

CABINET-REAR VIEW

## DISASSEMBLY INSTRUCTIONS

### CHASSIS REMOVAL

Remove thirteen screws holding cabinet back and remove back. Disconnect HV anode, CRT socket, deflection yoke connector, degaussing coil connector, speaker connectors, ground leads and all required cabling. Disconnect antenna connector. Remove two screws holding Stereo broadcast board to cabinet bottom and remove board from cabinet. Remove two screws holding tuner assembly to cabinet bottom and remove assembly from cabinet. Slide main board from out of cabinet bottom. Remote receiver may be removed at this point of disassembly. Remove one screw holding remote receiver to cabinet front and remove assembly from cabinet. Remove two screws holding

Secondary control board to cabinet front and remove board from cabinet. Remove two screws holding Stereo control board to cabinet front and remove board from cabinet. Remove two screws holding Keyboard assembly to cabinet front and remove from cabinet. Remove screws holding Indicator board to cabinet front and remove board from cabinet.

### CRT REMOVAL

Follow "Chassis Removal" procedure and lay set facedown on a soft protective surface. Loosen and remove CRT neck assemblies. Remove six screws nuts holding CRT to cabinet front and lift CRT out of cabinet. **DO NOT LIFT CRT BY NECK.**

## SERVICING IN THE FIELD

### CRT IMPLSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

### FUSE DEVICES

A 5amp fuse is used for AC line protection. (See photo, Cabinet - Rear View.)

### VHF/UHF TUNER

See Miscellaneous Adjustments.

### CHANNEL TUNING

Channel Up and Down buttons are provided for channel scanning with ten numbered buttons (on remote transmitter) are provided for one or two-digit entry direct access channel selection. Fine tuning is automatic.

### WIDTH

The width may be varied by adjusting the width control. (See photo, Cabinet - Rear View.)

### FOCUS

The focus may be varied by a Focus Control. (See photo, Cabinet - Rear View.)

### AGC

The AGC may be varied by an RF AGC control. (See photo, Cabinet - Rear View.)

SET 2622 FOLDER 2

**SAMS**

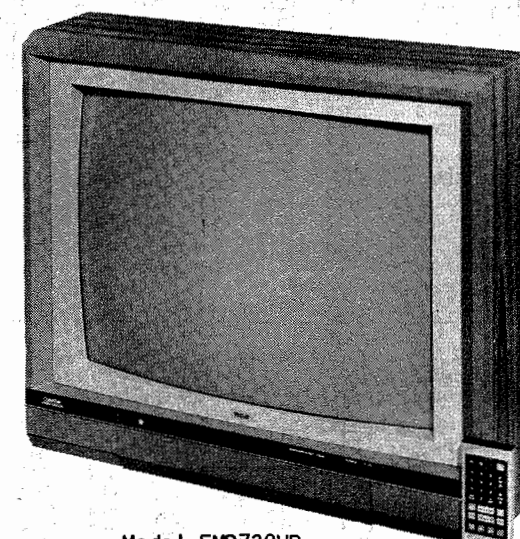
**PHOTOFACT®**

For Supplier Address See PHOTOFACT Index

RCA  
CHASSIS CTC130B

### MODEL

FMR550WR  
FMR555WR  
FMR565WR  
FMR566TR  
FMR720WR  
GMR851PR  
GMR855CR,HR  
GMR859PR  
GMR860TR  
GMR868PR



Model FMR720WR

## SAFETY PRECAUTIONS

See Page 1

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**SAMS**

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The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co. 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. by the manufacturers of the particular type of replacement part listed.

88PD-01556

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DATE 12-88

SET 2622 FOLDER 2

RCA  
CHASSIS CTC130B

SET 2622 FOLDER 2

SAFETY PRECAUTIONS

SERVICE WARNING

Service work should be performed only by qualified service technicians who are familiar with safety checks and guide lines.

- 1. For continued safety, no modification of any circuit should be attempted unless recommended by manufacturer.
- 2. Disconnect power source before replacing parts as some parts may be electrostatic sensitive.
- 3. Use an isolation transformer between the line cord and power receptacle, when servicing chassis.

SERVICING HIGH VOLTAGE AND PICTURE TUBE

When servicing the High Voltage circuits, extreme caution should be used.

- 1. Discharge static High Voltage by connecting a 10 kohms resistor in series with a test lead between chassis and anode lead of picture tube.
- 2. Wear shatter-proof eye protection (goggles) when handling the picture tube in case of implosion.
- 3. DO NOT lift picture tube by the neck.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Service personnel should be aware of the procedures and instructions covering x-ray radiation. The only potential source of x-ray in present day solid state receivers and monitors is the picture tube.

- 1. It is only when High Voltage is excessive that x-ray radiation is capable of being emitted from shell of picture tube. Be sure the High Voltage is set at specified level.
- 2. An accurate High Voltage meter should be available at all times. Meter calibration should be checked periodically.
- 3. High Voltage should be kept at rated value - NO HIGHER. Higher voltages may cause x-ray radiation or failure of other associated components. DO NOT depend on protection circuit to keep voltages at rated value.
- 4. Every time a chassis is serviced, High Voltage should be checked at various brightness levels to be sure it is regulating properly.
- 5. While troubleshooting a set with excessive High Voltage, avoid being close to picture tube. DO NOT operate longer than it is necessary to locate the cause of excessive High Voltage. Use a variable AC transformer to regulate voltage.
- 6. Many components, electrical and mechanical, in present chassis have safety related characteristics which are not evident with visual inspection. When these components are known, they are identified with a # on the schematic and in the parts list. When replacing these components, for SAFETY, use only an equivalent replacement part.

SAFETY CHECKS-FIRE AND SHOCK HAZARD

Cold Leakage Checks (Sets with isolated ground.)

- 1. Unplug the AC cord and connect a jumper across the two prongs on the plug.
- 2. Turn on power switch.
- 3. Measure the resistance, with an Ohm meter, between the jumpered AC plug and any exposed metal cabinet parts on the set such as: antenna screw heads, control shafts, handle brackets. Exposed metal parts that have a return path should measure between 200 kohms and 5 megohm. Parts without a return path must measure infinity.

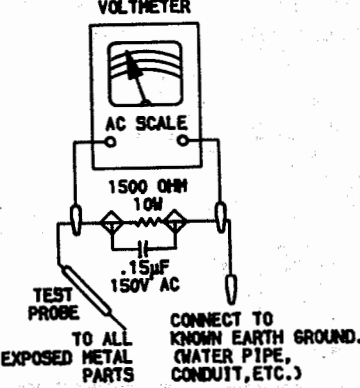
Leakage Current Hot Check

- 1. Plug the AC cord directly into AC outlet. DO NOT use an isolation transformer.
- 2. Connect a 1500 Ohm 10 watt resistor, in parallel with a .15µF 150V AC capacitor, between any exposed metal parts on the set and a good earth ground such as a water pipe. (See Figure below.)
- 3. Using an AC volt meter, with 1000 Ohms per volt or more sensitivity, measure the voltage across the resistor. Check each exposed part and measure voltage at each point.
- 4. Reverse the AC plug and repeat voltage measurement at each point.
- 5. The voltage at any point should not exceed .75 volts RMS. This corresponds to .5 milliamps AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected.

GENERAL GUIDE LINES

A final SAFETY check before returning the set to customer.

- 1. Check area repaired for poorly soldered or de-soldered connections. Check entire circuit board surface for solder splashes.
- 2. Check interboard 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.



TROUBLESHOOTING AID

Note: Waveforms taken with triggered scope, Keyed-Rainbow generator. Schematic voltages measured with digital meter, no signal. Controls adjusted for normal operation.

PICTURE or SOUND

NO PIC, NO SOUND, NO RASTER: Check AC power supply and sources generated from Horizontal Output Transformer (T402). Refer to "Troubleshooting" Power Supply and Horizontal circuits.

NO PIC, NO SOUND, HAS RASTER: Check IF-AGC and source voltages from Horizontal Output Transformer (T402). Refer to "Troubleshooting" IF-AGC and Horizontal circuits.

NO PIC, HAS SOUND, NO RASTER: Check Horizontal Output Transformer (T402) sources and Video circuit. Refer to "Troubleshooting" Horizontal and Video circuits.

NO PIC, HAS SOUND, HAS RASTER: Refer to "Troubleshooting" Video circuit.

HAS PIC, NO SOUND: Refer to "Troubleshooting" Audio circuit.

OVERLOADED PICTURE: Refer to "Troubleshooting" IF-AGC circuit.

LOW OR EXCESSIVE BRIGHTNESS: Check Video and Luminance circuits. Refer to "Troubleshooting" Video circuit.

SWEEP

NO RASTER, HAS SOUND: Check HV rectifier, Part of Horizontal Output Transformer (T402). Refer to "Troubleshooting" Horizontal circuit.

NO RASTER, NO SOUND: Refer to "Troubleshooting" Horizontal circuit.

NO VERT DEFLECTION: Refer to "Troubleshooting" Vertical circuit.

POOR VERT LIN OR FOLDOVER: Refer to "Troubleshooting" Vertical circuit.

POOR HORIZ LIN OR FOLDOVER: Refer to "Troubleshooting" Horizontal circuit.

NARROW PICTURE: Refer to "Troubleshooting" Horizontal circuit.

VERT OFF FREQUENCY: Refer to "Troubleshooting" Vertical circuit.

HORIZ OFF FREQUENCY: Refer to "Troubleshooting" Horizontal circuit.

SYNC

NO VERT/HORIZ SYNC: Refer to "Troubleshooting" Sync circuit.

RASTER

YELLOW (NO BLUE): Check Chroma and Blue Output circuits. Refer to "Troubleshooting" Raster circuit.

CYAN (NO RED): Check Chroma and Red Output circuits. Refer to "Troubleshooting" Raster circuit.

MAGENTA (NO GREEN): Check Chroma and Green Output circuits. Refer to "Troubleshooting" Raster circuit.

COLOR (B/W operating normally)

NO COLOR: Refer to "Troubleshooting" Chroma circuit.

WEAK COLOR: Refer to "Troubleshooting" Chroma circuit.

NO COLOR SYNC: Refer to "Troubleshooting" Chroma circuit.

NO GREEN: Check Chroma and Green Output circuits. Refer to "Troubleshooting" Raster circuit.

NO BLUE: Check Chroma and Blue Output circuits. Refer to "Troubleshooting" Raster circuit.

NO RED: Check Chroma and Red Output circuits. Refer to "Troubleshooting" Raster circuit.

INCORRECT HUE (TINT): Refer to "Troubleshooting" Chroma circuit.

## TEST JIG HOOKUP

FUNCTION	Chek-A-Color ADAPTER NO.
CRT YOKE YOKE SETTING	B243 D4142 YPI Focus Tap

## TROUBLESHOOTING

## POWER SUPPLY

Check the AC Fuse (F101). If Fuse F101 is open, check Bridge Rectifier Diodes (CR101 thru CR104), Capacitors C101 thru C104, C110, Electrolytic C105, Resistor R120, Horizontal Output Transistor (Q402) and Regulator SCR101. If F101 is good, apply 120V AC and check for 150V at the cathode of Diode CR103. If this voltage is missing, check Line Filter L101, Coil L105, and Resistor R120. If 150V is present, depress the power button and check for 127V at TP127V (REGB2). If 127V is not present at TP127V (REGB2) check the voltages and components associated with pins 4, 5, 7, 9, 10, and 11 of Deflection IC (U401), On-Off Transistor (Q601), Q402 and X-Ray/Over Voltage Protect SCR (SCR401). If the proper voltage is present at TP127V (REGB2) refer to the "Horizontal" section of this Troubleshooting guide. If the voltage at TP127V (REGB2) is 0V and the Voltage at TP106 is 0.0V, the set may be in shutdown. Refer to the "Horizontal" and "High Voltage Shutdown" sections of this Troubleshooting guide.

## HORIZONTAL

Determine if the horizontal or power supply circuits are in shutdown, refer to the "Power Supply" and "High Voltage Shutdown" sections of this Troubleshooting guide. If the circuits are not in shutdown, depress the power switch and check for a horizontal drive signal at pin 16 of Deflection IC (U401) and a SCR drive signal at pin 7 of U401. If none of these signals are present, check the voltages, waveforms and components associated with pins 1 thru 16 of U401. If the proper waveforms are present at pins 7 and 16 of U401, check the voltages, waveforms and components associated with Regulator SCR (SCR101), Horizontal Driver Transistor (Q401), Horizontal Output Transistor (Q402) and Horizontal Output Transformer (T402). Check Diodes CR106, CR107, CR109 and associated parts for defects. The high voltage rectifier is part of Transformer T402 and if defective will affect the operation of the horizontal circuits. If the horizontal oscillator is off frequency, check the voltages, waveforms and components associated with pins 4 and 5 of U401. Horizontal linearity or foldover problems may be caused by Capacitors C431 thru C436 being defective.

## HIGH VOLTAGE SHUTDOWN

The high voltage is monitored by Diode CR409 rectifying pulses from the Horizontal Output Transformer (T402) and applying the rectified

P401	P401	P501	P501
PIN 1	PIN 2	PIN 1	PIN 2
RED	BLUE	GREEN	YELLOW

(P.C. Board)

voltage to the cathode of Zener Diode CR406. Should the high voltage increase, the voltage at the cathode of Diode CR406 will also increase and trigger CR406 and SCR401 into conduction. This action takes the B+ voltage of pins 4 and 5 of Deflection IC (U401) near 0V, which shuts down the power supply and the horizontal circuits. To troubleshoot, disconnect Diode CR408 from the circuit, disconnect the high voltage lead and use a variable power supply for AC voltage. Start at 70V AC and troubleshoot to locate the defect. Replace CR408 in the circuit.

NOTE: Care should be taken in defeating the high voltage shutdown circuit as this may cause excessive X-Ray radiation and damage to the CRT and Transformer T401. Monitor the high voltage and troubleshoot.

Voltage taken in shutdown.

SCR401		
A	K	G
.9V	.0V	.0V

## HIGH VOLTAGE SHUTDOWN TEST

Apply 120V AC, turn set On, set all customer controls for normal operation. Momentarily short XT1 to XT2. Set should lose Raster and Sound. If set does not lose Raster and Sound the shutdown circuit should be repaired. To resume normal operation, remove AC Power and wait 30 seconds then turn set On.

## AUDIO

Select an active TV channel and check for an audio waveform at pin 7 of IC (U200). If there is no audio, check the voltages, waveforms and components associated with IF/AFT IC (U100), RF Amp Transistor (Q101) and IC U200. If an audio waveform is present at pin 7 of U200, select a station that is transmitting Stereo signal and check for an audio waveform at pins 8 and 16 and .67V at pin 29 of MPX/Decoder IC (U300). If the waveforms and the proper voltages are missing, check the voltages, waveforms and components associated with pins 8, 15, 16, and 18 thru 29 of U300. If the waveforms are present and the proper voltage is missing at pin 29, check the voltages, waveforms and components associated with pins 21 thru 29 of U300. If the audio waveforms are present at pins 8 and 16 and the proper voltage is present at pin 29 of U300, check for an audio waveform at pins 15 and 16 of DBX Processor IC (U400). If there is no

## TROUBLESHOOTING (Continued)

audio, check the voltages, waveforms and components associated with IC U400. If the proper waveforms are present at pins 15 and 16 of U400, select stereo mode and check for audio at pins 13 and 14 of U300. If there is no audio, check the voltages, waveforms and components associated with pins 9 thru 14 and 17 of U300 and ICs (U600), and (U700). Select a station that is transmitting a SAP signal, select SAP mode and check SAP audio at pins 13 and 14 and .67V at pin 30 of U300. If there is no audio and the voltage is incorrect, check the voltages, waveforms and components associated with pins 1 thru 7 and 30 of U300. If there is audio at pins 13 and 14 of U300 in Mono/Stereo/Sap, check for audio in either mode at pin 7 of Audio Power Amp, ICs (U2 and U3) on Stereo Power Amp Board. If these waveforms are missing, check the voltages, waveforms and components associated with Audio Control IC (U1) on Stereo Power Amp Board. If audio is present at either IC (U2 and U3), check the voltages, waveforms and components associated with IC's (U2 and U3). Check the voltage at pin 8 of U1, it should measure .3V at mute and 5.6V at Maximum volume.

## VIDEO

Inject a video signal at M3 and check for video on the CRT. If video is present, troubleshoot the "IF-AGC" section of this Troubleshooting guide. If there is no video on the CRT, check for a video waveform at pins 20, 21 and 22 of Luma/Chroma IC (U701). If there is no video at pins 20, 21 and 22, of U701, check the voltages, waveforms and components associated with pins 7, 8, 20, 21, 22, 24, 25, 26, 27, 28 of U701, check the voltages, waveforms and components associated with Red, Green and Blue Bias Transistors (Q704, Q705, Q706) and Driver Transistors (Q5001). If the brightness is inadequate or cannot be controlled, check the voltages, waveforms and components associated with the Black Level Control and pin 24 of U701.

## IF-AGC

Inject a video IF signal at P301 and check for video on the CRT. If video is present, check the tuner, tuner control and tuner AFC circuits. If there is no video on the CRT, check for a video waveform at M3. If video is present at M3, refer to the "Video" section of this Troubleshooting guide. If there is no video at M3, apply AGC bias to TP307. If video is now present at M3, check the voltages, waveforms and components associated with pins 3, 6 and 14 of IF Processor IC (U301). If there is still no video at M3, check the voltages, waveforms and components associated with pins 1, 4, 5, 7 thru 11, 12 and 16 of U301, IF Preamp Transistor (Q301) and Video Amp Transistors (Q303, Q304). A defective AGC circuit can cause an overloaded picture, excessive snow or loss of audio and video. See the AGC Voltage Chart for AGC voltages with signal.

AGC Voltage Chart	
U301	
Pin 3	5.9V
Pin 6	5.6V
Pin 14	7.9V

## VERTICAL

If there is no vertical sweep, check the voltages on the Vertical Transistors (Q501, Q502). If any of the voltages are missing or questionable, check the Transistor and its associated components. Inject a vertical signal at pin 11 of the Deflection IC (U401). If vertical deflection is now present, check the voltages, waveforms and components associated with pin 18 of U401. If there is no vertical sweep, check the Deflection Yoke (DY1), Pin Amp Transistor (Q1) and Pin Driver Transistor (Q2). Vertical linearity or foldover problems may be caused by the vertical feedback and bias circuits. Check Electrolytics C506, C508, C509, C505 and associated components for defects.

## SYNC

Check for vertical and horizontal sync pulses at TP302. If missing, check the voltages, waveforms and components associated with Sync Transistor (Q305). If vertical and horizontal sync pulses are present at TP302, check for the proper vertical waveforms at pin 18 of U401 and the proper horizontal waveforms at pin 16 of U401.

## RASTER

Check the CRT and CRT voltages. If there is no red, check the voltages and components associated with pin 21 of Chroma Luminance IC (U701), Red Bias Transistor (Q704) and Red Output Transistor (Q1). If there is no green, check the voltages and components associated with pin 20 of IC U701, Green Bias Transistor (Q705) and Green Output Transistor (Q2). If there is no blue, check the voltages and components associated with pin 22 of IC U701, Blue Bias Transistor (Q706) and Blue Output Transistor (Q3). If the raster has a pin cushion shape, check the voltages, waveforms and components associated with Pin Amp Transistor (Q1) and Pin Driver Transistor (Q2). If the raster has height or width problems, refer to the "Vertical", "Horizontal" and "Power Supply" section of this Troubleshooting guide.

## CHROMA

Check for a chroma waveform at TP801. If the waveform is missing, check the components associated with TP801. If a chroma waveform is present at TP801, check for the proper chroma waveforms at pins 20, 21 and 22 of Luma/Chroma IC (U701). If these waveforms are missing, check the voltages, waveforms and components associated with pins 1 thru 19 of U701. Check the 3.58MHz oscillator at pins 11, 12 and 13 of U701. Check the voltage and components associated with the color control and pin 2 of U701. If there is no color sync, check the voltages, waveforms and components associated with pin 7 of U701. If there is inadequate tint range, check the voltages and components associated with pin 14 of U701. If the proper chroma waveforms are present at pins 20, 21 and 22 of U701, refer to the "Raster" section of this Troubleshooting guide.



TEST EQUIPMENT

Test Equipment listed by Manufacturer illustrates typical or equivalent equipment used by SAMS' Engineers to obtain measurements and is compatible with most types used by field service technicians.

Equipment	B & K Precision Equipment No.	Sencore Equipment No.	Notes
OSCILLOSCOPE	1560, 1564, 1541	SC61	
GENERATORS			
RGB	1249,1260		
MULTIBURST SIGNAL	1251,1260	VA62	
COLOR BAR	1211A,1249,1251,1260	VA62,CG25	
ANALOG VOM	277,111,116		
DIGITAL VOM	2830,2806	DVM37,DVM56,SC61	
FREQUENCY METER	1803,1805	FC71,SC61	
HI-VOLTAGE PROBE	HV-44	HP200	
VOM/DMM			
Accessory probes	PR-28(HV)		
ISOLATION TRANSFORMER	TR110,1604,1653,1655	PR57	
CAPACITANCE ANALYZER	820,810,830	LC53,LC75,LC76,LC77	
CRT ANALYZER	467,470	CR70	
TEMPERATURE PROBE	TP-28,TP-30		
AC LEAKAGE TESTER	1655	PR57	
LOGIC PROBE	DP51,DP21		
LOGIC PULSER	DP101,DP31		
INDUCTANCE ANALYZER	875	LC53,LC75,LC76,LC77	
FLYBACK YOKE TESTER	875	LC53,VA62	
TV STEREO GENERATOR	2009	ST65,ST66	
FIELD STRENGTH METER		FS73,FS74	

TV ALIGNMENT INSTRUCTIONS

Use an Isolation transformer and observe power supply polarity. Maintain line voltage at 120V AC. Allow a 20-minute warm-up period for receiver and test equipment.  
Suggested Alignment Tools: GC ELECTRONICS  
L301, L303, L304, T301 .....9440

PRELIMINARY INSTRUCTIONS

Set the channel selector to the highest unused channel. Set scope sweep to external. Connect scope vertical input to scope vertical input on sweep/marker generator. Connect scope external horizontal input to scope horizontal input on sweep/marker generator. Ground test equipment to TV chassis unless specified otherwise. Use only enough generator output to provide a usable indication.  
Note: Response may vary slightly from that shown.  
T301 is factory set. Do not adjust.

VIDEO IF ALIGNMENT (SWEEP MARKER GENERATOR)

DIRECT PROBE FROM SWEEP/MARKER GENERATOR	SWEEP GENERATOR OUTPUT	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
To TP301	To IF Input (TP303)		47.25MHz	Adjust L301 for MINIMUM. See Figure 1.
To TP301			45.75MHz	Adjust L303 for Maximum. See Figure 1.

TV ALIGNMENT INSTRUCTIONS (Continued)

VIDEO IF ALIGNMENT (BAR SWEEP GENERATOR)

BAR SWEEP GENERATOR	SCOPE INPUT	REMARKS
To Antenna Terminals	To TP301	Perform Video IF Adjustments per SWEEP/MARKER GENERATOR Instructions above. See Figure 2.

AUTOMATIC FINE TUNING ALIGNMENT

Connect as explained in preliminary instructions unless specified otherwise. Connect a +5 bias to TP307. Adjust R332 (AFT Balance Control) for 5.5VDC at TP318 with no signal applied.

DIRECT PROBE FROM SWEEP/MARKER GENERATOR	SWEEP GENERATOR OUTPUT	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
To TP319	To TP303 (IF Input)	44.00MHz (10MHz Sweep)	45.75MHz	Adjust L304 to place 45.75MHz marker at crossover as shown. See Figure 3.

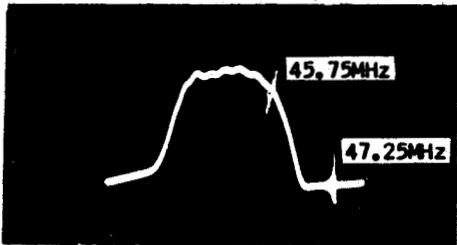


Figure 1



Figure 2

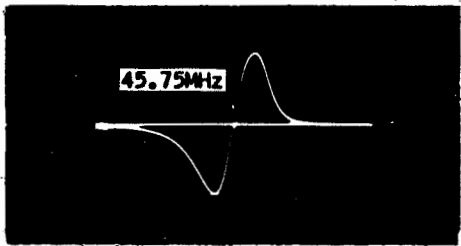
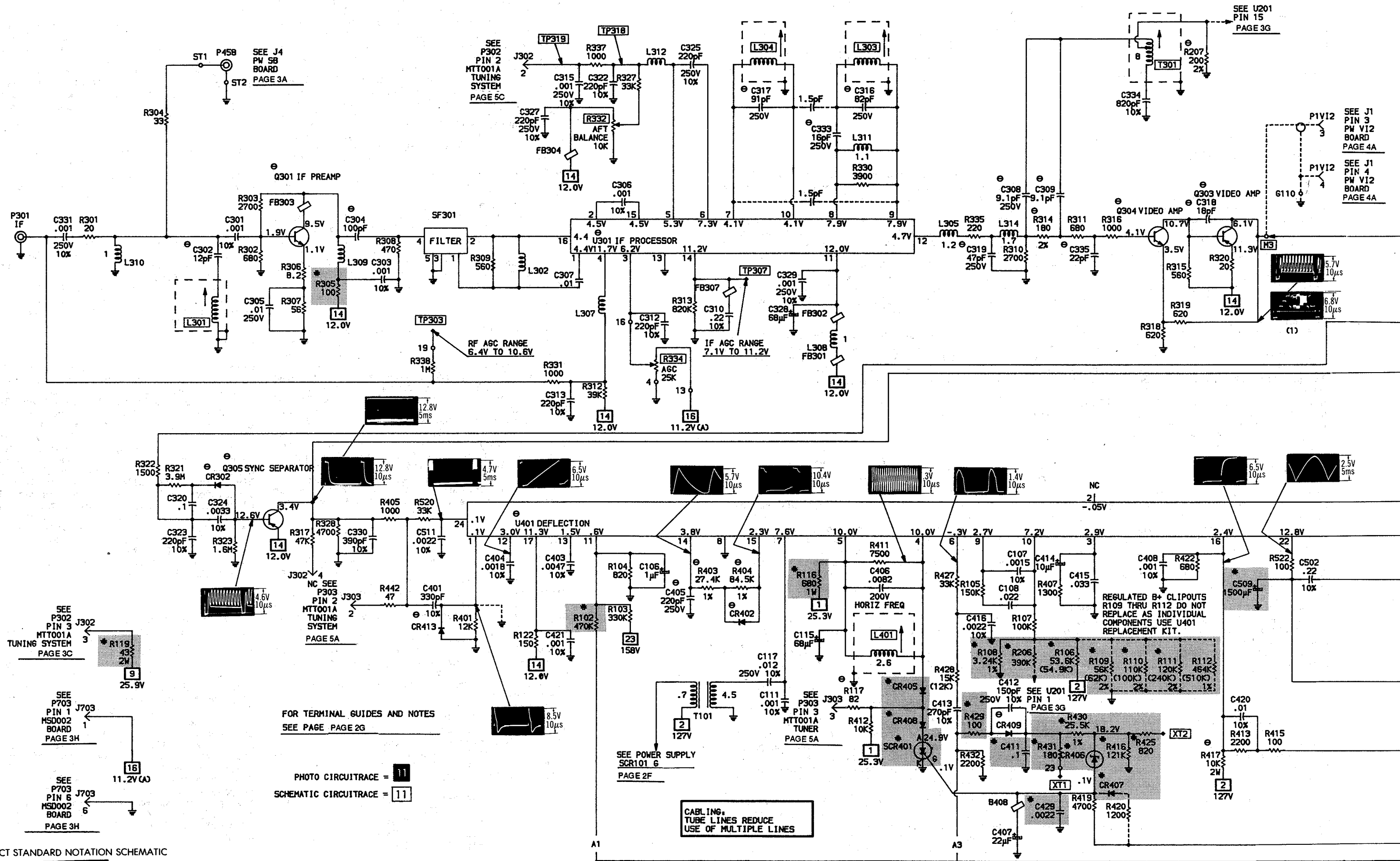


