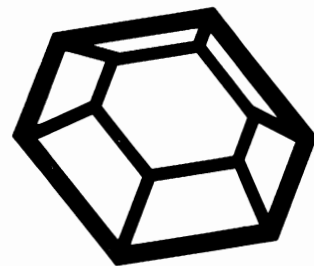


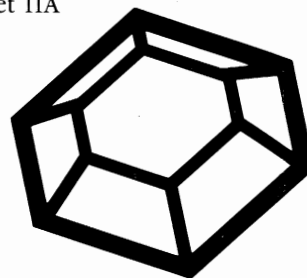
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NOTE

A Crystal Castles Troubleshooting Guide is included as part of this Schematic Package Supplement. The Troubleshooting Guide contains Atari CAT Box troubleshooting procedures.



NOTE
Remove this staple to separate the schematic diagrams from the Troubleshooting Guide.



Schematic Package Supplement to



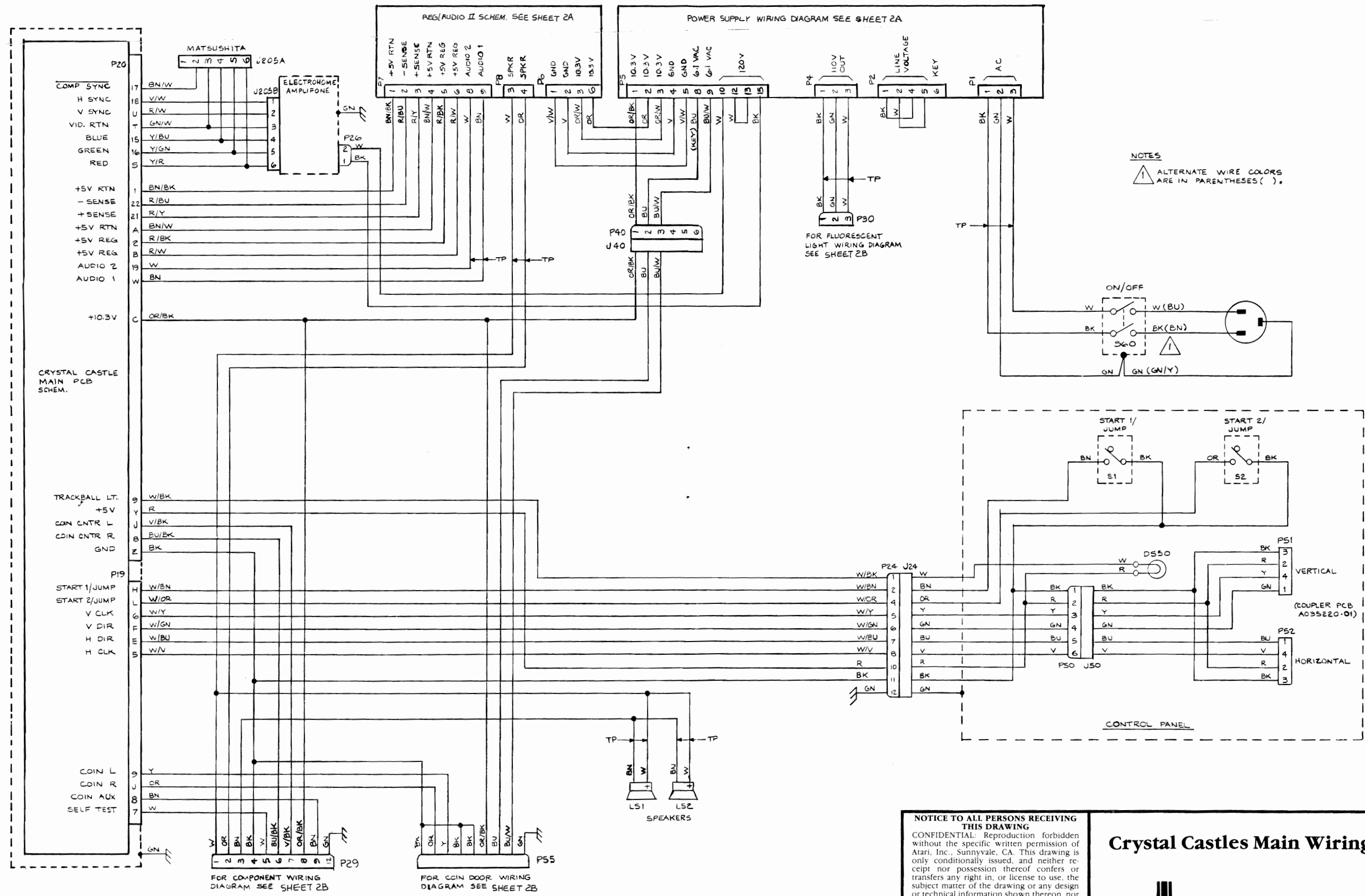
Operators Manual

Includes
Troubleshooting Guide

7M



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NOTES
 ⚠ ALTERNATE WIRE COLORS ARE IN PARENTHESES ().

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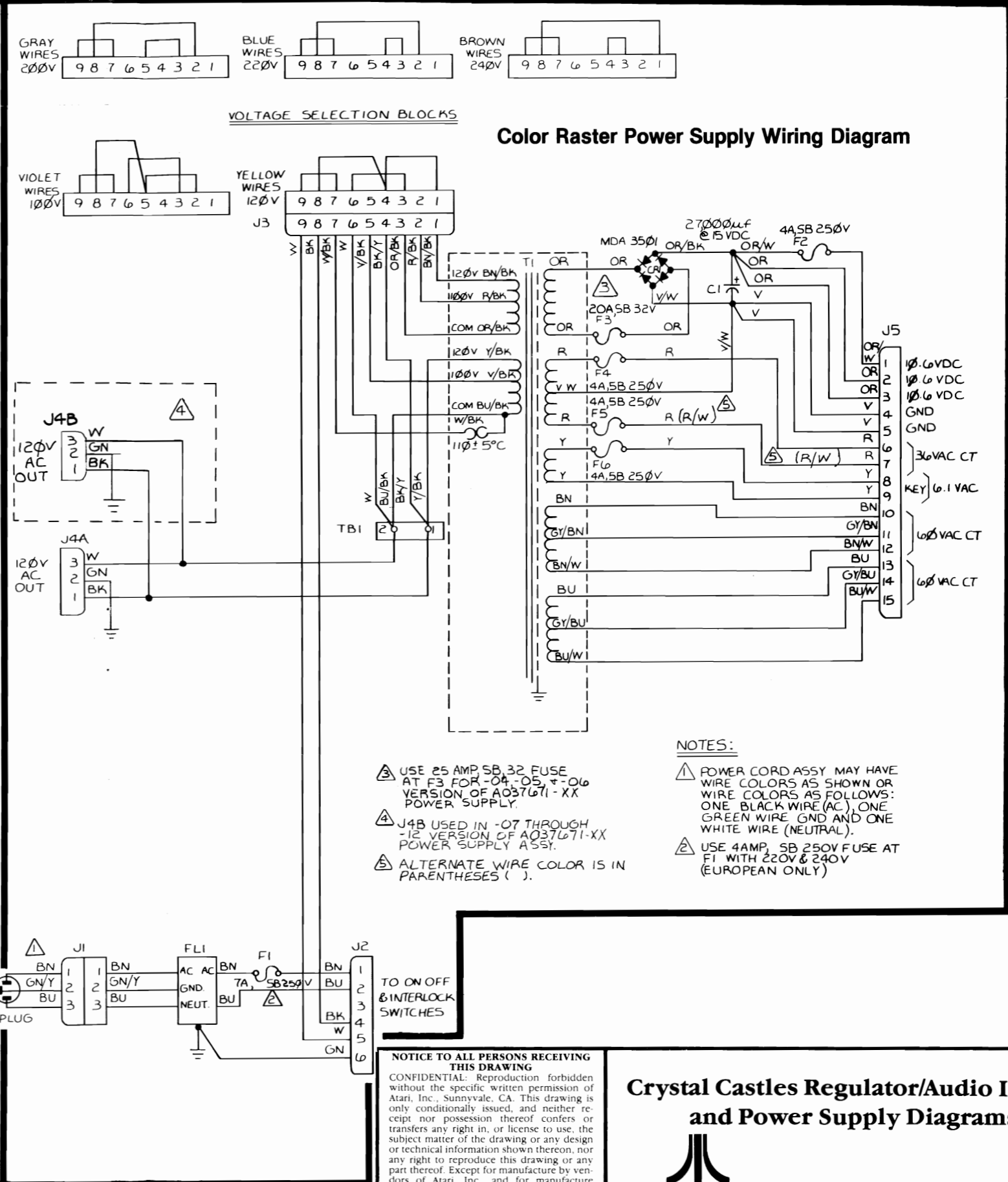
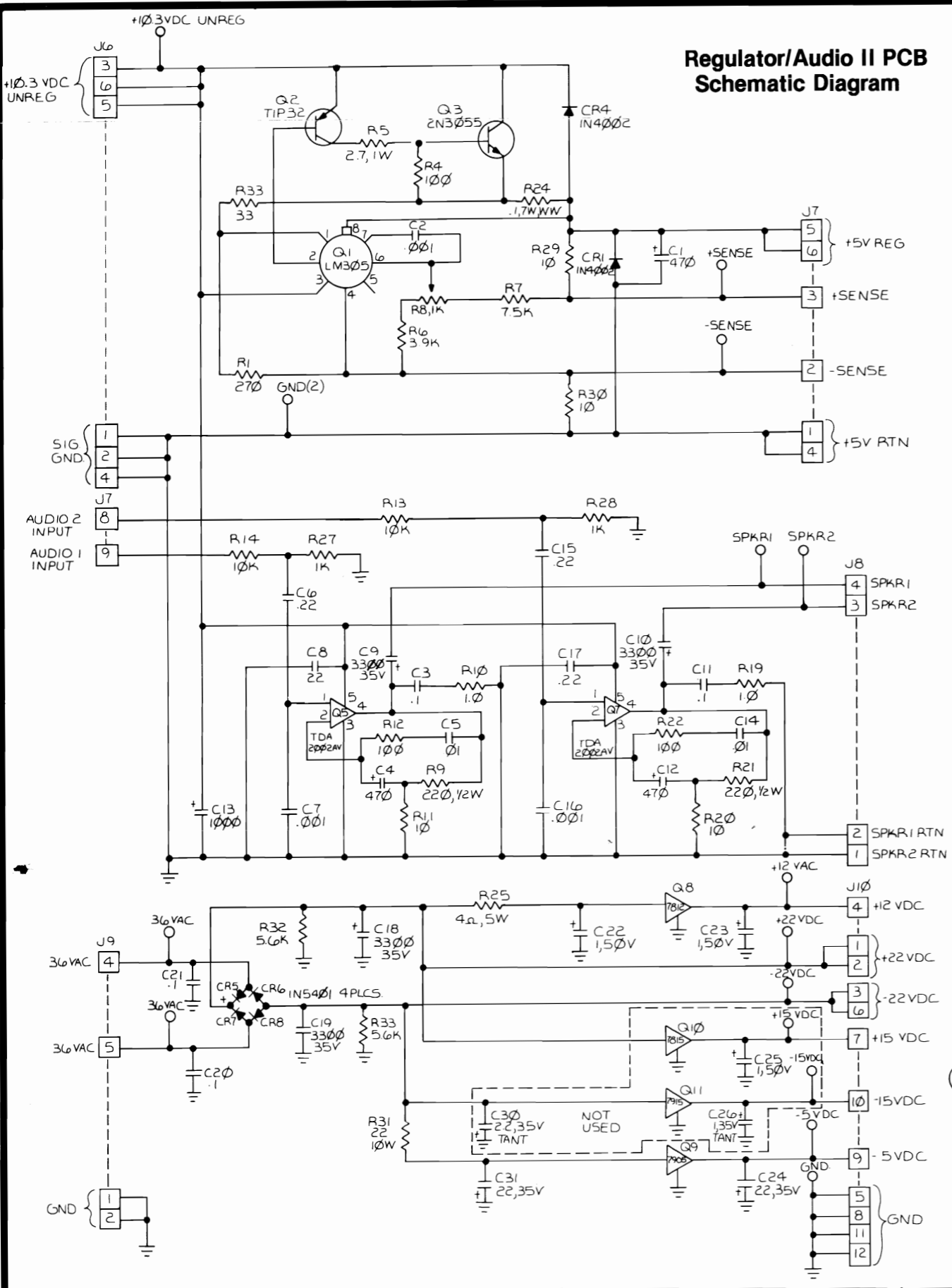
Crystal Castles Main Wiring Diagram



