



Gottlieb™

NEW YORK! NEW YORK!

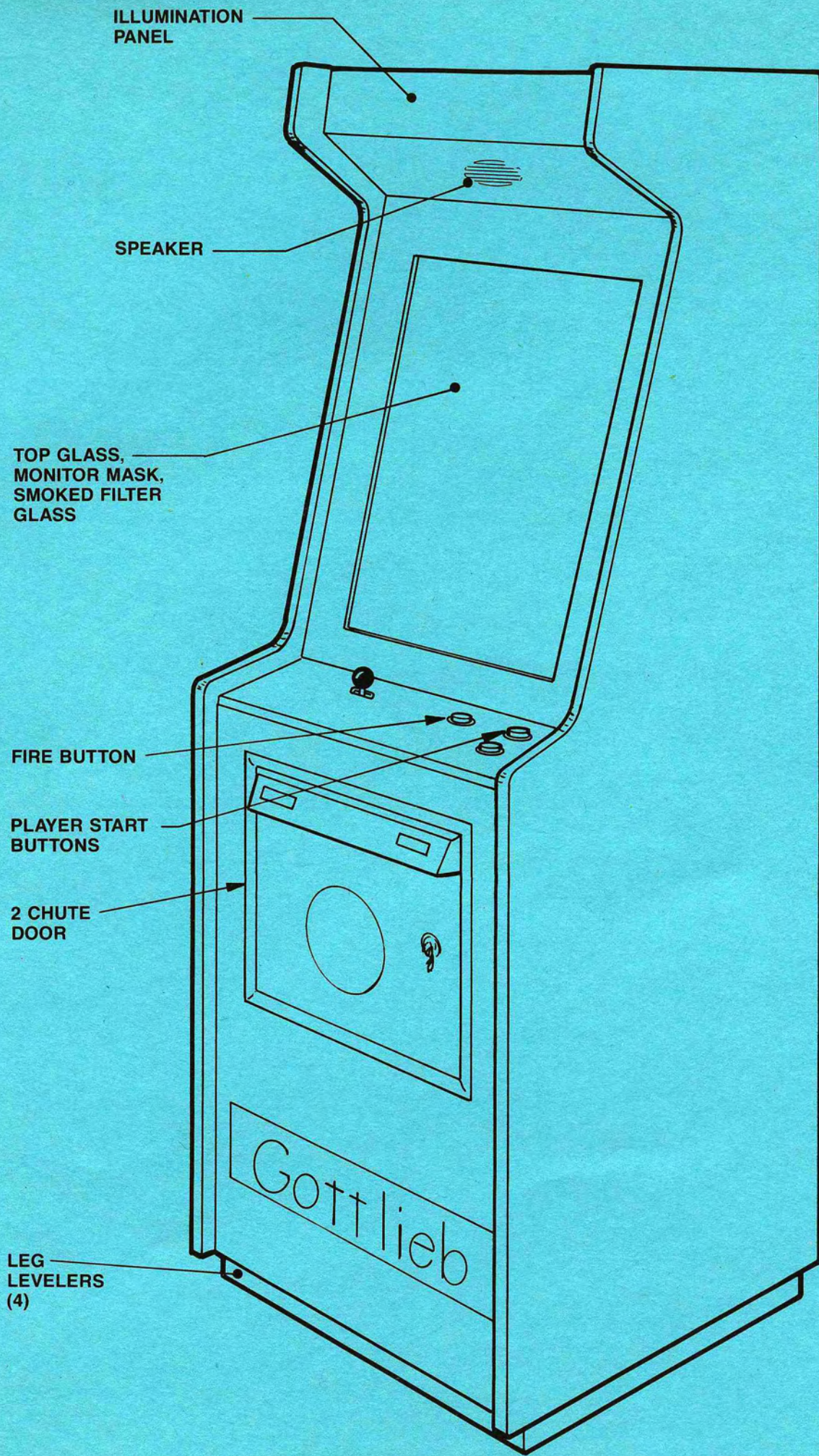
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Engineered by
Sigma Enterprises, Inc.

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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Toll Free Video Service Number 800-323-1114 Outside Illinois

CAUTION: Use original Gottlieb replacement parts for best results.

Some parts of the game remain electrically live even when the interlock and On/Off switches are off. Use caution when working near the line filter, fuse strip, interlock switch, or On/Off switch.