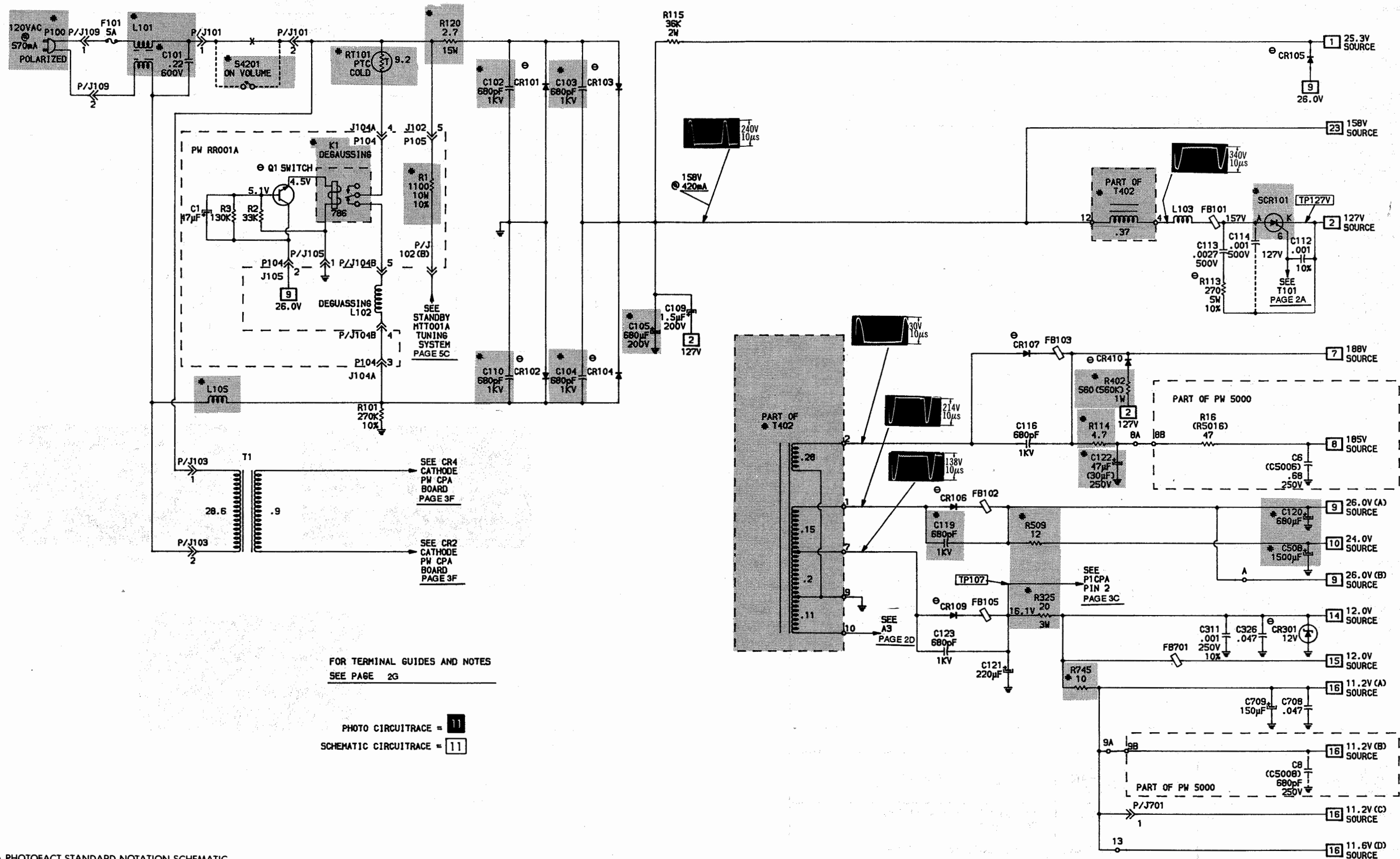
Figure 3

RCA  
CHASSIS CTC130B

A

B





A PHOTOFAC STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITRACE**  
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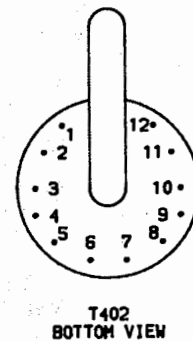
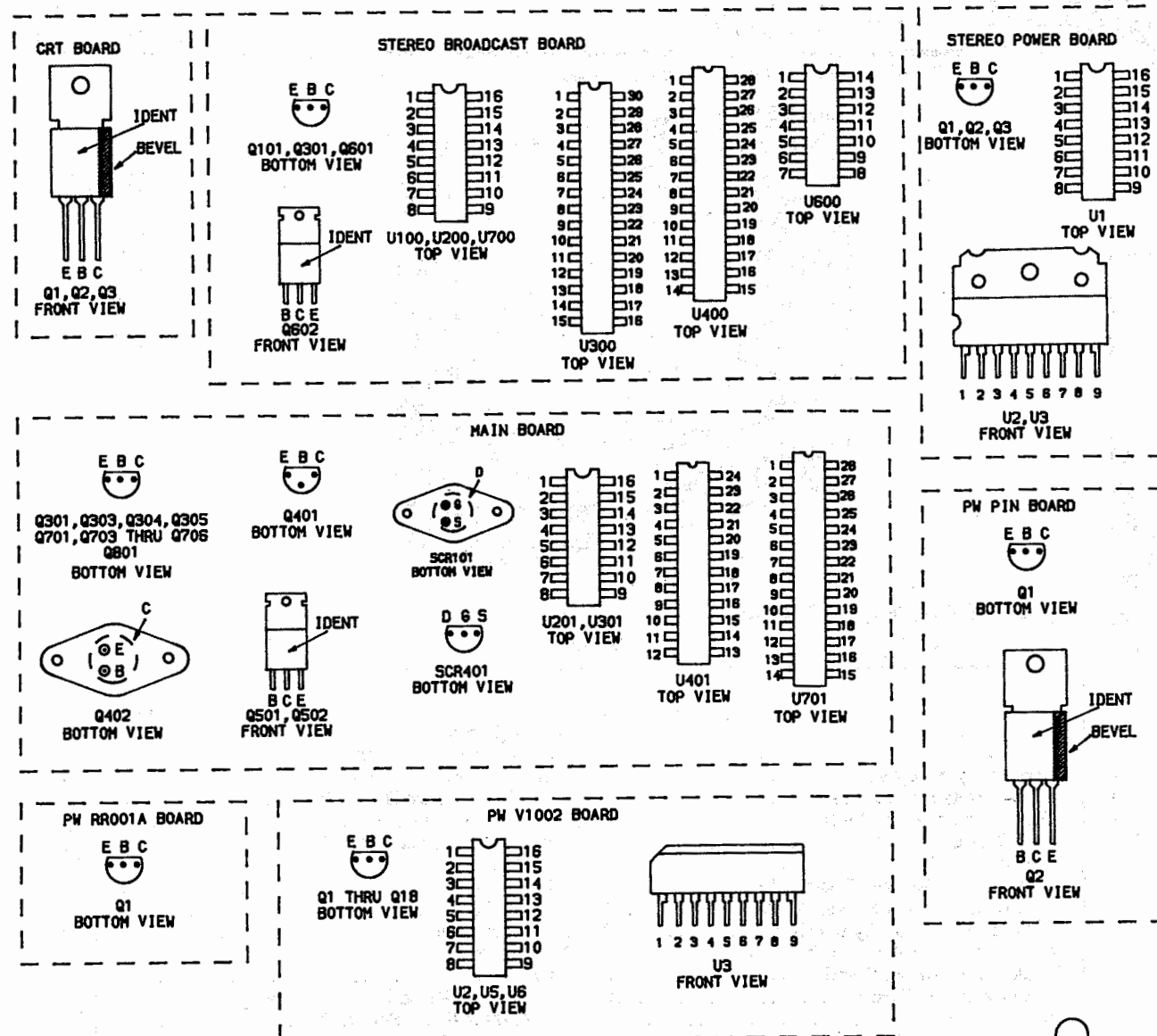
POWER SUPPLY

E

F

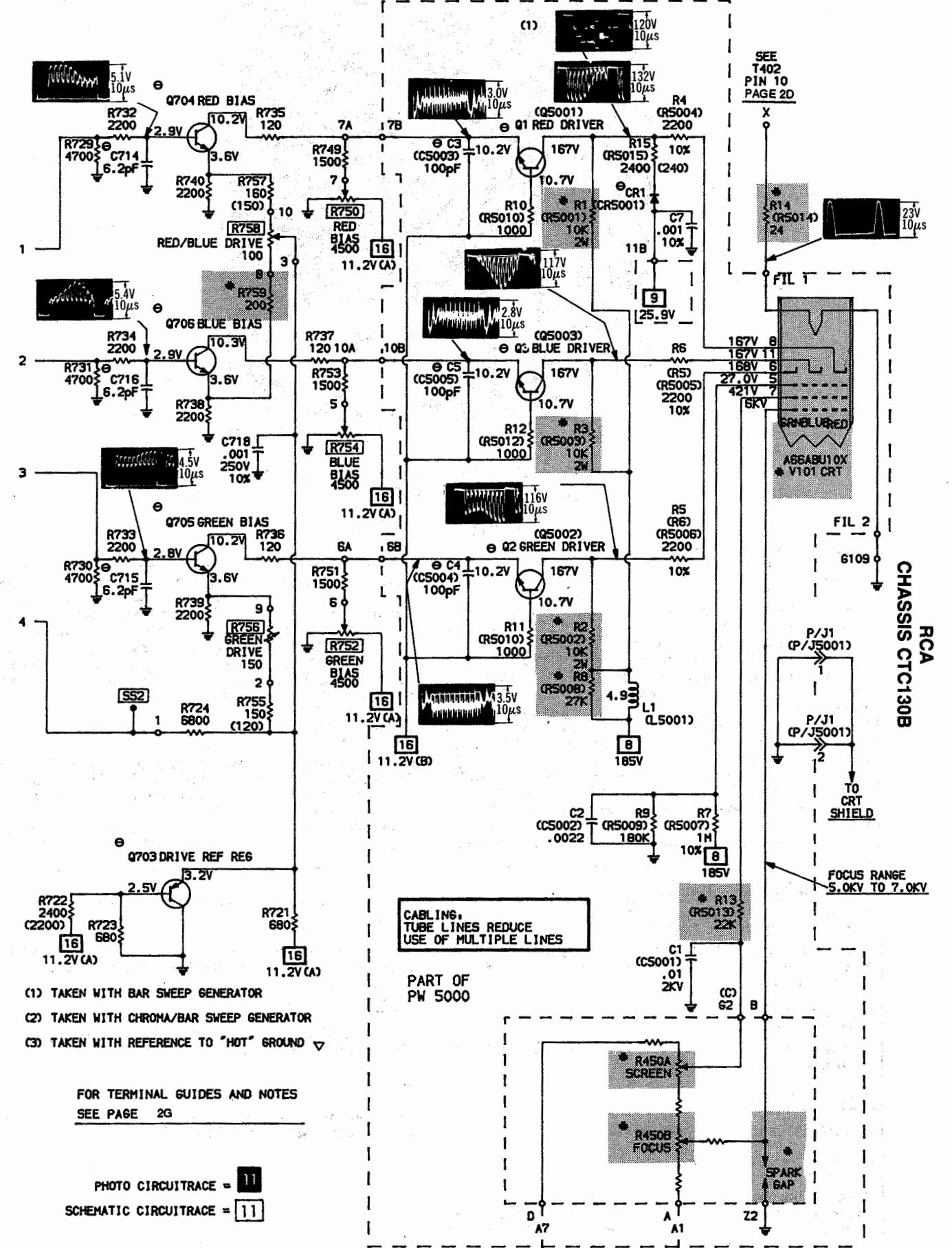


# TERMINAL GUIDES



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

- Circuitry not used in some versions
  - - - Circuitry used in some versions
  - o See parts list
  - \* 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/ad-justment instructions.  
Supply voltages 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% unless noted.  
Electrolytic capacitors are 50 volts or less, 20% unless noted.  
Resistors are 1/2W or less, 5% unless noted.  
Value in ( ) used in some versions.



A. PHOTOFACT STANDARD NOTATION SCHEMATIC

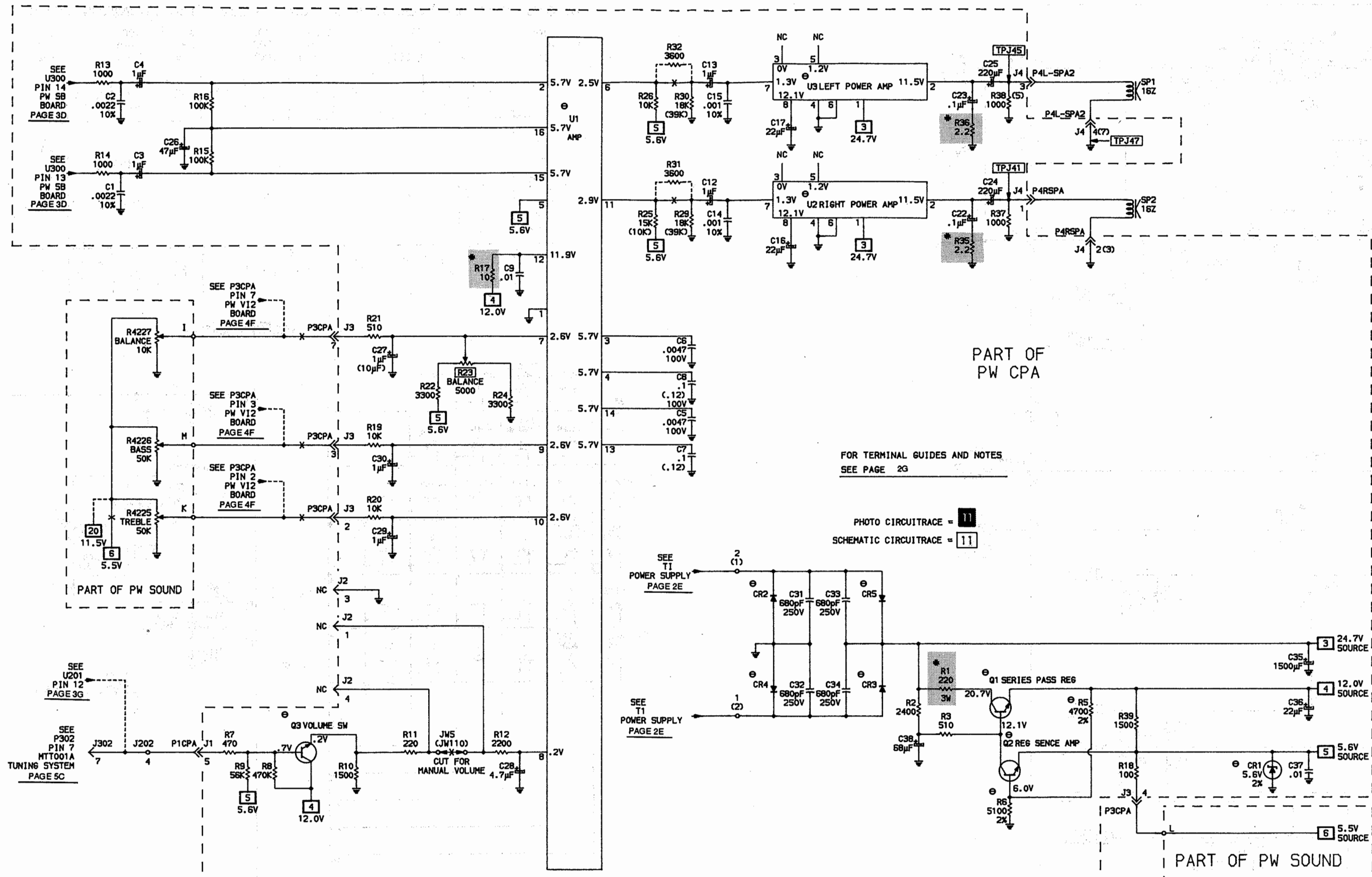
WITH CIRCUITRACE

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H SET 2622 FOLDER 2

CRT Page 2





A PHOTOFACT STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITRACE**

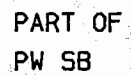
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STEREO POWER AMP

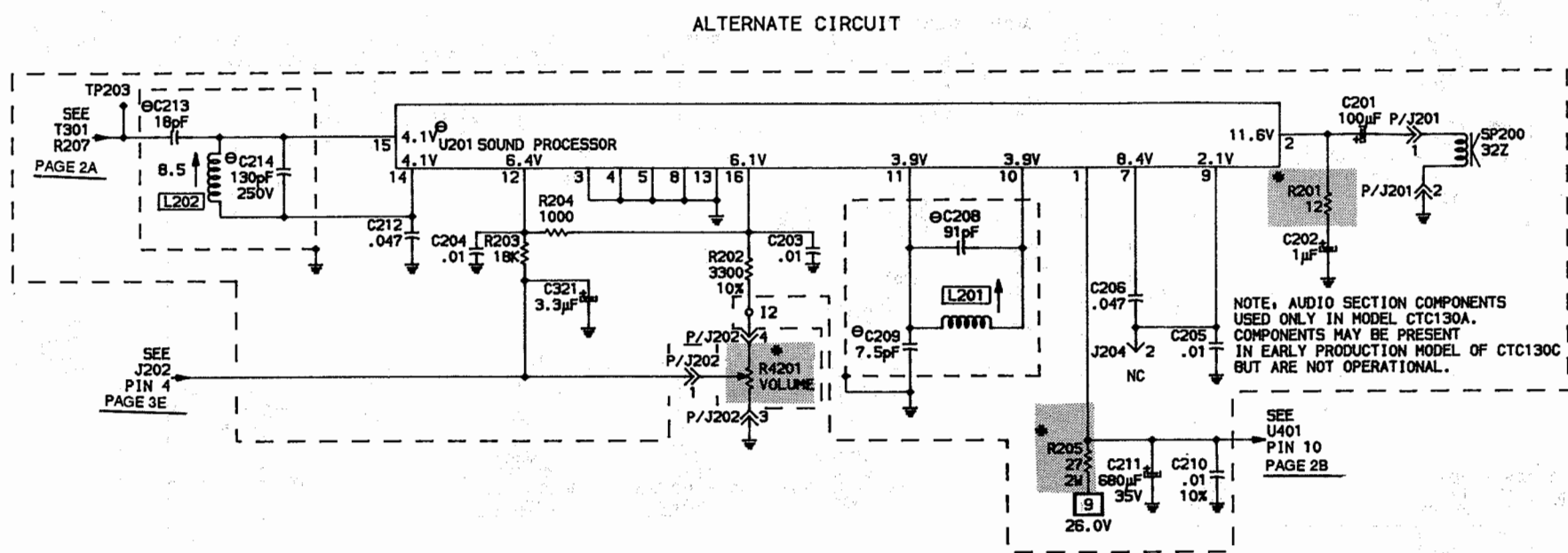
E

STEREO POWER AMP

F SET 2622 FOLDER 2



STEREO BROADCAST

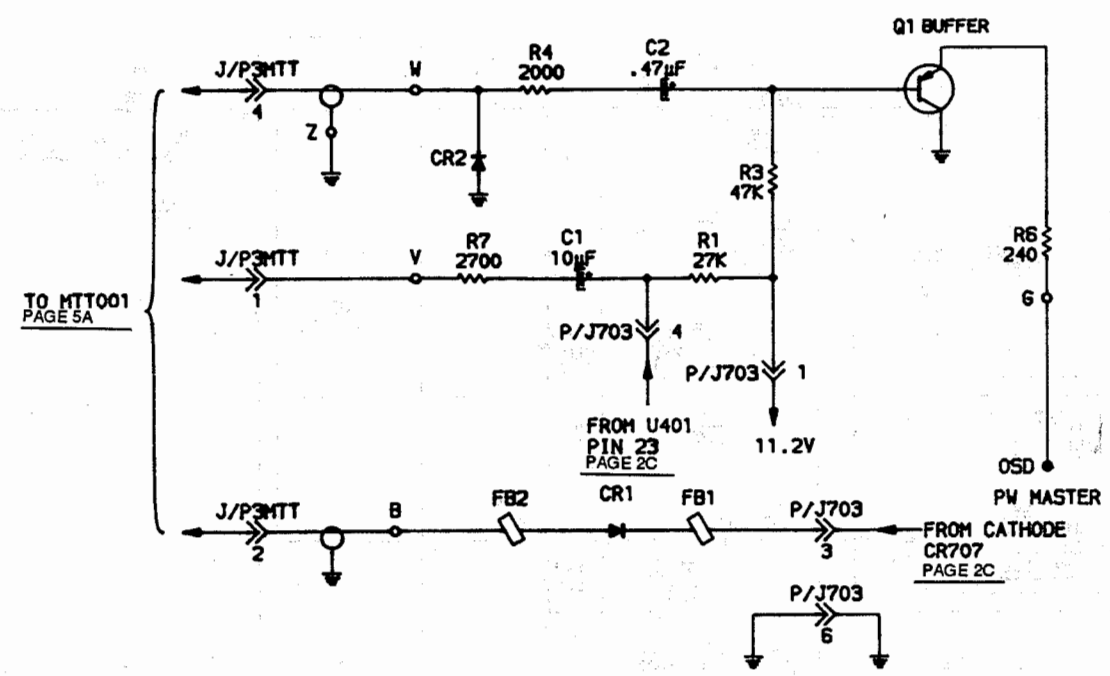


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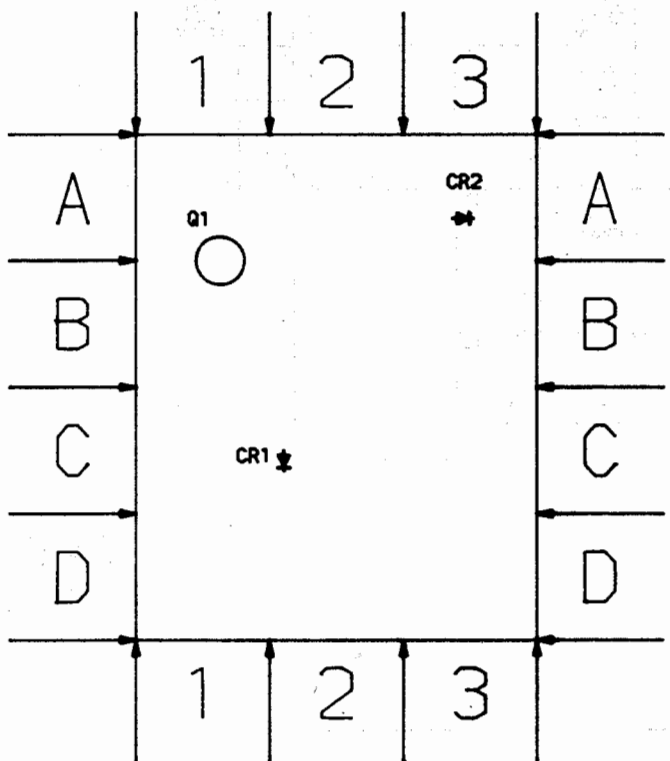
FOR TERMINAL GUIDES AND NOTES  
SEE PAGE 2G

PHOTO CIRCUITRACE = 11  
SCHEMATIC CIRCUITRACE = 11

SOUND PROCESSOR



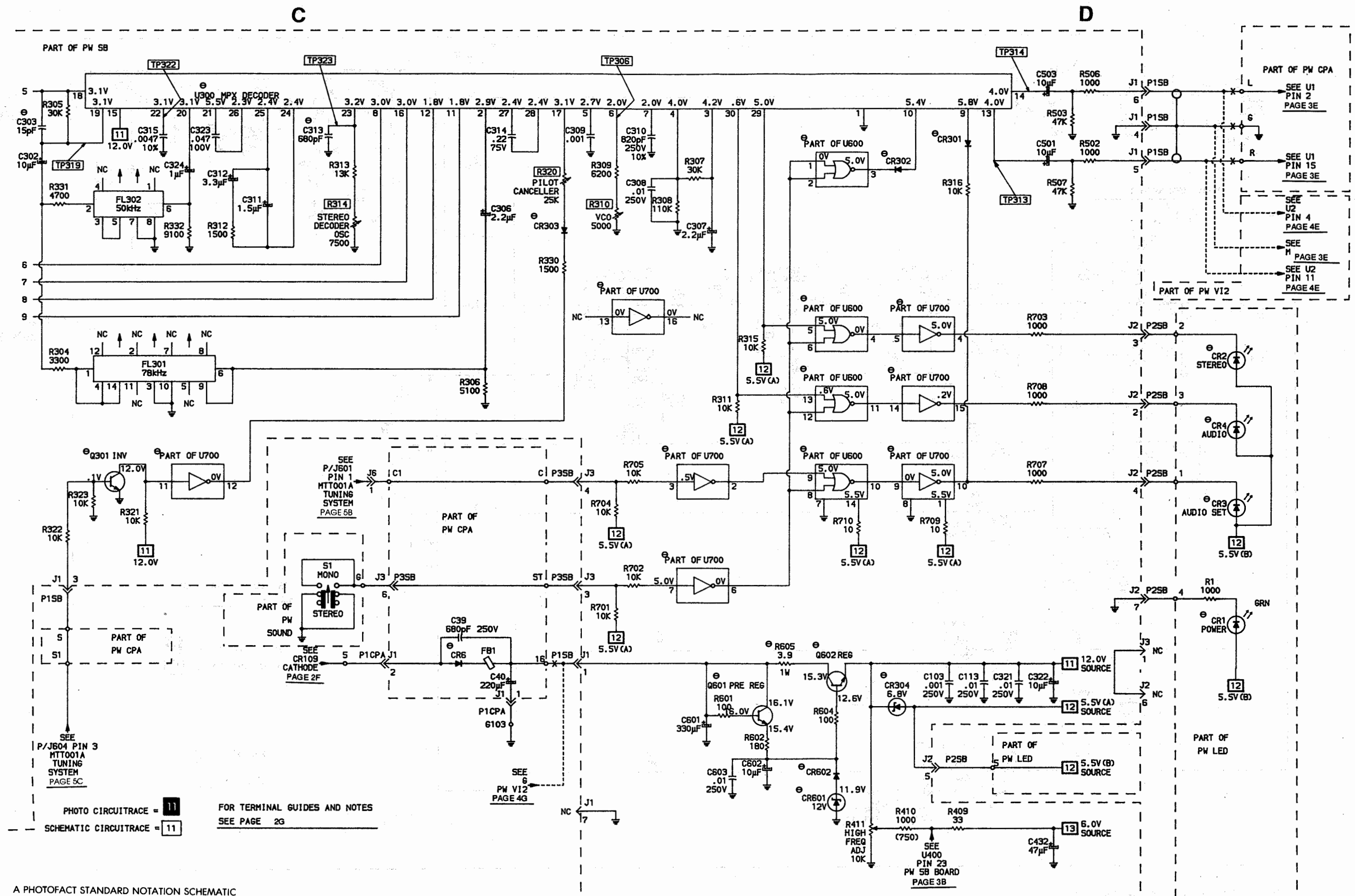
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ON SCREEN DISPLAY  
MSD002A/B-GridTrace  
LOCATION GUIDE

C1	C-2
C2	B-2
CR1	C-2
CR2	A-3
FB1	C-1
FB2	B-2
Q1	B-1
R1	C-1
R2	B-3
R3	C-1
R4	B-3
R6	A-2
R7	B-3

RCA  
CHASSIS CTC130B



A PHOTOFAC<sup>®</sup> STANDARD NOTATION SCHEMATIC  
WITH CIRCUITRACE<sup>™</sup>

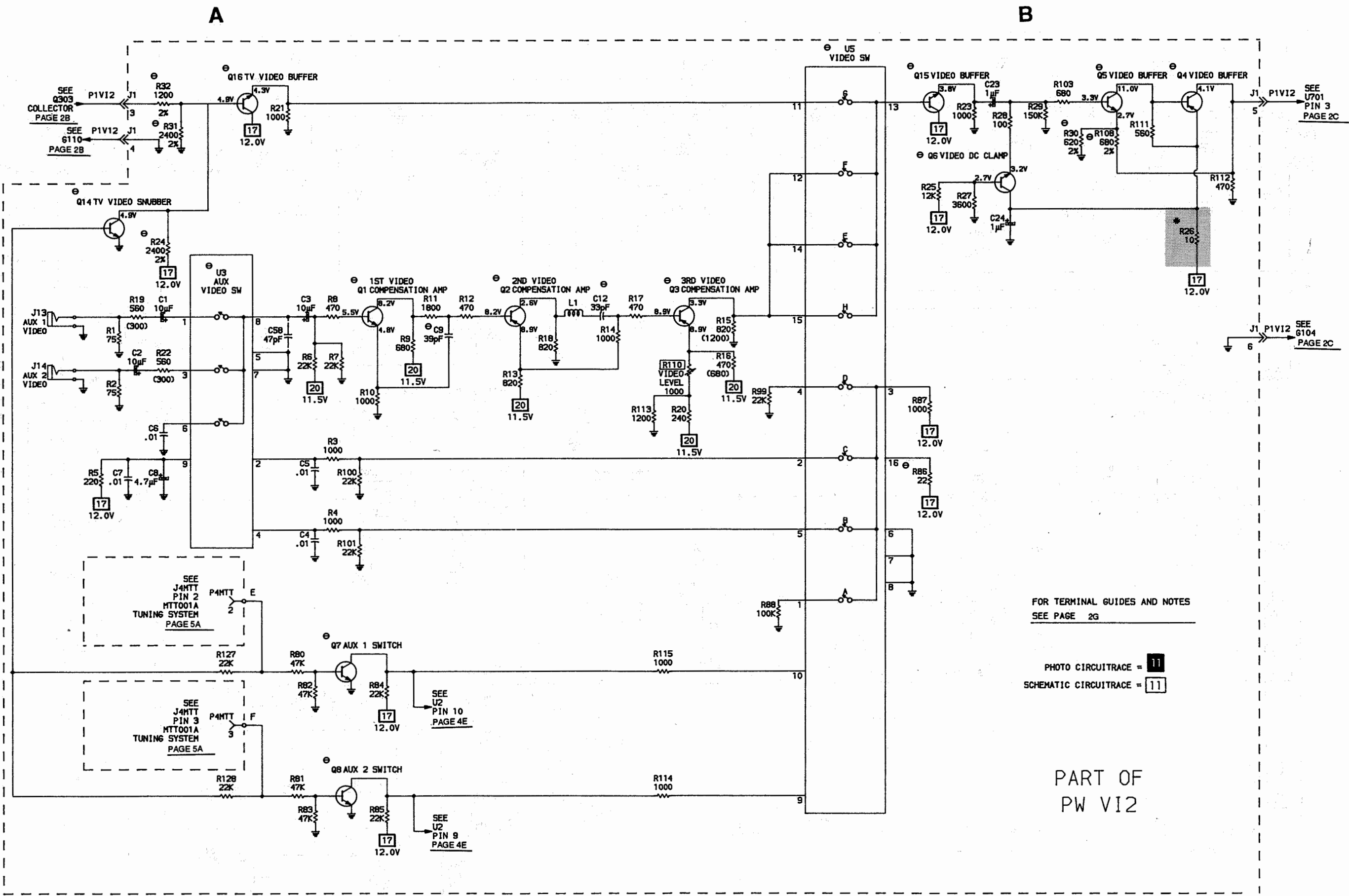
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STEREO DECODER

