



Gottlieb™

NEW YORK! NEW YORK!

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Engineered by
Sigma Enterprises, Inc.

OPERATION and MAINTENANCE Manual

Gottlieb™
AMUSEMENT GAMES

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A Columbia Pictures Industries Company 

NEW YORK, N.Y.

INSTRUCTION MANUAL

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I. GAME PLAY

Flying Saucer changes color with each direct hit. Saucer must be hit 7 times to score.

II. POWER-UP AND OPERATION

An On-Off switch is located on the cabinet top in the right rear corner. In addition, a Pull-to-Cheat Interlock switch is mounted on the cabinet in a manner such that if the back door is removed, the game will shut off. The Switch Plunger can be pulled out to restore power while working on the game.

Plug the AC power cord into a grounded outlet of proper voltage.

Check the 3 sets of D.I.P. Option switches on the Control Board for proper setting. (See chart in Section IV of this manual.)

NOTE: Option switches are read only during normal power-up. For this reason, always turn game off when adjusting the Option switches.

When power is applied the Monitor will power up with the Attract Mode picture on it. Sometimes the Monitor may have a random dot pattern on power-up. This is normal, and the screen will reset in several seconds.

Insert coins into each Coin Chute. Credits will be displayed at the bottom right corner of the screen.

Start a game using the 1 or 2 player start buttons located on the Control Panel.

Adjust desired background music volume using the pot on the Sound Board. Adjust volume of all sounds using VR1 on the Control Board. (Located near connector CN1). The 3 pots located near connector CN5 adjust the relative values of the primary colors, and should not need adjustment unless the Monitor has been serviced.

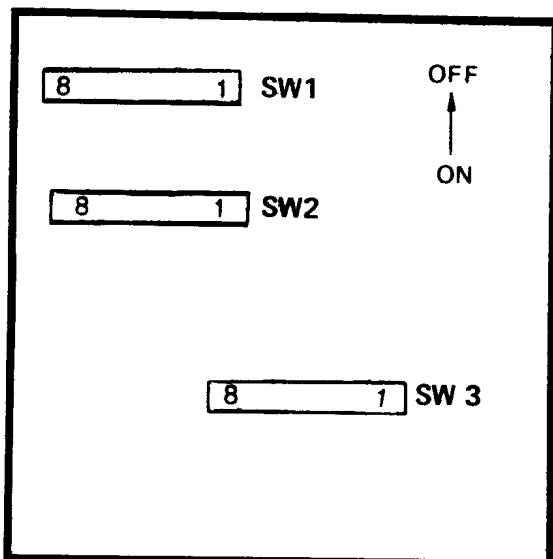
Player 1 score is displayed at the top left of the Monitor, and Player 2 score is at the top right. At the end of the game, the players rankings (down to 50th) are displayed, then the game returns to the Attract Mode.

III. BOOKKEEPING AND SERVICE SWITCHES

The RED button located on the inside of the front door adds credits without affecting the coin count in bookkeeping. This enables the game to be played or serviced without changing the bookkeeping. The WHITE button, also located on the inside of the door, displays the coin count on the Monitor when pressed. The coin count is cumulative and non-resetable.

IV. OPTION SWITCH SETTINGS

CAUTION: Switches are recognized only during normal power-up. Turn power off and on after changing switch setting.



SWITCH PAK 1

Number of Bombs from UFO
(Screen 3 or higher)

SW1	SW2	
OFF	OFF	9
ON	OFF	12
OFF	ON	3
ON	ON	6

Number of bombs from UFO
(Screen 1 or 2)

SW3		
OFF		6
ON		9

Switches 4-5-6-7 have no function

Relative Volume of Voice

SW8	
OFF	HIGH
ON	LOW

SWITCH PAK 2

Coin, Credits
1 Coin, 1 Credit
1 Coin, 2 Credits
2 Coins, 1 Credit
Free Play

SW1	SW2
OFF	OFF
OFF	ON
ON	OFF
ON	ON

Switches 3 and 4 have no function.