Always connect game to a properly grounded 3 wire outlet. Great care has been taken to insure that all player areas are properly isolated and grounded. To defeat the 3rd wire ground may create a shock hazard, and also lead to costly P.C.B. damage, by static discharge.

I. 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.

Leg levelers are shipped in the cash box of the game. Install levelers to stabilize the game for improved play. The levelers also provide height adjustment for comfortable play. Install flat washers and nuts to the levelers inside the cabinet to prevent pulling the T-nuts out of the cabinet bottom.

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.

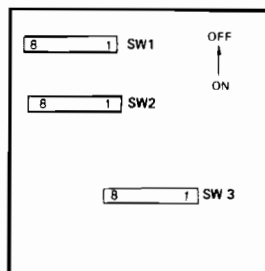
II. BOOKKEEPING AND SERVICE SWITCHES

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.

NOTE: White button works only when there are credits on the game.

III. 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 OFF ON OFF ON	SW2 OFF OFF ON ON	9 12 3 6
Number of bombs from UFO (Screen 1 or 2)	SW3 OFF ON		6 9
Switches 4-5-6-7 have no function			
Relative Volume of Voice	SW8 OFF ON	HIGH LOW	

SWITCH PAK 2

Coin, Credits	SW1	SW2	
1 Coin, 1 Credit	OFF	OFF	
1 Coin, 2 Credits	OFF	ON	
2 Coins, 1 Credit	ON	OFF	
Free Play	ON	ON	
Switches 3 and 4 have no function.			
Replay Score	SW5	SW6	
No Replays	OFF	OFF	
5,000 Points	ON	OFF	
10,000 Points	ON	ON	
15,000 Points	OFF	ON	
Extra Missile Base Score	SW7		
5,000 Points	OFF		
3,000 Points	ON		
Extra Missile Base Mode	SW8		
Extra Base at SW7 Score	OFF		
No Extra Base	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.

IV. GAME PLAY

Flying Saucer changes color with each direct hit.

Hit Squadron Leader while still white in color for higher mystery score.

22 small Target Ships destroyed activates UFO. If player is destroyed, 22 more Ships must be hit before the UFO appears. When the UFO is hit, the screen count increments (bottom left of screen) and the player starts with a new, more aggressive Squadron of 22 Ships.

On screen 3 and higher, the Target Ships drop fast Bombs.

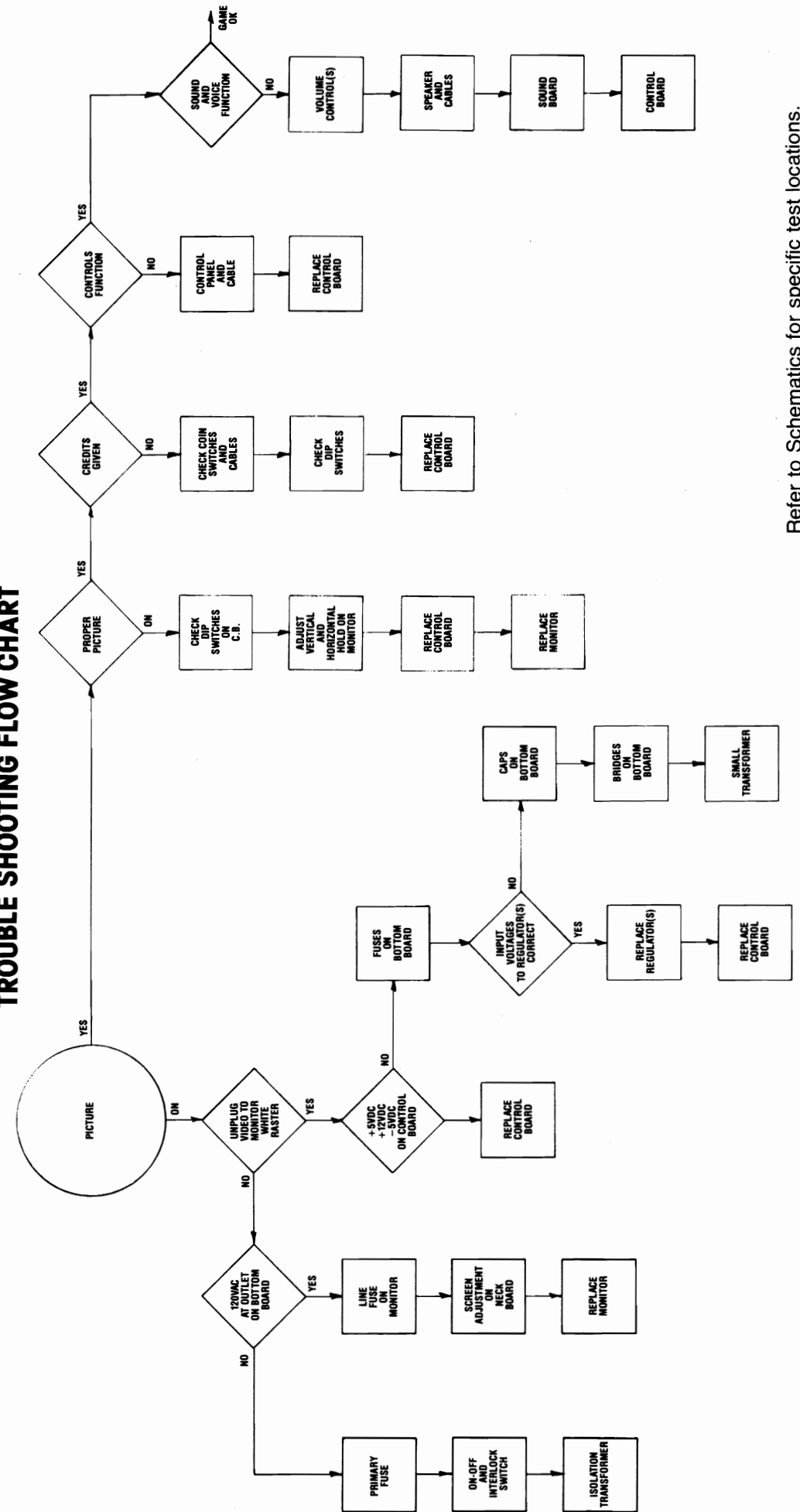
On screen 7 and higher, the Target Ships drop fast, tracking Bombs.