STEREO DECODER





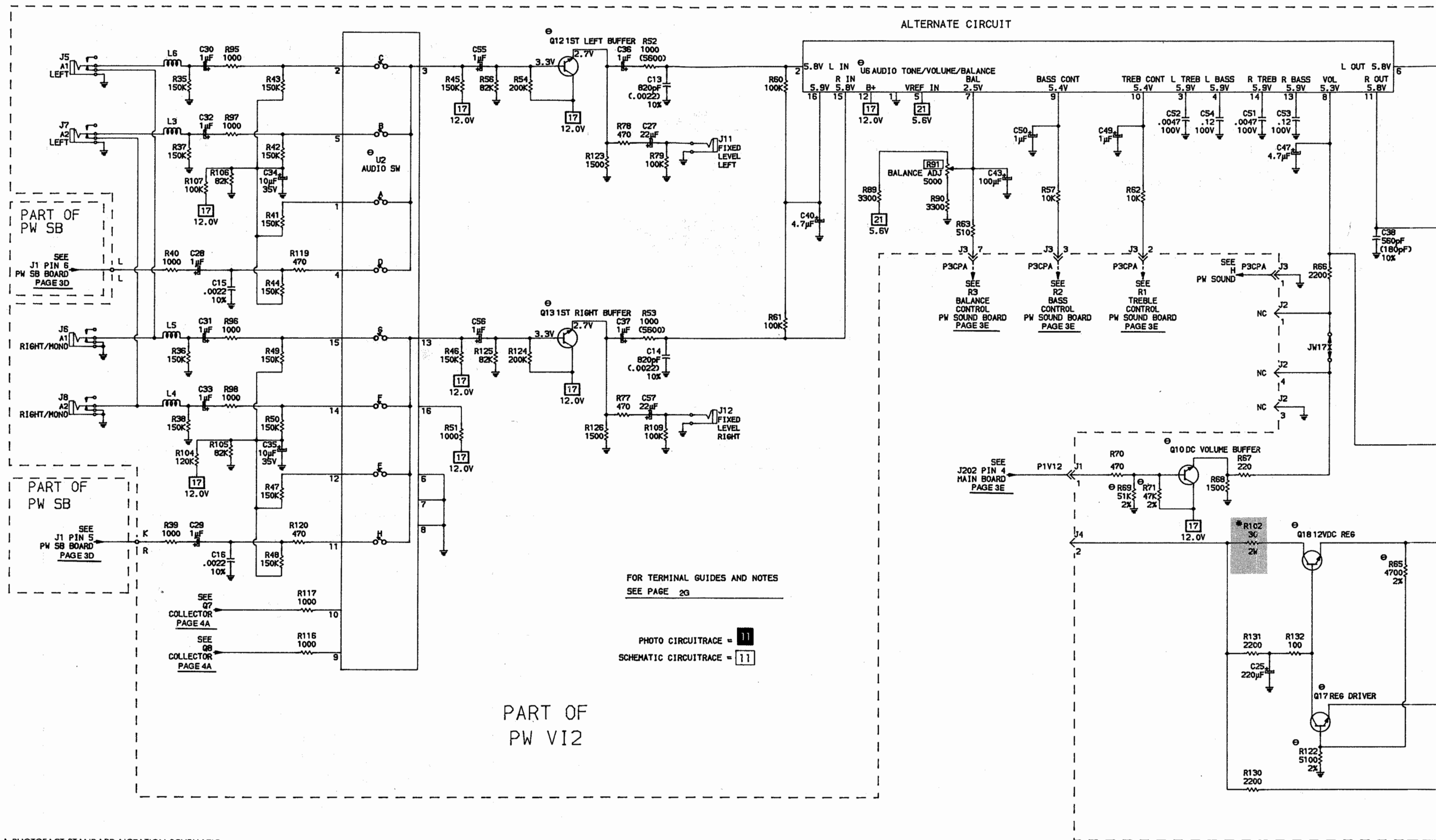


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VIDEO SWITCH

VIDEO SWITCH

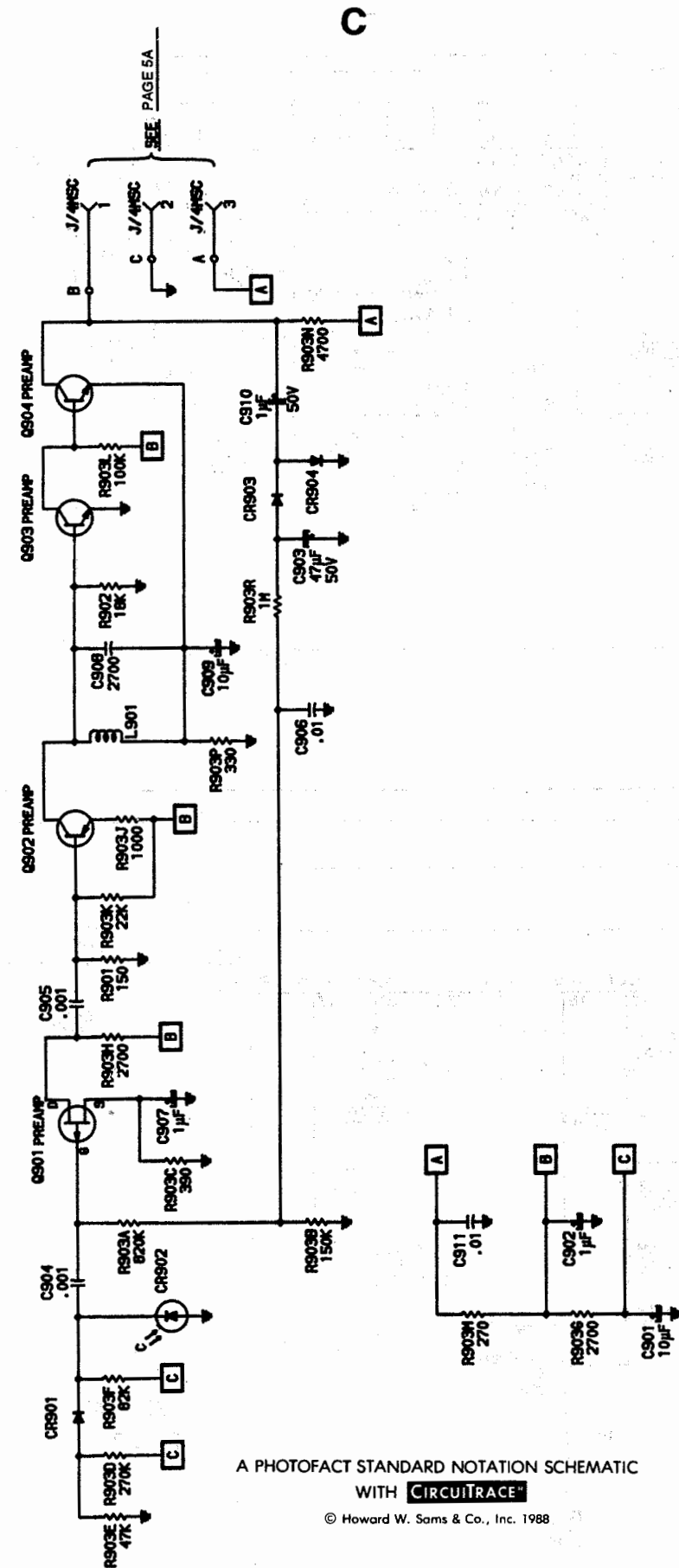


A PHOTOFAC STANDARD NOTATION SCHEMATIC

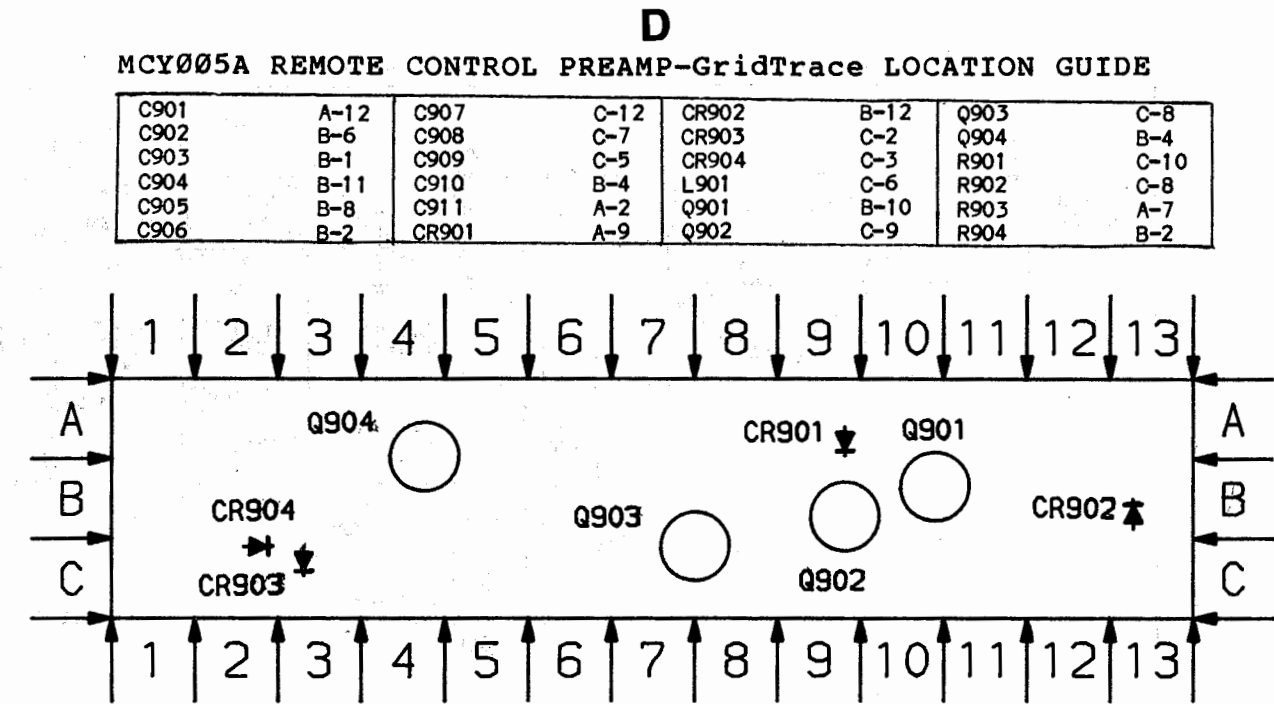
WITH **CIRCUITRACE**

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VIDEO IN/OUT



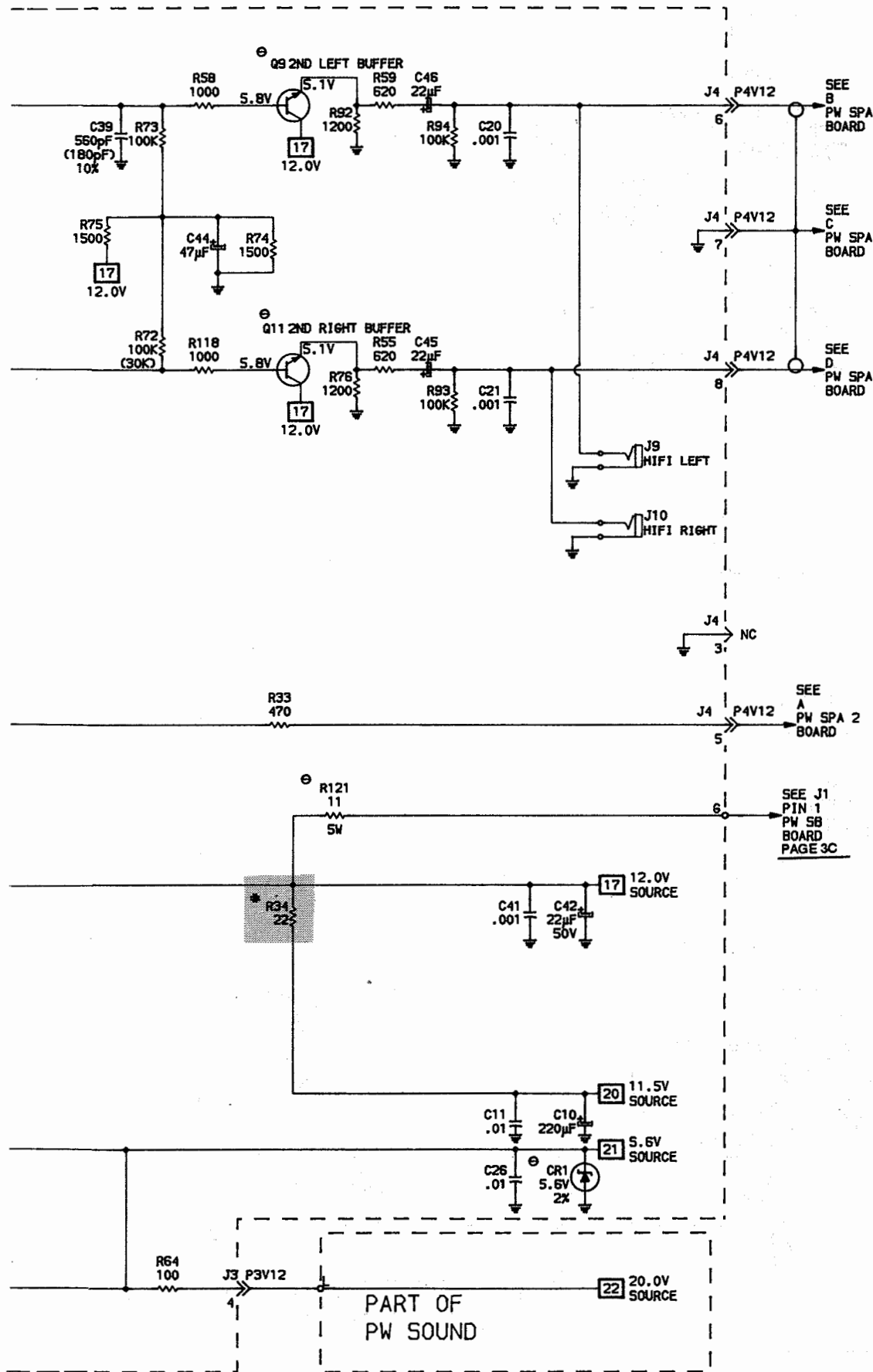
MCY005A REMOTE CONTROL PREAMP



**PARTS LIST**

ITEM No.	FUNCTION	MFR. PART No.
005A	REMOTE CONTROL ASSEMBLY MCY005A	
005A	Module Complete	156387
C901	4.7uF 35V	146365
C902	1uF 50V	141868
C903	.47uF 50V	146439
C904	1000pF Z5P 50V	143879
C905	1000pF Z5P 50V	143879
C906	.01uF Z5P50V	147971
C907	1uF 50V	141868
C908	2700pF Z5P 50V	145315
C909	10uF 25V	146211
C910	1uF 50V	141868
C911	.01uF 50V	147971
CR901	Diode	164874
CR902	Diode Photo	150711
CR903	Diode	164874
CR904	Diode	164874
L901	Coil (3mH)	157642
P4MSC	Connector 4 Pin	175703
Q901	Transistor Preamp	148070
Q902	Transistor Preamp	145410
Q903	Transistor Preamp	148061
Q904	Transistor Preamp	148061
R903	Resistor Network	157643
	Cover, Front	148063
	Cover, Rear	157640

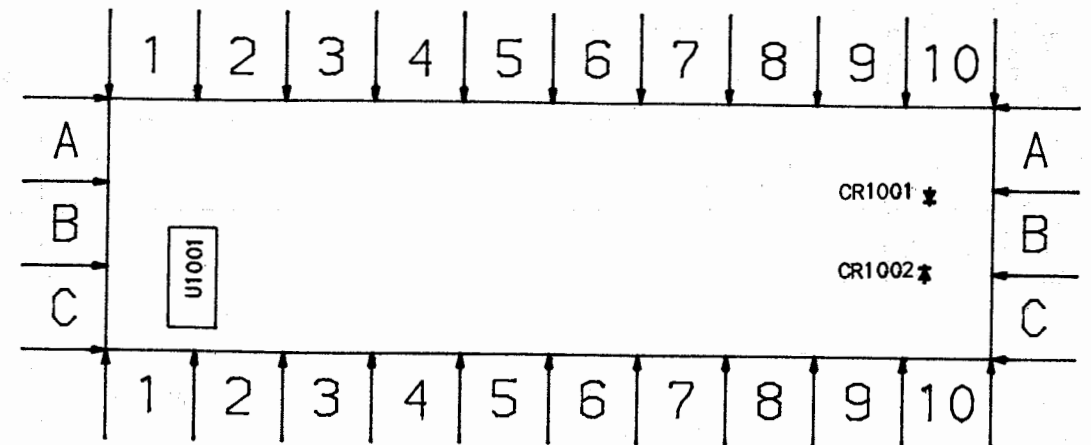
MCY005A REMOTE CONTROL PREAMP



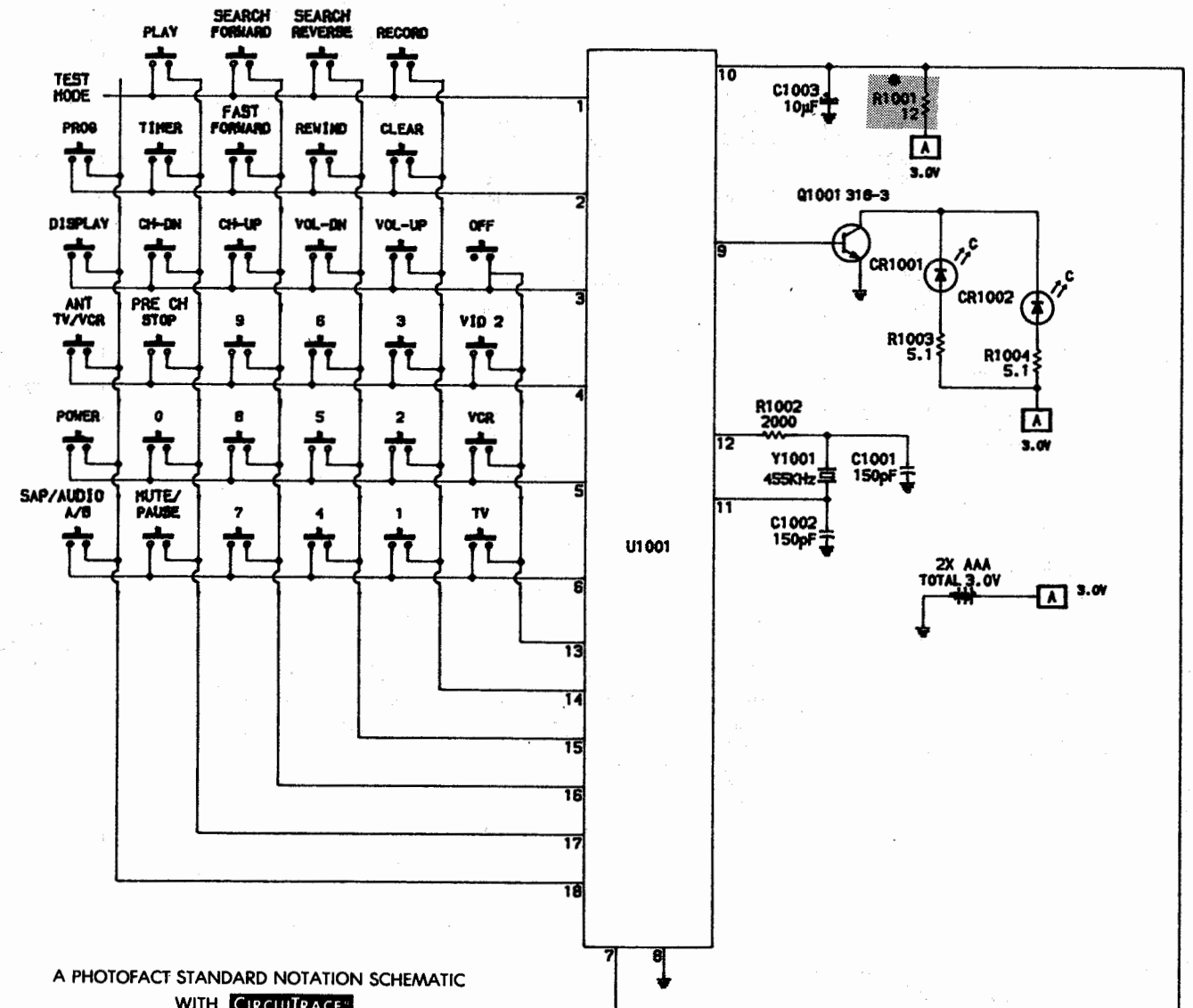
**G** VIDEO IN/OUT

# REMOTE CONTROL TRANSMITTER CRK40A-GridTrace LOCATION GUIDE

C1001	A-1	CR1001	B-10	R1001	A-1	R1004	C-9
C1002	B-2	CR1002	B-10	R1002	B-1	U1001	C-2
C1003	A-2	Q1001	A-2	R1003	A-9	Y1001	B-2



A Howard W. Sams **GRIDTRACE™** Photo



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CRK40A TRANSMITTER

**H** SET 2622 FOLDER 2

RCA  
CHASSIS CTC130B



# E

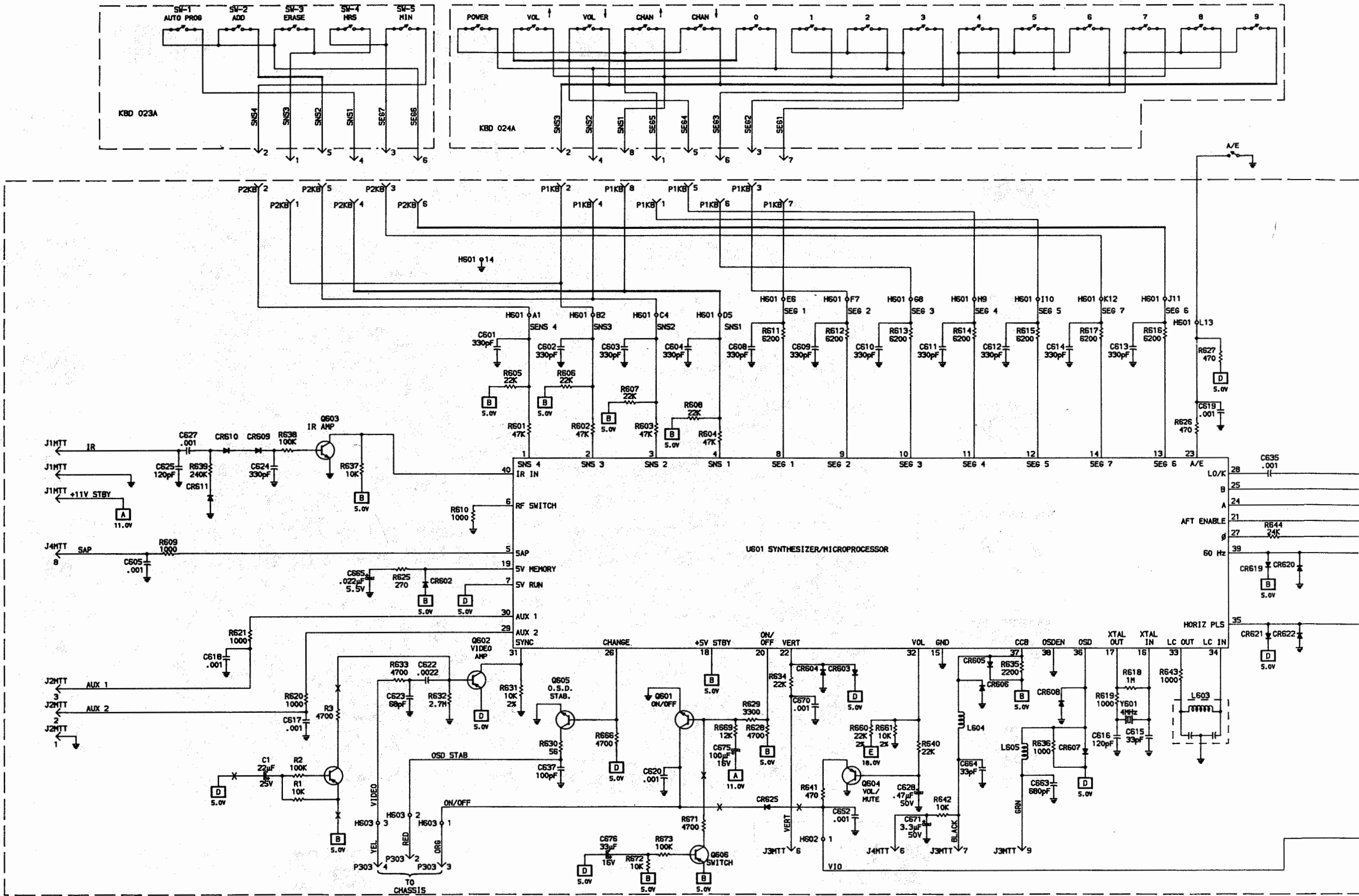


**F SET 2622 FOLDER 2**



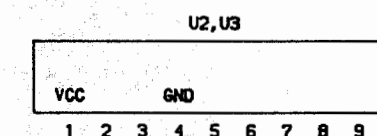
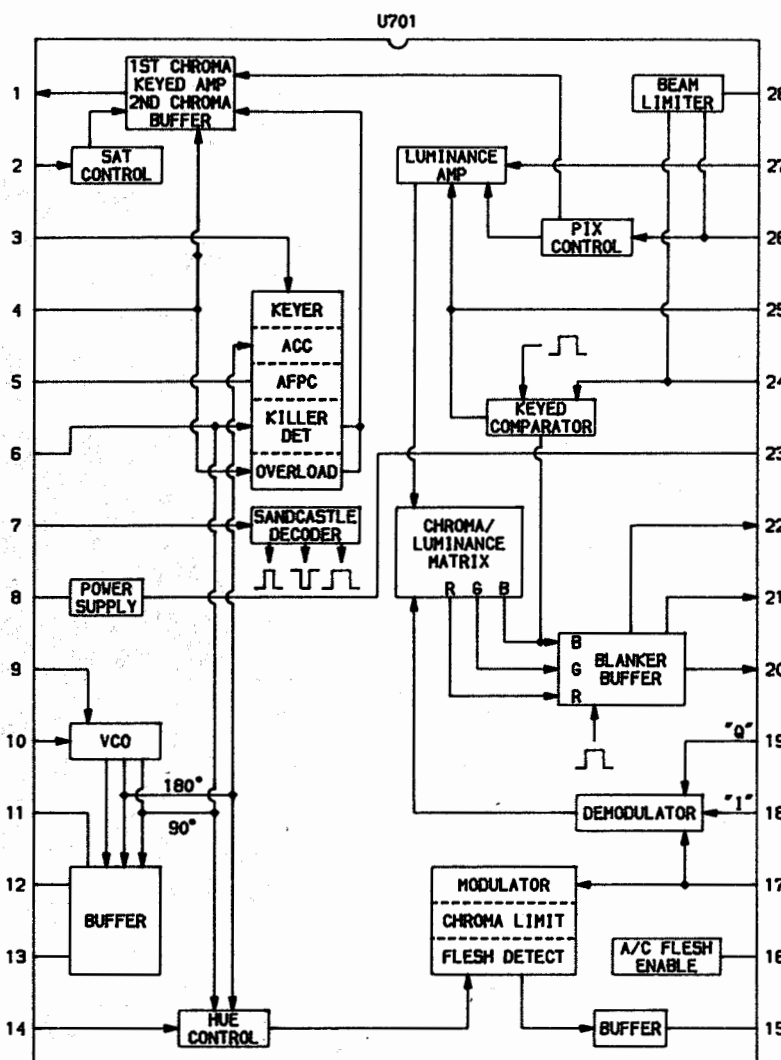
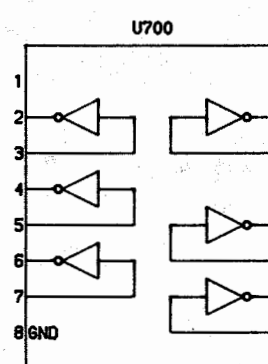
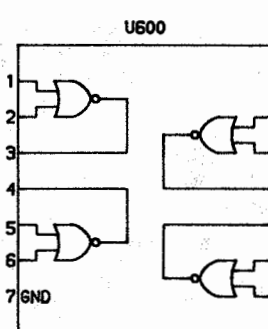
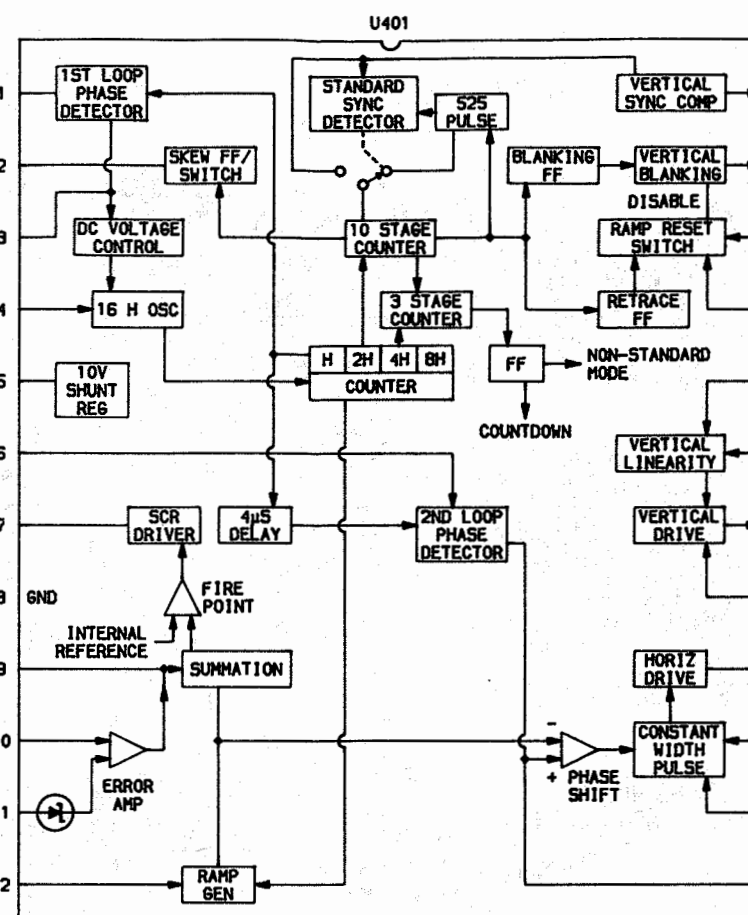
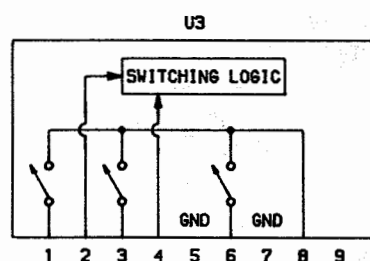
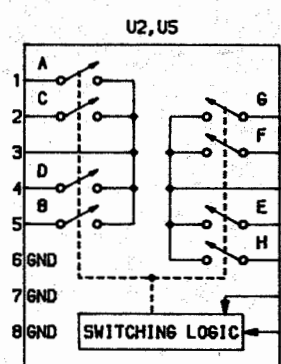
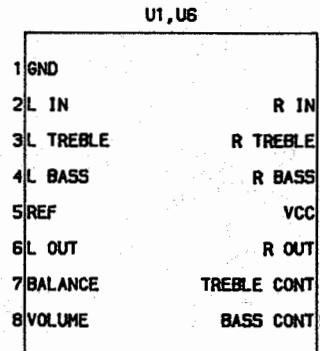
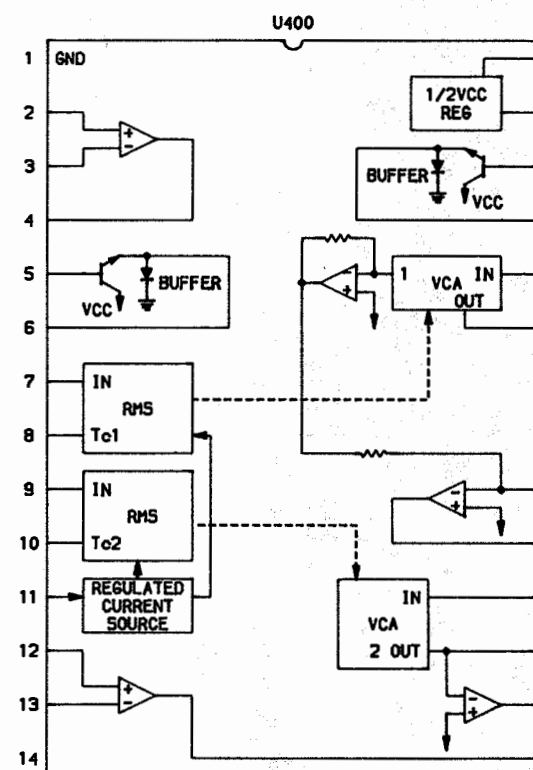
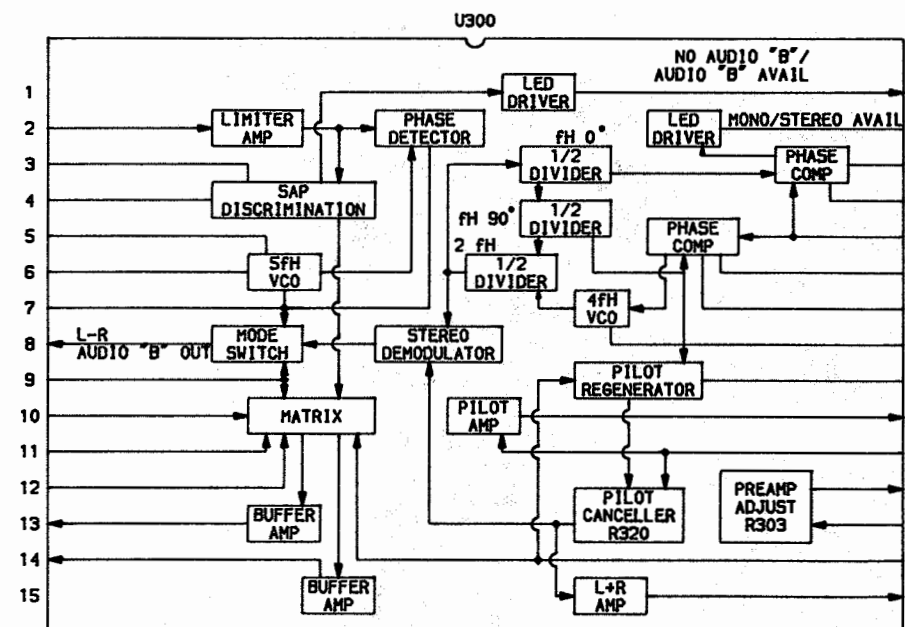
A