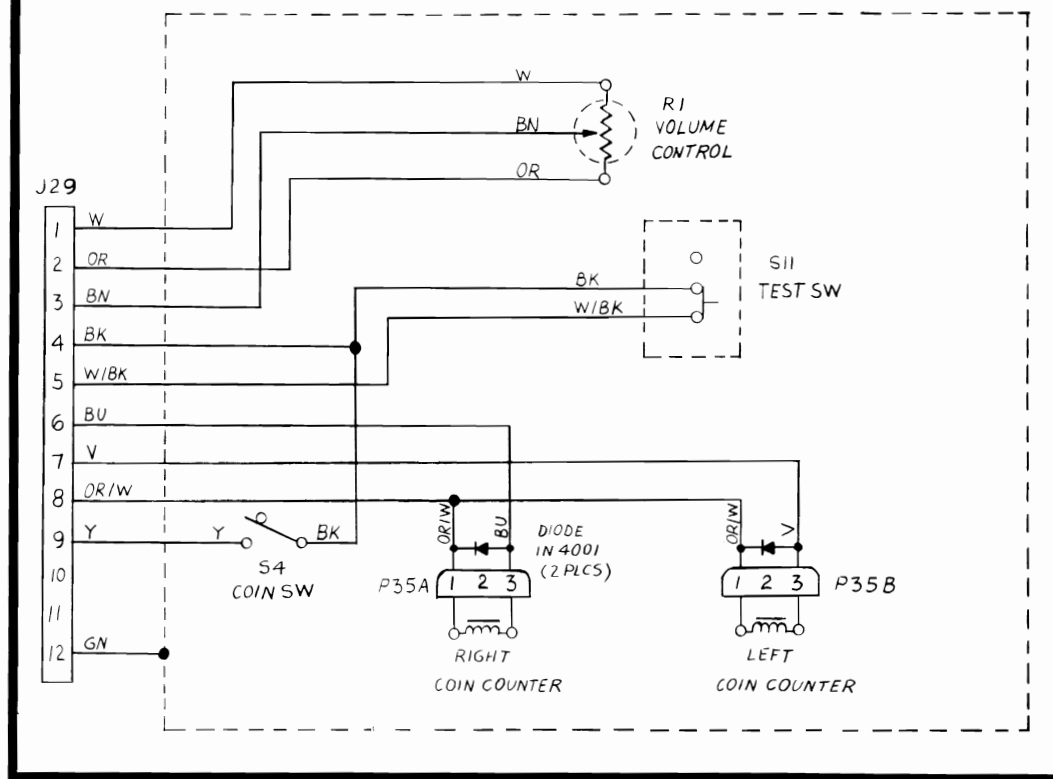
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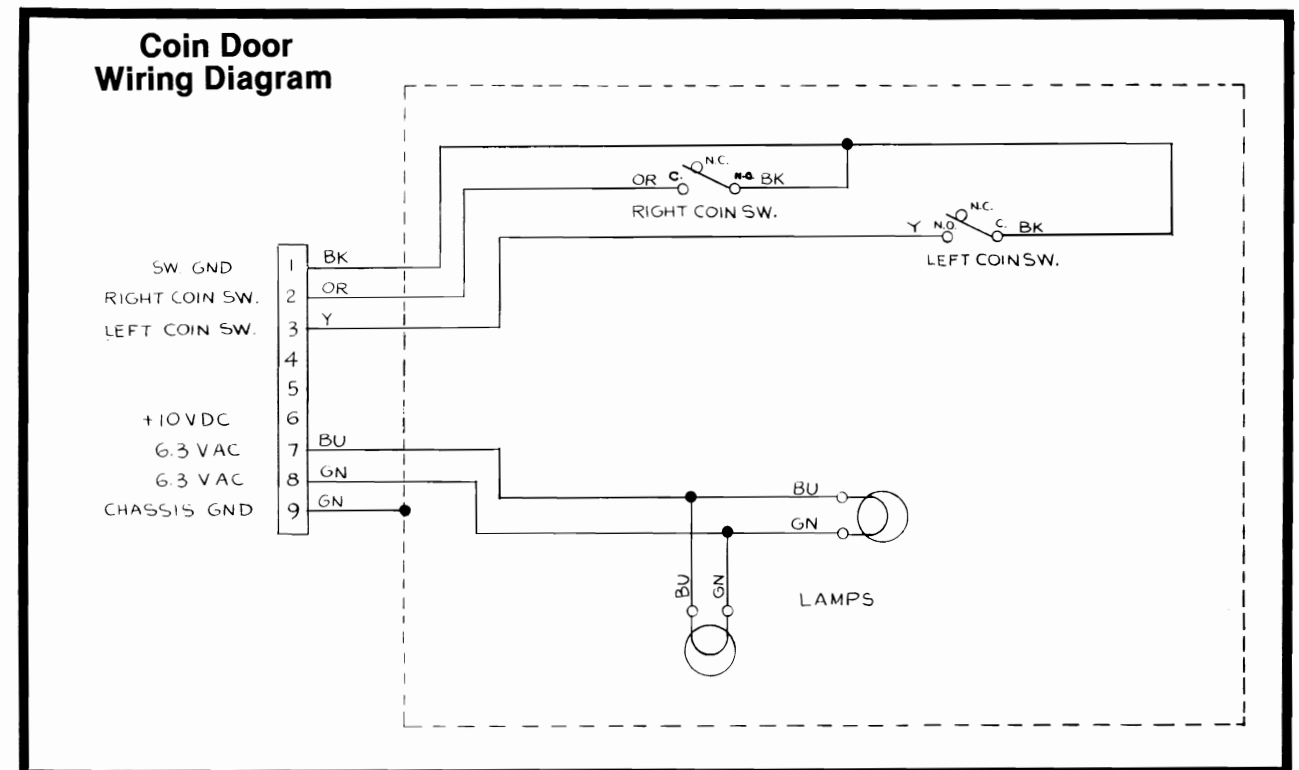
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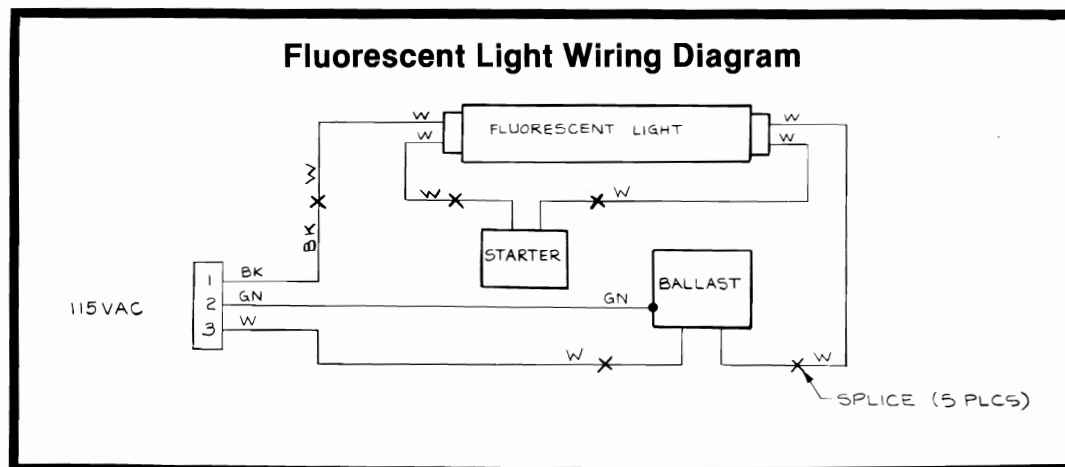
Utility Panel Wiring Diagram



Coin Door Wiring Diagram



Fluorescent Light Wiring Diagram



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Crystal Castles Game Interfaces






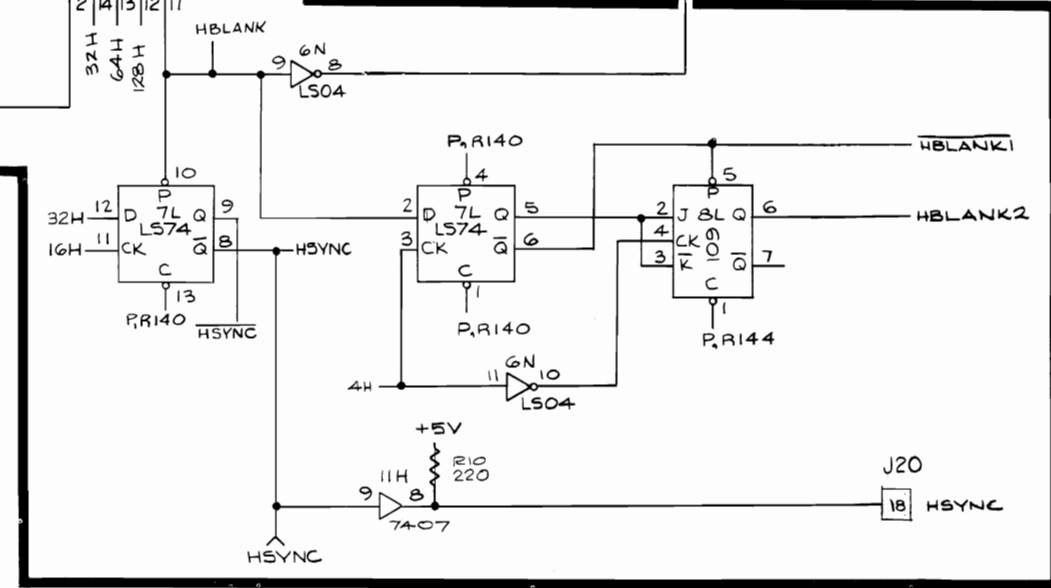
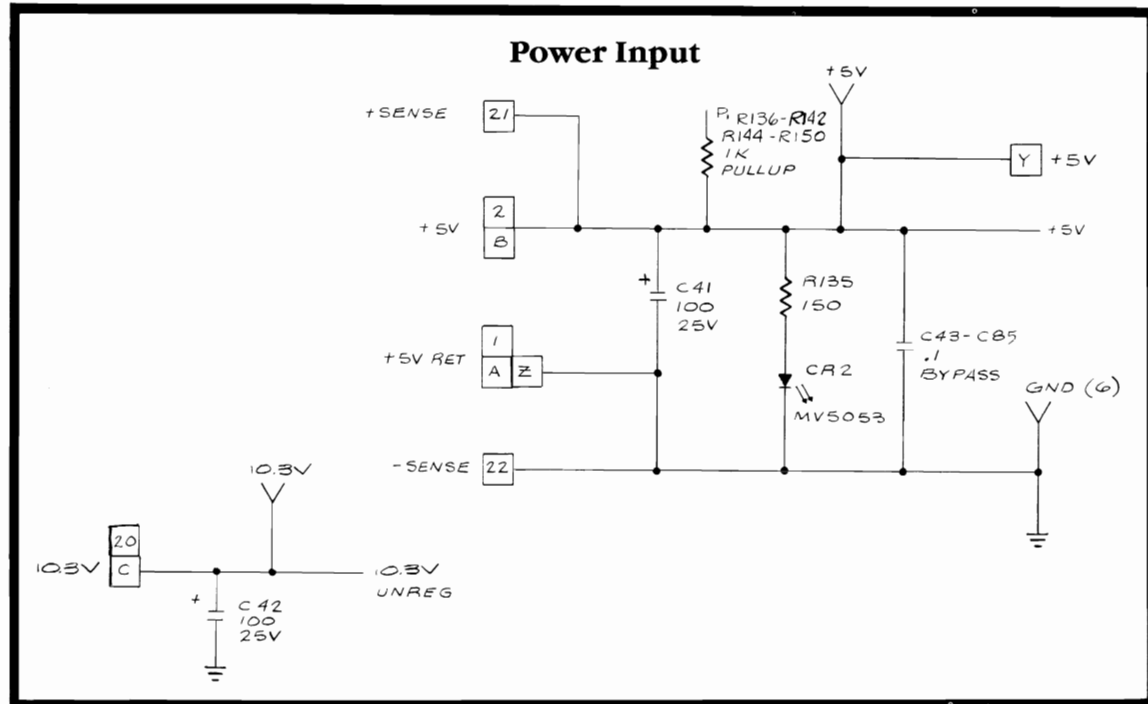
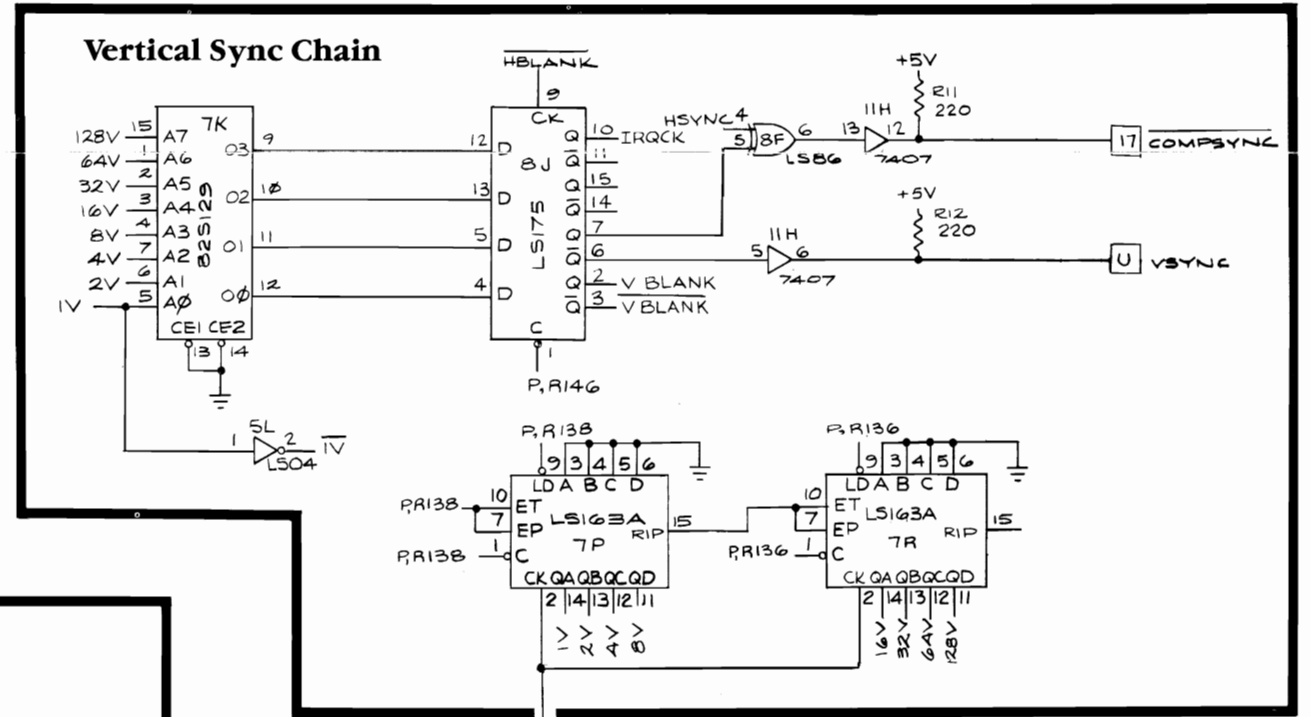
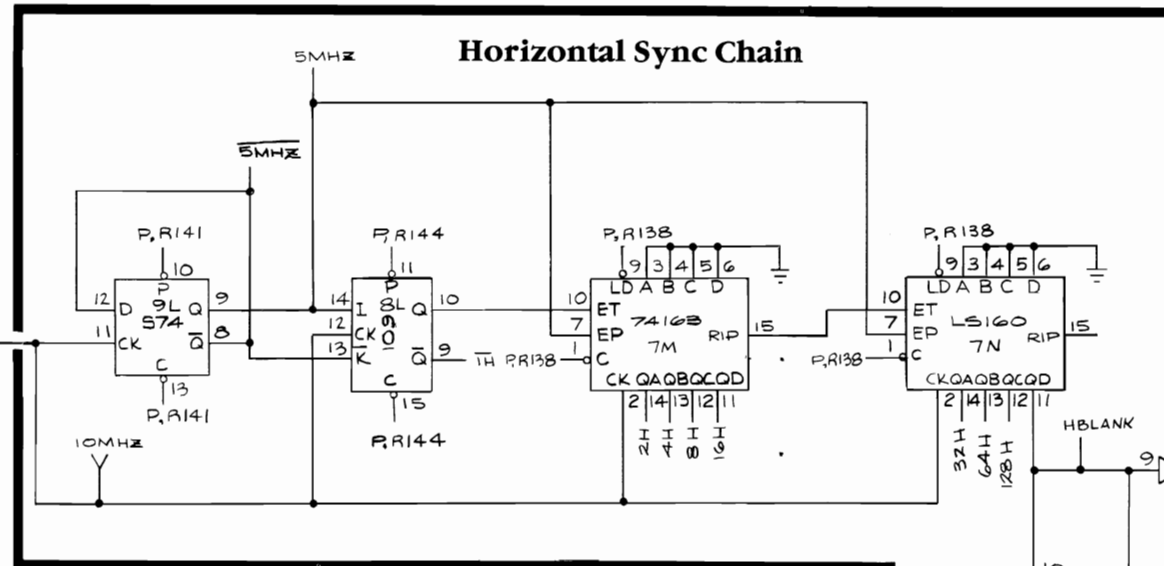
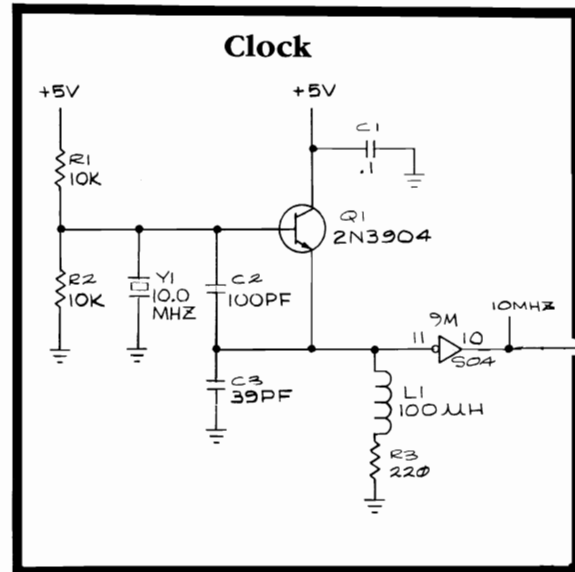
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Connector Symbols