Replay Score
No Replays
5,000 Points
10,000 Points
15,000 Points

SW5	SW6
OFF	OFF
ON	OFF
ON	ON
OFF	ON

Extra Missile Base Score
5,000 Points
3,000 Points

SW7
OFF
ON

Extra Missile Base Mode
Extra Base at SW7 Score
No Extra Base

SW8
OFF
ON

SWITCH PAK 3

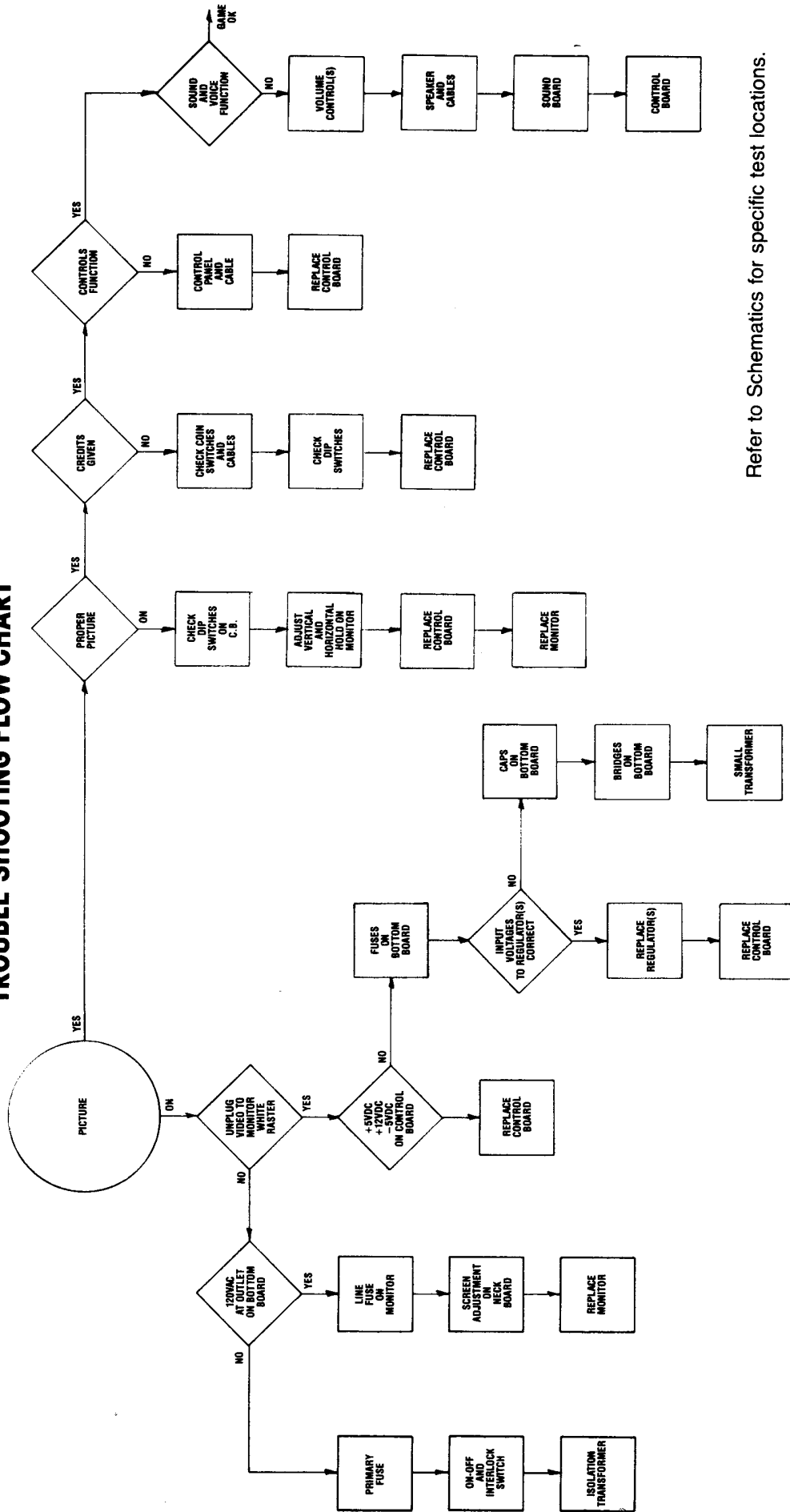
Picture Direction—Both Players	SW1		
Standard	ON		
Up-Side Down	OFF		
Same Mode	SW2		
Upright Cabinet	ON		
Cocktail Cabinet	OFF		
Vertical location of displayed picture	SW3	SW4	SW5
Horizontal location of displayed picture	SW6	SW7	SW8
+3	ON	ON	OFF
+2	OFF	ON	OFF
+1	ON	OFF	OFF
Neutral	OFF	OFF	OFF
-1	ON	ON	ON
-2	OFF	ON	ON
-3	ON	OFF	ON

NOTE: Switches 3 thru 8 should not need adjustment unless the Monitor is replaced by one manufactured by someone other than the original installed in the game.