When Flying Saucer appears, game says "I'm Here." After the first hit on the Flying Saucer, the game randomly says "Come On" and "Hit Me."

V. TROUBLESHOOTING:

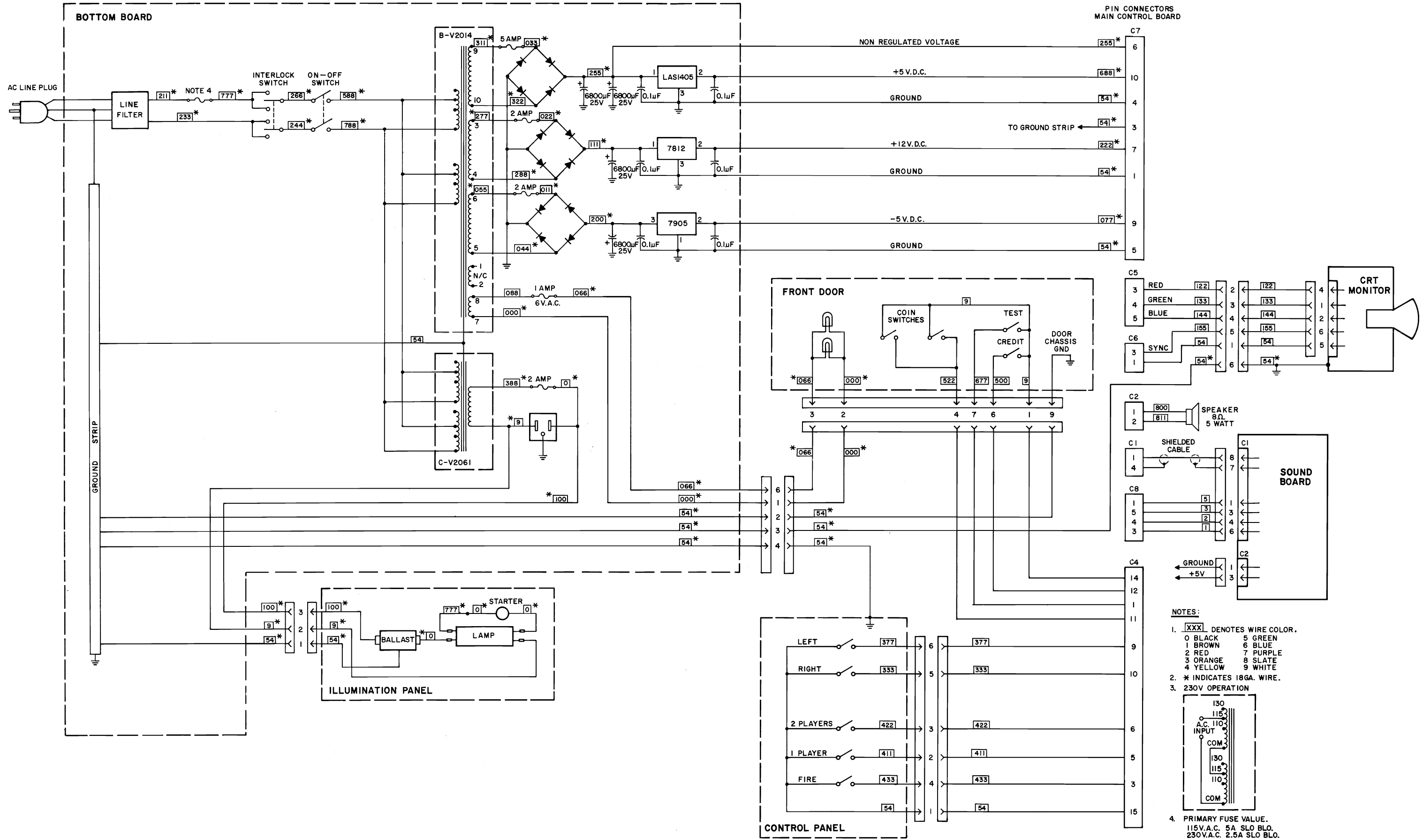
Most electronic troubleshooting will consist of isolating a faulty assembly and replacing that assembly on location.