1.  DENOTES J20 CONNECTOR.
2.  DENOTES J19 CONNECTOR.
3.  DENOTES TEST CONNECTOR.



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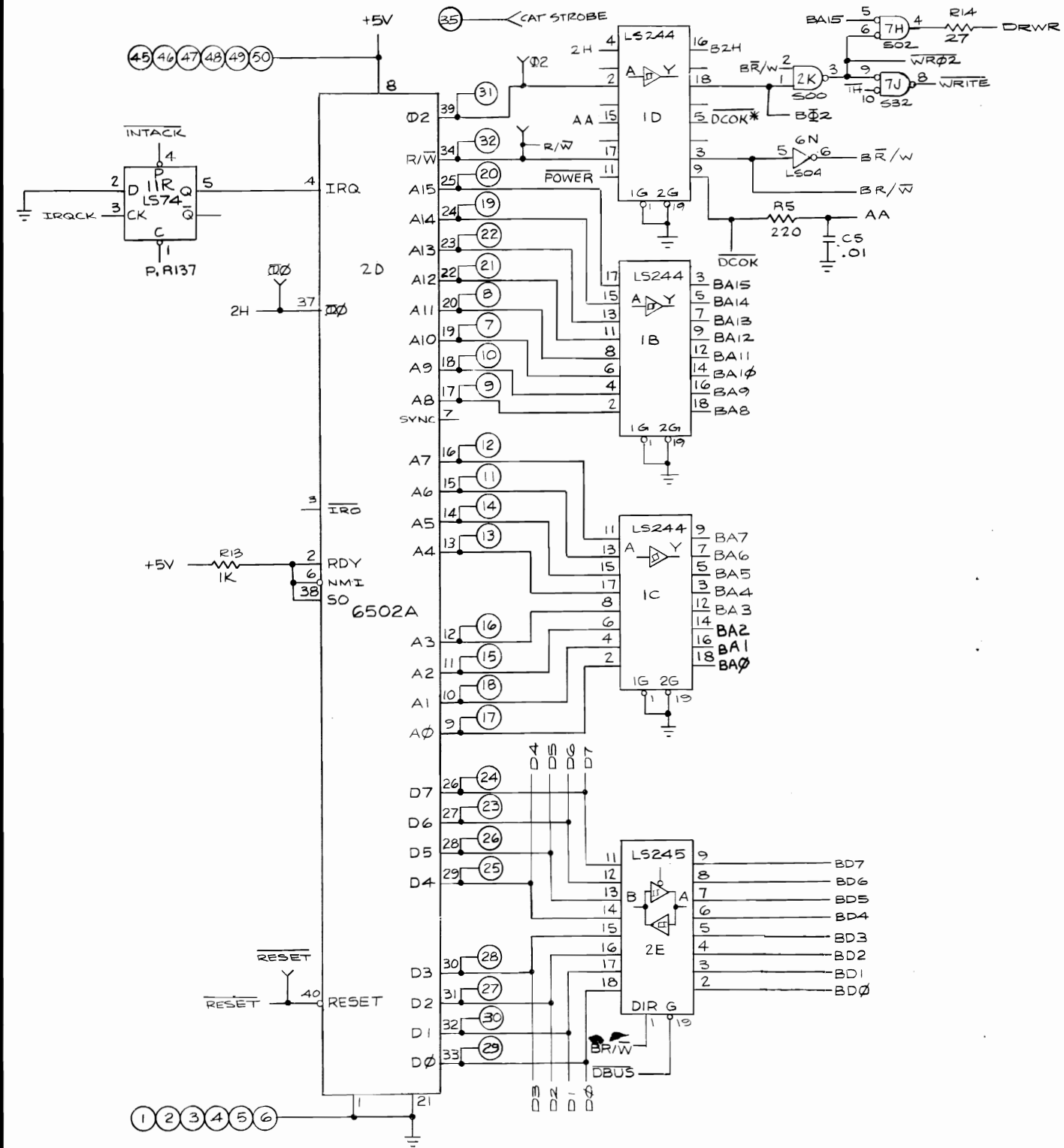
Crystal Castles PCB Schematic Diagram



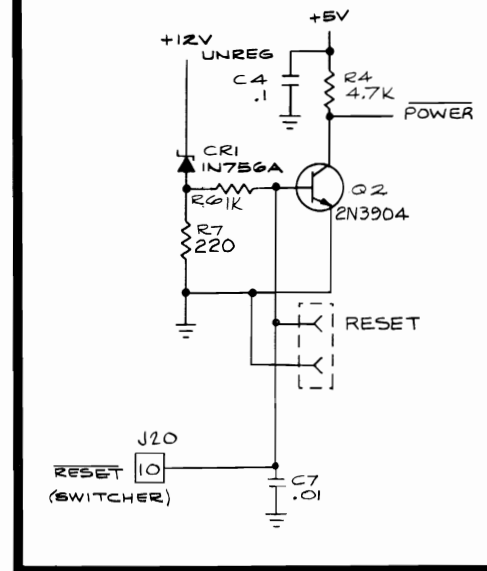
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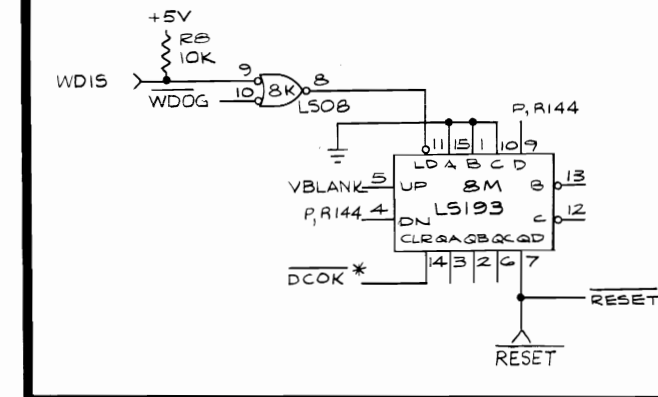
Microprocessor



Power-On Reset



Watchdog



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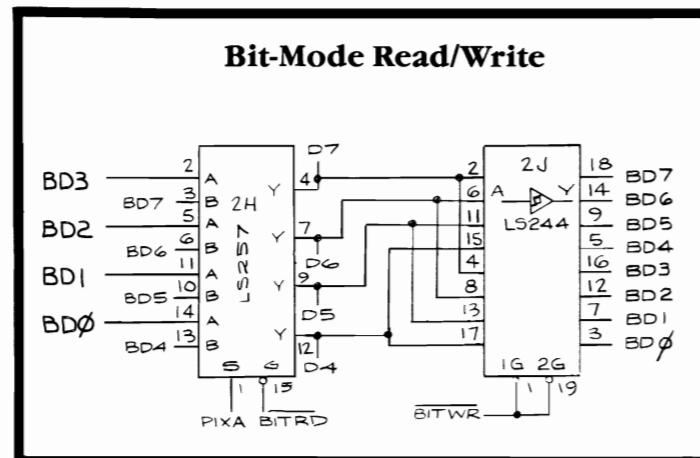
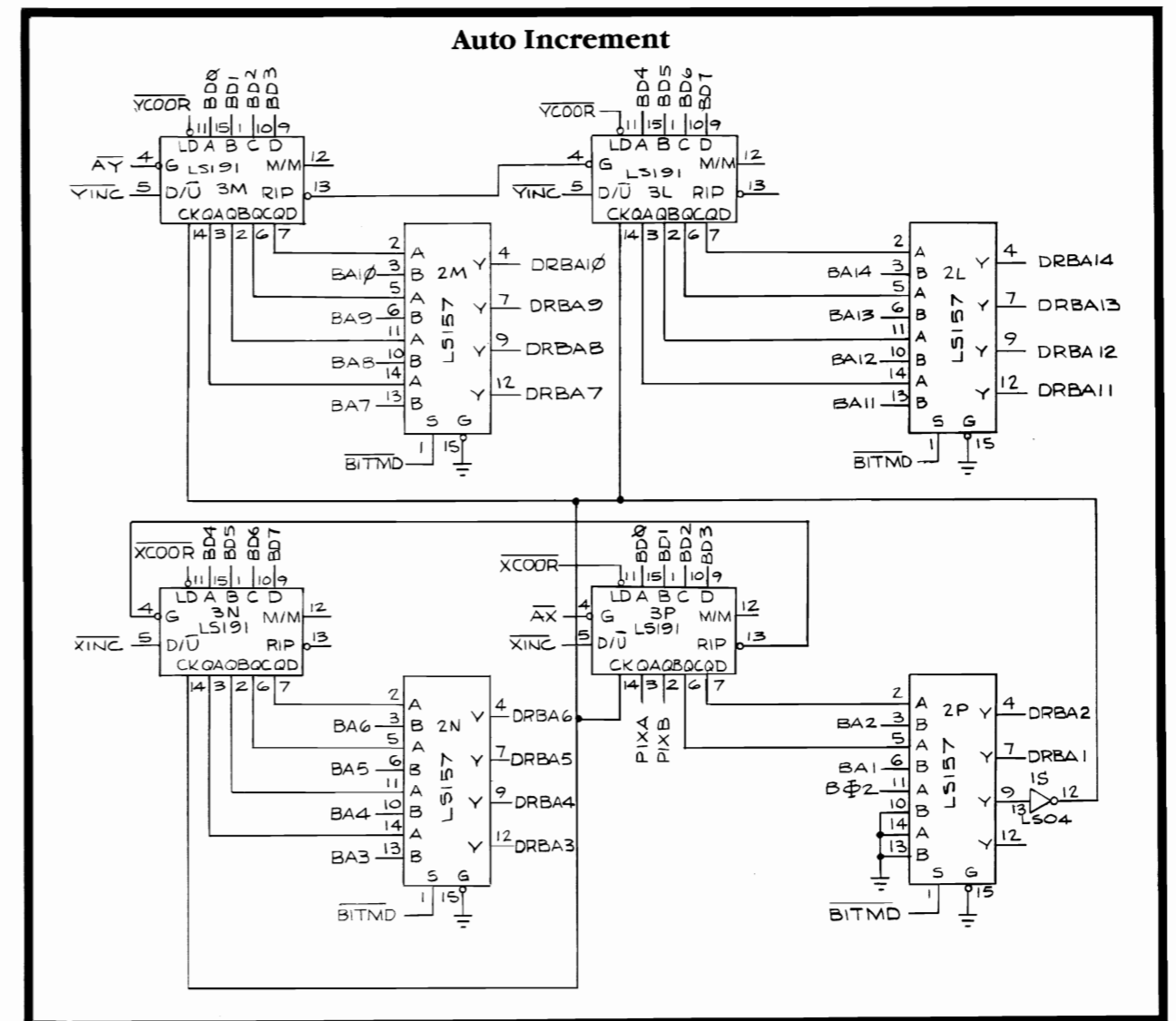
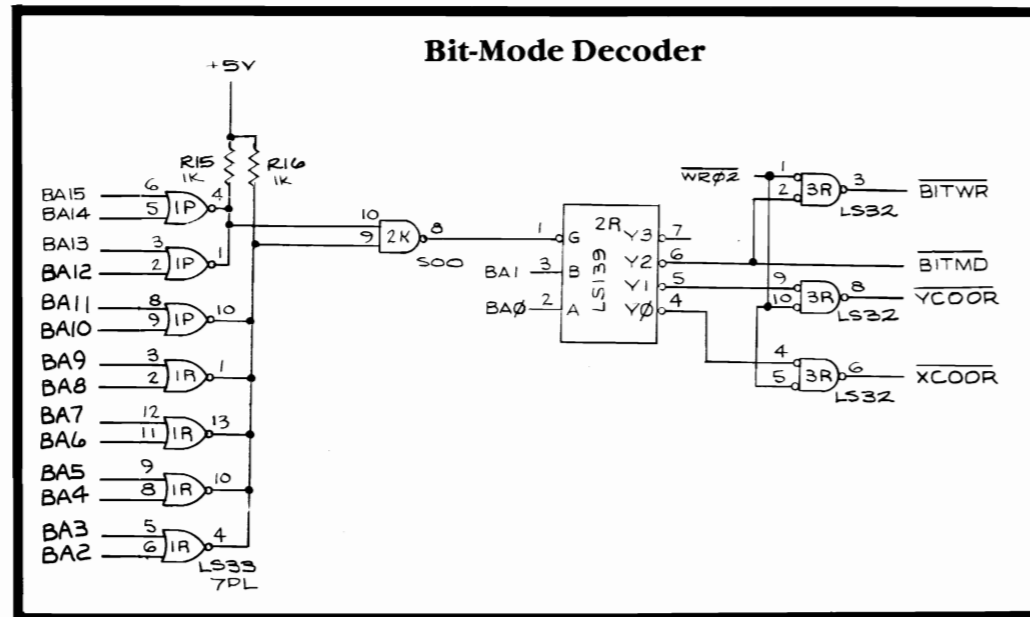
Crystal Castles PCB Schematic Diagram