B



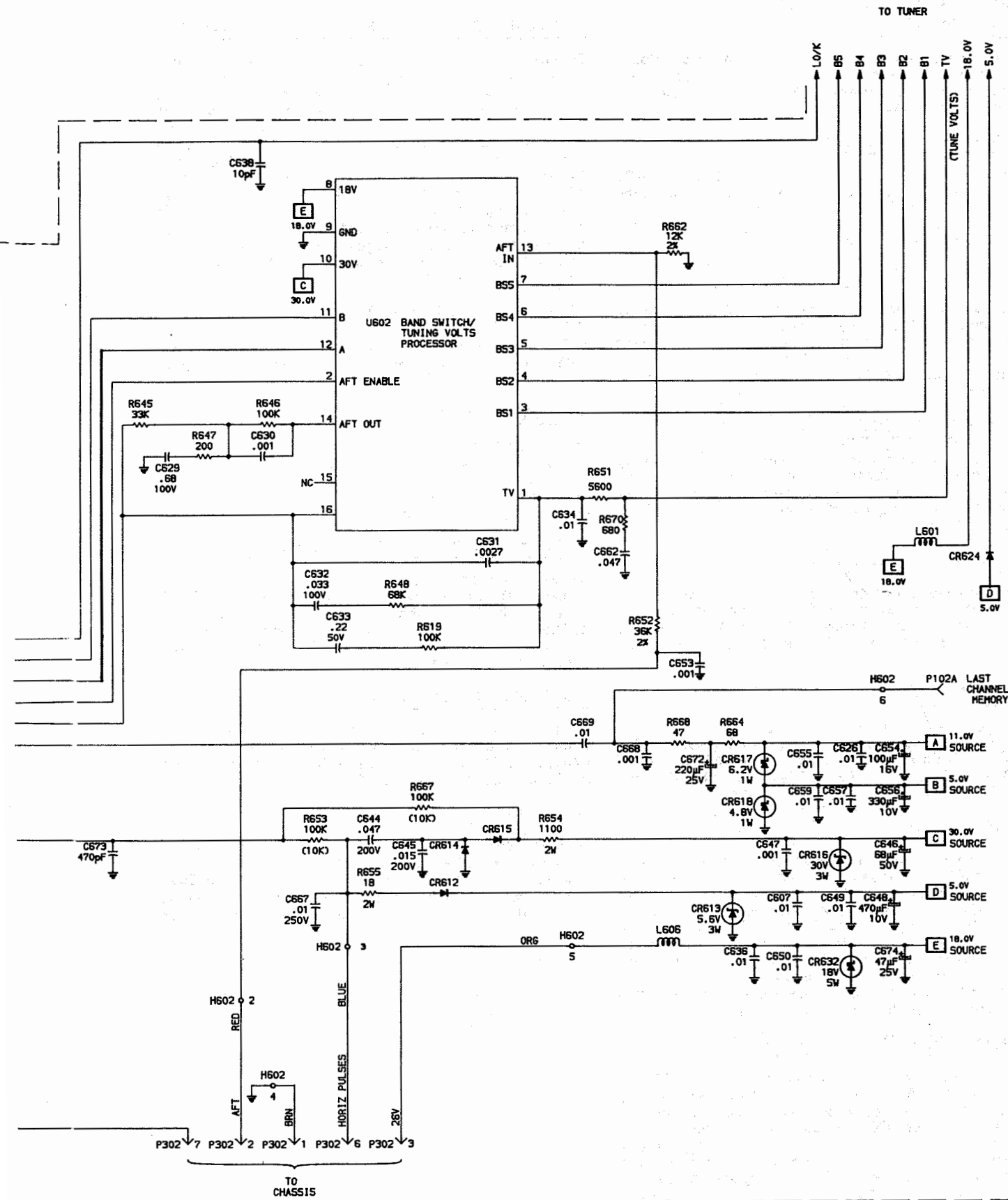
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MTT001A TUNER SYNTHESIZER

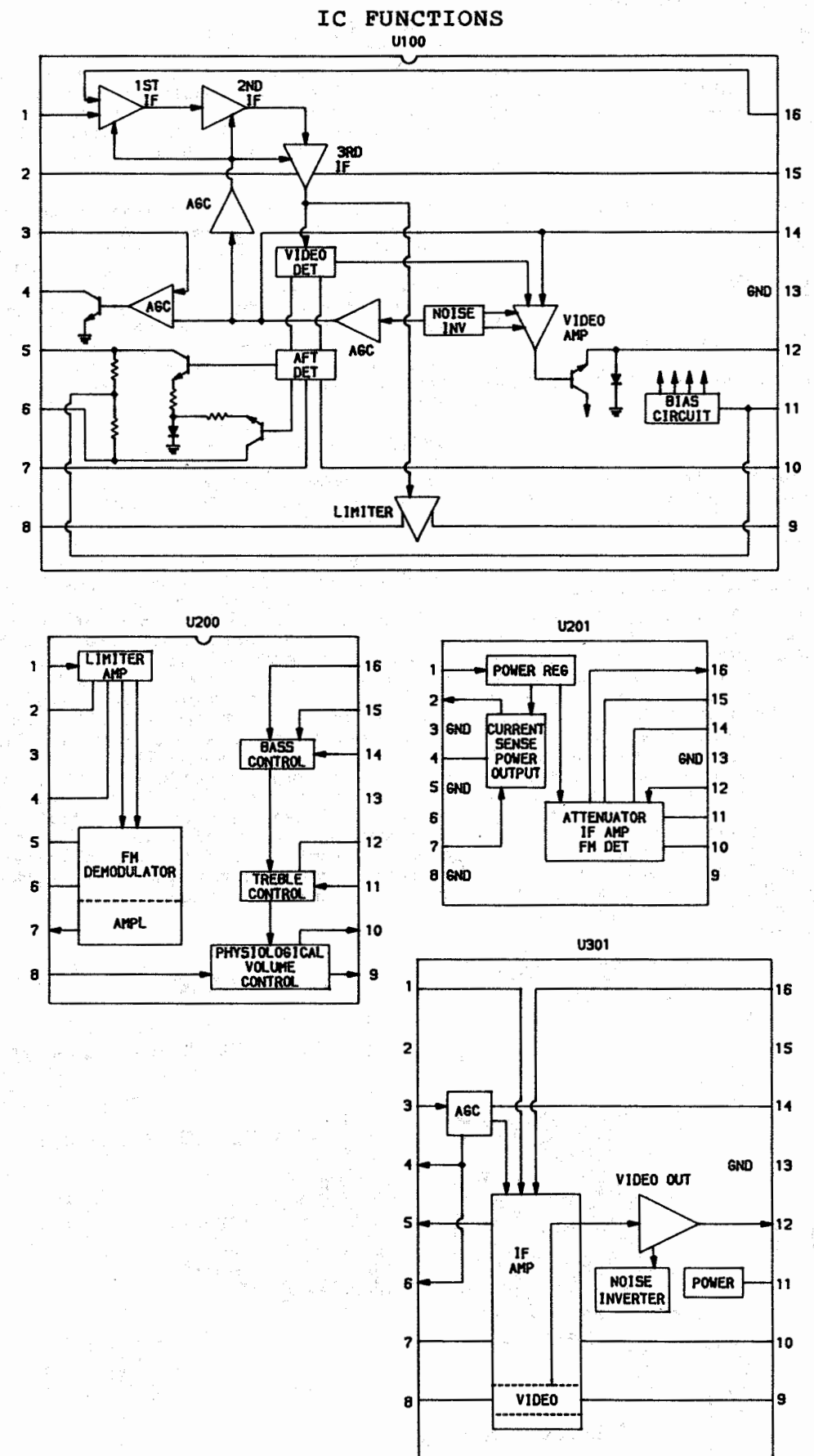


RCA  
CHASSIS CTC130B

C



D





**MISCELLANEOUS ADJUSTMENTS****HIGH VOLTAGE CHECK**

Tune in a picture. Set Brightness, Color, and Contrast Controls to MINIMUM. Connect a high voltage probe to CRT second anode High voltage should be 25.8 KV.

**RF AGC ADJUSTMENT**

Tune in a picture. Adjust AGC Control (R334) until snow appears and then back to a point where snow disappears.

**CONTRAST PRESET ADJUSTMENT**

Tune in a picture. Set Color Control to MINIMUM. Set Brightness and Contrast Controls to midrange. Adjust Contrast Preset Control (R715) for good white highlights without blooming.

**WIDTH ADJUSTMENT**

Tune in a crosshatch pattern. Allow a 15 minute warmup time. Adjust Width Adjust Control (R4) for horizontal overscan not more than 1/4 of an inch.

**COLOR TEMPERATURE ADJUSTMENT (B/W TRACKING)**

Tune in a picture. Turn Color Control to MINIMUM. Set Black Level and Picture to midrange. Turn Red (R750), Green (R752) and Blue (R754) Bias Controls and Screen to MINIMUM. Set Brightness and Contrast Controls to MINIMUM. Set Red/Blue (R758) and Green (R756) Drive Controls to Maximum. To obtain a service line connect a jumper wire between SS1 and SS2. Also short stakes SS3, and SS4 to ground. Advance Screen Control so that a horizontal line is just visible. Adjust only 2 Bias Controls to obtain a dim white line. Remove jumpers. Rotate Brightness Control to Maximum. Adjust the Blue/Red and Green Drive Controls for best Black and White picture. Check tracking at low and high brightness. If necessary, retouch Bias Controls.

**COLOR PURITY ADJUSTMENT**

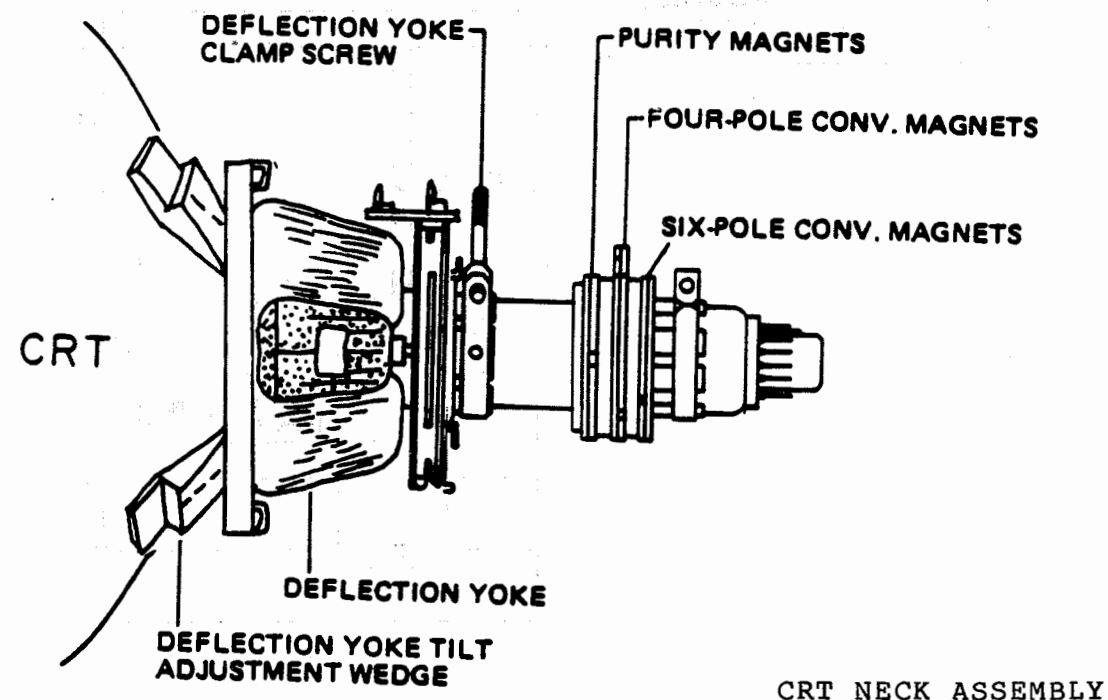
NOTE: Before attempting any purity adjustments the receiver should be operated for at least thirty minutes. If the magnetic tape type beam bender is used replace it with adjustable type beam bender found in parts list.

Use a degaussing coil to demagnetize the CRT and all mounting hardware. Adjust Red (R750) and Blue (R754) Bias Controls to obtain a green raster. Advance Green (R752) Bias Control if necessary. Loosen the yoke clamp screw and slide the yoke forward to obtain a vertical green band. Rotate and spread the tabs of the purity magnets until the green band is centered on the screen. Move the yoke backward until a uniform green screen is obtained.

**CONVERGENCE ADJUSTMENTS**

NOTE: Before attempting any convergence adjustments the receiver should be operated for at least fifteen minutes.

Connect a color bar generator to the antenna terminals and tune in a dot pattern. Adjust four-pole convergence magnets to converge the red and blue dots in the center of the screen. Adjust the six-pole convergence magnets to converge the red/blue dots over the green dots at the center of the screen. Tune in a crosshatch pattern and remove the rubber wedges between the yoke and the CRT. Tilt the yoke up or down to converge the vertical lines at top and bottom of screen. Tilt the yoke right or left to converge horizontal lines at top and bottom of screen. Repeat convergence procedure if necessary to obtain best overall convergence. Apply adhesive to wedges and carefully replace on CRT. For misconvergence on outer edges of screen place Compensators in quadrant needing correction.

**STEREO ADJUSTMENTS****STEREO ADJUSTMENTS**

NOTE: Adjustments were made using B&K Model 2009 MTS TV/Stereo Generator. Equivalent Generator may be used. Connect Generator to antenna terminals.

**WIDE BAND AUDIO ADJUSTMENT**

Select audio "B" on receiver. Select SAP, 1kHz audio frequency, and L-R modulating signal. Connect an oscilloscope to TP319 (U300-19) on Stereo Board. Adjust Wide Band Audio Control (R303) for 900 mV p-p.

**STEREO DECODER OSCILLATOR ADJUSTMENT**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L+R modulating signal. Adjust Stereo Decoder Oscillator Control (R314) clockwise until stereo indicator extinguishes then back until stereo indicator lights.

**PILOT CANCEL ADJUSTMENT**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L+R modulating signal. Connect Oscilloscope to TP322 (U300-22). Adjust Pilot Cancel Control (R320) for 400 mV p-p.

**DBX INPUT LEVEL ADJUSTMENT**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L-R modulating signal. Connect Oscilloscope to TP404 (U 400-4). Adjust DBX Level Control (R403) for 1V p-p +/- 10%.

**VCO ADJUSTMENT**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L-R modulating signal. Connect Frequency Counter to TP306 (U300-6). Adjust VCO Control (R310) for 78.670kHz reading on frequency counter.

**SEPARATION ADJUST**

Select stereo mode on receiver. Select Pilot, 300Hz audio frequency, and "L" Modulating Signal. Connect Oscilloscope to TP313 (U300-13). Adjust Low Separation Control (R417) for MINIMUM Amplitude of waveform on scope. Change Audio Frequency to 8kHz. Adjust HI-Separation Control (R411) for MINIMUM amplitude of waveform on scope. Repeat Adjustments as necessary for MINIMUM indication at both Audio Frequencies.

**LEFT/RIGHT SUB BALANCE ADJUSTMENT**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L+R Modulating Signal. Connect Oscilloscope trace "A" to TPJ 41 (J4 pin 1 on PW CPA board). Connect trace "B" to TPJ 45 (J4 pin 5 on PW CPA board). Connect ground of Oscilloscope to TPJ 47 (J4 pin 7 on PW CPA board). Superimpose trace "A" over trace "B". Turn volume up to a point where a visible waveform appears on Oscilloscope. Adjust Sub Balance Control (R23) for equal amplitude of both waveforms.

**ALTERNATE METHOD FOR SINGLE TRACE OSCILLOSCOPE**

Select stereo mode on receiver. Select Pilot, 1kHz audio frequency, and L+R Modulating Signal. Connect Oscilloscope to TPJ 41 (J4 pin 1 on PW CPA board). Connect ground of Oscilloscope to TPJ 47 (J4 pin 7 on PW CPA board). Turn volume up to a point where a visible waveform appears on Oscilloscope. Record peak to peak value. Move scope connection to TPJ 45 (J4 pin 5 on PW CPA board). Compare p-p value with that previously recorded. Alternate between test points with Oscilloscope making small adjustment to Sub Balance Control (R23) until equal amplitude of both waveforms is achieved.

**STEREO/AUDIO B ADJUSTMENTS**

NOTE: Adjustments were made using B&K Model 2009 MTS TV/Stereo Generator. Equivalent generator may be used.

**STEREO ADJUSTMENTS**

Generator Settings  
Pilot Switch ON  
SAP Switch OFF  
Audio Frequency 1kHz  
Modulating Signal L+R

**41.25MHz, 45.75MHz BANDPASS ADJUSTMENTS**

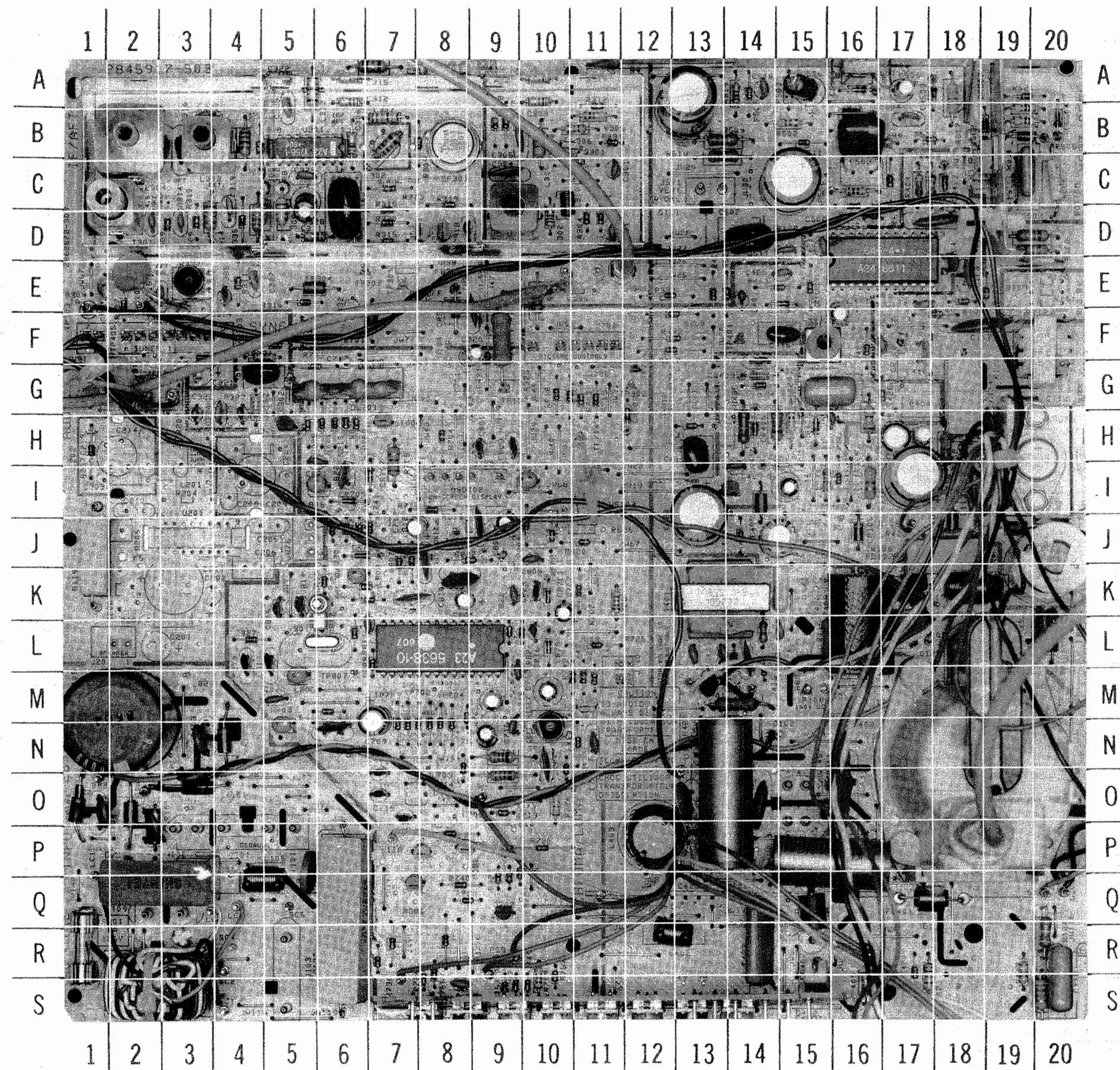
Connect Stereo Generator to antenna terminals. Connect Oscilloscope to TP12 (pin 12 of IC U1). Adjust 45.75MHz Bandpass Coil (L1) for MINIMUM Component in waveform. Adjust 41.25MHz Bandpass Coil (L2) for Maximum Component in waveform.

**4.5MHz DETECTOR ADJUSTMENTS**

Connect Stereo Generator to antenna terminals. Connect Oscilloscope to TP205 (Pin 5 of IC U200). Adjust 4.5MHz Detector Coil (L9) for Maximum Amplitude of waveform.

**4.5MHz BANDPASS ADJUSTMENTS**

Connect Stereo Generator to antenna terminals. Connect Oscilloscope to TP21 (Pin 2 of IC U200), low side to TP204 (Pin 4 of IC U200). Alternately adjust the two 4.5MHz Bandpass Coils (L7 and L8) for Maximum component of waveform.

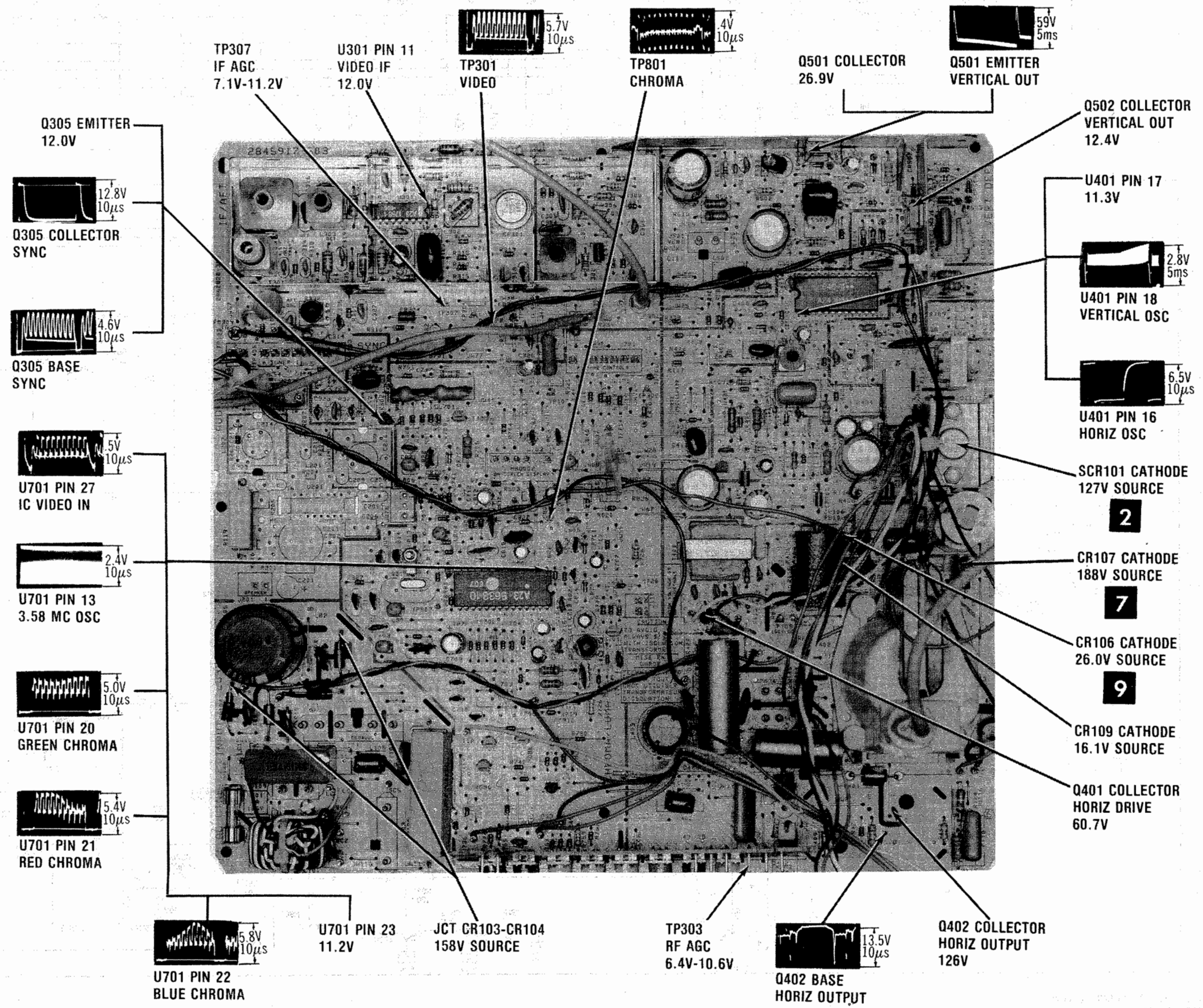


MAIN BOARD

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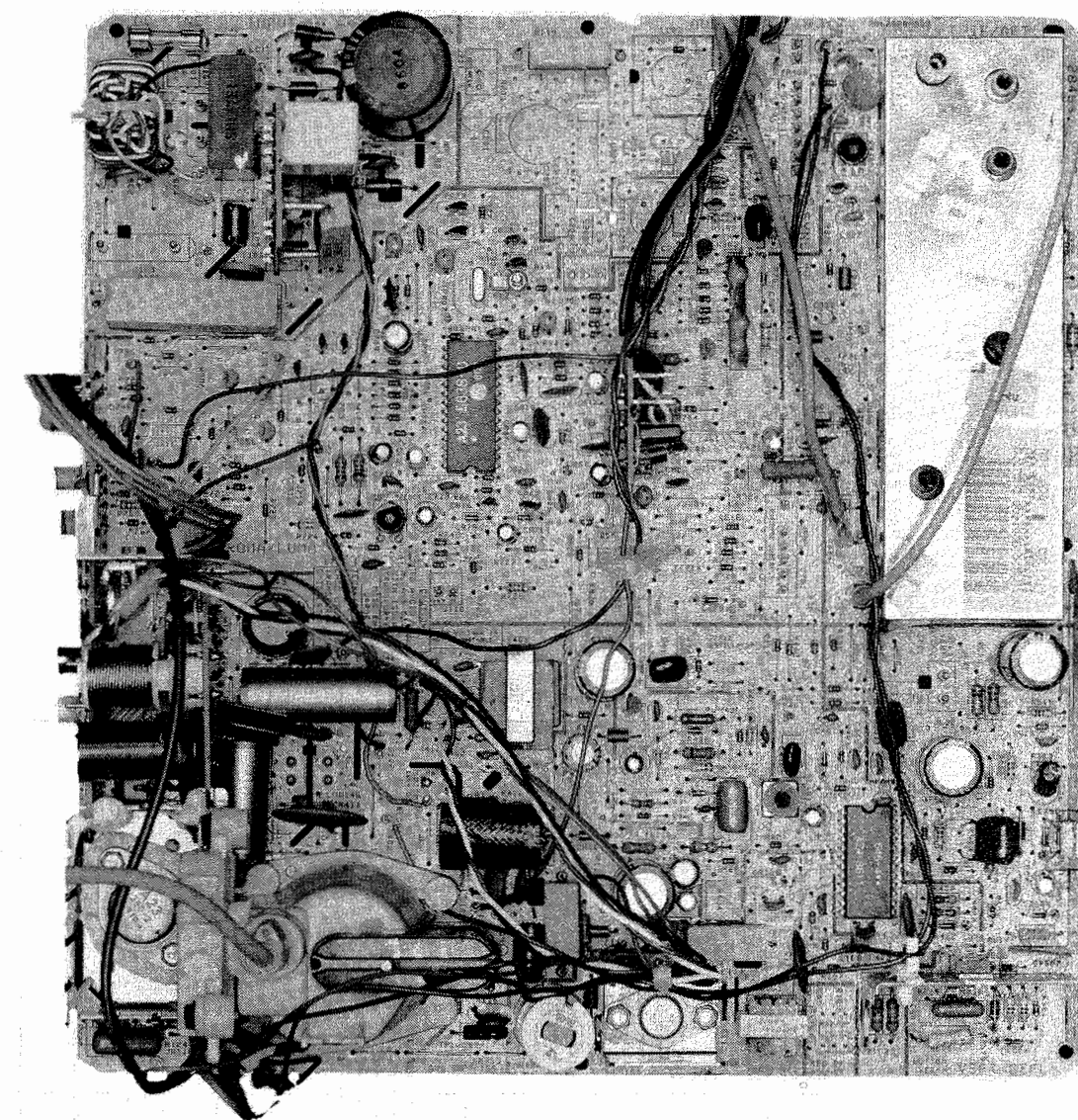
MAIN BOARD