TRUBLE SHOOTING FLOW CHART



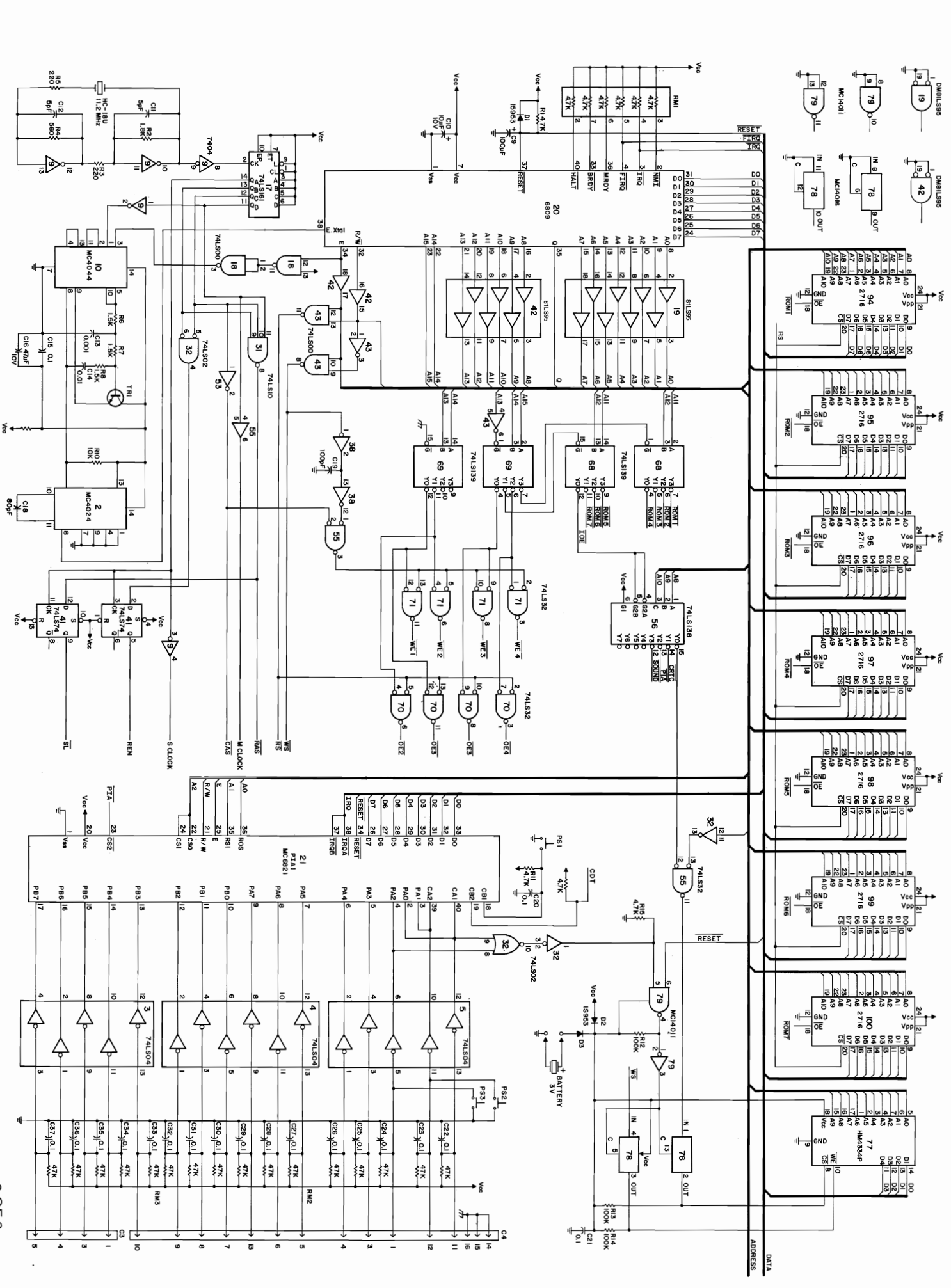