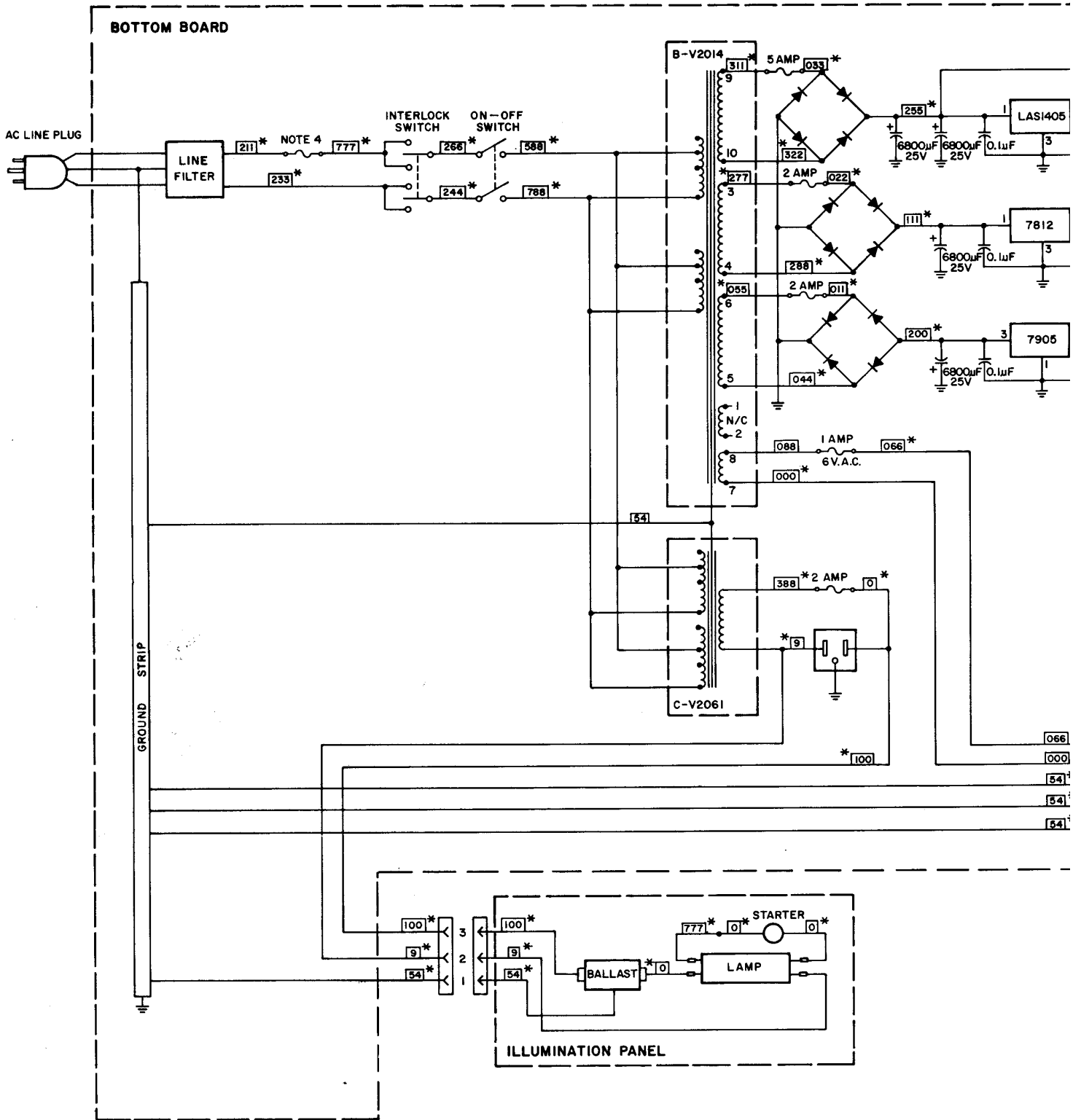
V. TROUBLESHOOTING:

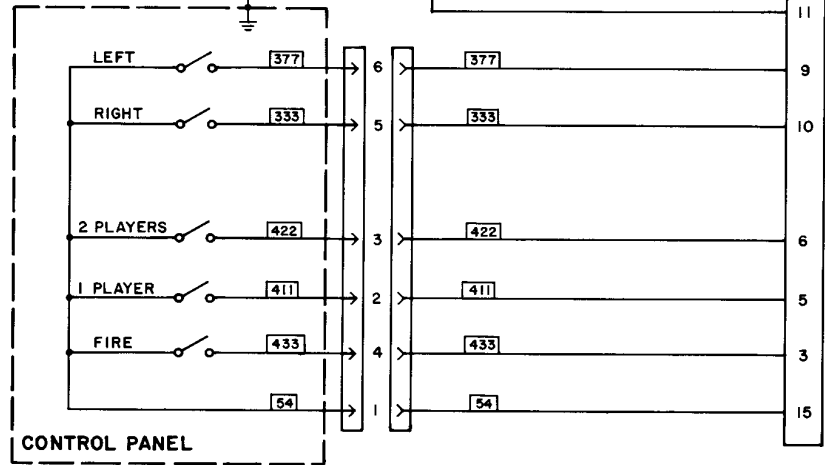
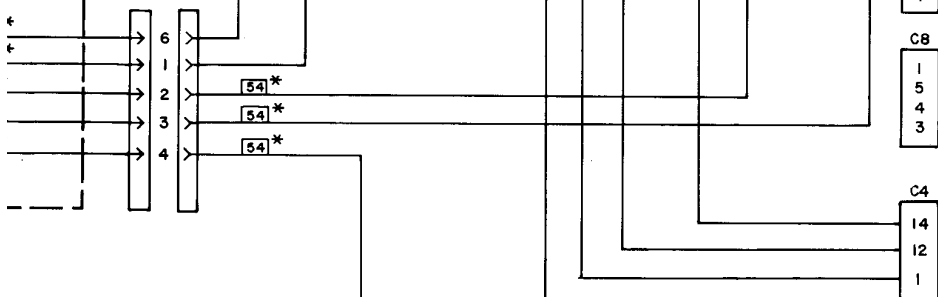
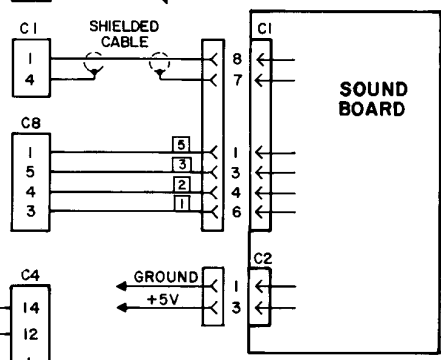
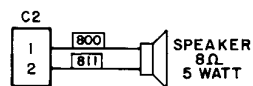
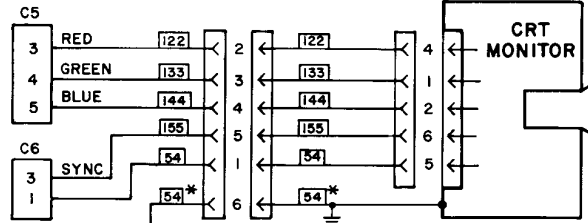
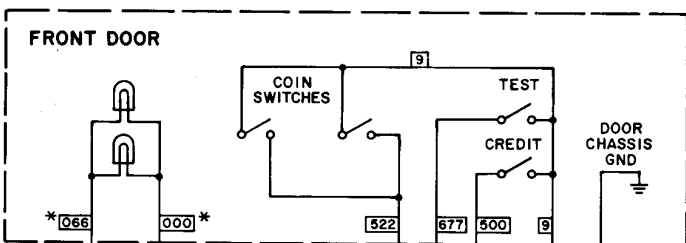
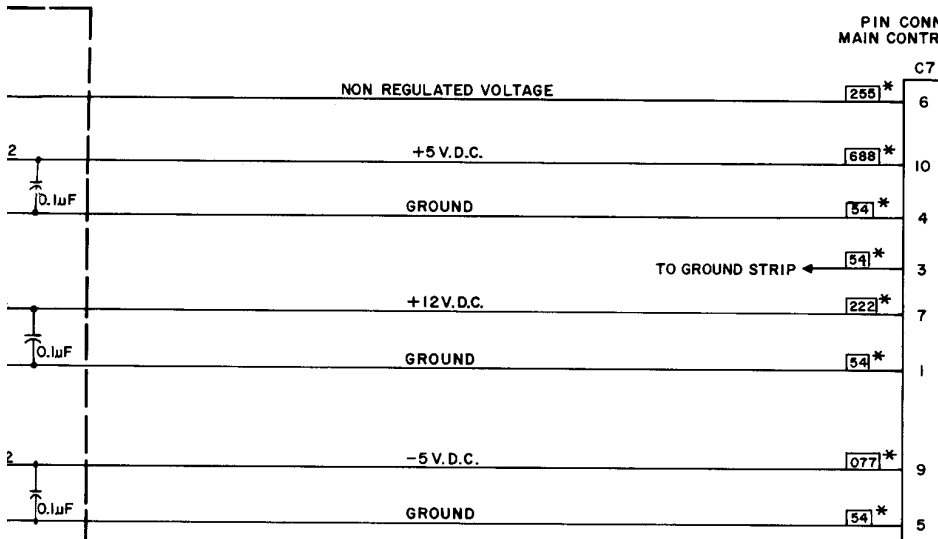
Most electronic troubleshooting will consist of isolating a faulty assembly and replacing that assembly on location.

TROUBLE SHOOTING FLOW CHART

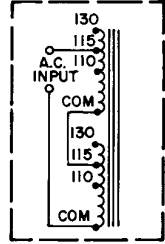


Refer to Schematics for specific test locations.