# MAIN BOARD-GridTrace LOCATION GUIDE

C101	Q-2	C420	L-15	CR406	H-14	Q401	M-13	R422	N-13	R745	F-10
C102	Q-3	C421	D-15	CR408	I-15	Q402	R-18	R423	L-14	R746	Q-10
C103	F-3	C422	K-17	CR409	G-14	Q501	A-16	R424	R-17	R747	N-11
C104	Q-1	C423	P-16	CR410	J-18	Q502	C-19	R425	Q-14	R748	M-10
C105	F-18	C425	Q-13	CR411	Q-15	Q701	M-10	R426	J-14	R749	S-10
C106	I-17	C429	I-14	CR412	Q-15	Q703	Q-9	R427	F-16	R751	Q-9
C107	F-17	C431	Q-16	CR413	E-15	Q704	Q-7	R428	G-17	R752	Q-9
C108	F-18	C433	R-14	CR501	A-16	Q705	P-8	R429	H-15	R755	R-8
C109	K-16	C434	Q-14	CR502	B-16	Q706	P-8	R430	H-14	R757	Q-10
C110	Q-2	C435	N-13	CR503	A-18	Q801	H-7	R431	H-13	R759	Q-10
C111	F-17	C436	Q-13	CR504	B-20	R101	Q-2	R432	I-15	R760	F-13
C112	F-12	C502	D-14	CR505	B-19	R102	R-20	R436	P-13	R761	N-8
C113	I-19	C503	B-16	CR507	B-19	R103	L-16	R442	F-13	R802	J-10
C114	F-19	C504	B-16	CR701	K-10	R104	E-18	R443	R-19	R804	J-10
C115	I-17	C505	A-17	CR703	H-12	R105	F-18	R501	Q-17	R806	J-10
C116	L-20	C506	A-15	CR704	L-10	R106	D-10	R502	B-15	R807	J-10
C117	F-19	C507	C-19	CR705	I-6	R107	E-19	R503	C-18	R808	L-7
C118	S-20	C508	C-15	CR706	J-6	R108	D-10	R504	D-16	R809	F-6
C119	K-17	C509	A-13	CR707	I-7	R113	G-18	R505	A-14	R810	N-6
C120	J-13	C510	A-17	DL701	G-6	R114	J-14	R506	C-20	R811	K-7
C121	J-15	C511	D-15	F101	R-1	R115	L-15	R507	B-18	R812	K-7
C122	I-17	C512	D-16	FB101	J-19	R116	I-16	R508	B-17	R813	K-6
C123	L-17	C701	F-9	FB102	K-17	R117	F-13	R509	B-13	R814	L-6
C301	Q-11	C703	M-9	FB103	L-20	R119	J-1	R511	B-15	R815	F-6
C302	D-10	C704	N-10	FB105	K-17	R120	B-6	R512	B-16	R818	Q-10
C303	A-10	C705	N-11	FB301	D-5	R122	D-15	R513	B-19	R819	Q-11
C304	Q-9	C706	M-10	FB303	B-10	R301	D-11	R514	B-19	R820	J-11
C305	B-9	C707	K-10	FB304	E-5	R302	C-11	R515	C-19	R821	F-6
C306	B-6	C708	N-6	FB307	C-6	R303	Q-11	R516	Q-19	R822	J-9
C307	B-7	C709	N-7	FB401	Q-17	R304	D-11	R517	A-18	R823	L-9
C308	B-3	C710	N-9	FB408	I-14	R305	B-11	R518	B-13	R824	L-6
C309	D-2	C711	N-9	J103	R-5	R306	B-11	R519	A-17	R825	F-6
C310	Q-6	C713	L-9	J104	P-3	R307	R-9	R520	E-13	R827	L-4
C311	D-5	C714	Q-7	J105	P-4	R308	B-9	R521	A-19	RT101	Q-5
C312	B-6	C715	Q-7	J109	Q-3	R309	B-8	R522	B-16	SCR101	H-20
C313	A-7	C716	Q-7	J302	F-2	R310	D-10	R701	G-6	SCR301	B-8
C314	F-2	C717	F-7	J303	F-3	R311	E-4	R702	M-11	SCR401	I-14
C315	E-3	C718	S-8	J501	C-13	R312	B-11	R703	M-8	SF301	B-8
C316	B-3	C801	H-8	J400	Q-15	R313	Q-7	R704	H-8	T101	F-20
C317	B-3	C803	H-8	J701	F-11	R314	B-3	R705	H-7	T102	N-19
C318	D-8	C805	J-16	J703	I-8	R315	D-7	R707	K-11	T301	Q-2
C319	C-4	C806	K-8	L101	S-2	R316	E-5	R709	B-6	T401	K-13
C320	Q-4	C807	J-9	L103	J-20	R317	F-3	R710	J-6	T402	N-19
C322	A-5	C808	J-9	L104	K-18	R318	D-7	R711	J-6	TP307	Q-6
C323	Q-3	C809	K-8	L105	Q-5	R319	Q-8	R713	G-11	TP318	F-1
C324	Q-4	C810	K-8	L301	Q-9	R320	D-7	R714	F-9	TP319	F-2
C325	A-5	C811	K-7	L302	B-7	R321	F-5	R715	N-10	TP127	H-18
C326	F-9	C812	J-10	L303	B-3	R322	F-5	R716	J-6	U301	B-5
C327	E-4	C813	L-4	L304	B-3	R323	Q-4	R718	G-11	U401	F-17
C328	Q-5	C814	K-5	L305	D-4	R327	E-2	R719	Q-9	U701	L-8
C329	Q-5	C815	K-5	L307	A-7	R328	H-5	R720	P-10	Y801	L-6
C330	G-4	C816	L-10	L308	C-5	R330	B-4	R721	Q-9		
C331	D-4	C818	K-6	L310	Q-10	R331	B-11	R722	Q-9		
C334	D-2	C819	L-5	L311	B-4	R332	E-3	R723	Q-9		
C335	E-4	C820	M-5	L312	A-5	R333	B-3	R724	R-8		
C401	E-13	C821	H-6	L314	D-4	R335	D-4	R725	L-11		
C403	E-18	C822	I-6	L401	F-15	R337	E-2	R726	Q-26		
C404	E-18	C823	K-10	L402	R-13	R338	E-12	R727	S-20		
C405	D-18	C825	L-7	L403	P-12	R401	E-15	R728	K-11		
C406	H-16	C826	K-9	L404	H-16	R402	H-18	R729	N-7		
C407	I-15	CR101	Q-3	L701	N-9	R403	A-15	R730	N-7		
C408	G-14	CR102	Q-2	L702	Q-9	R404	C-17	R731	N-8		
C409	S-16	CR103	Q-1	L801	I-10	R405	E-13	R732	N-8		
C410	L-13	CR104	J-16	L803	N-5	R407	E-15	R733	N-7		
C411	H-13	CR105	K-17	L804	K-6	R411	G-16	R734	N-8		
C412	G-14	CR106	L-20	L805	M-5	R412	I-16	R735	R-7		
C413	H-16	CR107	K-17	L806	I-6	R413	L-14	R736	R-7		
C414	F-16	CR109	R-17	M3	E-7	R415	L-14	R737	R-8		
C415	F-15	CR301	D-8	M4	Q-8	R416	H-14	R738	Q-8		
C416	F-17	CR302	G-5	Q301	B-10	R417	K-14	R740	Q-8		
C417	L-13	CR401	I-14	Q303	D-8	R418	R-15	R741	J-7		
C418	L-15	CR402	C-18	Q304	D-8	R419	J-14	R743	M-11		
C419	K-14	CR405	H-15	Q305	H-5	R421	F-9	R744	I-8		



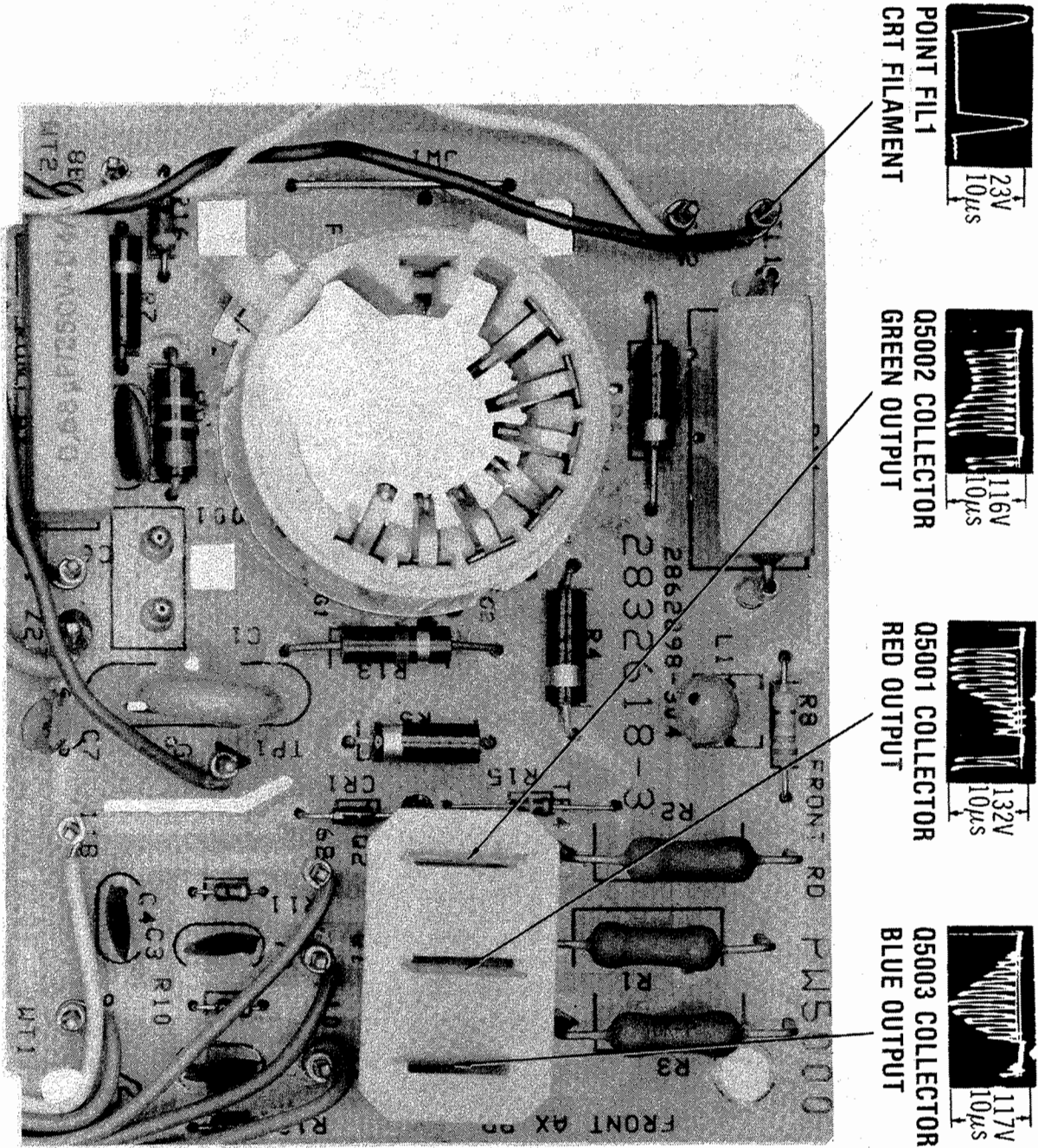
RCA  
CHASSIS CTC130B

MAIN BOARD-SHIELD LOCATION (TOP VIEW)

SET 2622 FOLDER 2

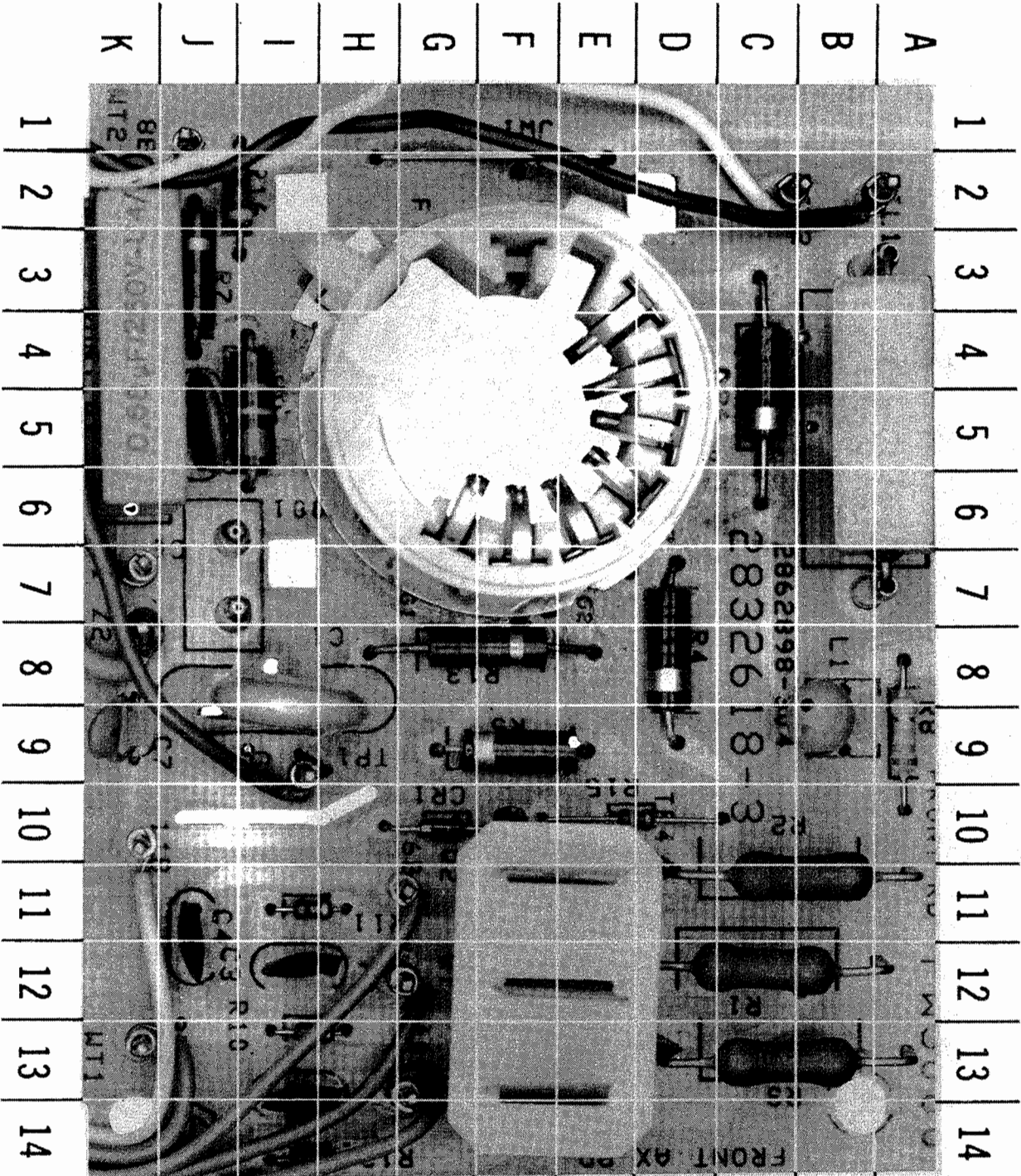
Page 6





A Howard W. Sams QUICK-CHECKS™ Photo

CRT BOARD

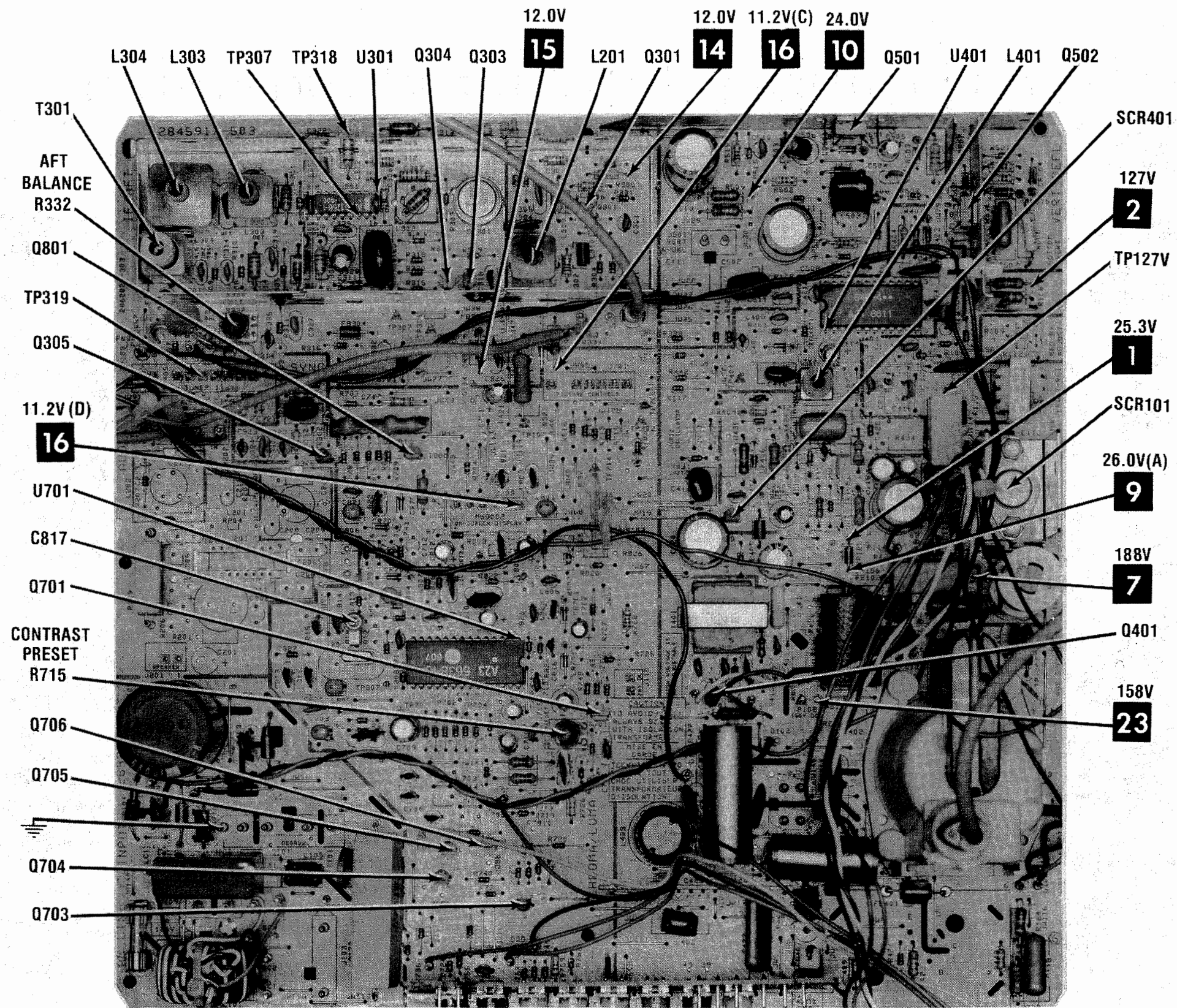


CRT BOARD

A Howard W. Sams GRIDTRACE™ Photo

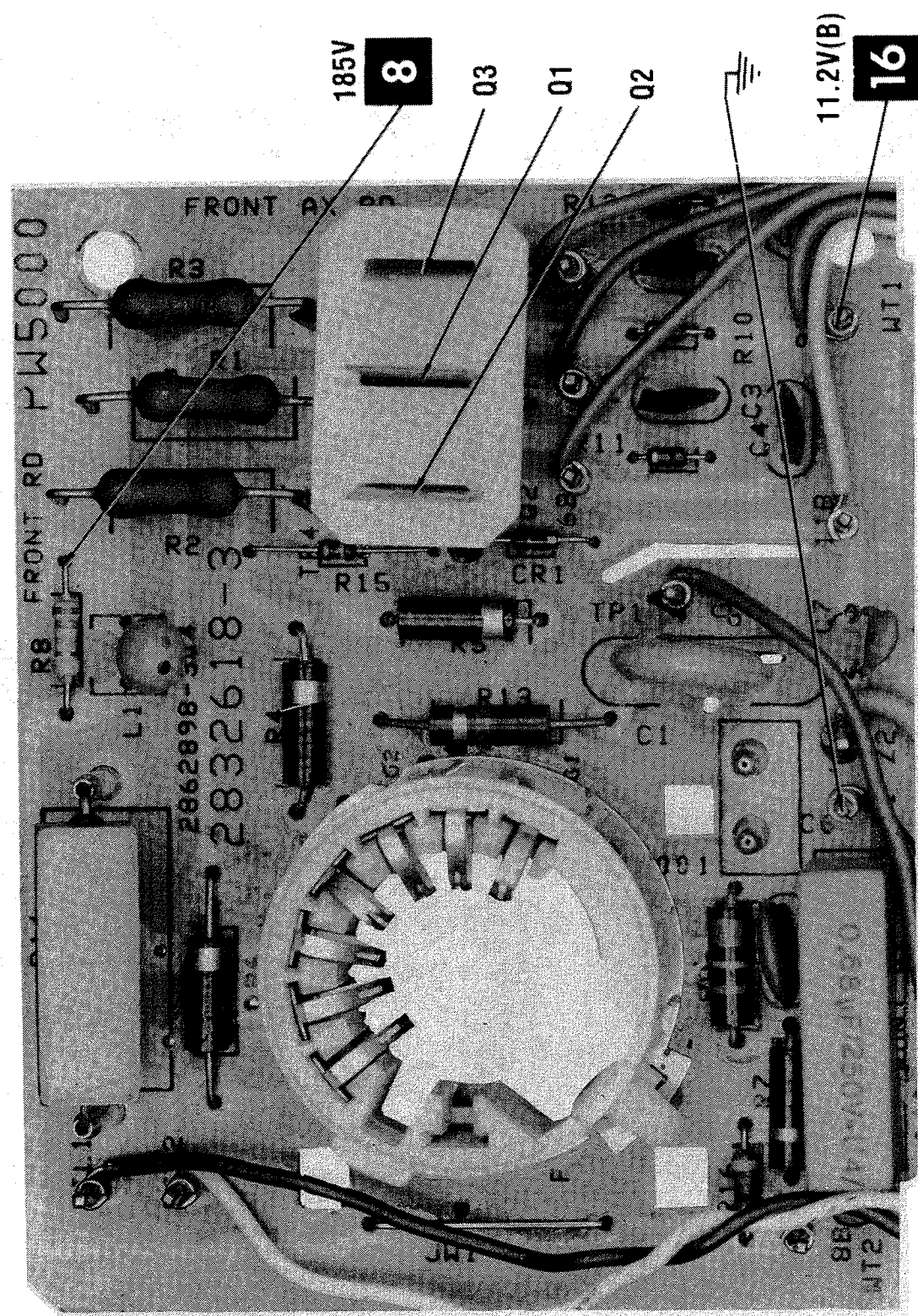
CRT BOARD- GridTrace LOCATION GUIDE	
C1	J-9
C2	J-5
C3	I-11
C4	J-12
C5	I-13
C6	K-4
C7	K-9
CR1	C-10
J5001	J-7
L101	B-9
Q1	E-8
Q2	E-11
R1	F-3
R2	C-1
R3	B-11
R4	C-13
R5	D-8
R6	F-9
R7	C-4
R8	J-3
R9	A-9
R10	A-9
R11	I-10
R12	I-11
R13	F-8
R14	A-5
R15	D-10
R16	J-2



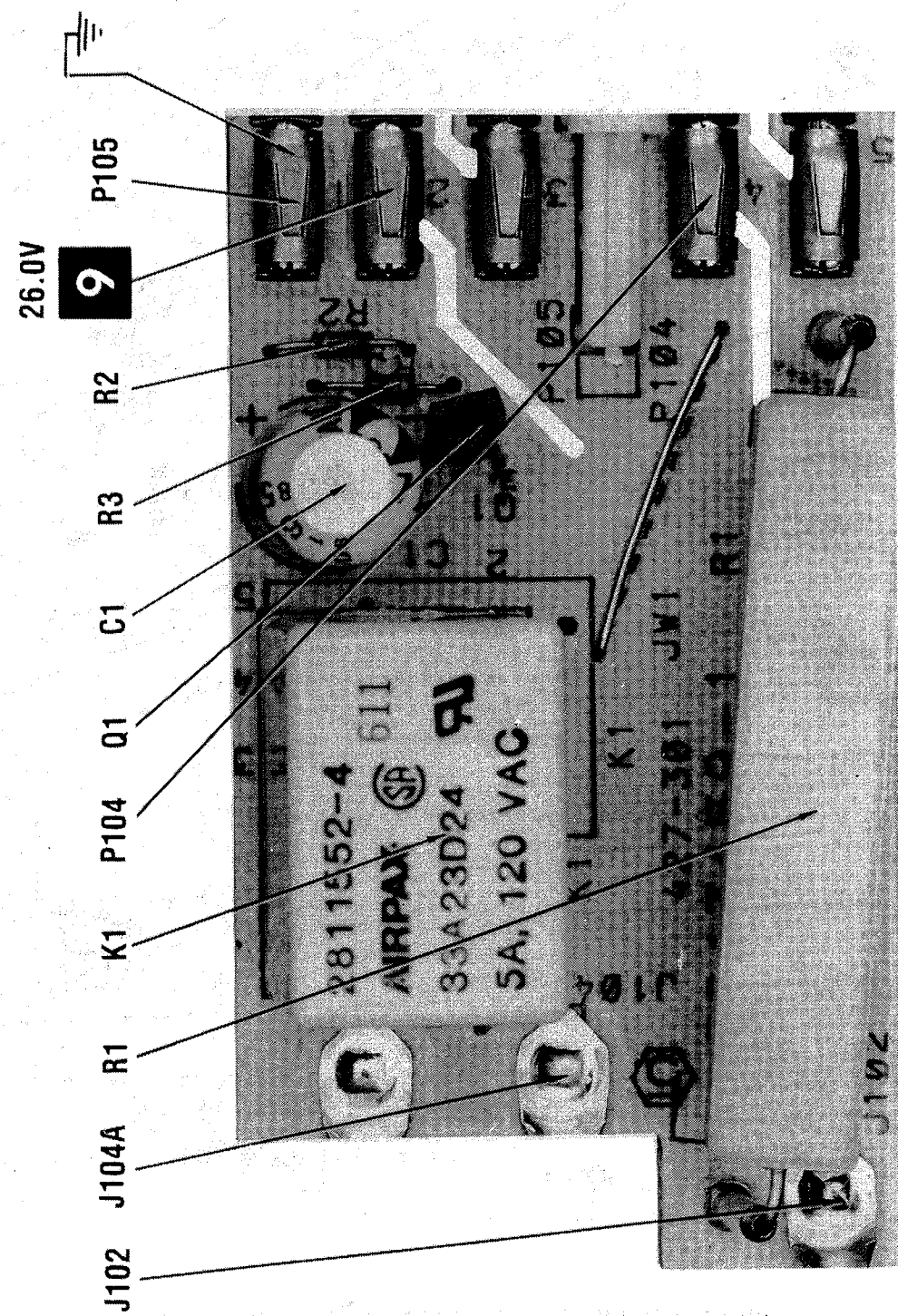


NOTE: ARROWS ON IC'S INDICATE PIN 1 UNLESS NOTED.