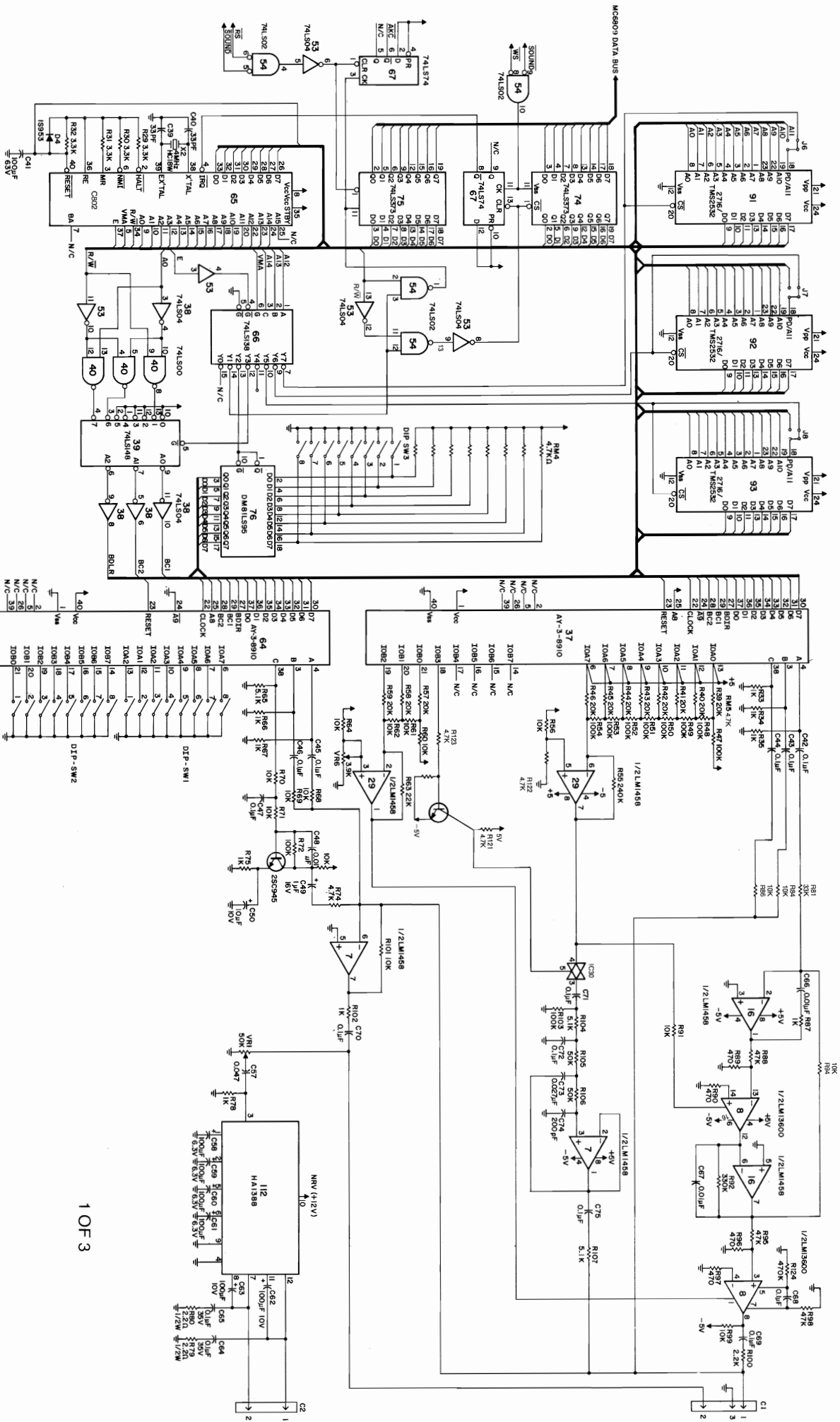
Refer to Schematics for specific test locations.