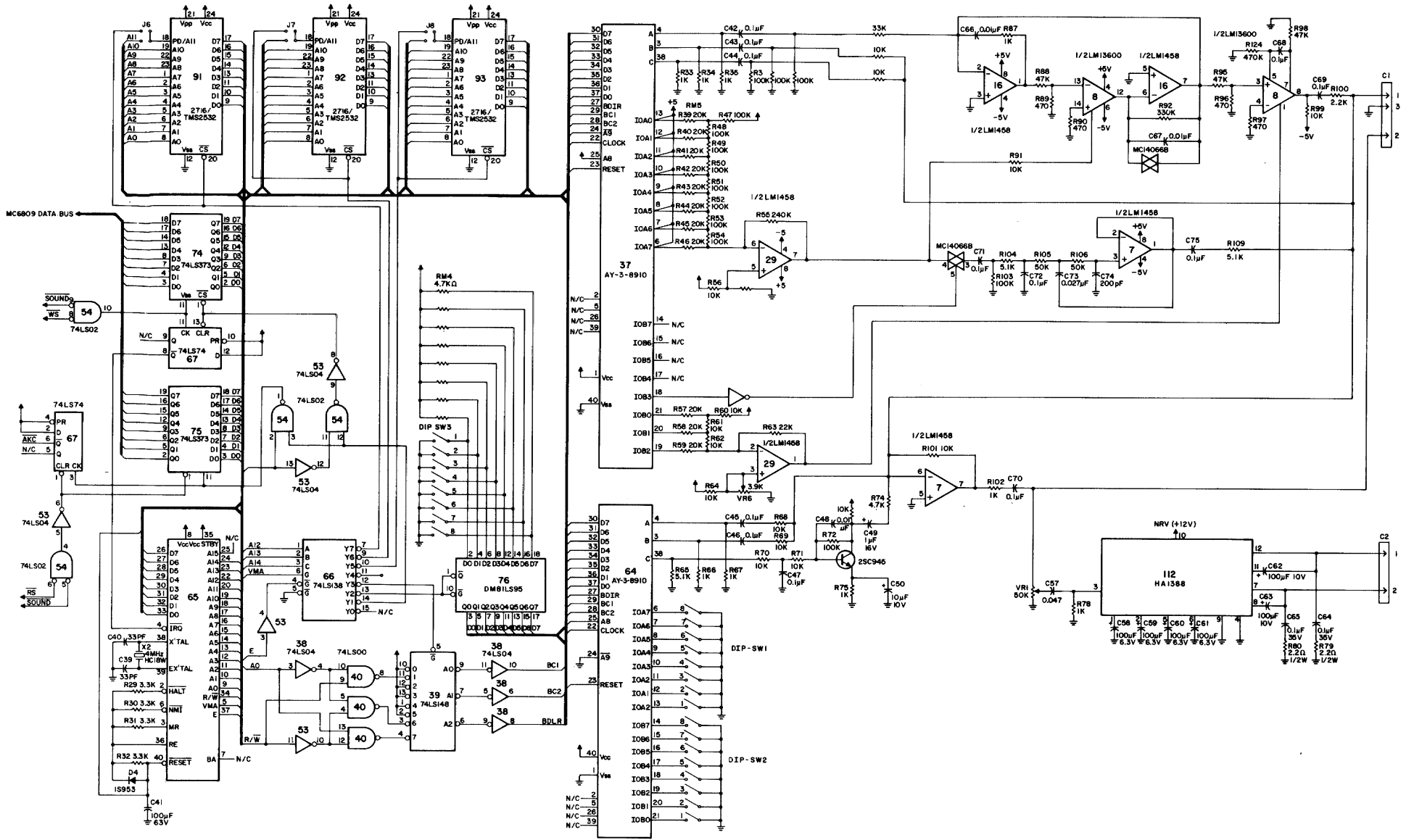


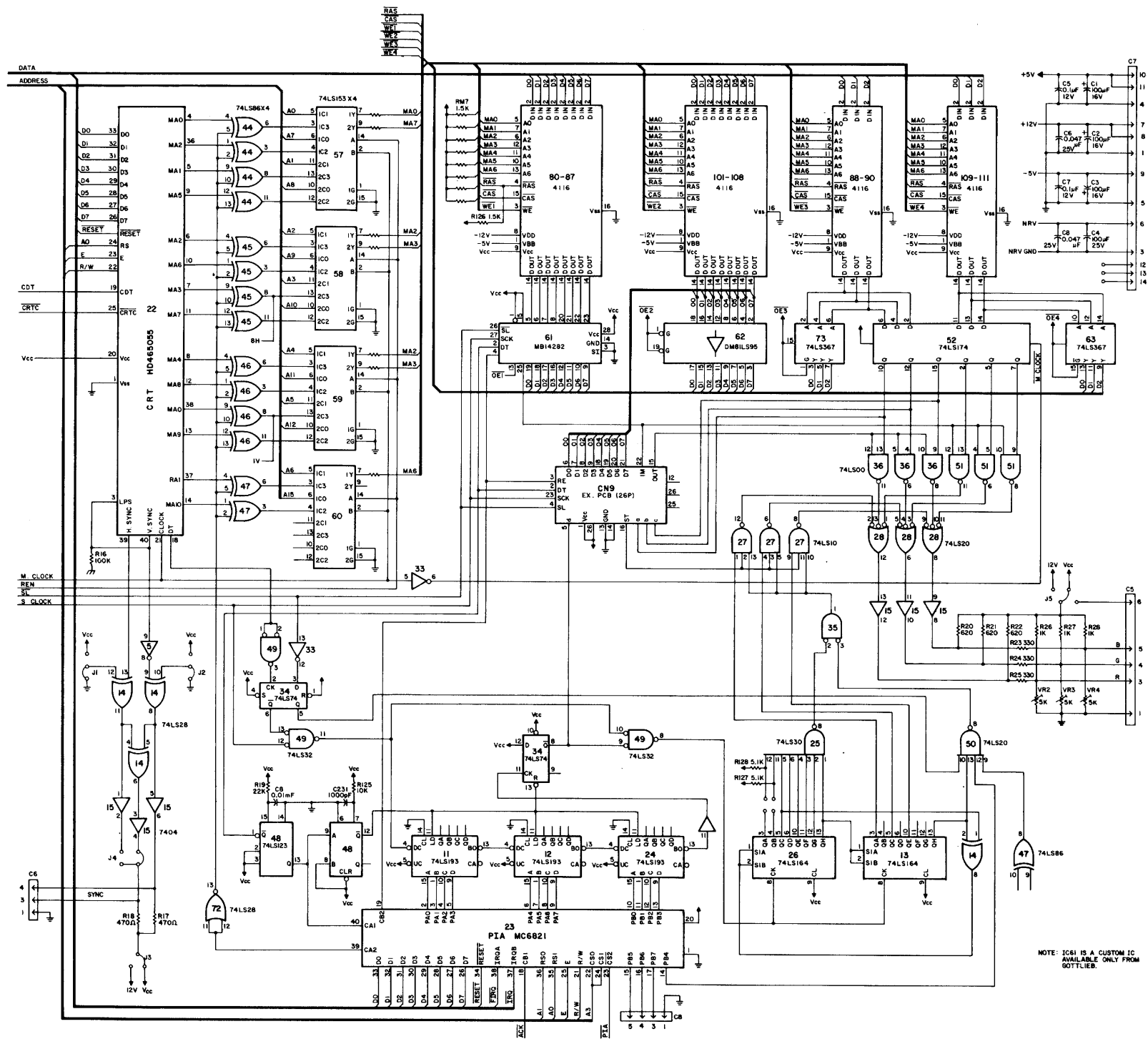


- NOTES:**
- [XXX] DENOTES WIRE COLOR.
 0 BLACK 5 GREEN
 1 BROWN 6 BLUE
 2 RED 7 PURPLE
 3 ORANGE 8 SLATE