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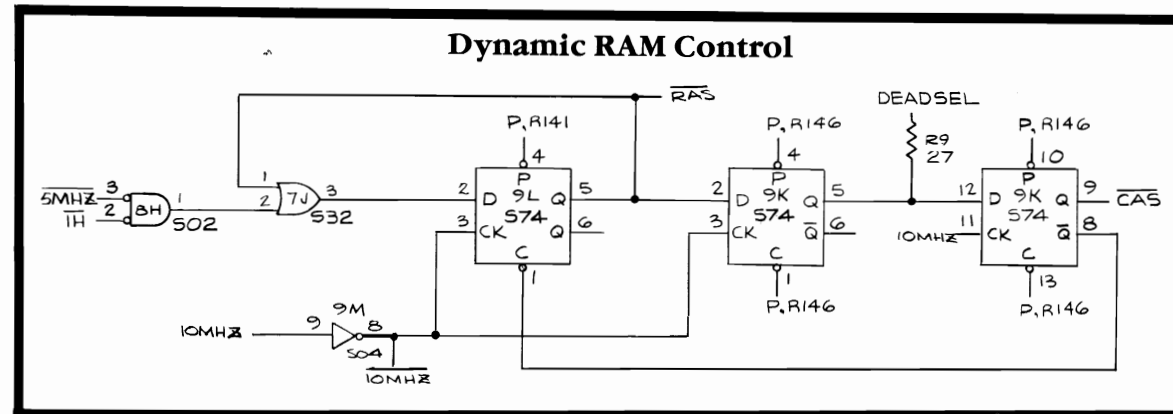
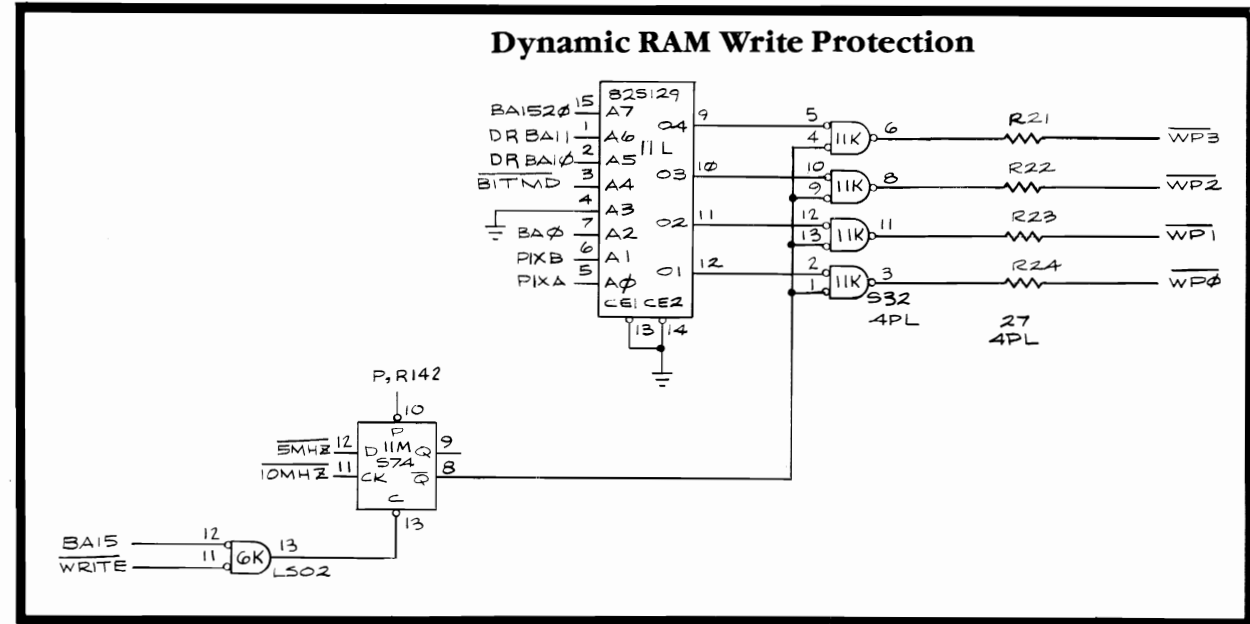
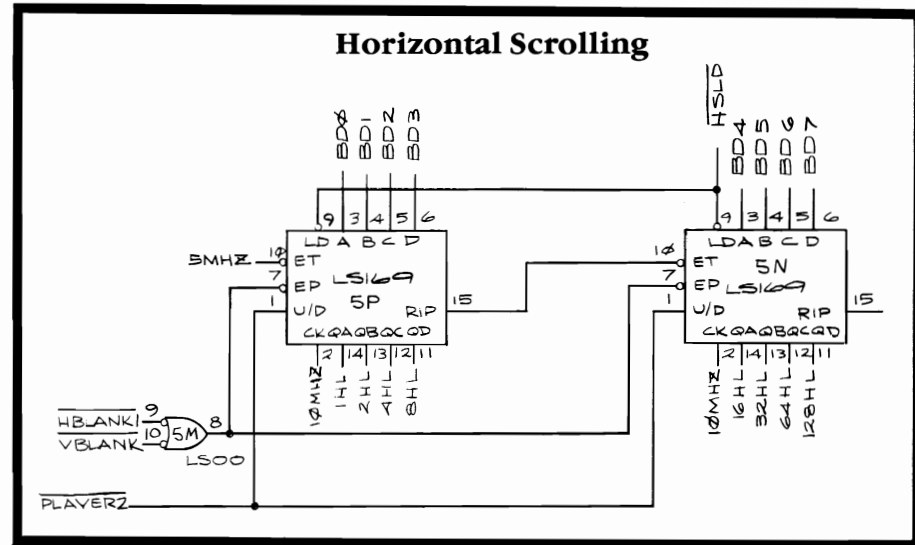
Crystal Castles PCB Schematic Diagram




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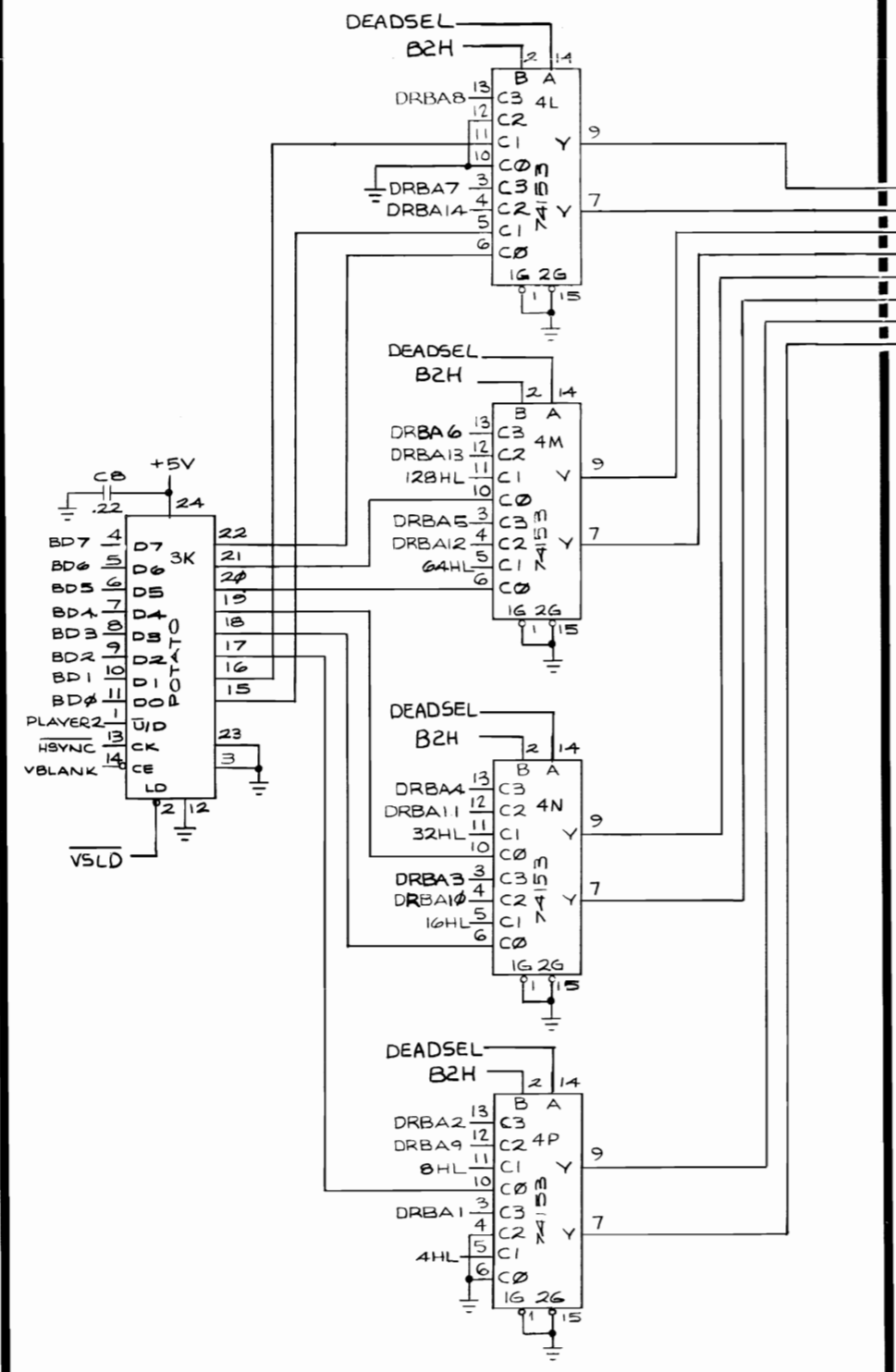


Crystal Castles PCB Schematic Diagram

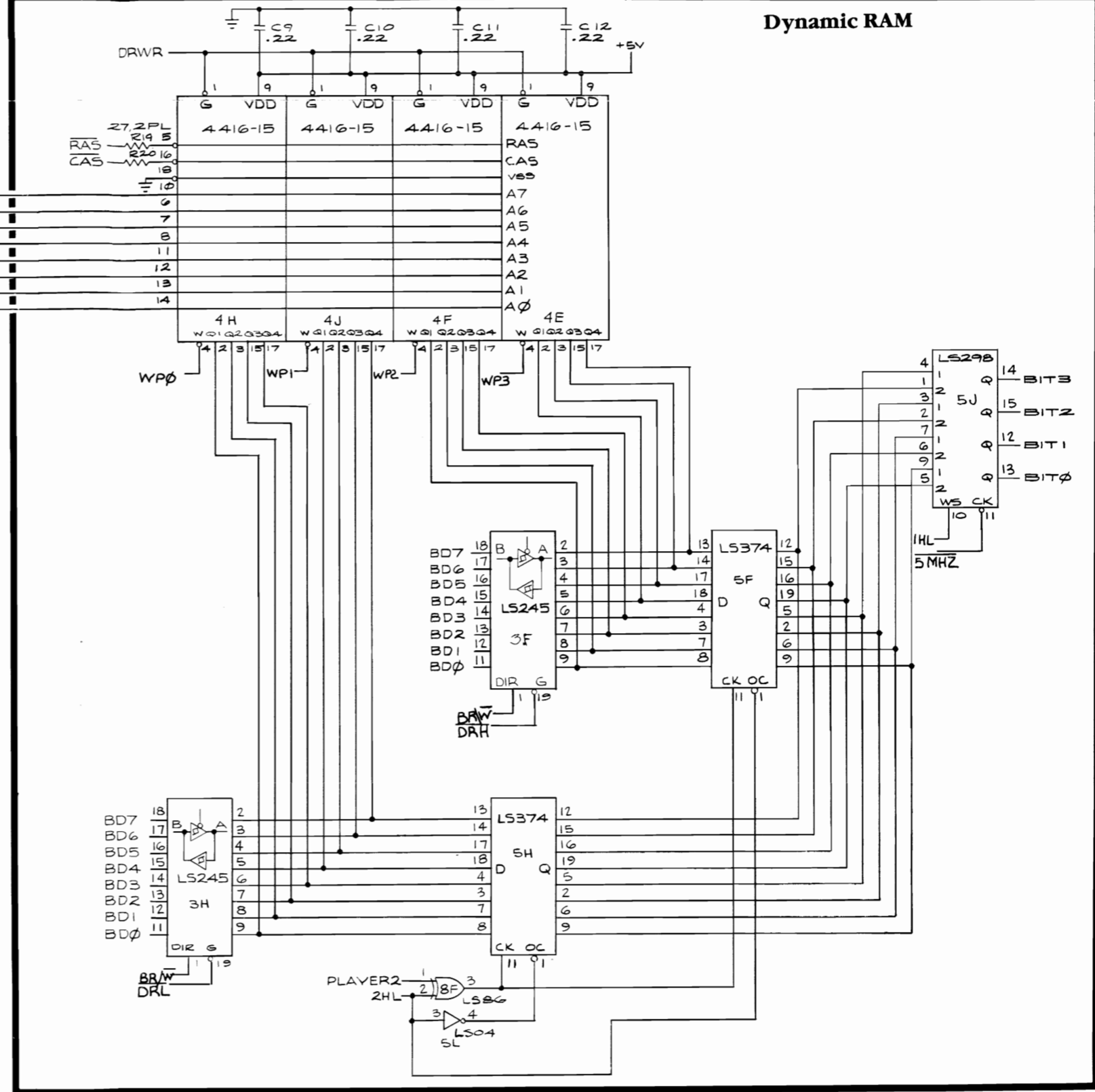
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Address Selectors




Dynamic RAM



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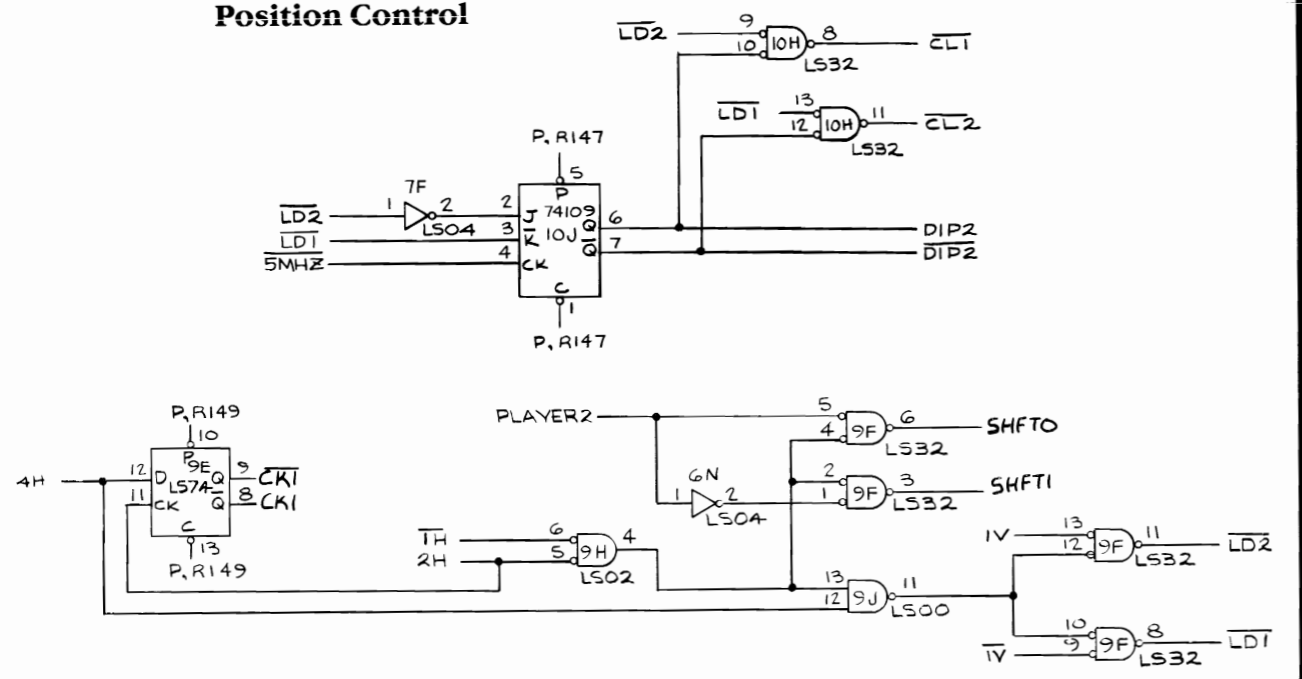
Crystal Castles PCB Schematic Diagram