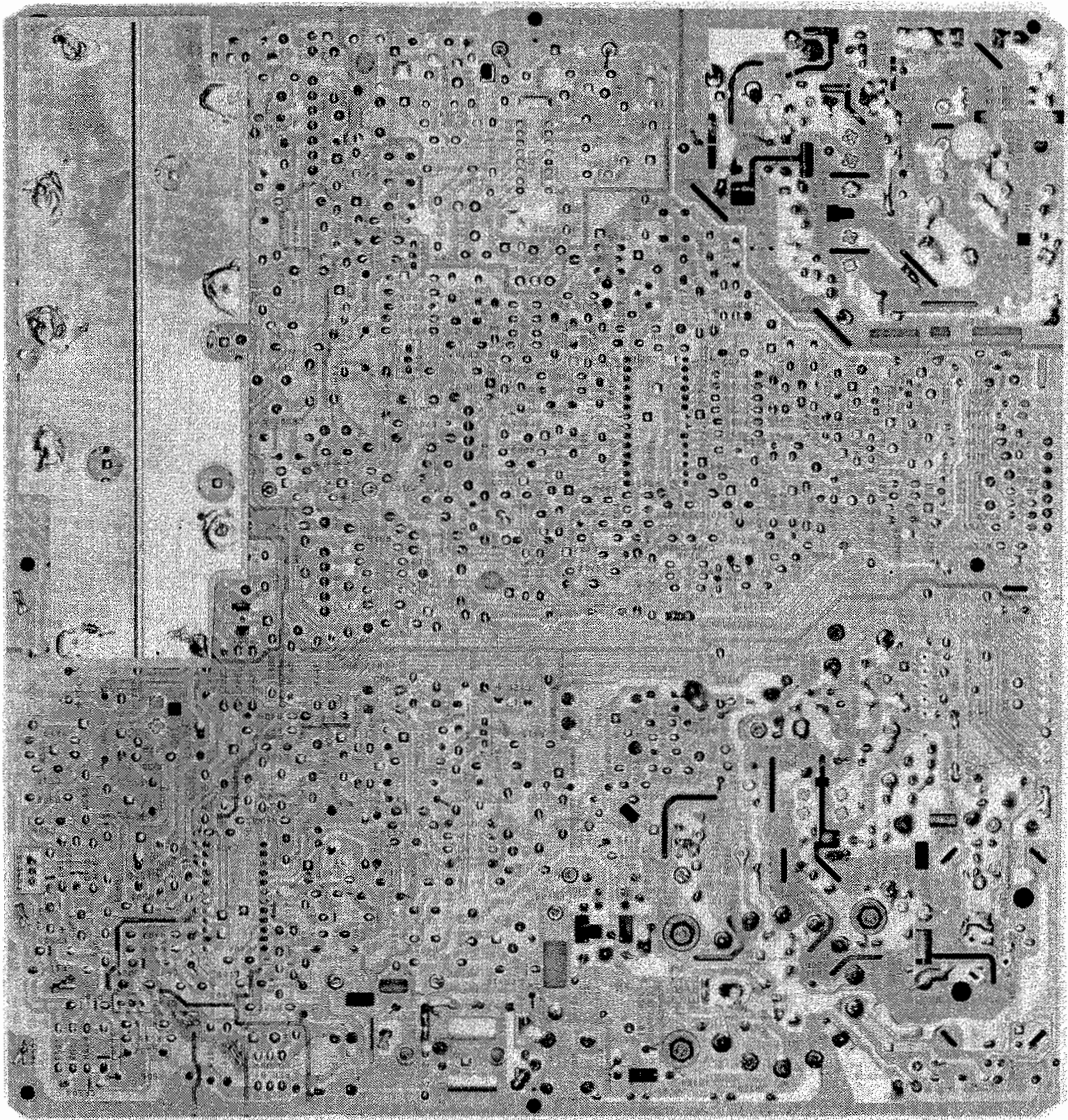
A Howard W. Sams **CIRCUITRACE** Photo

CRT BOARD

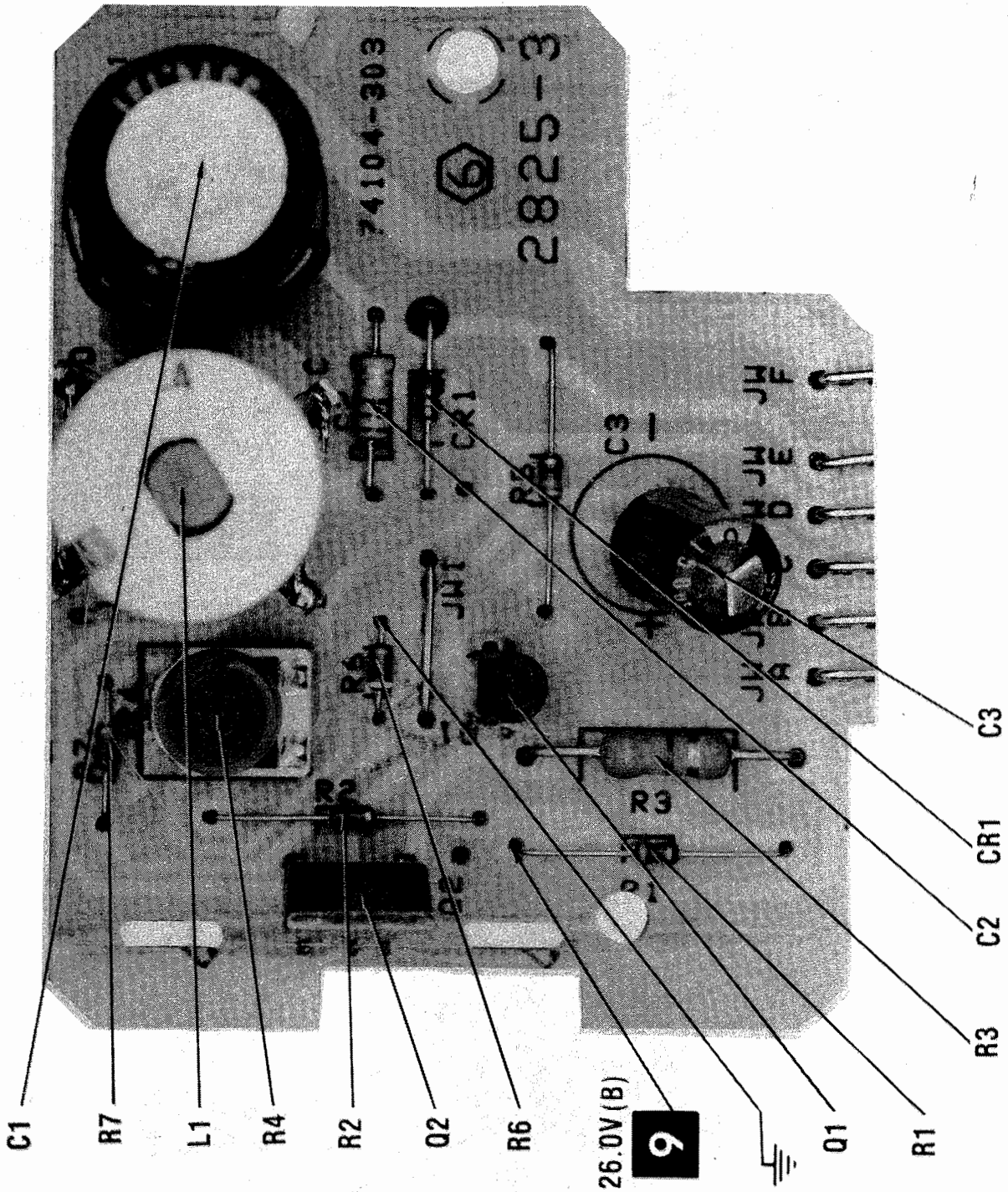


A Howard W. Sams **CIRCUITRACE™** Photo PW RR001A RELAY BOARD  
SET 2622 FOLDER 2 Page



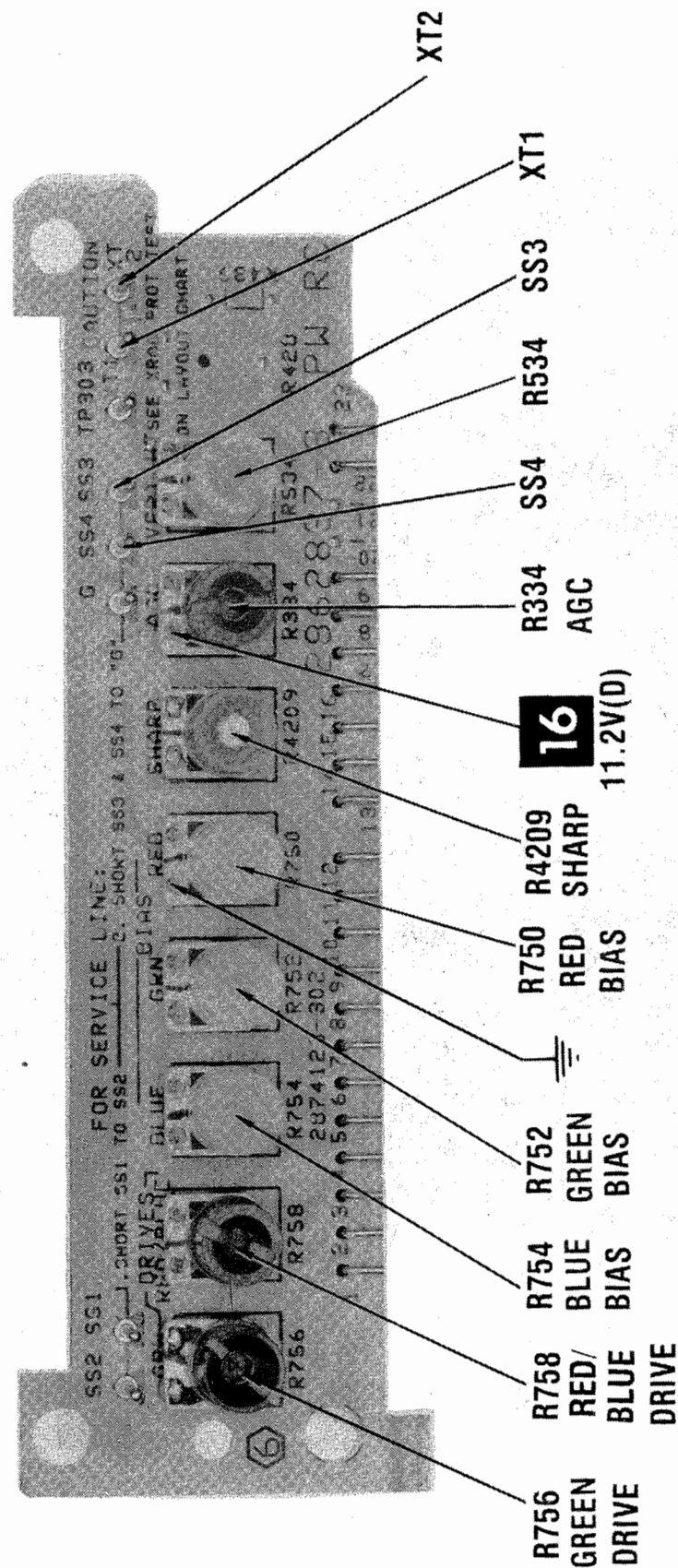


MAIN BOARD-SHIELD LOCATION (BOTTOM VIEW)



PINCUSHION BOARD

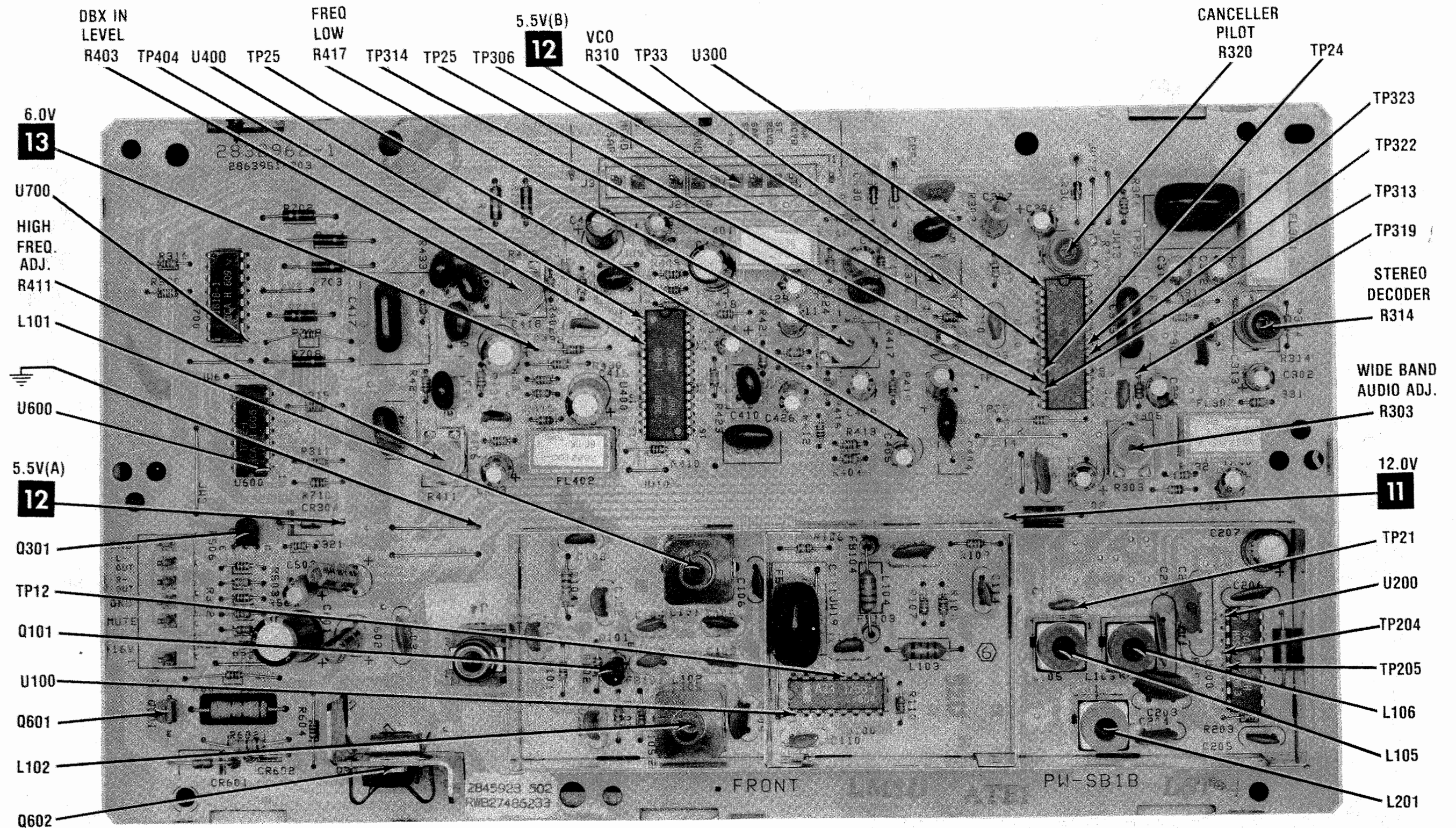
A Howard W. Sams CIRCUITRACE<sup>®</sup> Photo



STEREO BROADCAST BOARD-GridTrace LOCATION GUIDE

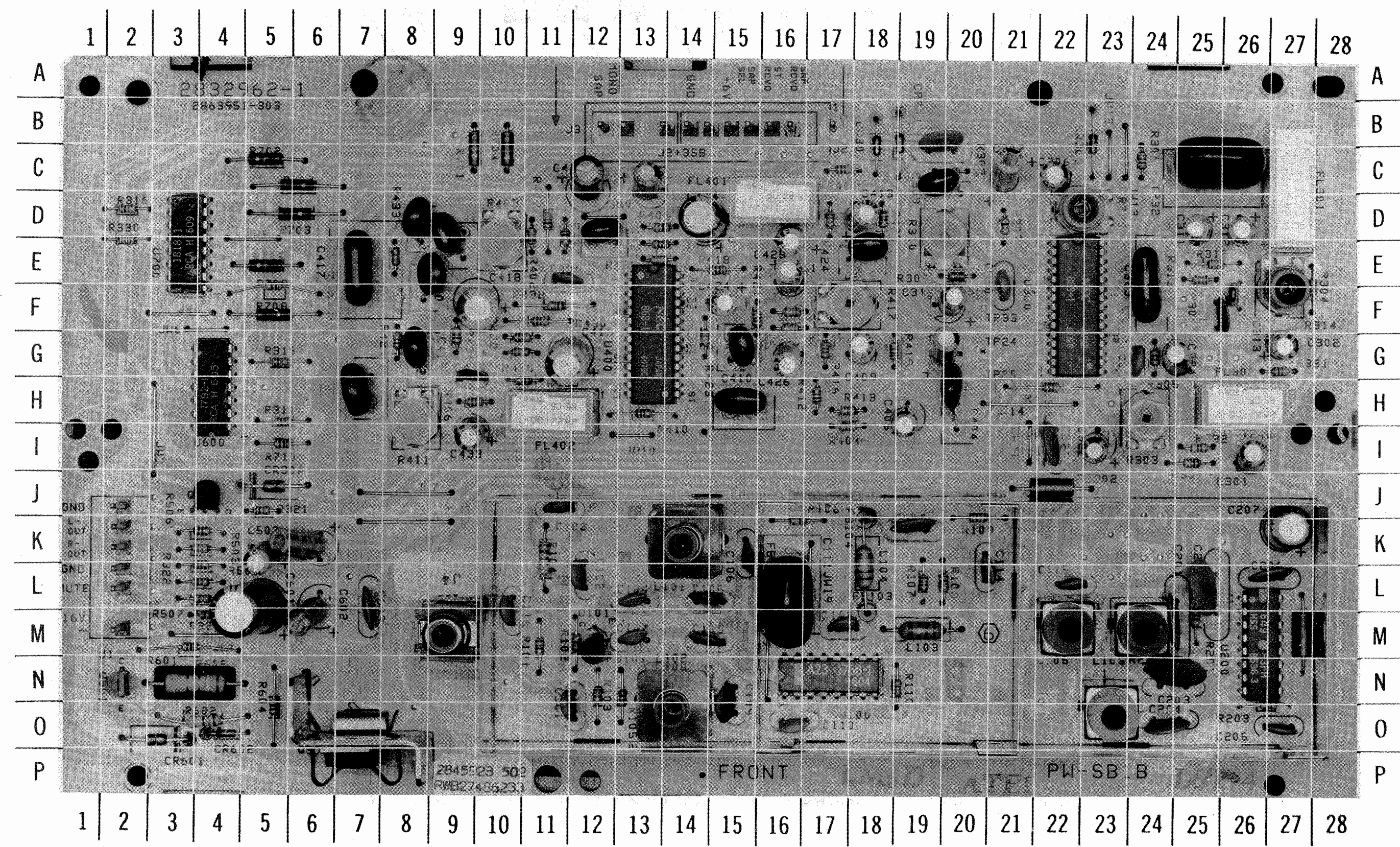
C101	O-12	CR303	B-23	R410	I-13
C102	L-12	CR304	J-5	R411	H-8
C103	J-11	CR601	O-3	R412	H-17
C104	L-13	CR602	O-4	R413	H-17
C105	L-14	FB101	M-12	R415	G-10
C106	K-15	FB102	K-16	R416	G-17
C107	M-13	FB103	L-18	R417	F-17
C108	M-14	FB104	K-18	R418	E-15
C109	N-15	FB201	M-27	R419	G-18
C110	O-16	FB202	J-22	R420	G-16
C111	L-16	FL301	O-27	R421	F-16
C112	M-17	FL302	H-26	R422	G-16
C113	K-19	FL401	M-12	R423	G-14
C114	L-20	FL402	D-16	R424	D-17
C115	L-22	J1	K-2	R425	D-18
C116	M-10	J2	B-15	R428	G-10
C201	M-25	J3	B-13	R429	G-8
C202	L-25	J4	M-9	R430	F-11
C203	N-25	L101	K-14	R431	G-9
C204	O-24	L102	O-14	R432	F-11
C205	O-27	L103	M-19	R433	E-8
C206	L-27	L104	K-18	R434	E-13
C207	K-27	L105	M-22	R435	E-13
C302	G-23	L106	M-24	R437	D-11
C303	G-23	L201	O-23	R438	H-11
C306	C-22	Q101	M-12	R502	L-4
C307	C-21	Q301	J-4	R503	K-4
C308	B-19	Q601	N-2	R506	K-4
C309	C-19	Q602	P-7	R507	L-4
C310	E-20	R101	M-11	R601	M-3
C311	D-23	R102	M-12	R602	O-4
C312	D-26	R103	N-12	R604	O-6
C313	F-26	R104	K-11	R605	N-4
C314	C-27	R105	N-13	R701	O-7
C315	F-26	R106	K-16	R702	O-5
C321	I-22	R107	L-19	R703	D-6
C322	I-23	R108	L-20	R704	O-10
C323	E-23	R109	K-20	R705	E-5
C324	G-23	R110	N-19	R707	O-6
C402	L-25	R201	M-25	R708	F-5
C404	H-20	R202	N-25	R709	F-5
C405	H-19	R203	O-27	R710	I-5
C406	E-11	R301	C-17	TP12	M-27
C407	D-11	R303	H-23	TP21	L-26
C408	H-15	R304	E-23	TP24	F-13
C409	G-18	R305	G-23	TP25	F-23
C410	G-15	R306	C-24	TP33	F-22
C411	E-16	R307	D-21	TP204	M-26
C412	E-18	R308	C-19	TP205	M-26
C413	D-18	R309	E-20	TP306	E-20
C414	D-14	R310	B-20	TP313	G-22
C415	G-11	R311	H-5	TP314	G-22
C416	H-7	R312	E-25	TP319	G-24
C417	E-7	R313	E-25	TP322	F-23
C418	F-9	R314	E-27	TP323	F-23
C419	G-8	R315	G-15	TP404	F-13
C420	E-9	R316	D-2	U11	M-17
C421	D-9	R310	D-22	U200	M-27
C422	D-8	R321	J-5	U300	E-22
C423	D-12	R322	L-4	U400	G-13
C424	F-17	R323	M-4	U600	F-4
C425	E-16	R330	E-2	U700	F-2
C426	G-16	R331	G-23		
C429	G-9	R332	I-22		
C432	O-12	R401	I-25		
C433	I-9	R402	D-11		
C501	K-6	R403	E-10		
C503	K-5	R404	H-17		
C601	L-6	R404	H-22		
C602	M-6	R405	H-9		
C603	L-7	R406	D-11		
CR301	B-19	R407	D-13		
CR302	B-18	R409	D-13		



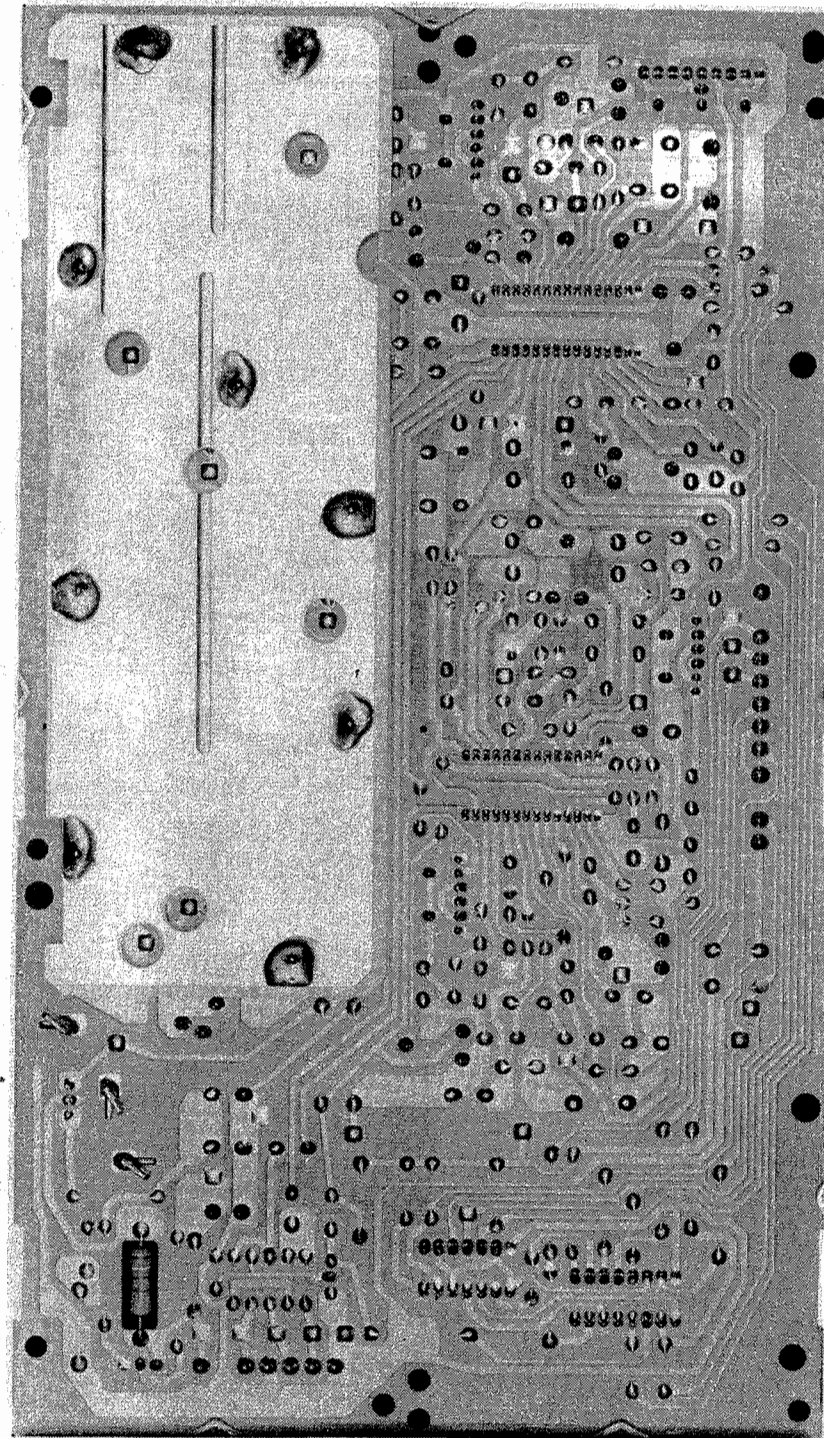


NOTE: ARROWS ON IC'S INDICATE PIN 1 UNLESS NOTED.

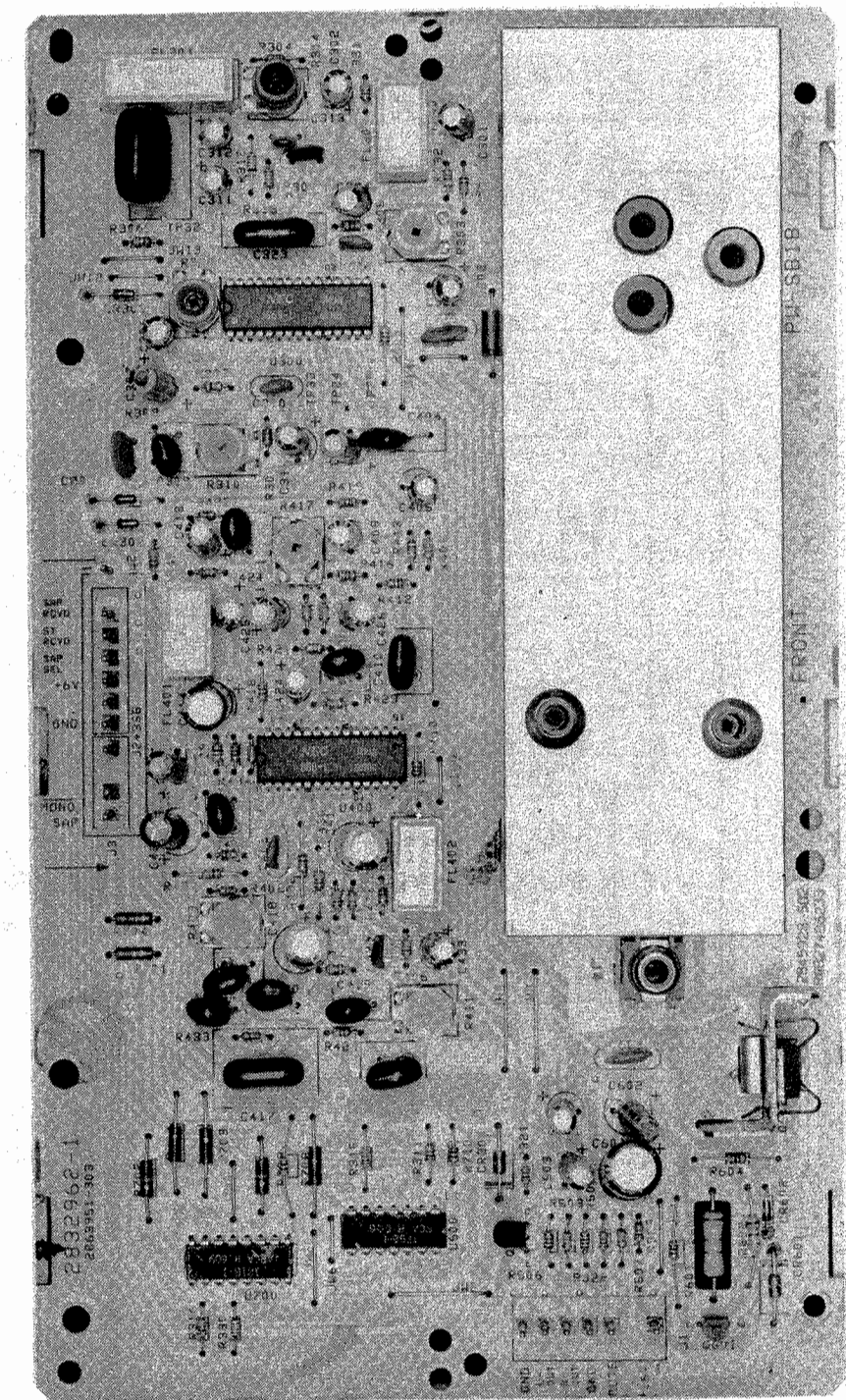








STEREO BROADCAST BOARD-SHIELD LOCATION (BOTTOM VIEW)

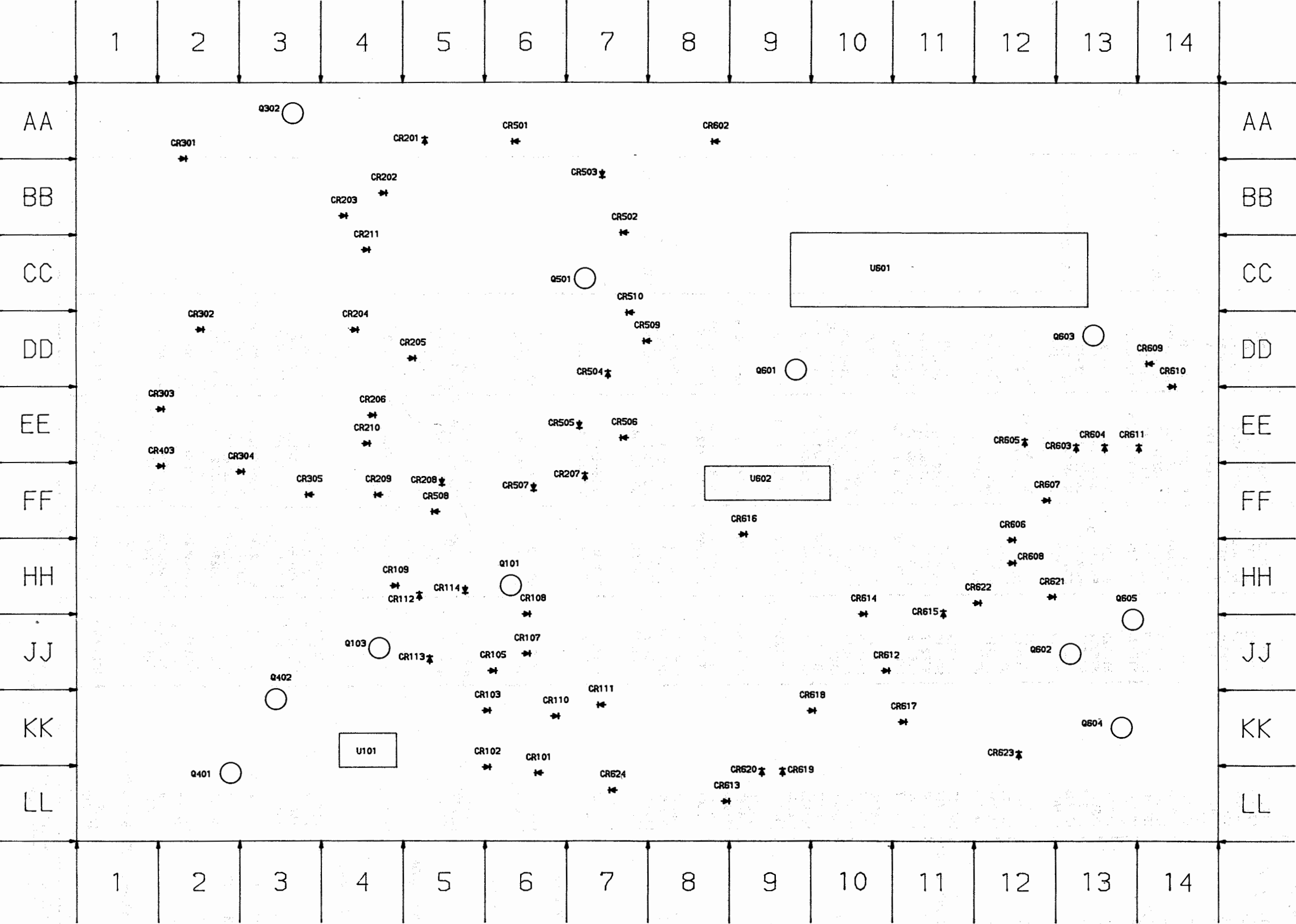


STEREO BROADCAST BOARD-SHIELD LOCATION (TOP VIEW)

