R625	I-16
C230	I-16	C362	J-19	R213	G-17	R316	C-11	R626	J-11
C253	C-18	C371	C-11	R214	F-17	R319	H-14	R627	I-14
C254	A-18	C372	C-11	R216	G-16	R321	H-15	R628	H-15
C271	C-16	C373	C-11	R217	G-16	R323	D-11	R629	K-12
C285	B-16	C385	C-11	R218	H-16	R325	B-11	R630	M-19
C286	A-18	C386	C-11	R219	H-17	R328	K-19	R631	J-13
C296	D-19	C387	C-10	R220	I-16	R329	K-19	R632	J-12
C305	C-11	C389	C-10	R221	J-14	R331	D-11	R634	J-12
C309	C-12	C518	M-18	R223	F-16	R357	E-14	R635	M-19
C314	D-11	C519	J-7	R224	K-18	R366	J-19	R638	J-12
C316	C-12	C603	H-11	R227	B-17	R374	C-12	R639	M-19
C318	D-11	C606	G-13	R229	J-17	R381	H-14	R643	J-11
C319	C-10	C608	I-11	R231	C-18	R405	A-12	R645	J-11
C320	C-11	C612	G-12	R232	E-16	R435	C-8	R671	M-20
C321	C-11	C617	H-11	R233	A-18	R510	J-7	R672	I-16
C322	A-14	C622	J-12	R234	F-15	R513	M-17	R673	K-16
C326	C-12	C623	J-11	R235	F-15	R517	J-7	R674	I-13
C328	C-10	C624	J-11	R244	H-19	R518	J-15	R675	I-14
C329	C-10	C625	J-11	R246	H-18	R520	I-7	R677	M-19
C331	C-10	C631	K-12	R247	H-18	R548	K-13	R681	K-16
C337	C-12	C633	J-12	R253	H-18	R551	J-10	R684	H-12
C338	C-12	C367	K-12	R256	G-19	R554	L-10	R685	H-13
C339	C-12	C642	I-15	R262	C-15	R556	M-12	R688	K-15
C340	C-12	C662	I-14	R264	C-16	R558	M-12	R691	G-15
C341	C-12	C666	J-16	R271	A-18	R559	L-12	R693	E-15
C342	C-12	C667	I-16	R278	C-18	R565	M-10	R696	H-15
C343	C-12	C668	J-16	R280	C-17	R567	L-9		
C344	C-12	C697	I-16	R282	B-19	R609	H-13		
C345	C-11	Q248	H-19	R283	B-19	R610	H-11		

STEREO/SAP/DBX BOARD - TOP VIEW



STEREO/SAP/DBX BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C700	B-10	C707	C-10	C714	F-4	J701	G-14	R732	F-8
C701	E-10	C708	B-3	C715	B-13	R700	G-11	R733	F-2
C702	E-12	C709	F-10	C716	F-11	R701	D-4		
C703	D-13	C711	D-10	IC700	B-5	R702	F-2		
C704	C-13	C712	C-9	IC701	B-12	R730	D-8		
C706	F-12	C713	B-9	J700	G-3	R731	E-4		

PARTS LIST

Important Parts Information

- The parts listed here are those not usually available from a well-stocked supply cabinet or bin.
- Where items may be replaced with equivalent parts, several alternates are shown from participating vendors.
- On the parts lists, safety items are marked with a # to remind you that only exact replacements are recommended for these items.
- When ordering parts, state the model number, part number, and description.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

Or consult the Sams *Annual Index* for the address of the original equipment manufacturer.

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors. Consult the Sams *Annual Index* for their current address.

- B&K Precision
- Custom Components Corporation (Chek-A-Color)
- EVG / Russell Industries, Inc.
- NTE Electronics, Inc. (NTE)
- Philips ECG Company (ECG)
- PTS Electronics Corporation (PTS)
- Quam-Nichols Co. (Quam)
- Sencore, Inc.
- Thomson Consumer Electronics, Inc. (SK, TCE)