 4 YELLOW 9 WHITE
 - * INDICATES 18GA. WIRE.
 - 230V OPERATION



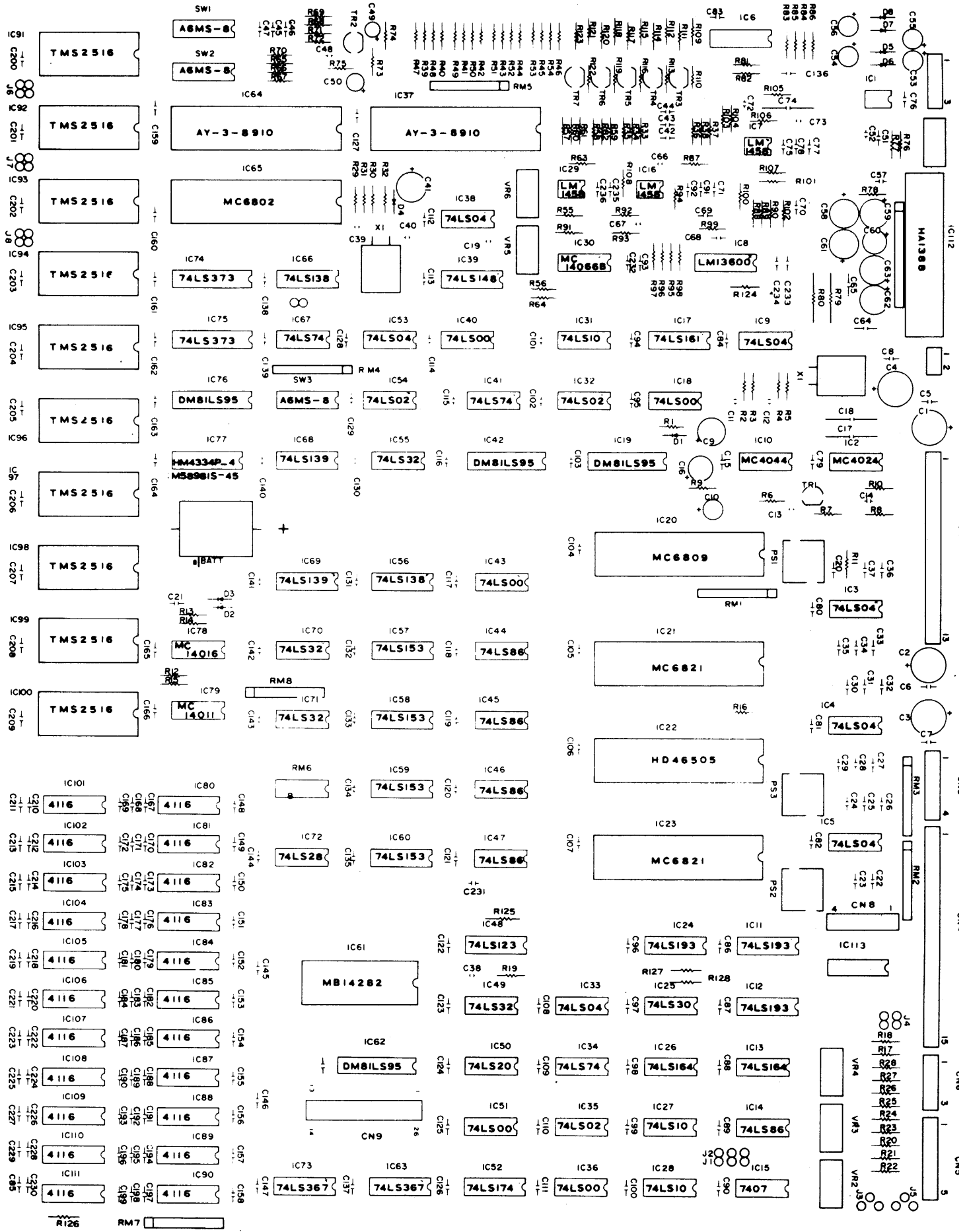
- PRIMARY FUSE VALUE.
 115V.A.C. 5A SLO BLO.
 230V.A.C. 2.5A SLO BLO.