SET 2622 FOLDER 2

RCA  
CHASSIS CTC130B

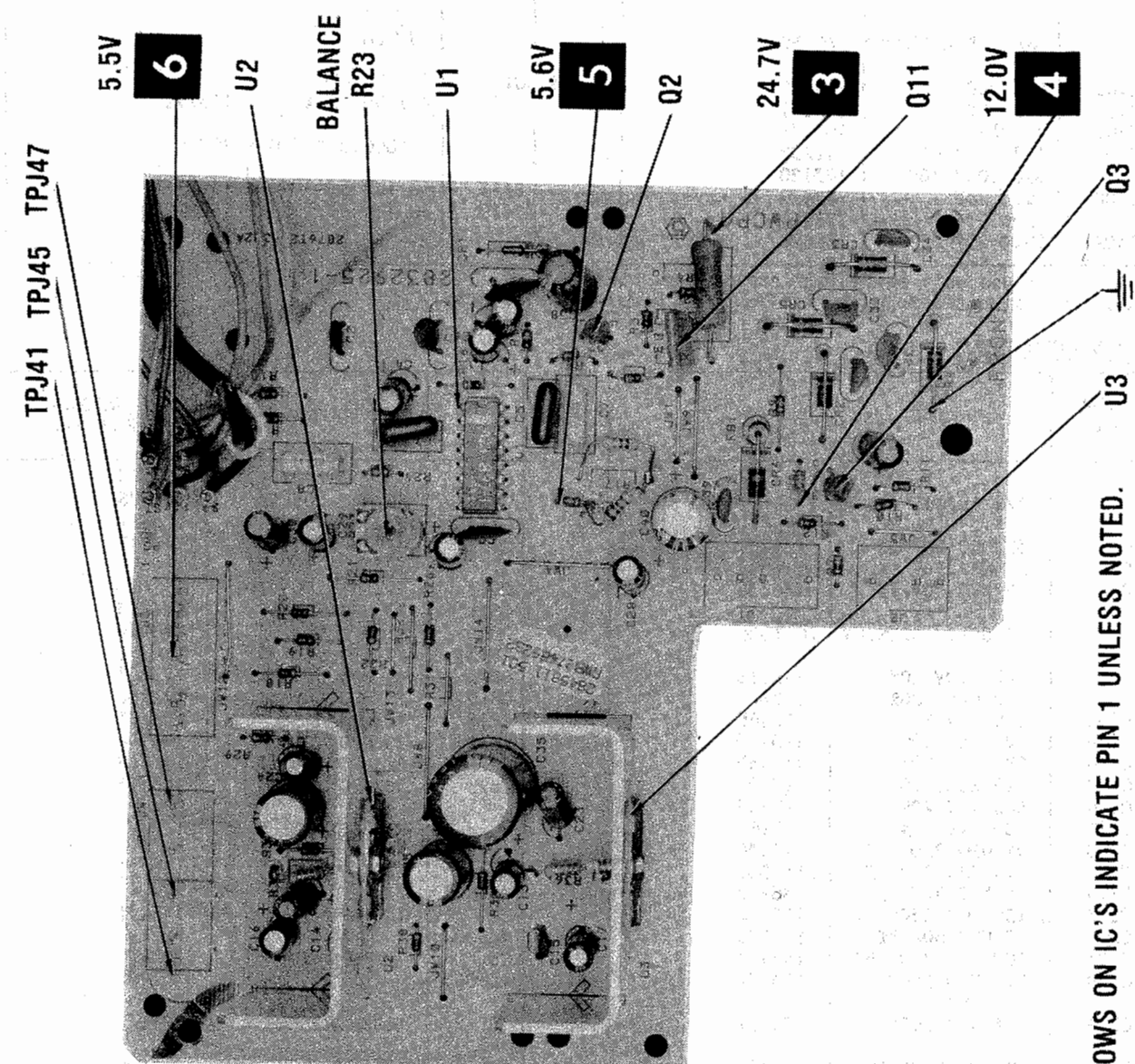






# TUNER CONTROL MTT001A (BOTTOM VIEW)-GridTrace LOCATION GUIDE

C1	A-11	C314	E-14	C657	L-5	R509	D-8
C2	A-10	C316	F-14	C659	C-5	R511	E-9
C3	A-10	C317	D-13	C662	C-7	R512	D-8
C4	A-9	C319	C-14	C663	H-1	R515	C-9
C100	H-9	C322	E-12	C664	H-1	R517	D-8
C101	L-10	C323	E-14	C668	L-3	R518	D-9
C102	L-10	C401	J-12	C669	L-4	R605	A-2
C103	K-10	C403	H-13	C670	F-1	R606	A-2
C104	J-10	C404	H-12	C673	D-3	R607	A-3
C105	J-9	C405	H-12	CR401	H-13	R608	A-3
C106	J-9	C406	F-12	CR402	H-13	R609	B-6
C107	H-9	C407	K-12	CR407	K-12	R618	C-5
C109	F-10	C408	K-13	R102	L-10	R619	B-6
C110	H-10	C412	K-13	R107	J-10	R620	C-1
C111	J-11	C413	L-13	R109	J-9	R621	C-1
C115	L-11	C415	J-14	R111	H-10	R625	B-7
C116	C-8	C416	K-14	R113	K-11	R627	B-6
C117	K-11	C418	L-12	R115	J-8	R628	B-6
C118	K-11	C419	J-13	R117	L-11	R630	J-2
C119	L-11	C420	J-1	R119	J-11	R631	J-2
C121	J-10	C421	L-14	R120	L-11	R632	K-1
C122	J-11	C501	A-8	R122	J-11	R633	J-1
C123	J-11	C502	B-9	R123	J-10	R635	E-2
C124	J-11	C503	B-8	R126	J-10	R636	H-3
C125	H-11	C504	B-8	R128	K-10	R637	D-2
C126	J-11	C505	B-8	R129	J-11	R639	E-1
C127	J-8	C507	A-8	R130	J-10	R640	K-2
C128	H-9	C509	C-8	R145	K-11	R641	L-1
C131	H-9	C510	C-8	R202	C-9	R643	D-3
C133	K-8	C511	E-8	R203	C-11	R645	D-7
C134	L-8	C512	D-8	R205	D-10	R646	D-6
C135	K-11	C513	E-8	R206	C-2	R647	D-7
C137	K-8	C514	E-9	R208	C-11	R648	D-6
C139	H-8	C515	E-9	R209	D-11	R649	E-6
C141	H-12	C516	B-9	R212	E-11	R652	K-3
C142	H-11	C517	B-8	R213	E-10	R660	J-3
C143	H-10	C518	F-10	R214	D-10	R661	K-2
C144	J-9	C521	D-9	R215	C-11	R662	K-2
C146	J-8	C601	A-2	R217	D-10	R666	E-2
C147	K-10	C602	A-2	R219	D-10	R667	H-4
C149	H-9	C603	A-3	R221	B-11	R670	C-7
C150	H-8	C604	A-3	R222	B-11		
C202	B-11	C605	B-1	R301	A-13		
C203	B-11	C607	C-3	R302	B-13		
C204	B-11	C608	A-3	R303	B-14		
C205	C-11	C609	A-4	R304	C-13		
C206	C-5	C610	A-4	R305	B-13		
C208	C-11	C611	A-4	R308	D-14		
C210	D-11	C612	A-4	R309	D-14		
C211	D-11	C613	A-5	R310	F-13		
C212	D-11	C614	A-5	R311	D-14		
C214	E-11	C615	C-5	R314	B-14		
C215	E-10	C616	B-5	R317	A-12		
C216	E-10	C617	D-1	R402	L-10		
C217	E-11	C618	D-1	R403	K-13		
C218	E-12	C619	A-5	R404	K-13		
C219	B-11	C620	J-1	R405	K-13		
C220	F-10	C622	J-2	R406	H-13		
C221	F-10	C623	K-2	R407	H-12		
C223	C-11	C624	D-1	R408	K-13		
C224	E-11	C625	E-1	R409	K-12		
C227	C-12	C626	F-1	R411	K-12		
C228	C-2	C627	E-1	R412	K-12		
C229	B-11	C630	D-6	R417	F-14		
C302	A-13	C631	E-6	R418	J-13		
C303	A-13	C634	F-7	R420	K-12		
C304	B-14	C635	K-6	R421	J-13		
C305	B-14	C636	H-5	R423	K-13		
C306	B-13	C637	J-1	R501	B-9		
C307	B-13	C638	K-7	R502	B-8		
C308	C-13	C649	L-7	R503	C-9		
C309	C-13	C650	L-3	R504	C-9		
C310	D-13	C652	L-1	R505	C-8		
C313	E-13	C653	L-2	R506	C-9		

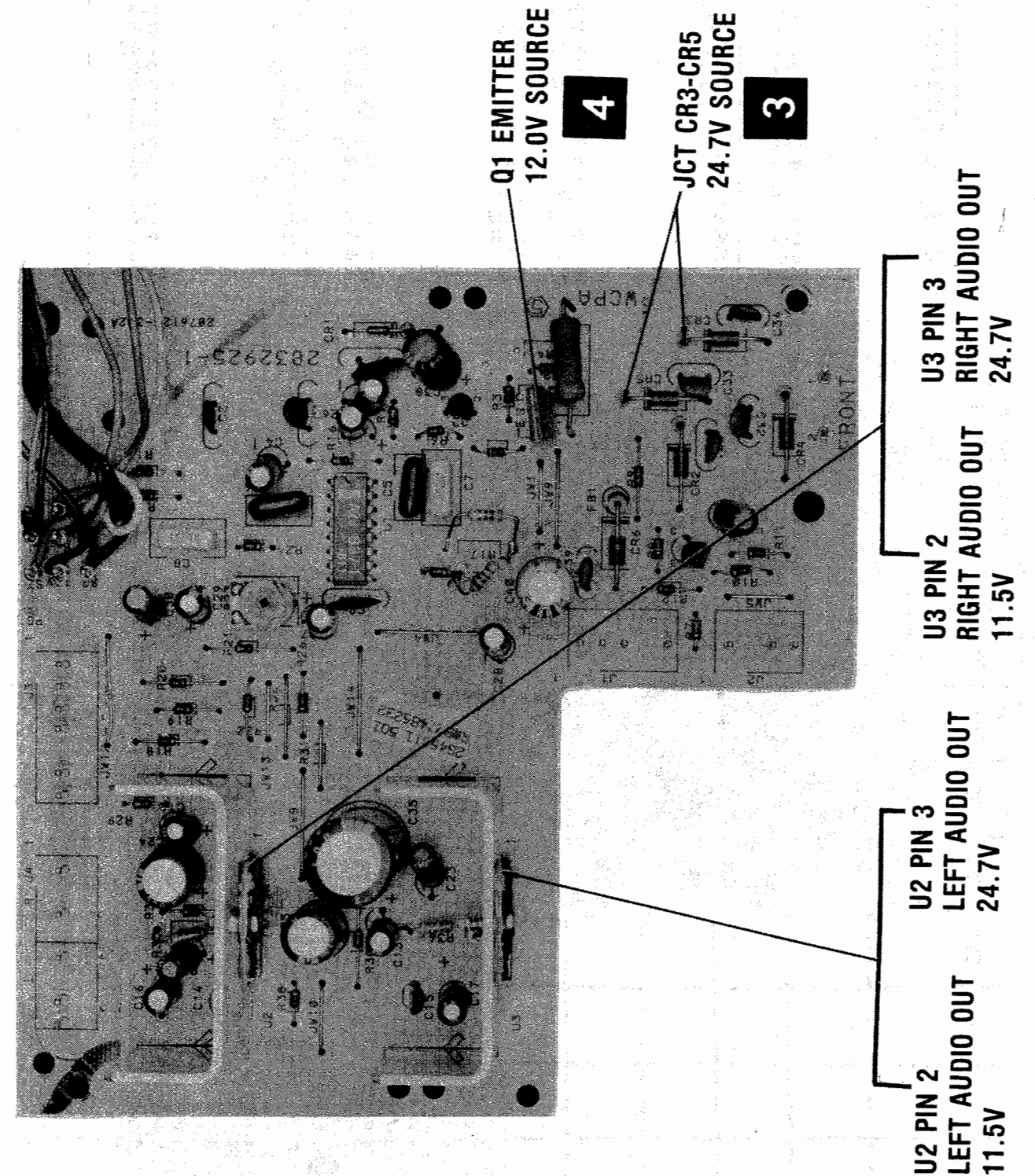


NOTE: ARROWS ON IC'S INDICATE PIN 1 UNLESS NOTED.

RCA  
CHASSIS CTC130B

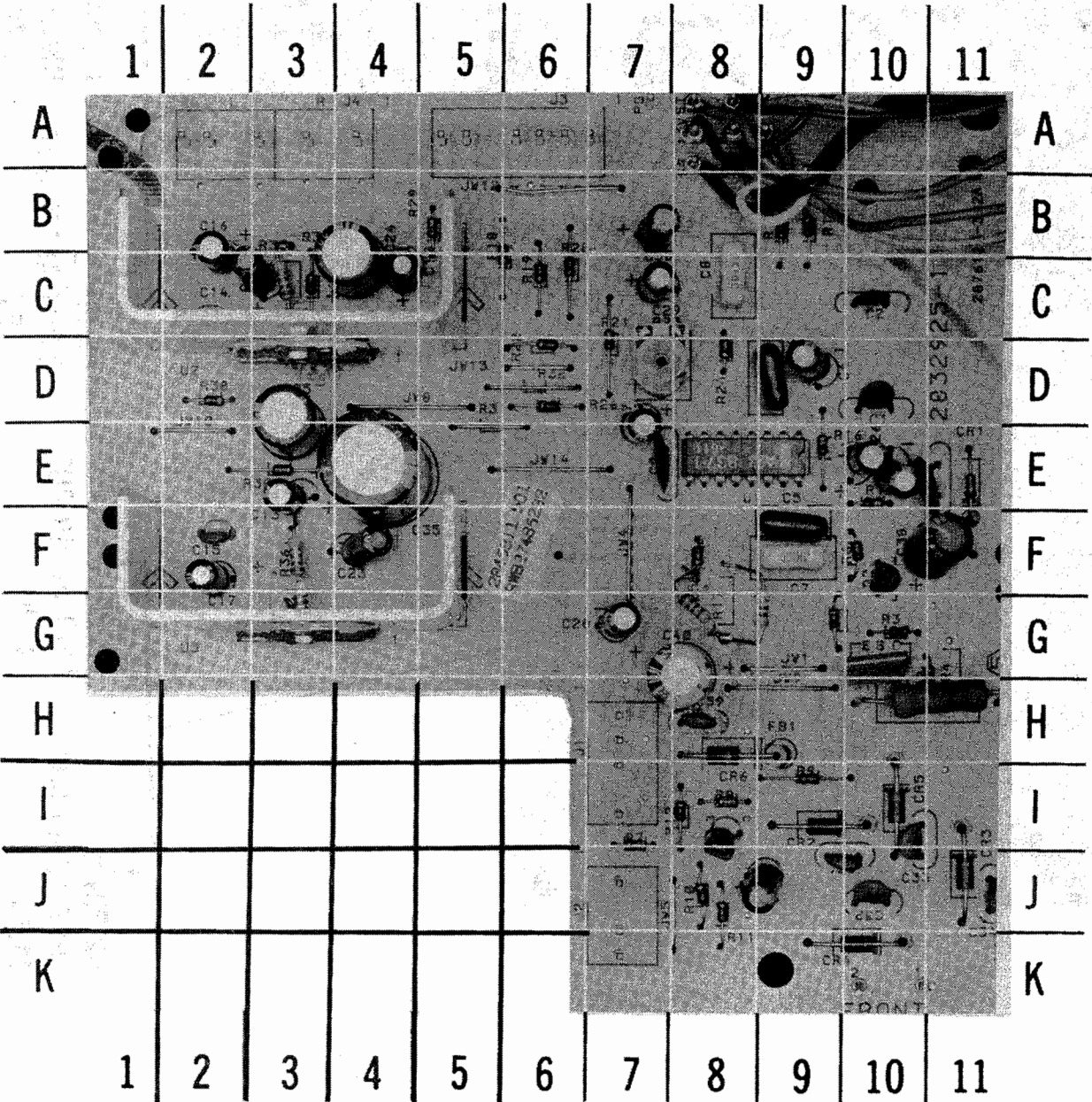
## TUNER CONTROL MTT001A (TOP VIEW)-GridTrace LOCATION GUIDE

C148	HH-4	FB401	LL-2	R106	JJ-7
C207	CC-4	FB501	CC-6	R110	HH-6
C209	EE-6	L1	AA-4	R112	JJ-3
C222	DD-4	L2	AA-5	R118	HH-4
C225	BB-5	L3	AA-6	R121	JJ-4
C226	EE-5	L101	LL-6	R124	KK-4
C311	AA-1	L102	KK-6	R131	HH-6
C312	DD-1	L103	KK-6	R207	LL-4
C320	FF-2	L104	JJ-6	R211	DD-5
C411	LL-2	L105	KK-4	R216	EE-3
C414	HH-1	L106	HH-4	R218	DD-6
C417	FF-1	L201	AA-4	R220	CC-4
C506	CC-2	L202	BB-5	R223	FF-4
C519	BB-6	L203	BB-5	R306	CC-2
C628	KK-14	L204	DD-5	R307	BB-2
C629	DD-8	L205	DD-4	R312	DD-3
C632	DD-9	L206	DD-4	R315	AA-2
C633	EE-9	L207	DD-4	R316	AA-2
C644	JJ-11	L208	EE-4	R414	HH-1
C645	HH-10	L209	EE-4	R415	HH-1
C646	FF-10	L210	EE-5	R416	FF-3
C647	FF-8	L211	FF-5	R419	HH-2
C648	LL-8	L212	BB-4	R422	KK-2
C654	LL-11	L213	DD-4	R507	CC-7
C656	LL-10	L301	BB-2	R508	CC-7
C665	BB-8	L302	BB-2	R513	FF-7
C667	LL-13	L303	CC-2	R514	CC-6
C671	BB-13	L304	DD-2	R601	BB-13
C672	LL-11	L305	DD-1	R602	BB-13
C674	JJ-9	L306	EE-1	R603	BB-12
C675	FF-11	L307	FF-2	R604	BB-12
CR101	LL-6	L308	BB-2	R610	BB-13
CR102	LL-5	L309	CC-2	R611	BB-12
CR103	KK-5	L310	EE-1	R612	BB-12
CR105	JJ-5	L311	AA-1	R613	BB-11
CR107	JJ-6	L312	AA-2	R614	BB-11
CR108	JJ-6	L401	JJ-2	R615	BB-11
CR109	HH-4	L402	LL-5	R616	BB-11
CR110	KK-6	L403	LL-1	R617	BB-10
CR111	KK-6	L404	JJ-1	R626	CC-9
CR112	HH-5	L405	KK-1	R629	CC-9
CR113	JJ-5	L502	BB-7	R634	FF-13
CR114	HH-5	L503	BB-7	R638	DD-13
CR201	AA-5	L504	DD-7	R642	CC-14
CR202	BB-4	L505	DD-6	R644	CC-8
CR203	BB-4	L506	EE-7	R651	EE-8
CR204	DD-4	L507	DD-7	R653	JJ-11
CR205	DD-4	L508	DD-6	R654	HH-10
CR206	EE-4	L509	EE-6	R655	JJ-10
CR207	FF-7	L510	EE-6	R664	KK-11
CR208	FF-5	L511	FF-6	R668	LL-11
CR209	FF-4	L601	HH-9	R669	EE-10
CR210	EE-4	L603	DD-12	T401	JJ-3
CR211	CC-4	L604	HH-13	T402	FF-2
CR212	EE-5	L605	HH-13	T501	AA-6
CR301	AA-2	L606	KK-13	U101	KK-4
CR302	DD-2	Q101	HH-6	U601	CC-11
CR303	EE-1	Q103	JJ-4	U602	FF-9
CR304	FF-2	Q201	CC-4	Y601	BB-10
CR305	FF-3	Q301	CC-1		
CR403	FF-1	Q302	AA-3		
CR501	AA-6	Q401	LL-2		
CR502	BB-7	Q402	KK-3		
CR503	AA-7	Q501	CC-7		
CR504	DD-7	Q601	DD-9		
CR505	EE-7	Q602	JJ-13		
CR506	EE-7	Q603	DD-13		
CR507	FF-6	Q604	KK-13		
CR508	FF-5	Q605	JJ-14		
CR509	DD-8	R1	AA-5		
CR510	CC-7	R101	KK-6		
FB201	CC-5	R103	KK-6		
FB301	BB-1	R104	KK-6		
FB302	BB-2	R105	KK-6		



STEREO POWER BOARD-GridTrace LOCATION GUIDE

C1	D-10	C27	E-7	R2	G-11	R23	D-7
C2	C-10	C28	G-7	R3	G-10	R24	D-7
C3	E-10	C29	C-7	R5	G-9	R25	G-8
C4	D-9	C30	B-7	R6	F-10	R26	D-6
C5	F-9	C31	J-10	R7	J-7	R29	B-5
C6	D-9	CR1	E-11	R8	I-8	R30	E-3
C7	F-9	CR2	I-9	R9	I-9	R31	D-6
C8	C-8	CR3	J-11	R10	J-8	R33	I-10
C9	E-7	CR4	K-10	R11	J-8	R35	C-3
C12	C-4	CR5	I-10	R12	I-8	R36	F-3
C13	E-3	CR6	H-8	R13	B-9	R37	C-3
C14	C-2	FB1	H-9	R14	B-9	R38	D-2
C15	F-2	J1	H-7	R15	E-10	R39	G-9
C16	B-3	J2	J-7	R16	E-9	TP J41	A-2
C17	F-2	J3	A-6	R17	G-9	TP J45	A-3
C22	C-3	L	A-2	R18	C-6	TP J47	A-3
C23	F-4	Q1	G-10	R19	C-6	U1	E-8
C24	C-4	Q2	F-10	R20	C-6	U2	D-3
C25	D-3	Q3	I-8	R21	C-6	U3	G-3
C26	E-10	R1	H-11	R22	D-6		



STEREO POWER BOARD

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PARTS LIST AND DESCRIPTION

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
CRT BOARD						
CR1	139706	NTE177	ECG177	SK9091/177	103-131	
CR50011	153680	NTE171	ECG171	SK3201/171	121-822	
Q1,2,3						
Q5001,2,3						
STEREO BROADCAST BOARD						
CR301, 2, 3	164717	NTE519	ECG519	SK3100/519	103-131	
CR304	177807	NTE5071A	ECG5071A	SK6V8/5071A	103-Z9020	
CR601	150363	NTE142A	ECG142A	SK12V/142A	103-Z9003	
CR602	164717	NTE519	ECG519	SK3100/519	103-131	
Q101	146848	NTE229	ECG229	SK3246A/229	121-Z9021	*
Q301	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	**
Q601	139366	NTE340	ECG340	SK3452/108	121-883	**
Q602	140979	NTE196	ECG196	SK3054/196	121-987-03	
U100	146857	NTE1545	ECG1545	SK9379/1545		
U200	150368		ECG1652			
U300	176223					
U400	176224					
U600	154222					
U700	176225					
STEREO POWER BOARD						
CR1	161081	NTE5011T1	ECG5011T1			
CR2,3,4,5	147015	NTE125	ECG125	SK5010A/117A	212-Z9000	
CR6	176296	NTE552	ECG552	SK9000/552	103-287	
Q1	146849	NTE210	ECG210	SK3202/210	121-Z9055	
Q2,3	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
U1	176226	NTE1576	ECG1576	SK7672/1576		
U2,3	150369	NTE1566	ECG1566	SK7726/1566		



PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	MFGR. PART No.
	CHASSIS ASSEMBLY	CTC130C
# C105	680 200V	175442
# C120	680 35V	146217
# C407	22 25V	153991
C506	4.7 100V 10%	151238
	6.8 100V 10%	175120
# C508	1500 25V	162422
	1500 35V	177534
# C509	1500 25V	162422

# For SAFETY use only equivalent replacement part.  
Items Not Listed Are Normally Available At Local Distributors.

CAPACITORS

ITEM No.	RATING	MFGR. PART No.
	A/V IN/OUT ASSEMBLY PW VI-003	
C9	39 NPO 50V 5%	149151
C12	33 NPO 50V 5%	176879
C48	18 NPO 50V 1%	146538
	CHASSIS ASSEMBLY CTC 130C	
# C101	.22 600V 20%	145613
	.22 600V 20%	175604
# C102	680 1KV 20%	113165
# C103	680 1KV 20%	113165
# C104	680 1KV 20%	113165
# C109	1.5 200V 10%	147600
# C110	680 1KV 20%	113165
# C119	680 1KV 20%	113165
C208	91 NPO 250V 5%	142336
C209	7.5 NPO 250V 3%	143555
C213	18 NPO 50V 5%	146249
C214	130 NPO 250V 5%	153974
C302	12 NPO 50V 5%	145676
C304	100 NPO 250V 5%	153973
C308	9.1 NPO 250V	153971
	± .5PF	
C309	9.1 NPO 250V	153971
	± .5PF	
C316	82 NPO 250V 5%	145376
C317	91 NPO 250V 5%	142336
C318	18 NPO 50V 1%	145538
C319	47 NPO 250V 10%	157314
C333	16 NPO 250V 5%	147628
C335	22 NPO 50V 10%	150821
C405	220 NPO 250V 2%	153234
# C411	.1 50V 20%	159640
# C417	27 NPO 250V 5%	143755
# C423	.0155 1.2KV 2%	161372
# C425	.43 200V 5%	154269
# C429	.0022 50V 10%	143881
C431	.001 N1500 1.5KV	143554
	5%	
C434	330 N1500 1.5KV	146822
	5%	

# For SAFETY use only equivalent replacement part.  
Items Not Listed Are Normally Available At Local Distributors.

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

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

ITEM NO.	FUNCTION	RESISTANCE	MFGR. PART NO.	NOTES
	A/V IN/OUT ASSEMBLY PW VI-003			
R91	Balance	5000	157493	
R110	Video Level	1000	175372	
	CHASSIS ASSEMBLY CTC130C			
R332	AFT	10K	151270	
R450	Focus/Screen		(1)	
R715	Contrast Preset	10K	151270	
	INSTRUMENT ASSEMBLY			
# R4202	Black Level	170K	164893	
# R4203	Color	100K	164894	
# R4204	Tint	100K	164894	
# R4207	Picture	125K	161401	
R4225	Treble	50K	176612	
R4226	Bass	50K	176612	
R4227	Balance	10K	161397	
			Detent @ 50%	
	PW CPA			
R23	Balance	5000	157493	
	PW PIN			
R4	Width	1000	147615	
	PW RC			
R334	AGC	25K	176662	
R534	Vert Height	500K	147618	
		50K	177508	
R750	Red Bias	4500	147617	
R752	Green Bias	4500	147617	
R754	Blue Bias	4500	147617	
R756	Green Drive	150	147619	
R758	Red/Blue Drive	100	147616	
R4209	Sharpness	500	176663	
		500	177509	
	PW SB001B SOUND ASSEMBLY			
R303	Wide Band Audio	50K	148415	
R310	VCO	5000	177055	
R314	Stereo Decoder OSC	7500	161383	
R320	Pilot Cancel	25K	160156	
R403	DBX Input Level	10K	148417	
R411	High Freq Adjust	10K	148417	
R417	Low Freq Sep	3000	177057	

# For SAFETY use only equivalent replacement part.  
(1) Contained In Cover Assembly, Part Number 176664 or 176863.

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
MAIN BOARD						
CR101,2,3,4,5	147015	NTE125	ECG125	SK5010A/117A	212-Z9000	
CR106,7,9	176296	NTE552	ECG552	SK9000/552	103-287	
CR301	149930	NTE5021A	ECG5021A	SK12A/5021A	103-279-21	
CR302	164717	NTE519	ECG519	SK3100/519	103-131	
CR402	139706	NTE177	ECG177	SK9091/177	103-131	
CR405	139706	NTE177	ECG177	SK9091/177	103-131	#
CR406	175424	NTE5029A	ECG5029A	SK20A/5029A	103-Z9023	#
CR407	157301	NTE177	ECG177	SK9091/177	103-131	USED SOME VERSIONS
CR408,9	157301	NTE177	ECG177	SK9091/177	103-131	#
CR410	147015	NTE125	ECG125	SK5010A/117A	212-Z9000	
CR411	146316	NTE525	ECG525	SK3925/525	212-Z9010	
CR412	156317	NTE552	ECG552	SK9000/552	103-287	
CR413	164717	NTE519	ECG519	SK3100/519	103-131	
CR414	139706	NTE177	ECG177	SK9091/177	103-131	
CR501	139706	NTE177	ECG177	SK9091/177	103-131	
CR502	147015	NTE125	ECG125	SK5010A/117A	212-Z9000	
CR503	164717	NTE519	ECG519	SK3100/519	103-131	
CR504	164874	NTE177	ECG177	SK9091/177	103-131	
CR505	149731	NTE116	ECG116	SK3312	212-76-02	
CR507	139706	NTE177	ECG177	SK9091/177	103-131	
CR701	164717	NTE519	ECG519	SK3100/519	103-131	
CR703 THRU CR707	164717	NTE519	ECG519	SK3100/519	103-131	
Q301	146848	NTE229	ECG229	SK3246A/229	121-Z9021	*
Q303	146850	NTE159	ECG159	SK3466/159	121-Z9003	
Q304	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q305	146850	NTE159	ECG159	SK3466/159	121-Z9003	
Q401	153677	NTE255	ECG255	SK9412/255	121-Z9001	*
Q402	146823	NTE238	ECG238	SK3710/238	121-Z9001	*
Q501,2	146856	NTE152	ECG152	SK3893/152	121-987-03	
Q701	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q703	143806	NTE159	ECG159	SK3466/159	121-Z9003	
Q704	176980	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q705	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q706	176980	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q801	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
SCR101	149251	NTE230	ECG230	SK3042/230	185-Z9001	
SCR401	153682	NTE5402	ECG5402	SK3638/5402	185-Z9006	
U201	153684	NTE1175	ECG1175	SK3212/1175	221-Z9056	
U301	146857	NTE1545	ECG1545	SK9379/1545		USED MODEL CTC130A
U401	177857	NTE868	ECG868	SK7692/868		#
U701	176222	NTE844	ECG844	SK9381/844	221-Z9171	
MSD002A BOARD						
CR1,2	164717	NTE519	ECG519	SK3100/519	103-131	
Q1	143806	NTE159	ECG159	SK3466/159	121-Z9003	
PW PIN BOARD						
CR1	164874	NTE177	ECG177	SK9091/177	103-131	
Q1	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q2	153350	NTE153	ECG153	SK3274/153	121-988-03	
PW RRO01A BOARD						
Q1	148907	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
PW V1002 BOARD						
CR1	161081	NTE5011T1	ECG5011T1	SK3854/123AP	121-Z9000A	*
Q1	146847	NTE123AP	ECG123AP	SK3466/159	121-Z9003	
Q2	145410	NTE159	ECG159	SK3466/159	121-Z9003	
Q3,4	145410	NTE159	ECG159	SK3466/159	121-Z9003	
Q5 THRU Q11	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q12,13	139366	NTE340	ECG340	SK3452/108	121-883	*
Q14 THRU Q17	146847	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q18	146849	NTE210	ECG210	SK3202/210	121-Z9055	
U2	161079	NTE4052B	ECG4052B	SK4052B	905-381	
U3	176873	NTE4052B	ECG4052B	SK4052B	905-381	
U5	161079	NTE1576	ECG1576	SK7672/1576		
U6	176226	NTE1576	ECG1576	SK7672/1576		
CRK40A TRANSMITTER						
Q1	148996	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	
U1	173219	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	

# For SAFETY use only equivalent replacement part.

\* Lead configuration may vary from original.