WIRING DIAGRAM

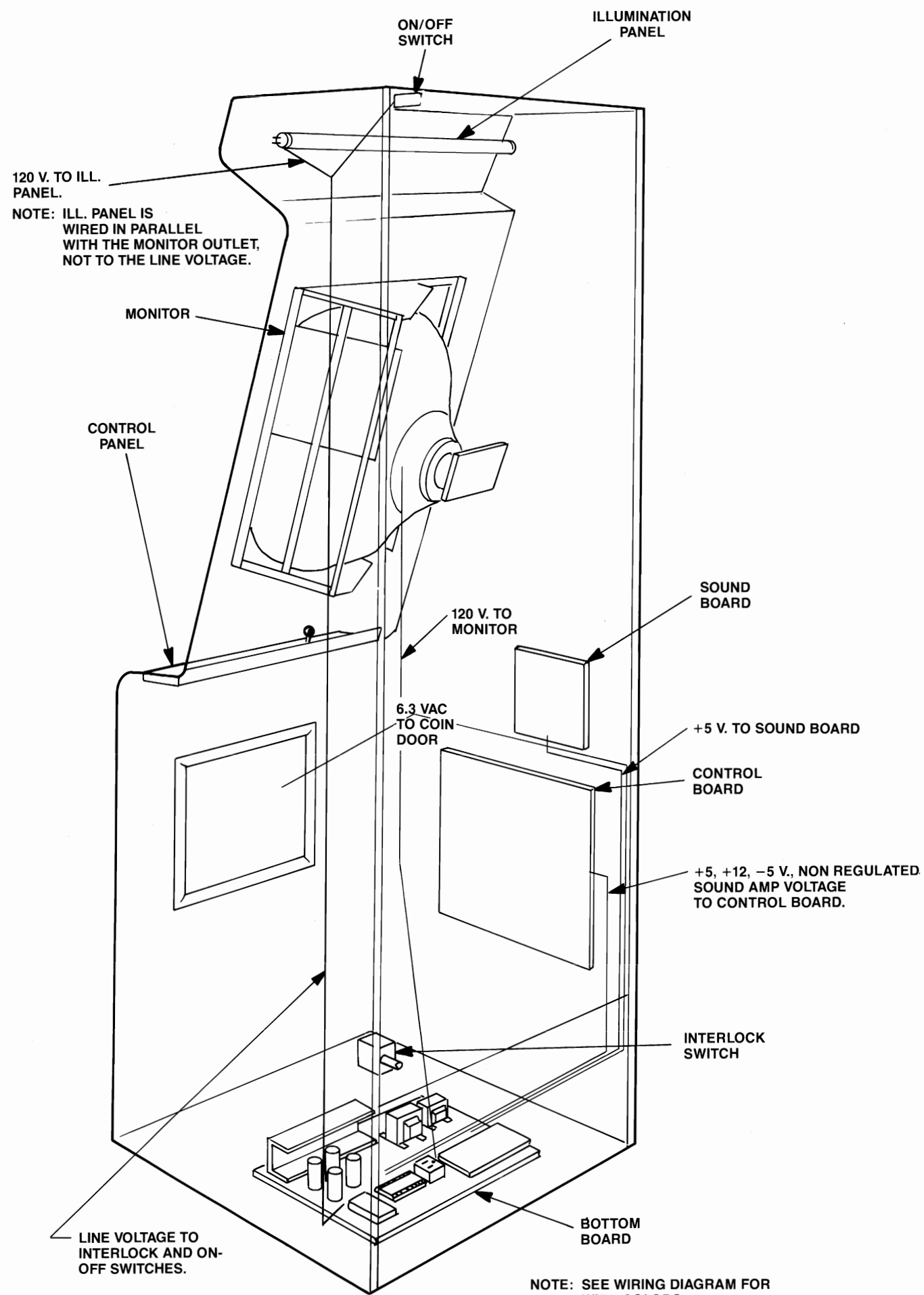


- NOTES:**
1. [XXX] DENOTES WIRE COLOR.
 0 BLACK 5 GREEN
 1 BROWN 6 BLUE
 2 RED 7 PURPLE
 3 ORANGE 8 SLATE
 4 YELLOW 9 WHITE
 2. * INDICATES 18GA. WIRE.
 3. 230V OPERATION
-
4. PRIMARY FUSE VALUE.
 115V.A.C. 5A SLO BLO.
 230V.A.C. 2.5A SLO BLO.