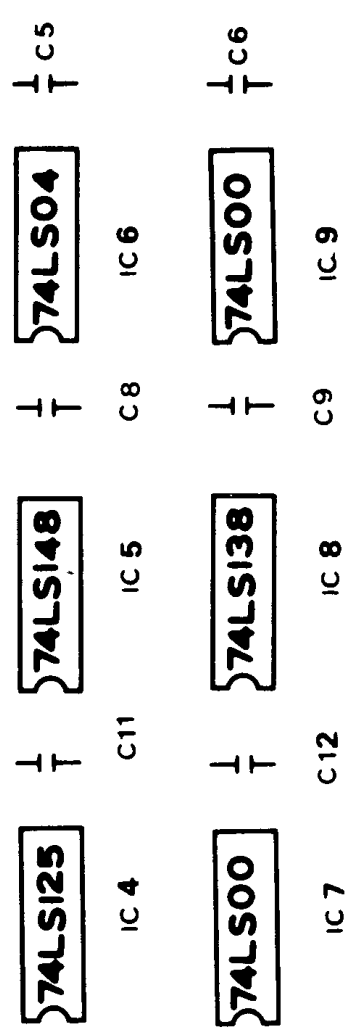
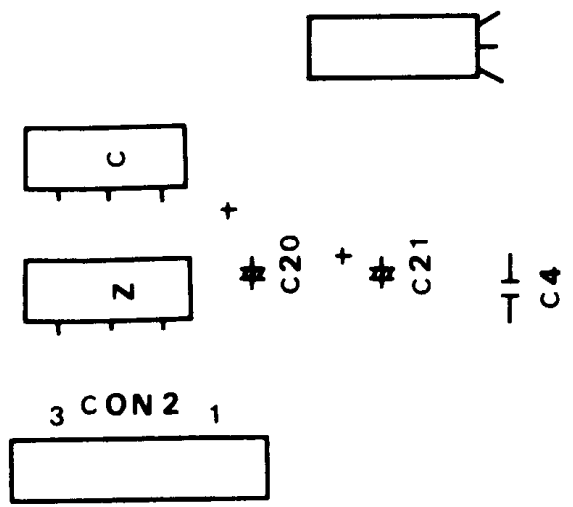
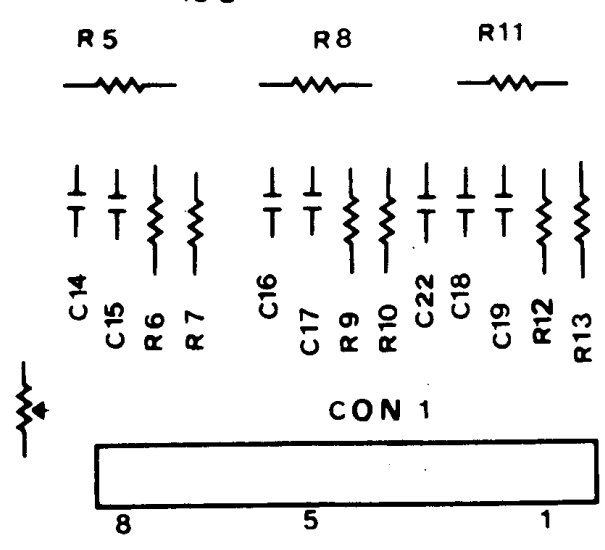
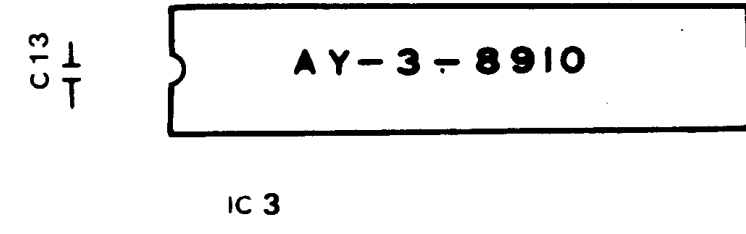
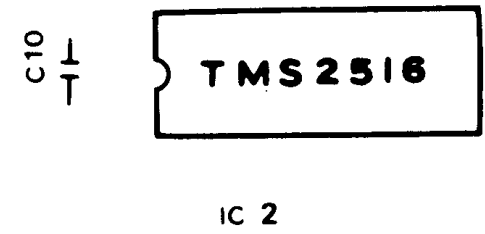
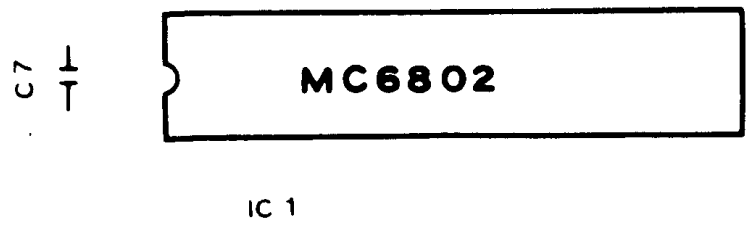
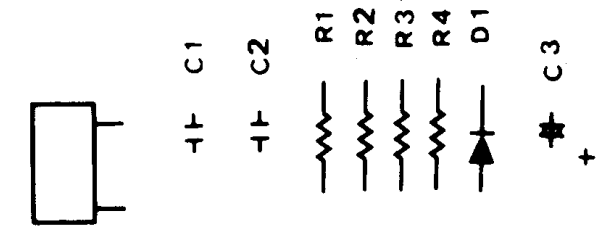