SEMICONDUCTORS

(Select replacement for best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
D214 - D215	-	4835-130-37048	NTE519	ECG519	SK3100
D270 - D271	-	4835-130-37048	NTE519	ECG519	SK3100
D304 - D305	-	4835-130-37048	NTE519	ECG519	SK3100
D390	-	4835-130-37048	NTE519	ECG519	SK3100
D402 - D405	BYW95C	4835-130-37059	NTE580	ECG580	SK5036
# D408	-	4835-130-37052	NTE580	ECG580	SK5036
D418	-	4835-130-37048	NTE519	ECG519	SK3100
D428	-	4835-130-37052	NTE580	ECG580	SK5036
D429	-	4835-130-37058	NTE587	ECG587	SK9937
D430A	BYV29-500	4835-130-37563	NTE598	ECG598	SK9859
	-	4835-130-37061	NTE580	ECG580	SK5036
D442, 45	-	4835-130-37052	NTE580	ECG580	SK5036
D448	-	4835-130-37059	NTE580	ECG580	SK5036
D451	-	4835-130-37052	NTE580	ECG580	SK5036
D458	-	4835-130-37058	NTE587	ECG587	SK9937
D509	-	4835-130-37094	NTE580	ECG580	SK5036
D512	-	4835-130-37048	NTE519	ECG519	SK3100
# D530	-	4835-130-37058	NTE587	ECG587	SK9937
D550	-	4835-130-37094	NTE580	ECG580	SK5036
D551	-	4835-130-37048	NTE519	ECG519	SK3100
D630	-	4835-130-37048	NTE519	ECG519	SK3100
D650	-	4835-130-37058	NTE587	ECG587	SK9937
D659	-	4835-130-37048	NTE519	ECG519	SK3100
D661	-	4835-130-37053	NTE552	ECG552	SK9000
IC200	LA7670	4835-209-87837	-	-	-
IC260	-	4835-209-47008	-	-	-
IC261	TDA1524A	4835-209-17148	NTE1803	ECG1803	SK9884
IC280,90	TDA1013B	4835-209-87835	NTE1852	ECG1852	SK10151
IC350	-	4835-209-47112	-	-	-
IC351	X2402P	4835-209-47113	-	-	-
# IC352	CNX35U	4835-130-97005	NTE3041	ECG3041	SK2041
# IC400	HP4510	4835-130-97006	NTE3092	ECG3092	SK9770
IC401	-	612664-2	-	-	-
	-	4835-209-87834	-	-	-
# IC402	CNX35U	4835-130-97005	NTE3041	ECG3041	SK2041
IC403	-	612771-1	-	-	-
	-	4835-209-87712	-	-	-
IC550	TDA8174	4835-209-87091	NTE1857	ECG1857	SK10156
# IC570	SC78130U	4835-209-87838	-	-	-
IC601	LA7222	4835-209-87089	-	-	-
Q210	BC548B	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q215	-	4835-130-47049	NTE159	ECG159	SK3466
Q248	-	4835-130-47112	-	-	-
Q280	-	4835-130-7058	-	-	-
Q326	BC548B	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q408	-	4835-130-47049	NTE159	ECG159	SK3466
Q420	MTH8N45	4835-130-47768	-	-	-
Q450	-	4835-130-47063	-	-	-

- # For SAFETY use only equivalent replacement part.
- * Lead configuration may vary from original.

SEMICONDUCTORS continued

(Select replacement for best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
Q500	BC548B	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q501	-	4835-130-47705	-	-	-
Q502	-	4835-130-47771	-	-	-
Q510	-	4835-130-47086	NTE2406	ECG2406	SK10097
Q512	-	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q601	-	4835-130-47086	NTE2406	ECG2406	SK10097
Q611	-	4835-130-47112	-	-	-
Q612	-	4835-130-47173	-	-	-
Q620	-	4835-130-47112	-	-	-
Q630 - Q631	-	4835-130-47086	NTE2406	ECG2406	SK10097
Q650 - Q652	BC548B	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q660	-	4835-130-47049	NTE159	ECG159	SK3466
Q661	-	4835-130-47051	NTE123AP	ECG123AP	SK3854
Q690	BC548B	4835-130-47055	NTE123AP*	ECG123AP*	SK3854*
Q691	-	4835-130-47112	-	-	-
Z261	-	4835-130-37067	NTE139A	ECG139A	SK9V1
Z361	-	4835-130-37046	NTE5036A	ECG5036A	SK33A
Z569	-	4835-130-37547	-	-	-
CRT SOCKET MODULE					
Q1,2,3	2SC3789D	4835-130-47769	NTE157	ECG157	SK3747
CUSTOMER SWITCH MODULE					
D90	-	4835-130-37516	-	-	-
D91	-	4835-130-37541	-	-	-
IR90	-	4835-218-27004	-	-	-
PIP MODULE					
D1 - D2	-	4835-130-37066	-	-	-
IC1	-	4835-209-17339	-	-	-
IC2	M52692SP	-	-	-	-
IC3	FCB61C65L-70P	4836-209-87531	-	-	-
IC4	74HCU04A	-	-	-	-
Q1	-	4835-130-47065	NTE2406	ECG2406	SK10097
STEREO/SAP/DBX MODULE					
Q700 - Q702	-	4835-130-47086	NTE2406	ECG2406	SK10097
IC700	CXA1124AS	4835-209-87836	-	-	-
IC701	HEF4053BP	4835-209-17033	NTE4053B	ECG4053B	SK4053B
Z700	-	4835-130-37562	-	-	-

* Lead configuration may vary from original.