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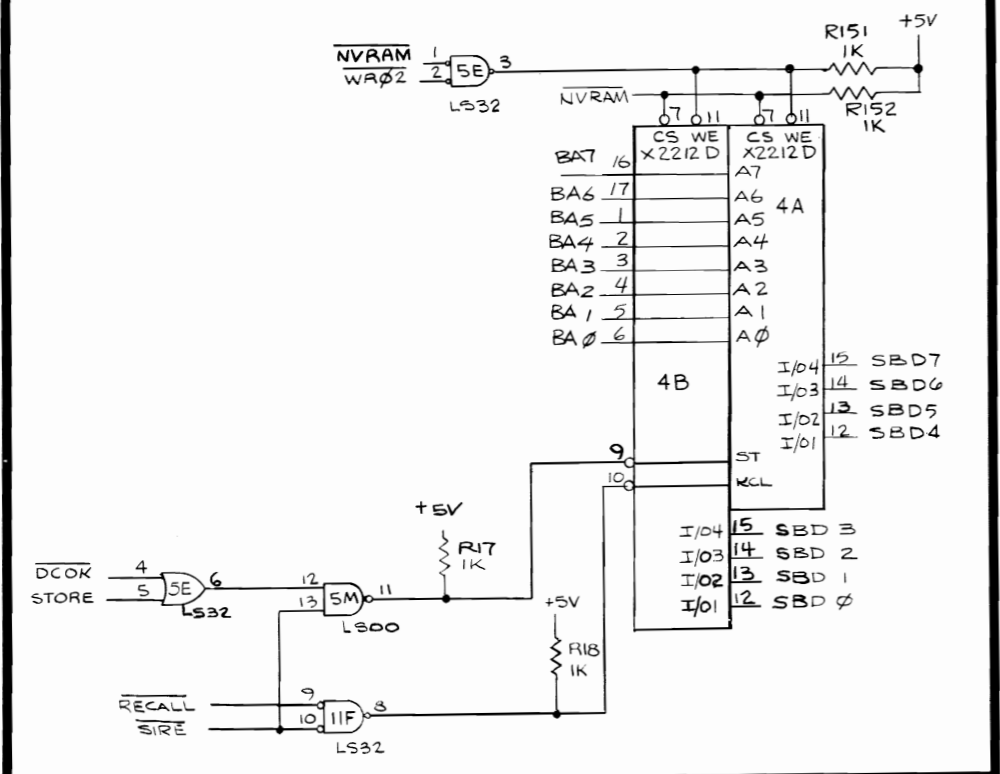
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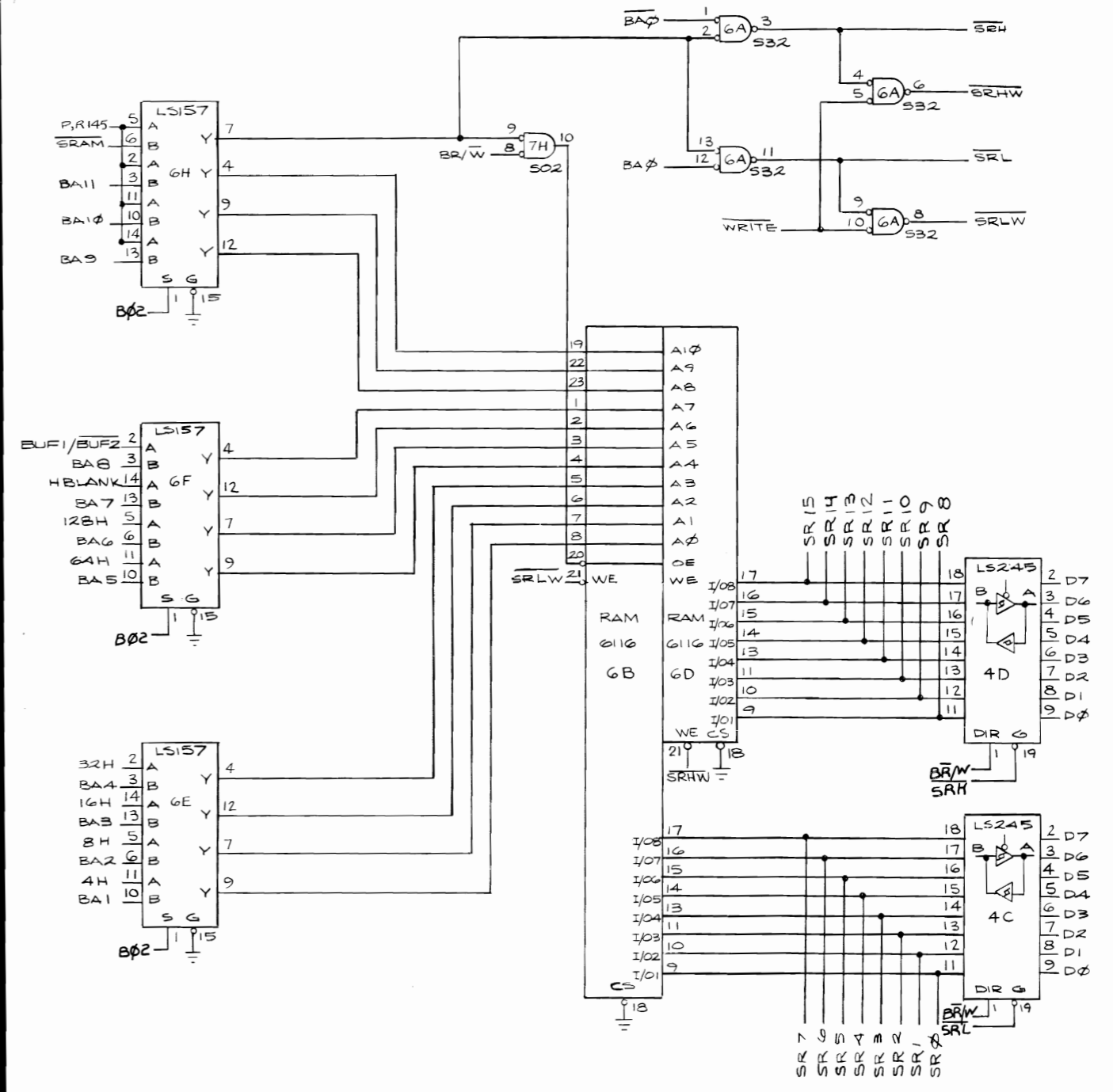
Position Control



Non-Volatile RAM



Working RAM and Motion-Object RAM



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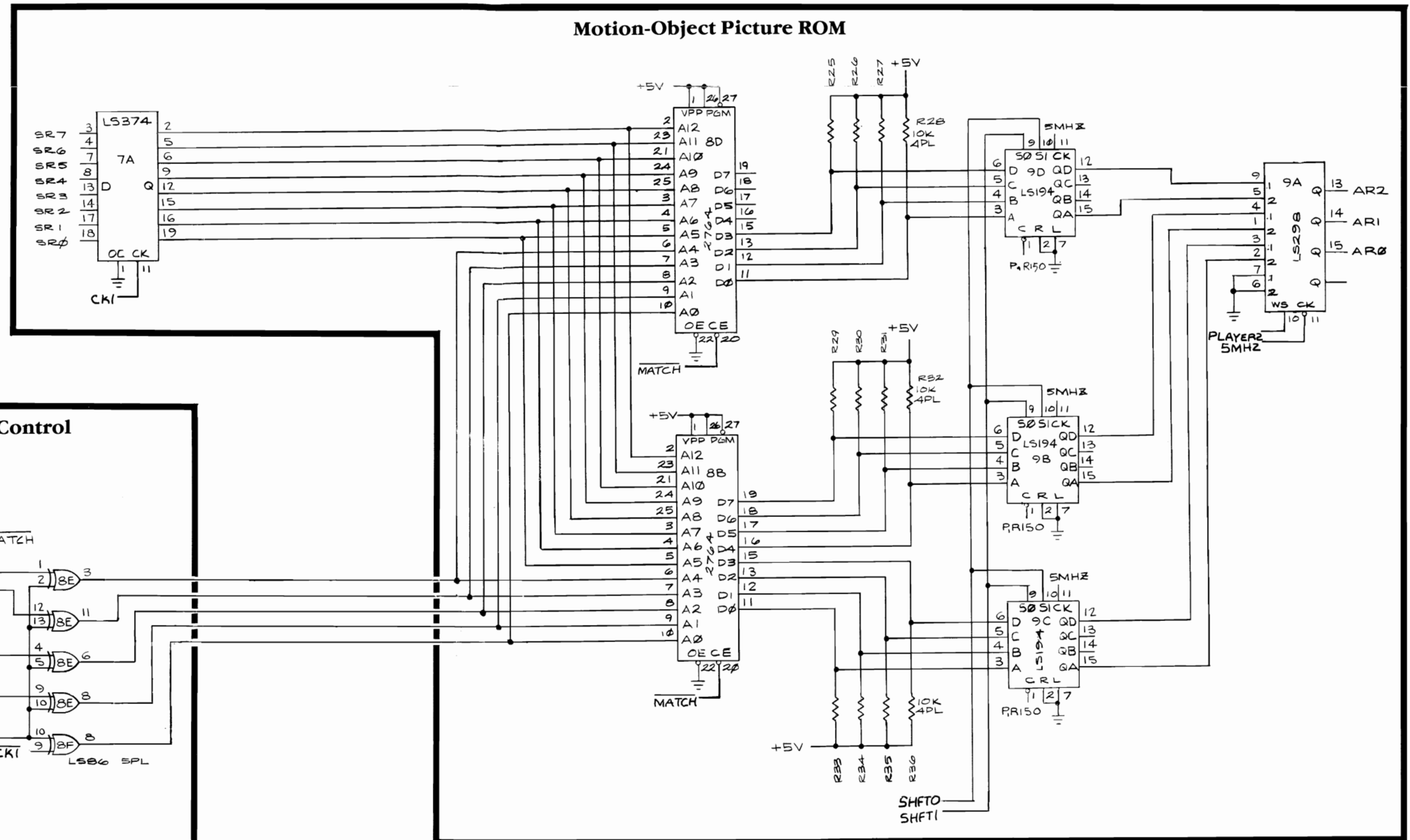
Crystal Castles PCB Schematic Diagram



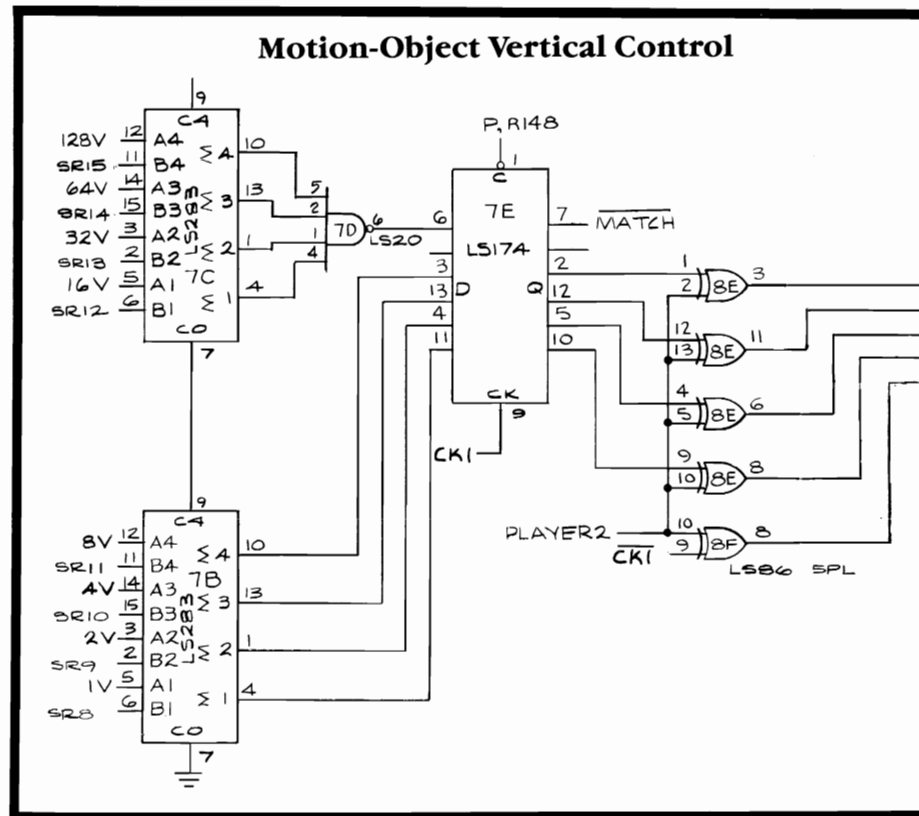
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Motion-Object Picture ROM