WIRING DATA

High Voltage Lead .....	Use BELDEN No. 8866 (40 KV)
Shielded Hook-up Wire .....	Use BELDEN No. 8401 or 8421 (Single-Conductor)
General-use Unshielded Hook-up Wire .....	8208 (Two-Conductor)
75-Ohm Tuner Input Lead .....	8529 (Solid) Available in 13 Colors
300-Ohm Antenna Lead-In .....	8522 (Stranded) Available in 13 Colors
Antenna Rotor Cable .....	8241 (Foam Core) or 8285 (Foam Jacketed)
	Use BELDEN No. 8275
	Use BELDEN No. 8484 (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

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		MFGR. PART No.	NTE PART No.	
	A/V IN/OUT ASSEMBLY PW VI-003			
R24	2400 2% 1/8W Carbon Film	176876	EW224	
R26	10 5% 1/4W Flame Proof Carbon Film	829010	QW010	
R30	620 2% 1/4W Carbon Film	176647	QW162	
R31	2400 2% 1/8W Carbon Film	176876	EW224	
R32	1200 2% 1/4W Carbon Film	175308	QW212	
R34	22 5% 1/4W Flame Proof Carbon Film	829022	QW022	
R65	4700 2% 1/4W Carbon Film	175413	QW247	
R69	51K 2% 1/4W Carbon Film	175315	QW351	
R71	47K 2% 1/4W Carbon Film	175322	QW347	
R86	22 5% 1/4W Flame Proof Carbon Film	829022	QW022	
R102	30 5% 2W Flame Proof Metal Film	176875	2WD30	
R108	680 2% 1/4W Carbon Film	175312	QW168	
R121	11 5% 5W WW	176814		
R122	5100 2% 1/4W Carbon Film	175417	QW251	
	CHASSIS ASSEMBLY CTC 130B			
R102	470K 5% 1/2W Flame Proof Carbon Film	830447	HW447	
R106	53.6K 1% 1/2W Metal Film	177533		
	54.9K 1% 1/2W Metal Film	176624		
R108	3240 1% 1/2W Metal Film	176625		
R109	62K 2% 1/4W Carbon Film	(1)	QW362	
R110	120K 2% 1/4W Carbon Film	(1)	QW412	
R111	240K 2% 1/4W Carbon Film	(1)	QW424	
R112	510K 5% 1/4W Carbon Film	(1)	QW451	
	464K 1% 1/4W Carbon Film	(1)		
R113	270 10% 5W WW	115166		
R114	4.7 5% 1/2W Flame Proof Carbon Film	830A47	HW4D7	
R115	36K 5% 1W Flame Proof Metal Film	176657(2)	2W336	
R116	680 5% 1W Flame Proof Metal Film	176653	1W168	
R117	82 5% 1/4W Carbon Film		QW082	
	82 2% 1/4W Carbon Film	175757(2)	QW082	
R119	43 5% 3W WW	176279		
R120	2.7 10% 15W WW	160238		
R201	12 5% 1/2W Flame Proof Carbon Film	830012(2)	HW012	
R205	27 5% 2W WW	176339(2)		
R207	200 2% 1/4W Carbon Film	175363	QW120	
R305	100 5% 1/4W Flame Proof Carbon Film	829110	QW110	
R314	180 2% 1/4W Carbon Film	176646	QW118	
R325	20 5% 3W Flame Proof Metal Film	176658	3W020	
R402	560 5% 1W Flame Proof Metal Film		1W156	
	560 5% 1W Flame Proof Metal Film	176652	1W456	
R403	27.4K 2% 1/4W Metal Film	151883		
R404	84.5K 1% 1/4W Metal Film	154258		
R416	121K 1% 1/2W Metal Film	153978		
R417	10K 5% 2W Flame Proof Metal Film	176656	2W310	
R418	.24 5% 2W W	162412		
R423	5600 5% 1/2W Carbon Film	175369	HW256	
R425	820 5% 1/4W Carbon Film	175043	QW182	
R426	4700 5% 5W WW		5W247	
	4700 5% 5W Flame Proof Metal Film	179595		
R429	100 5% 1/4W Flame Proof Carbon Film	829110	QW110	
R430	25.5K 1% 1/2W Metal Film	149782		
R431	180 5% 1/4W Carbon Film	176628	QW118	
R436	220 5% 1/2W Carbon Film	176651	HW122	
R506	6800 5% 2W Flame Proof Metal Film	176655	2W268	
R509	12 5% 1/2W Flame Proof Carbon Film	830012	HW012	
R511	10 5% 1/4W Carbon Film	175753	QW010	
R513	10 5% 1/4W Flame Proof Carbon Film	829010	QW010	
R514	10 5% 1/4W Flame Proof Carbon Film	829010	QW010	
R518	1 5% 1/2W Flame Proof Metal Film	830A10	HW1D0	
R726	180 5% 1/4W Flame Proof Carbon Film	829118	QW118	
R727	33K 5% 1W Flame Proof Metal Film	176654	1W333	
R728	9530 1% 1/4W Metal Film	176862		

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		MFGR. PART No.	NTE PART No.	
R745	10 5% 1/2W Flame Proof Carbon Film	830010	HW010	
R746	2700 2% 1/4W Carbon Film	176648	QW227	
R747	150 2% 1/4W Carbon Film	176645	QW115	
R759	200 5% 1/4W Flame Proof Carbon Film	829120	QW120	
	150 5% 1/4W Flame Proof Carbon Film	829115	2W115	
R761	200 2% 1/4W Carbon Film	175363	QW120	
	68 5% 1/4W Carbon Film	175039	QW068	
R802	390 2% 1/4W Carbon Film	177535	QW139	
	330 2% 1/4W Carbon Film	175045	QW133	
R804	620 2% 1/4W Carbon Film	176647	QW162	
R811	820 2% 1/4W Carbon Film	175043	QW182	
RT101	9.2 Cold PTC	149680		
	INSTRUMENT ASSEMBLY			
R1	1100 10% 10W WW	175614		
R799	LDR			
	KINE SOCKET ASSEMBLY PW5000			
R1	10K 5% 2W Flame Proof Metal Film	176656	2W310	
(R5001)				
R2	10K 5% 2W Flame Proof Metal Film	176656	2W310	
(R5002)				
R3	10K 5% 2W Flame Proof Metal Film	176656	2W310	
(R5003)				
R8	27K 5% 1/4W Carbon Film	829327	QW327	
(R5008)				
R13	22K 10% 1/2W Carbon Comp	502322	HW322	
(R5013)				
R14	2.4 10% 3W WW	176660		
(R5014)				
	PW CPA			
R1	220 5% 3W Flame Proof Metal Film	177856	3W122	
R5	4700 2% 1/4W Carbon Film	175413	QW247	
R6	5100 2% 1/4W Carbon Film	175417	QW251	
R17	10 5% 1/4W Flame Proof Carbon Film	829010	QW010	
R35	2.2 5% 1/4W Flame Proof Carbon Film	829A22	QW2D2	
R36	2.2 5% 1/4W Flame Proof Carbon Film	829A22	QW2D2	
	PW PIN			
R3	680 5% 1W Flame Proof Metal Film	176653	1W168	
	PW SB001B SOUND ASSEMBLY			
R605	3.9 5% 1W Flame Proof Metal Film	831A3D9	1W3D9	

# For SAFETY use only equivalent replacement part.

RCA  
CHASSIS CTC130B

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

MISCELLANEOUS

ITEM No.	PART NAME	MFGR. PART No.	NOTES
#	Cushion	164921	Wedge, Yoke and Adjustment, Models FMR720WR, GMR851PR, GMR855CR, GMR855HR, GMR859PR, GMR860TR, and GMR868PR PWSB/PWV1PUR. Models FMR550WR, FMR555WR, FMR565WR, and FMR566TR Focus, Screen Auxiliary Control Auxiliary Control Models FMR550WR, FMR565WR, FMR566TR, FMR720WR, GMR851PR, GMR855CR, GMR855HR, GMR85 Auxiliary Control Model FMR555WR LED, Models FMR5550WR, FMR565WR, and FMR566TR LED, Model FMR555WR LED, Models FMR720WR, GMR851PR, GMR855CR, GMR855HR, GMR859PR, GMR860TR and GMR868PR Relay Sound, Models FMR550WR, FMR555WR, FMR565WR and FMR720WR Sound, Models GMR851PR, GMR855CR, GMR859PR, GMR860TR and GMR868PR
	Grommet	173133	
	Housing	176863	
	Panel, Rear	164134	
	PC Board	164898	
	PC Board	176681	
	PC Board	177370	
	PC Board	177080	
	PC Board	176601	
	PC Board	176825	
#	PC Board	177432	
	PC Board	177521	

# For SAFETY use only equivalent replacement part.

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

ITEM	PART No.	PART No.	PART No.	PART No.
MODELS	FMR550WR	FMR555WR	FMR565WR	FMR566TR
# Cabinet Front, Mask	MK0469	MK0429	MK0557	MK0511
# Cabinet Back	MK0469	BK0428	MK0557	MK0511
Door, Auxiliary Control	179889	177803	179889	179889
Latch, Door	161908	161908	161908	161908
Hinge, Door		161899		
Stop, Door	141648		141648	141648
Knob, Sharpness	176606	176606	176606	176606
MODELS	FMR720WR	GMR851PR	GMR855CR	GMR855HR
# Cabinet Front, Mask	MK0406	MK0414	MK0415	MK0415
# Cabinet Back	BK0405	BK0412	BK0413	
Door, Auxiliary Control	177433	177522	177522	177522
Latch, Door	161908	161908	161908	161908
Hinge, Door		161899	161899	161899
Stop, Door	141648		176606	
Knob, Sharpness	176606	176606	176606	176606
MODELS	GMR859PR	GMR860TR	GMR868PR	
# Cabinet Front, Mask	MK0415	MK0414	MK0415	
# Cabinet Back	BK0431	BK0505	BK0413	
Door, Auxiliary Control	177522	177522	177522	
Latch, Door	161908	161908	161908	
Hinge, Door	161899	161899	161899	
Stop, Door				
Knob, Sharpness	176606	176606	176606	

# For SAFETY use only equivalent replacement part.  
Items Not Listed Are Normally Available At Local Distributors.

PARTS LIST AND DESCRIPTION

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	RCA PART No.	ZENITH PART No.	NOTES
TUNING SYSTEM MTT001A						
CR101	164717	NTE519	ECG519	SK3100/519	103-131	MATCHED SET INCLUDES CR108, CR203, CR204, CR210 CR502, CR506, CR510 USE CR107 MATCHED SET MATCHED SET INCLUDES CR112, CR301, CR302, CR303 USE CR109 MATCHED SET USE CR107 MATCHED SET USE CR107 MATCHED SET USE CR109 MATCHED SET USE CR107 MATCHED SET USE CR107 MATCHED SET
CR102,3	174378	NTE553	ECG553	SK3322		
CR105	129095					
CR107	174449					
CR108	174450					
CR109	164717	NTE519	ECG519	SK3100/519	103-131	
CR110,11		NTE553	ECG553	SK3322		
CR112	129095	NTE553	ECG553	SK3322	103-131	
CR113,14,15,201,202		NTE553	ECG553	SK3322		
CR203,4	129095	NTE553	ECG553	SK3322		
CR205,6	129095	NTE553	ECG553	SK3322		
CR207	164717	NTE519	ECG519	SK3100/519	103-131	
CR208,9	129095	NTE553	ECG553	SK3322		
CR210	164717	NTE519	ECG519	SK3100/519	103-131	
CR211	164717	NTE519	ECG519	SK3100/519	103-131	
CR212	129095	NTE553	ECG553	SK3322		
CR301,2,3	174378	NTE519	ECG519	SK3100/519	103-131	
CR304,5	174381	NTE553	ECG553	SK3322		
CR401,2	164717	NTE519	ECG519	SK3100/519	103-131	
CR403		NTE553	ECG553	SK3322		
CR501	129095	NTE553	ECG553	SK3322		
CR502	129095	NTE553	ECG553	SK3322		
CR503,4,5		NTE553	ECG553	SK3322		
CR506		NTE553	ECG553	SK3322		

RCA  
CHASSIS CTC130B

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

COILS (RF-IF)

ITEM No.	FUNCTION	MFGR. PART No.	ITEM No.	FUNCTION	MFGR. PART No.
AUDIO/VIDEO/IN/OUT/BOARD MODEL FMR720WR			L311	Peaking (15uH)	157133
L1	Peaking (33uH)	153921	L312	Peaking (1.2uH)	154047
L3	Peaking (470uH)	163028	L314	Peaking (3.3uH)	154048
L4	Peaking (470uH)	163028	L401	Horizontal	160969
L5	Peaking (470uH)	163028	L402	Peaking (3.8uH)	153986
L6	Peaking (470uH)	163028	L403	Linearity	161369
CRT BOARD			L404	Peaking (.15uH)	176620
L1	RF Choke (400uH)	164015	L701	RF Choke (56uH)	176621
MAIN BOARD			L701	RF Choke (33uH)	177537
# L101	Line Filter	176619	L702	RF Choke (56uH)	176621
L103	RF Choke	154026	L702	RF Choke (33uH)	177537
# L104	Peaking (68uH)	153987	L801	RF Choke (12uH)	149175
# L105	RF Choke (3.8uH)	153986	L803	Peaking (39uH)	154050
L301	Trap 47.25MHz	146198	L804	Peaking (56uH)	161090
L302	Peaking (1uH)	146200	L805	Peaking (27uH)	160517
L302	Peaking (1uH)	147367	L806	RF Choke (470uH)	176622
L303	Detector	143899	SOUND BOARD		
L304	AFT	143831	L101	Bandpass 45.75MHz	161095
L305	Peaking (2.2uH)	143893	(L1)	Bandpass 45.75MHz	161095
L307	Peaking (1uH)	147637	L102		
L308	RF Choke (2.2uH)	143893	(L2)	Bandpass 45.75MHz	161095
L309	RF Choke (.82uH)	148420	L103		
L310	RF Choke (.62uH)		L104	Peaking (2.2uH)	143893
			L104	RF Choke (2.2uH)	143893
			L105	Bandpass 4.5MHz	151247
			(L7)	Bandpass 4.5MHz	151247
			L106		
			(L8)	Bandpass 4.5MHz	151247
			L201		
			(L9)	Detector 4.5MHz	151248

# For SAFETY use only equivalent replacement part.

COILS & TRANSFORMERS

ITEM No.	FUNCTION	MFGR. PART No.	OTHER IDENTIFICATION	NOTES
# DY1	Yoke: 110° Horiz 1.3mh Vert 22.3mh	1842022-503	1842022-503(1)	
# T1	Standby	2863308-002	2863308 2(1)	
T101	Regulator	2870941-007	2870941-7(1)	
T401	Horizontal Driver	1467974-002	1467974-2(1)	
# T402	Horizontal Output	1455874-801	455874-801(1)	

# For SAFETY use only equivalent replacement part.

(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2 1/4" X 5" Oval Speaker 15 Ohms	163428		
SP2	2 1/4" X 5" Oval Speaker 15 Ohms	163428		
SP1		164933		Not Available for Process Not Available for Process
SP2		164933		

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

MISCELLANEOUS

ITEM No.	PART NAME	MFGR. PART No.	NOTES
DL701	Delay Line	153674	
F101	Fuse, AC	175425	5 Amp @ 125VAC
FB1	Ferrite Bead	152103	PW CPA
FB101	Ferrite Bead	154022	Main
FB101	Ferrite Bead	152102	Sound
FB102	Ferrite Bead	152102	Main
FB102	Ferrite Bead	152102	Sound
FB103	Ferrite Bead	152102	Main
FB103	Ferrite Bead	152102	Sound
FB104	Ferrite Bead	152102	Sound
FB105	Ferrite Bead	152102	
FB201	Ferrite Bead	153328	
FB202	Ferrite Bead	153328	
FB301	Ferrite Bead	152102	
FB302	Ferrite Bead	152102	
FB303	Ferrite Bead	152102	
FB304	Ferrite Bead	154052	
FB307	Ferrite Bead	152102	
FB308	Ferrite Bead	154052	
FB309	Ferrite Bead	154042	
FB401	Ferrite Bead	154322	
FB404	Ferrite Bead	152102	
FB405	Ferrite Bead	152102	
FB406	Ferrite Bead	154322	
FB407	Ferrite Bead	154322	
FB408	Ferrite Bead	154052	
FB501	Ferrite Bead	154052	
FB701	Ferrite Bead	154052	
# J5201	Jack	156257	Video Input
J5202	Jack	156257	Video Input
J5203	Jack	156257	Audio Input
J5204	Jack	156257	Audio Input
# K1	Relay, Degauss	160093	
# L102	Degaussing Coil	157872	Models FMR55WR, FMR55WR, FMR56WR, and FMR566TR
	Degaussing Coil	164121	Models FMR720WR, GMR851PR, GMR855CR, GMR855CR, GMR855HR, GMR859PR, GMR860TR and GMR85PR CRT
PW5000	PC Board	176867	
PWCPA	PC Board	177844	
PWPIN	PC Board	176868	
PWRC	PC Board	176869	
PWRR	PC Board	176825	
01A			
PWSB0	PC Board	177064	
01B			
PWV1	PC Board	179384	
003			
S4228	Switch	176613	Speaker, Model FMR55WR
S4229	Switch	176613	Stereo/Mono
SF301	Filter	147639	Saw
V101	CRT	A66ABU10X or	Models FMR720WR, GMR851PR, GMR855CR, GMR855HR, GMR859PR, GMR860TR, and GMR868PR
		A51ABU10X	Models FMR550WR, FMR555WR, FMR565WR, and FMR566TR
Y801	Crystal	161235	3.58MHz
	Antenna, UHF	10E0113	Models FMR550WR, FMR555WR, FMR565WR, and FMR566TR. Russell Replacement BOW-4H
	Antenna, VHF	156265	Models FMR550WR, FMR555WR, FMR565WR, and FMR566TR. Russell Replacement POR-12H
	Antenna, Rod		Models FMR550, FMR555WR, FMR565WR, and FMR566TR. Russell Replacement SIM4H
#	Cord, AC	1769595	U.S. Version
		179450	Canada Version
	Cover	176644	Focus/Screen
	Cushion	149903	Wedge Yoke Adjustment
	Cushion	144903	Wedge, Yoke Adjustment, Models FMR550WR, FMR555WR, FMR565WR, FMR566TR

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

CAPACITORS

ITEM No.	RATING	MFGR. PART No.
	TUNING BOARD MTT001A	
C1	15 NPO 50V 5%	174404
C2	27 NPO 50V 5%	174407
C3	27 NPO 50V 5%	174407
C4	68 NPO 50V 5%	174410
C101	470 NPO 50V 10%	174416
C102	470 NPO 50V 10%	174416
C103	82 NPO 50V 10%	174411
C104	470 NPO 50V 10%	174416
C105	470 NPO 50V 10%	174416
C106	470 NPO 50V 10%	174416
C107	470 NPO 50V 10%	174416
C108	5 N750 50V ±.25pF	174400
C109	470 NPO 50V 10%	174416
C110	470 NPO 50V 10%	174416
C111	470 NPO 50V 10%	174416
C112	470 NPO 50V 10%	174416
C116	22 NPO 50V 5%	174406
C117	22 NPO 50V 5%	174406
C118	470 NPO 50V 10%	174416
C119	33 NPO 50V 5%	174408
C121	120 NPO 50V 5%	174414
C122	470 NPO 50V 10%	174416
C123	2 NPO 50V ±.25pF	174396
C124	3 N750 50V ±.25pF	174398
C125	470 NPO 50V 10%	174416
C126	5 N750 50V ±.25pF	174400
C127	470 NPO 50V 10%	174416
C128	7 NPO 50V ±.5pF	174401
C129	470 NPO 50V 10%	174416
C131	10 NPO 50V ± 1P	174402
C135	10 NPO 50V ± 1P	174402
	5 NPO 50V ±.5pF	174399
C139	470 NPO 50V 10%	174416
C141	470 NPO 50V 10%	174416
C142	470 NPO 50V 10%	174416
C143	470 NPO 50V 10%	174416
C144	.5 NPO 50V ±.25pF	174395
C145	10 NPO 50V ±1pF	174402
C148	Trimmer	174385
C149	10 NPO 50V ±1pF	174402
C150	470 NPO 50V 10%	174416
C202	470 NPO 50V 10%	174416
C203	470 NPO 50V 10%	174416
C204	100 NPO 50V 5%	174412
C205	470 NPO 50V 10%	174416
C208	470 NPO 50V 10%	174416
C210	82 NPO 50V 10%	174411
C211	470 NPO 50V 10%	174416
C212	470 NPO 50V 10%	174416
C214	.5 NPO 50V ±.25pF	174395
	1 NPO 50V ±.25pF	174391
C215	470 NPO 50V 10%	174416
C216	470 NPO 50V 10%	174416
C217	82 NPO 50V 10%	174411
C218	470 NPO 50V 10%	174416
C220	470 NPO 50V 10%	174416
C221	470 NPO 50V 10%	174416
C223	470 NPO 50V 10%	174416
C224	470 NPO 50V 10%	174416
C227	470 NPO 50V 10%	174416
C228	470 NPO 50V 10%	174416
C229	470 NPO 50V 10%	174416
C230	470 NPO 50V 10%	174416

ITEM No.	RATING	MFGR. PART No.
C231	470 NPO 50V 10%	174416
C232	470 NPO 50V 10%	174416
C233	470 NPO 50V 10%	174416
C302	470 NPO 50V 10%	174416
C303	18 NPO 50V 5%	174405
C304	5 NPO 50V ±.5pF	174399
C305	470 NPO 50V 10%	174416
C306	470 NPO 50V 10%	174416
C307	470 NPO 50V 10%	174416
C308	470 NPO 50V 10%	174416
C309	3 NPO 50V ±.25pF	174397
C310	15 NPO 50V 5%	174404
C313	470 NPO 50V 10%	174416
C314	15 NPO 50V 5%	174404
C316	470 NPO 50V 10%	174416
C317	470 NPO 50V 10%	174416
C318	.5 NPO 50V ±.25pF	174395
C319	470 NPO 50V 10%	174416
C320	1 NPO 100V ±.25pF	134437
C323	1 NPO 50V ±.25pF	174391
C324	470 NPO 50V 10%	174416
C401	47 NPO 50V 5%	174409
C402	470 NPO 50V 10%	174416
C403	470 NPO 50V 10%	174416
C404	470 NPO 50V 10%	174416
C405	470 NPO 50V 10%	174416
C406	470 NPO 50V 10%	174416
C407	33 NPO 50V 5%	174408
	47 NPO 50V 5%	174409
C408	470 NPO 50V 10%	174416
C409	27 NPO 50V 5%	174407
	33 NPO 50V 5%	174408
C410	12 NPO 50V 5%	174403
C413	12 NPO 50V 5%	174403
C414	15 NPO 50V ±1%	146768
C415	68 NPO 50V 5%	174410
	82 NPO 50V 5%	176828
C419	15 NPO 50V 10%	174404
C420	3 NPO 50V ±.25pF	174397
C422	4.7 NPO 50V ±.5pF	119406
C423	22 NPO 50V 5%	174406
C501	15 NPO 50V ±1%	174402
	15 N150 50V 5%	174404
C502	470 NPO 50V 10%	174416
C505	10 NPO 50V ±1%	174402
C513	2 NPO 50V ±.25pF	174396
C517	1 NPO 50V ±.25pF	174396
C518	3 NPO 50V ±.25pF	174397
C520	470 NPO 50V 10%	174416
C521	470 NPO 50V 10%	174416
C615	33 NPO 50V 5%	174408
C616	120 NPO 50V 5%	174414
C623	68 NPO 50V 5%	174410
C625	120 NPO 50V 5%	174414
C637	100 NPO 50V 5%	174412
C638	10 NPO 50V ±1pF	174402
C664	33 NPO 50V 5%	174408
C706	3.9 N470 100V ±.25pF	130197
	3.3 NPO 500V ±25pF	130573

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		MFGR. PART No.	NTE PART No.	WORKMAN PART No.
	TUNING BOARD MTT001A			
R107	18K 2% 1/8W Chip Metal Film	174366		
R109	10K 2% 1/8W Chip Metal Film	147364		
R115	18K 2% 1/8W Chip Metal Film	174366		
R119	30K 2% 1/8W Chip Metal Film	174368		
R123	10K 2% 1/8W Chip Metal Film	174364		
R130	10K 2% 1/8W Chip Metal Film	174364		
R203	100K 2% 1/8W Chip Metal Film	176817		
R206	160K 2% 1/8W Chip Metal Film	176815		
R207	1000 2% 1/4W Carbon Film	829210	QW210	
R208	270 2% 1/4W Carbon Film	175420	QW127	
R301	10K 2% 1/8W Chip Metal Film	174364		
R302	100K 2% 1/8W Chip Metal Film	176816		
R303	160K 2% 1/8W Chip Metal Film	176815		
R304	1000 2% 1/4W Carbon Film	175055	QW210	
R305	270 2% 1/4W Carbon Film	175420	QW127	
R308	10K 2% 1/8W Chip Metal Film	174364		
R309	10K 2% 1/8W Chip Metal Film	174364		
R311	10K 2% 1/8W Chip Metal Film	174364		
R405	820 2% 1/8W Chip Metal Film	176814		
R407	13K 2% 1/8W Carbon Film	157334	EW313	
R417	33K 2% 1/8W Chip Metal Film	176813		
R418	100K 2% 1/8W Chip Metal Film	176816		
R419	240K 2% 1/4W Carbon Film	829424	QW424	
R505	100K 2% 1/8W Chip Metal Film	147356		
R506	160K 2% 1/8W Chip Metal Film	176815		
R507	270 2% 1/4W Carbon Film	175420	QW127	
R508	1000 2% 1/4W Carbon Film	175055	QW210	
R605	22K 2% 1/8W Chip Metal Film	174367		
R606	22K 2% 1/8W Chip Metal Film	174367		
R607	22K 2% 1/8W Chip Metal Film	174367		
R608	22K 2% 1/8W Chip Metal Film	174367		
R631	10K 2% 1/8W Chip Metal Film	174364		
R652	36K 2% 1/8W Chip Metal Film	174369		
R654	1500 5% 2W Flame Proof Metal Film	174938	2W215	22-4100
	1100 5% 2W Flame Proof Metal Film	176812	2W211	
R655	18 5% 2W Flame Proof Metal Film	174939	2W018	22-4054
R660	22K 2% 1/8W Chip Metal Film	174367		
R661	10K 2% 1/8W Chip Metal Film	174364		
R662	12K 2% 1/8W Chip Metal Film	174365	EW312	

COILS (RF-IF) TUNING BOARD MTT001A

ITEM No.	FUNCTION	MFGR. PART No.	ITEM No.	FUNCTION	MFGR. PART No.
L403	Coil Adjust W/Can	174435	MSD 002A	CHANNEL DISPLAY MSD002A	
L404	Coil Adjust W/Can	174435	C1	Circuit Complete	163275
L601	Coil (33uH)	174436	C2	10uF 25V	146256
L603	Coil Adjust	174437		.47uF 50V	173271
L604	Coil (4.7uH)	158726	CR1	Diode	164717
L605	Coil (15uH)	174438	CR2	Diode	164717
L606	Coil (68uH)	160184	FB1	Ferrite Bead	152103
T401	Transformer Balun	174439	FB2	Ferrite Bead	152103
T402	Transformer Balun	174439	P3MSC	Connector 4 Pin	173563
T501	Transformer Antenna	151544	P703	Connector 6 Pin	157612
T501	Transformer Antenna	176810	Q1	Transistor Video	143806
T703	Transformer Balun	174425		Blanking Retainer, Bead Chain	139301

# For SAFETY use only equivalent replacement part.  
Items Not Listed Are Normally Available At Local Distributors.



PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

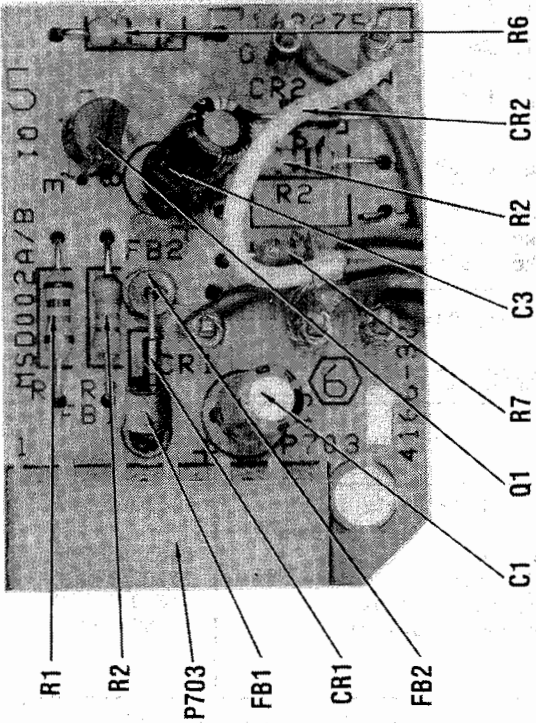
ITEM No.	MFGR. PART No./ TYPE No.					ZENITH PART No.	NOTES
		NTE PART No.	ECG PART No.	RCA PART No.			
CR507,8 CR509 CR510 CR602	129095 129095 164717 164874	NTE553	ECG553	SK3322		103-131 103-131 103-131 212-76-02 103-131	USE CR107 MATCHED SET
		NTE519	ECG519	SK3100/519			
		NTE177	ECG177	SK9091/177			
		NTE519	ECG519	SK3100/519			
CR603 THRU CR608 CR609,10,11 CR612 CR613 CR614,15	164717 164874 137652 174431 139706	NTE177	ECG177	SK3313/116		103-131	
		NTE177	ECG177	SK9091/177			
		NTE5141A	ECG5141A	SK30X/5141A			
		NTE5069A	ECG5069A	SK4V7/5069A			
CR616 CR617 CR618 CR619 THRU CR622 CR623	164717 174370 164594 164717 142717	NTE519	ECG519	SK3100/519		103-131	
		NTE519	ECG519	SK3100/519			
		NTE123AP	ECG123AP	SK3854/123AP			
		NTE222	ECG222	SK3065/222			
CR624,25 Q101 Q103 Q201,301 Q302	148085 146848 148085 146847 143802 146847	NTE222	ECG222	SK3246A/229		121-826 121-29021 121-826 121-29000A 121-29003 121-29000A	
		NTE222	ECG222	SK3065/222			
		NTE123AP	ECG123AP	SK3854/123AP			
		NTE159	ECG159	SK3466/159			
Q401 Q402 Q501 Q601 Q602 Q603	145410 146847 157808 174377 174375 174376	NTE123AP	ECG123AP	SK3854/123AP		121-29003 121-29000A 121-29003 121-29000A	
		NTE159	ECG159	SK3466/159			
		NTE123AP	ECG123AP	SK3854/123AP			
		NTE159	ECG159	SK3466/159			

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.					ZENITH PART No.	NOTES
		NTE PART No.	ECG PART No.	RCA PART No.			
RC PREAMP MCY005A CR901,3,4 Q901 Q902 Q903,4	164874 148070 145410 148061	NTE177	ECG177	SK9091/177		103-131 121-29003	
		NTE451	ECG451	SK9164/451			
		NTE159	ECG159	SK3466/159			
		NTE519	ECG519	SK3100/519			
ON SCREEN DISPLAY MSD002A CR1,2 Q1	164717 143806	NTE519 NTE159	ECG519 ECG159	SK3100/519 SK3466/159		103-131 121-29003	



MSD002/B ON SCREEN DISPLAY