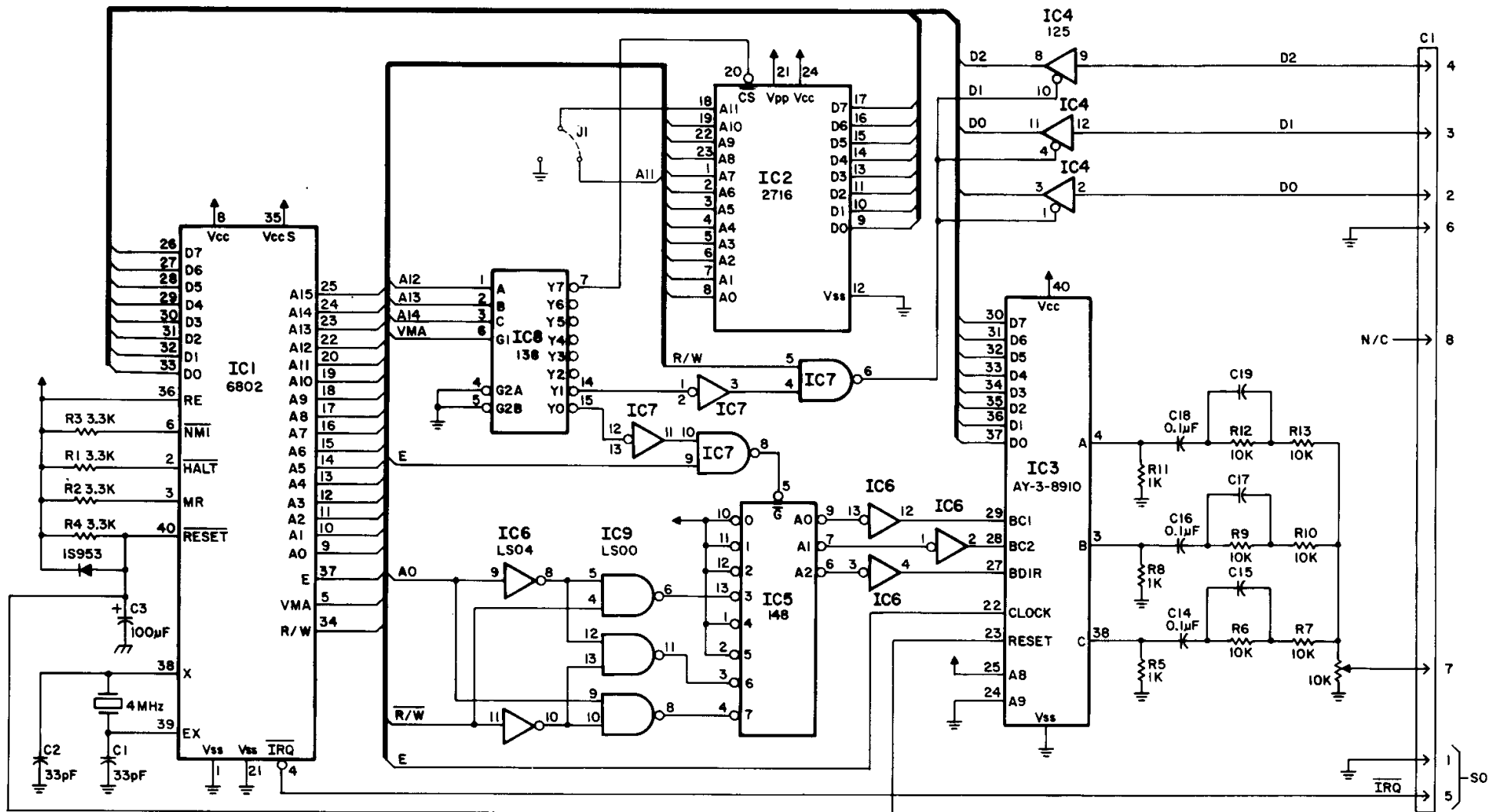
NOTE: IC61 IS A CUSTOM IC AVAILABLE ONLY FROM GOTTILIEB.

CONTROL BOARD COMPONENT LOCATION



0088B







IC5



7425



IC2



74LS157

00898



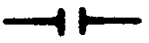
CNI



IC6



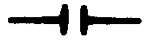
74LS74



IC3



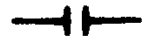
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IC7



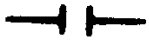
74LS00



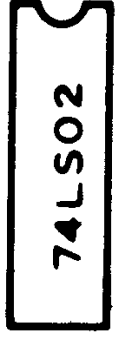
IC4



74LS166



IC1



74LS02