Motion-Object Vertical Control



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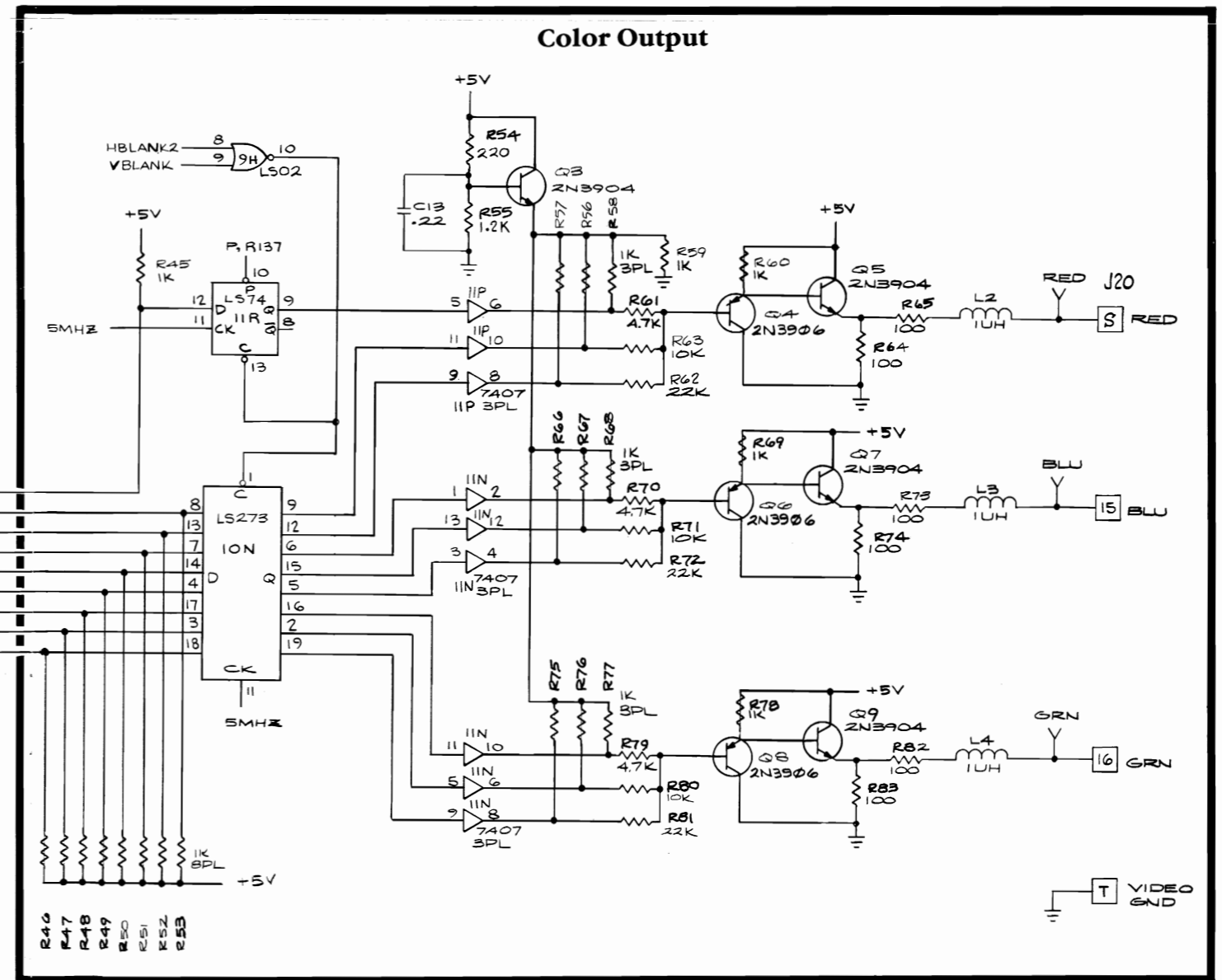
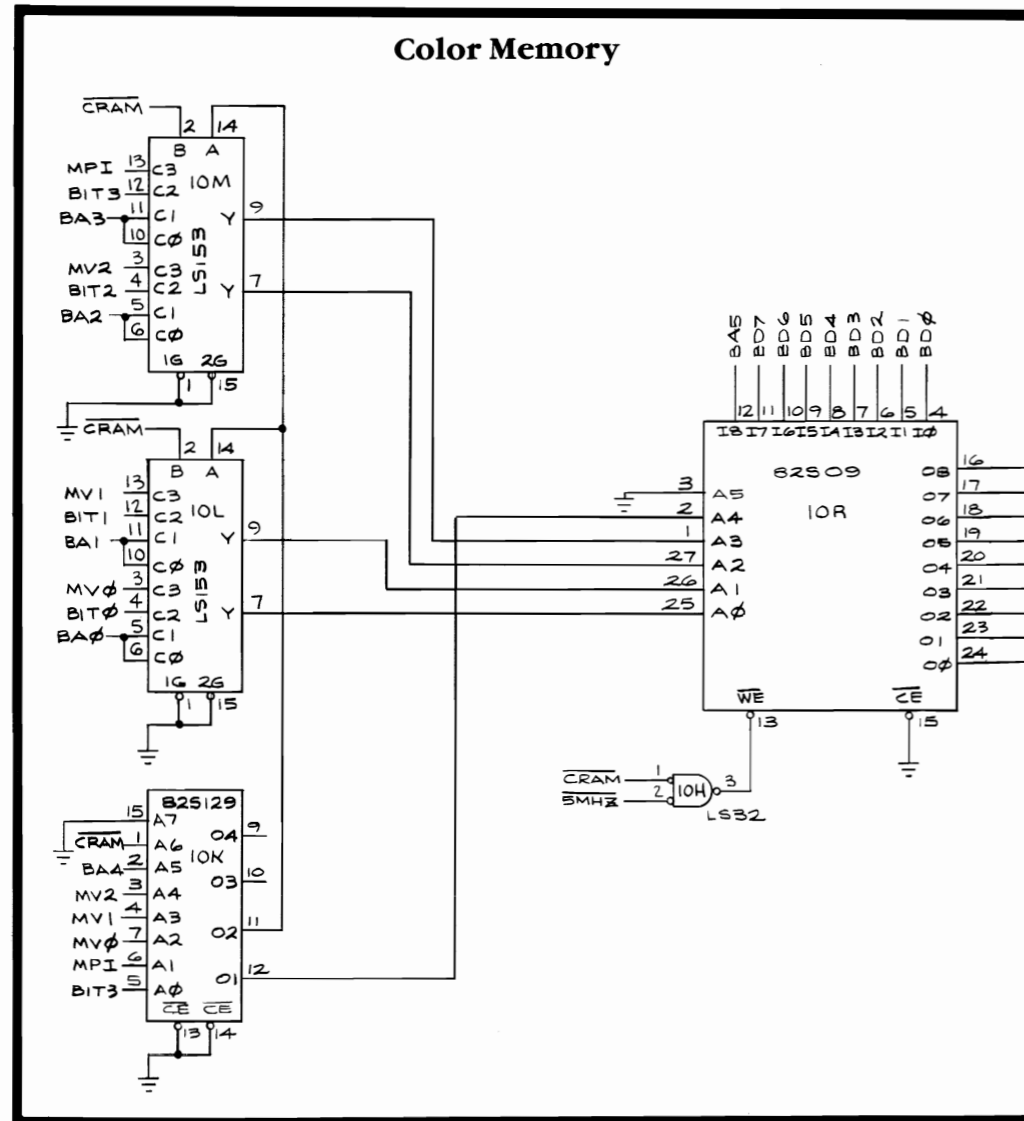
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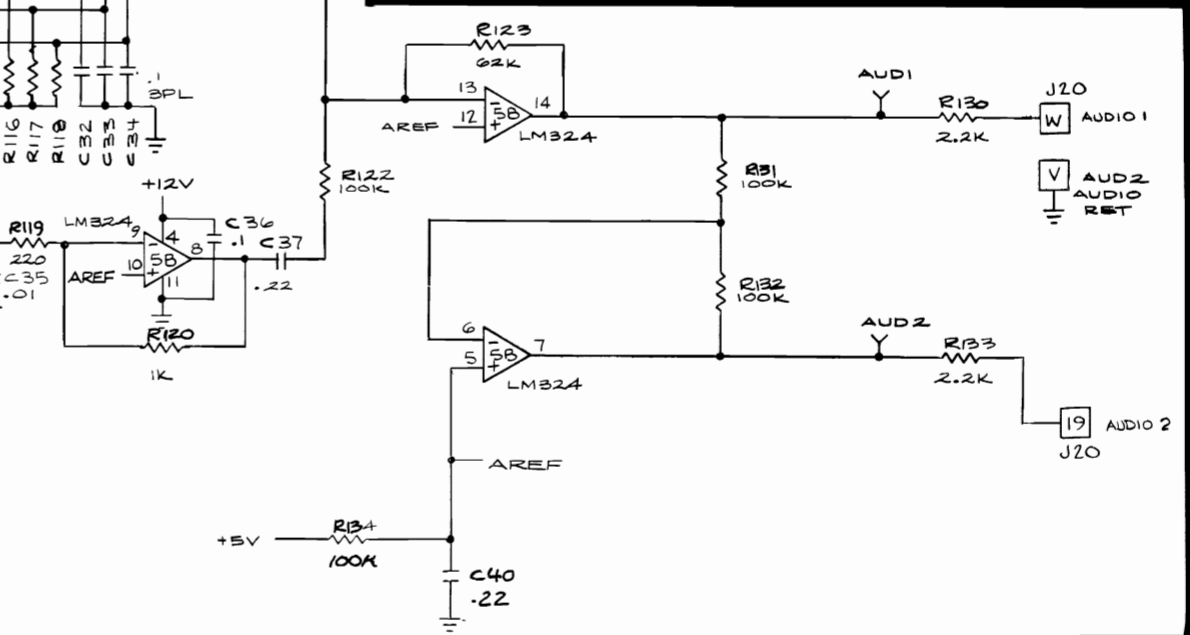
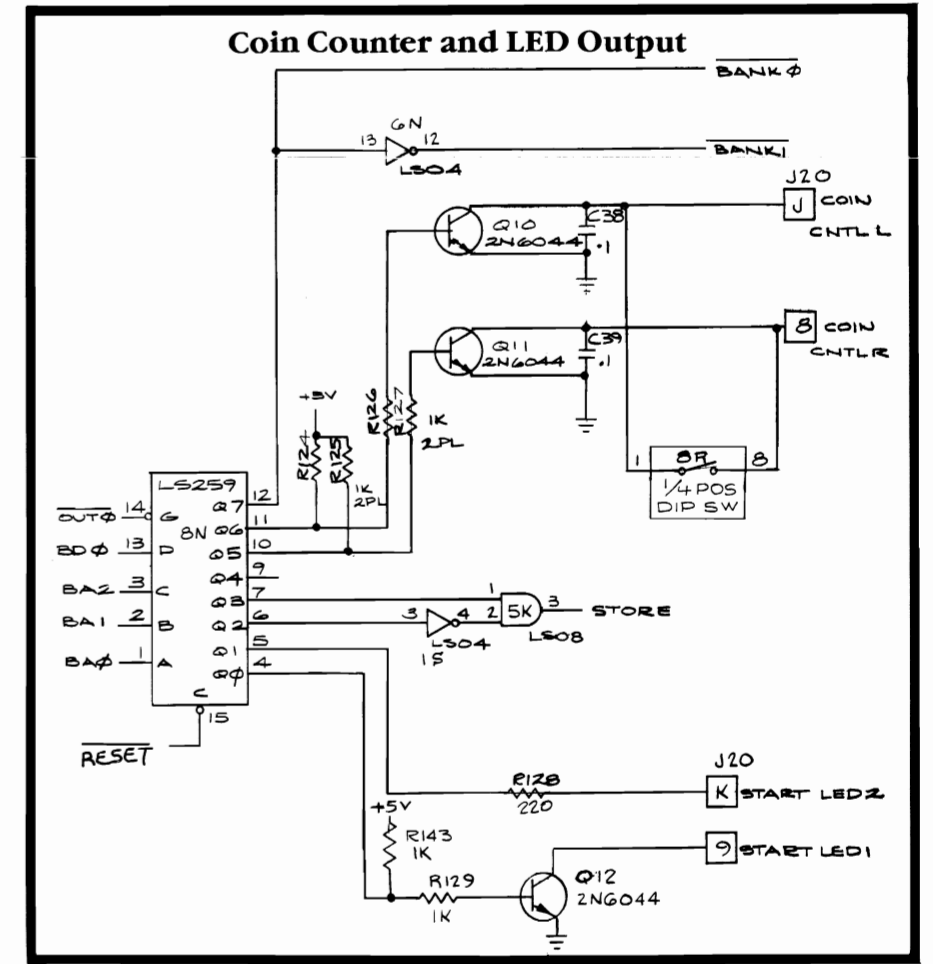
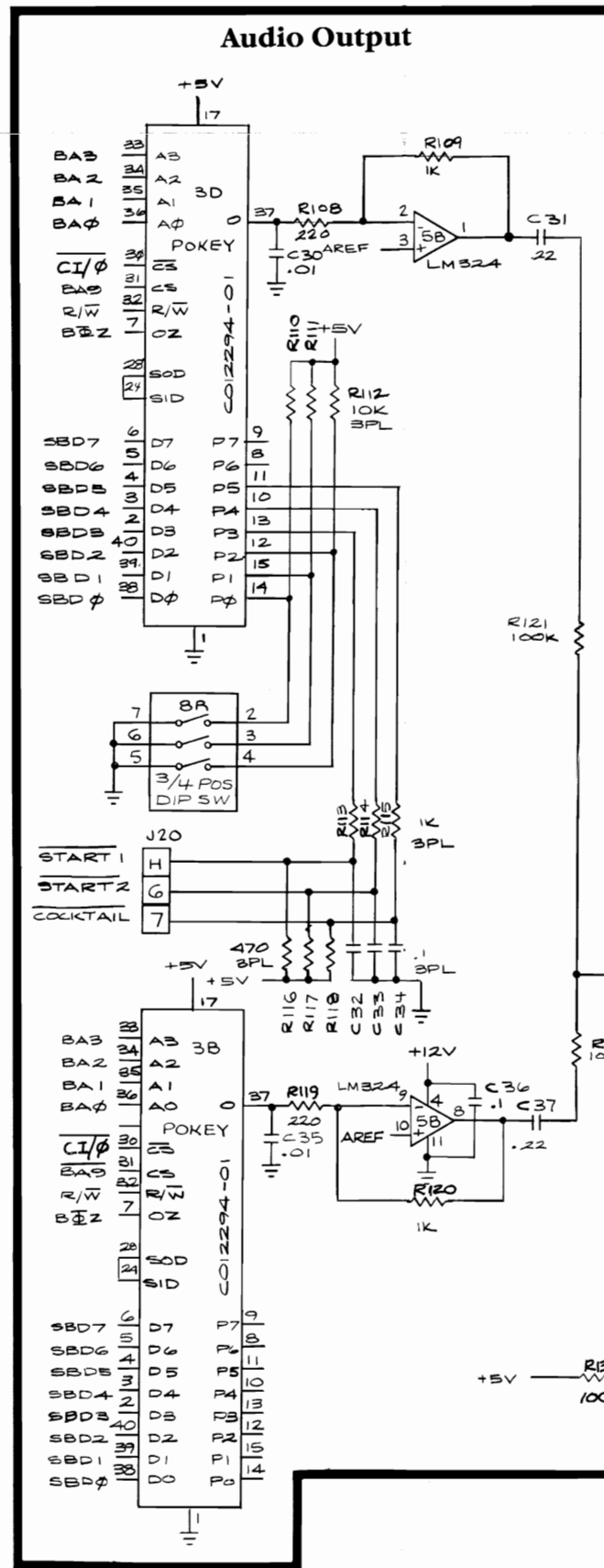
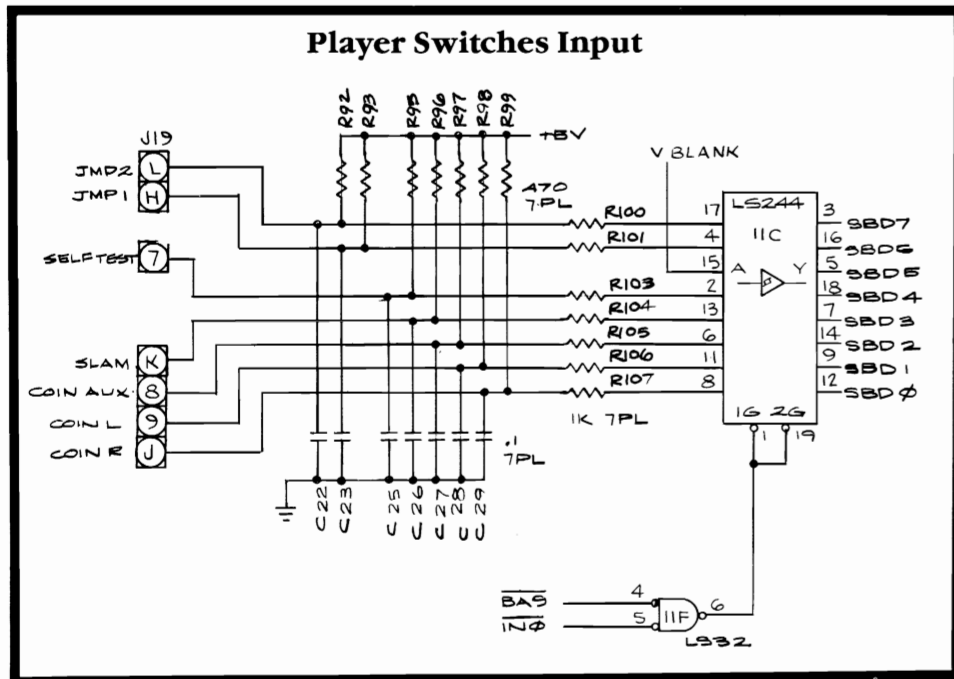
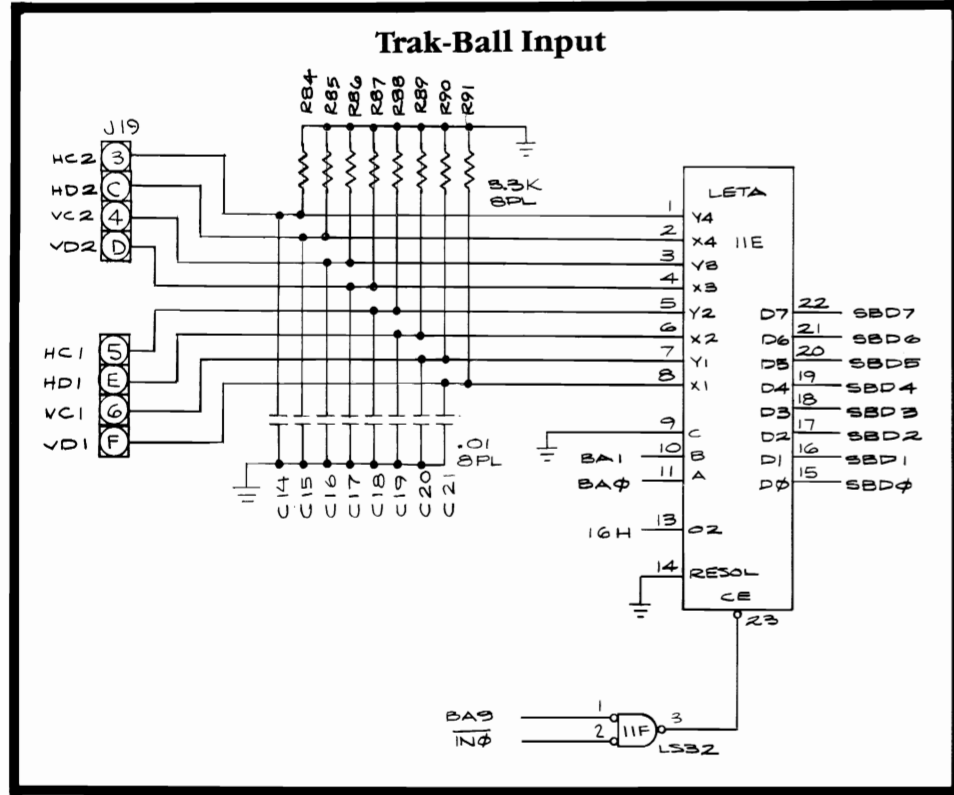


Crystal Castles PCB Schematic Diagram

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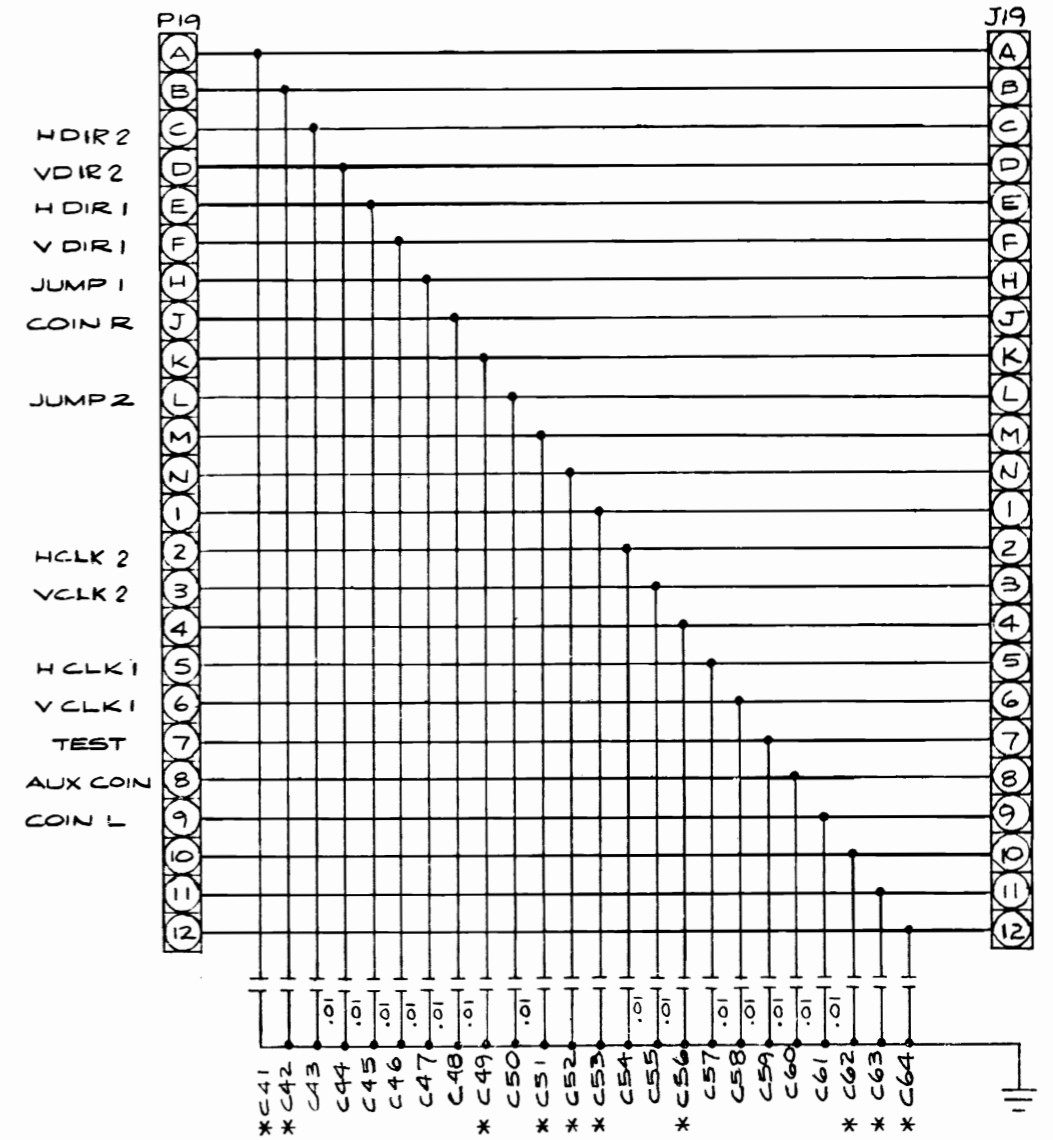
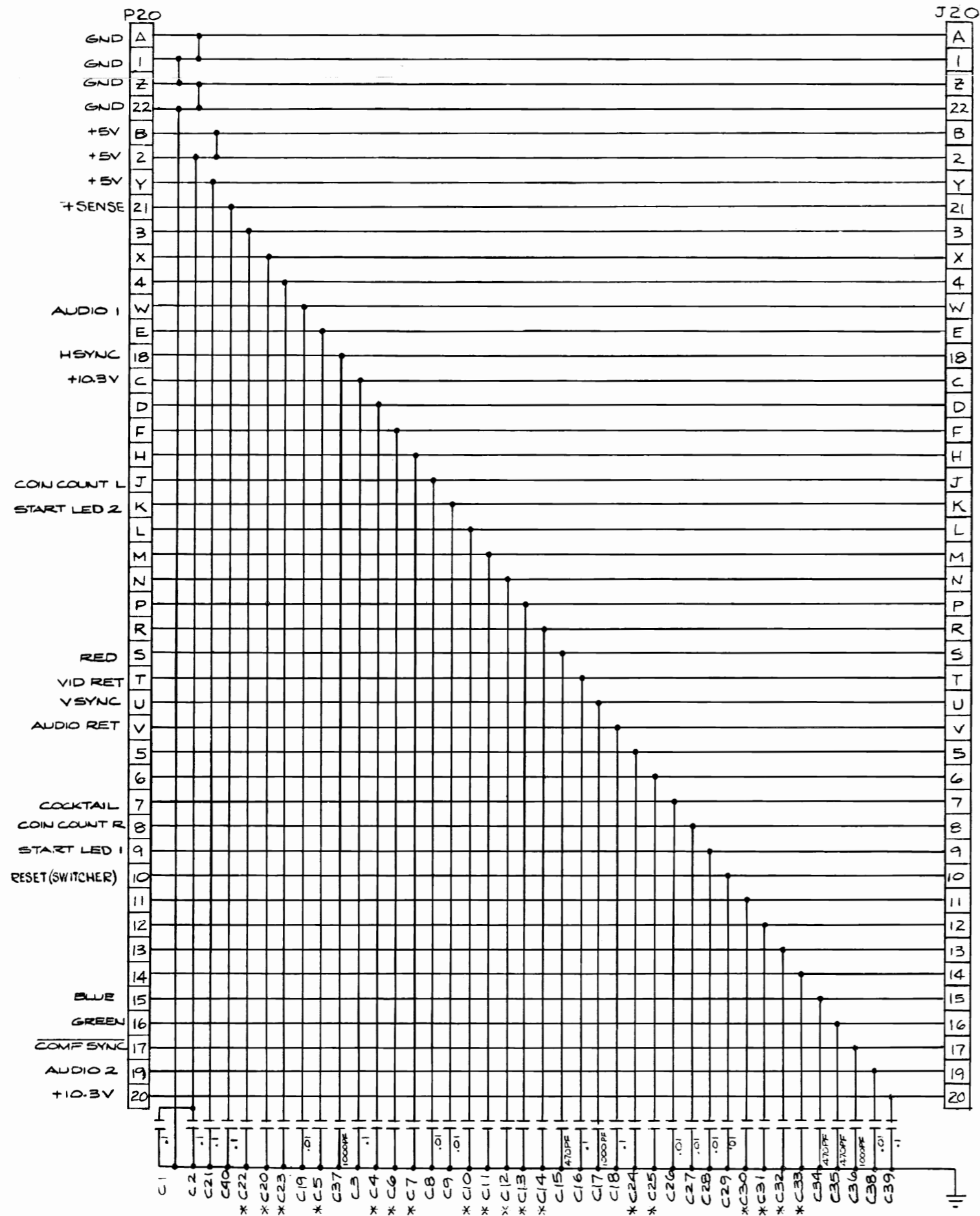


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NOTES:
 1. * DENOTES NOT LOADED CAPACITOR.

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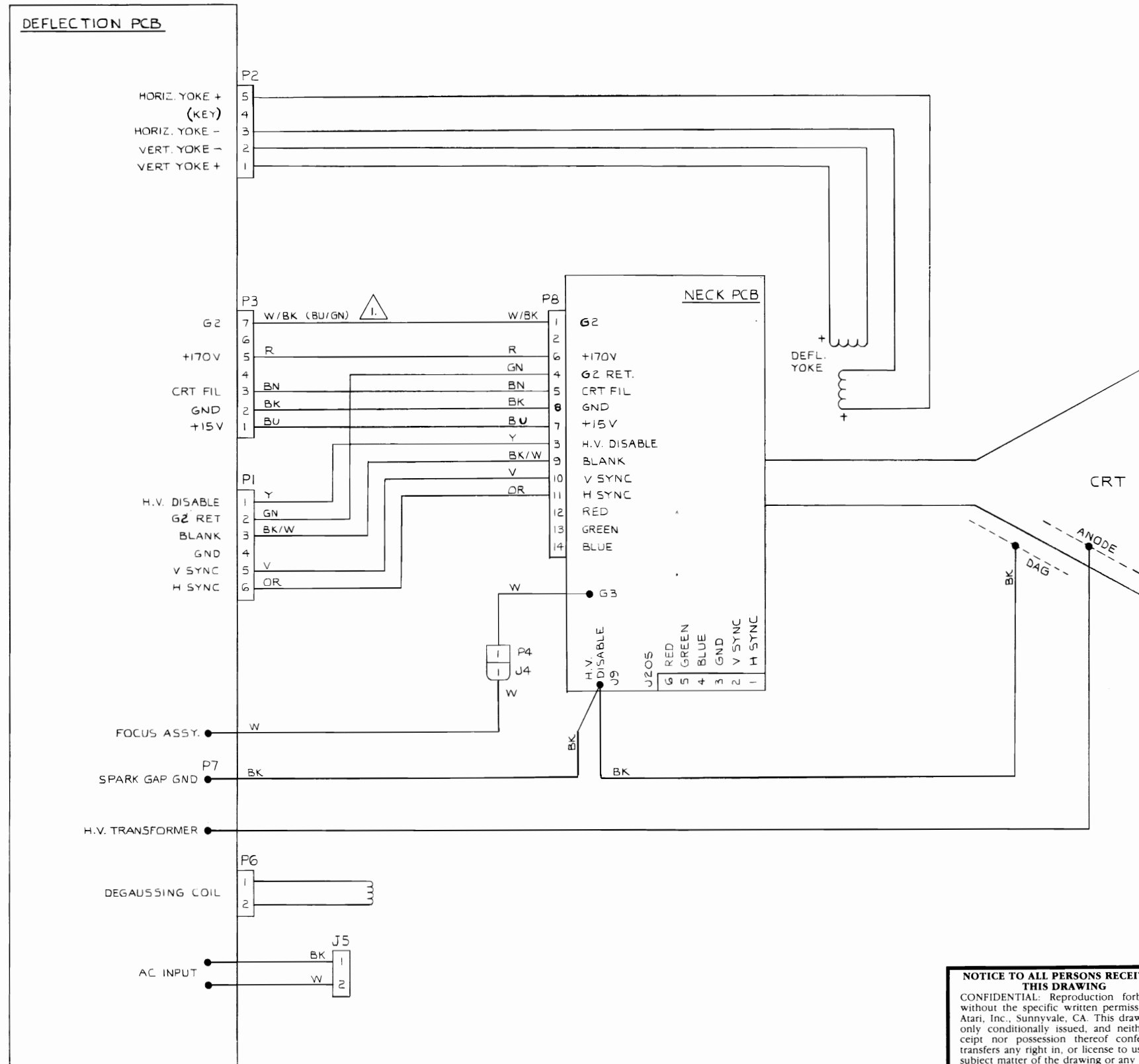
Crystal Castles EMI Shield PCB


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NOTE:
 1. ALTERNATE COLOR IN PARENTHESES ().

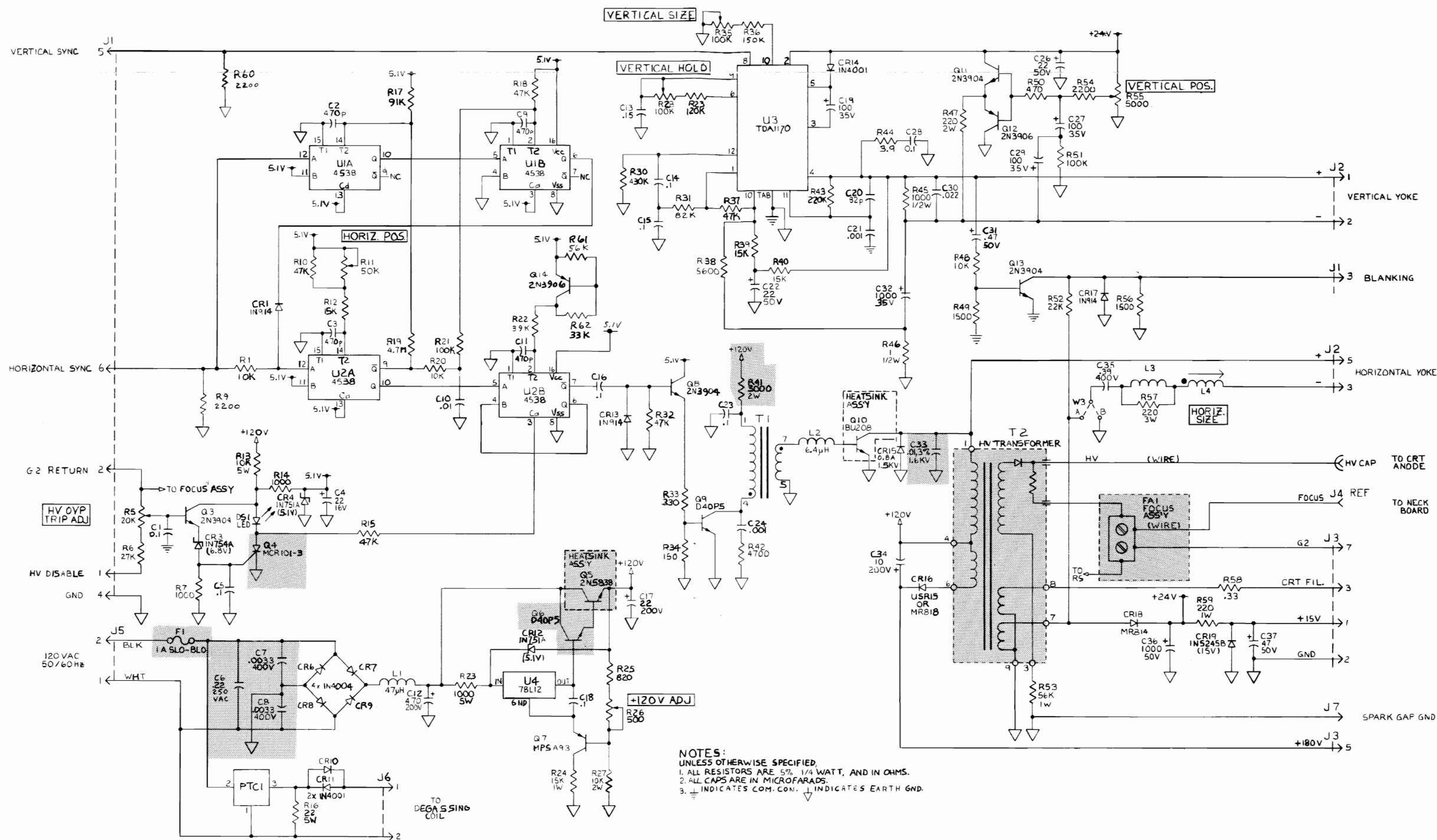
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**Atari Color Raster Display
 Wiring Diagram**


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PRODUCT SAFETY NOTICE

The shaded areas of this schematic indicate components whose values are of special significance to product safety. Should any component in the shaded areas need to be replaced, use only the value given in the parts lists. Do not deviate from the resistance, wattage, and voltage values shown.

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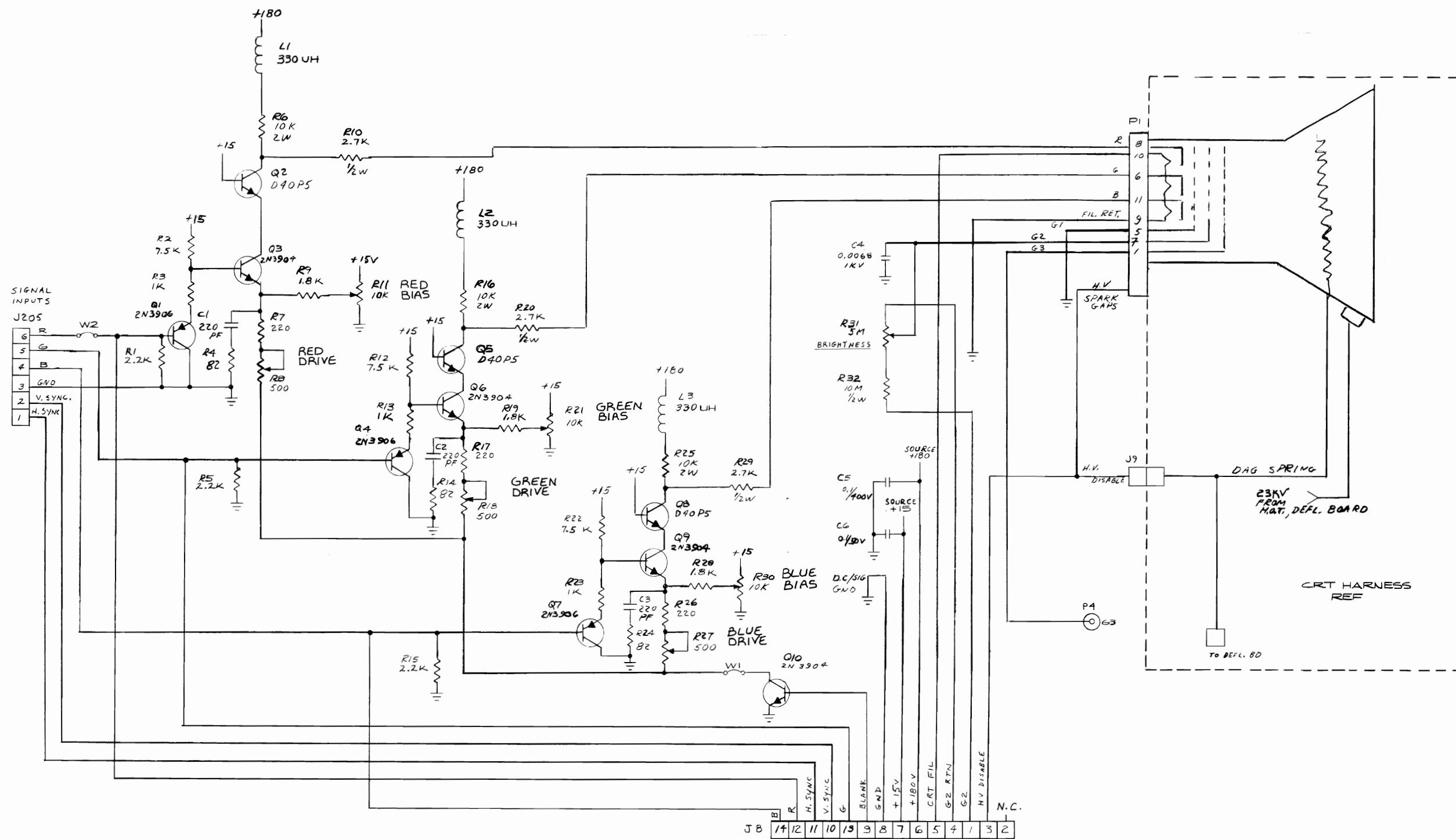


Atari Color Raster Display Deflection PCB

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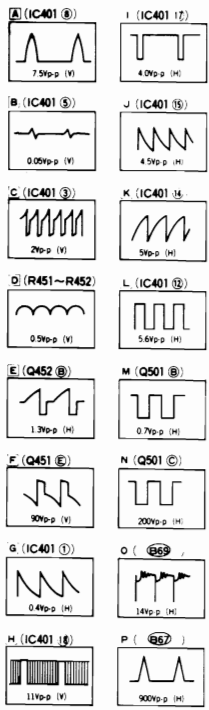
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Atari Color Raster Display Neck PCB

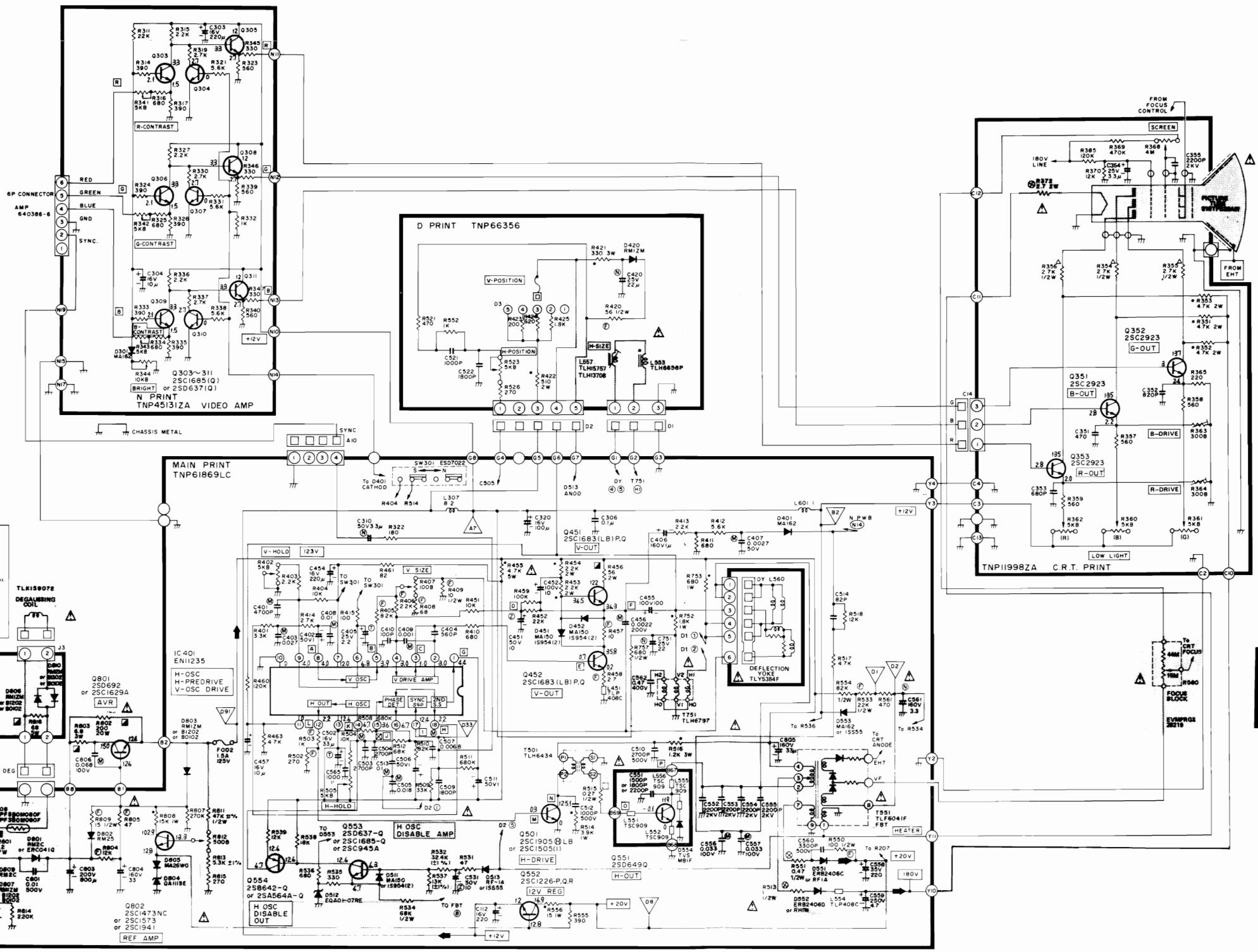

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Waveform



NOTE
 1. RESISTOR
 All resistors are carbon 1/4W resistor, unless otherwise noted the following marks:
 Line of resistance in Ohm (Ω) 1K = 1,000, M = 1,000,000
 □ Solid Metal Oxide
 □ Wire Wound Thermistor
 □ Non-Flammable
 □ Cement
 2. CAPACITOR
 All capacitors are ceramic 50V capacitor, unless otherwise noted the following marks:
 Line of capacitance in μF, unless otherwise noted:
 * Electrolytic Safety Vent Polyethylene
 * Bipolar Titanium Oxide Polystyrene
 * Z Type Temp Compensation Polyester
 * Doped Tantalum
 * Polyester
 3. COIL
 Limit of inductance is μH
 4. TEST POINT
 Y Test point position



WARNING
 Components identified by shading have special characteristics important to safety and must be replaced only with identical parts.

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Matsushita Color Raster Display

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