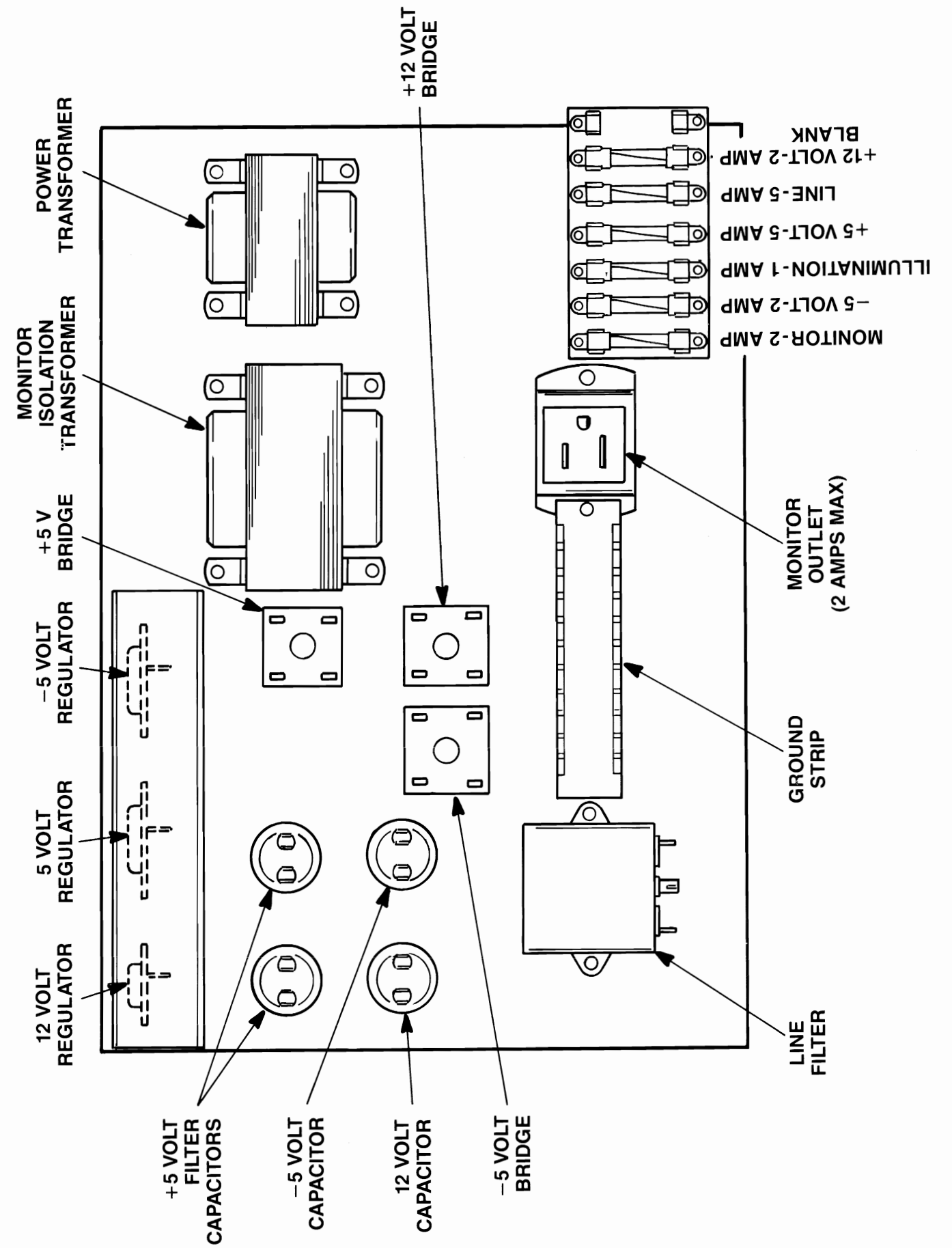
CONTROL BOARD



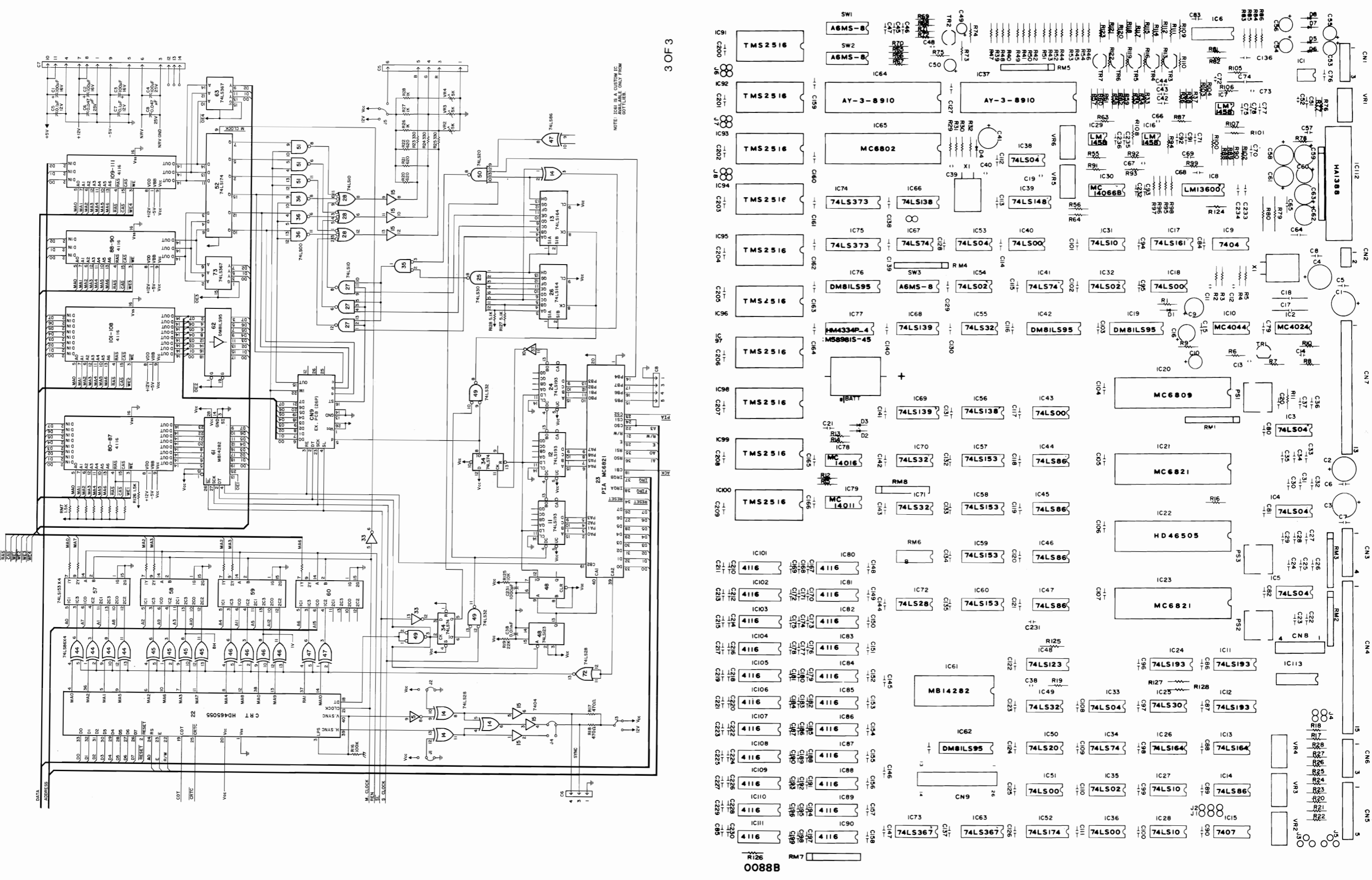
POWER DIAGRAM



BOTTOM BOARD-POWER SUPPLY ILLUSTRATION DIAGRAM



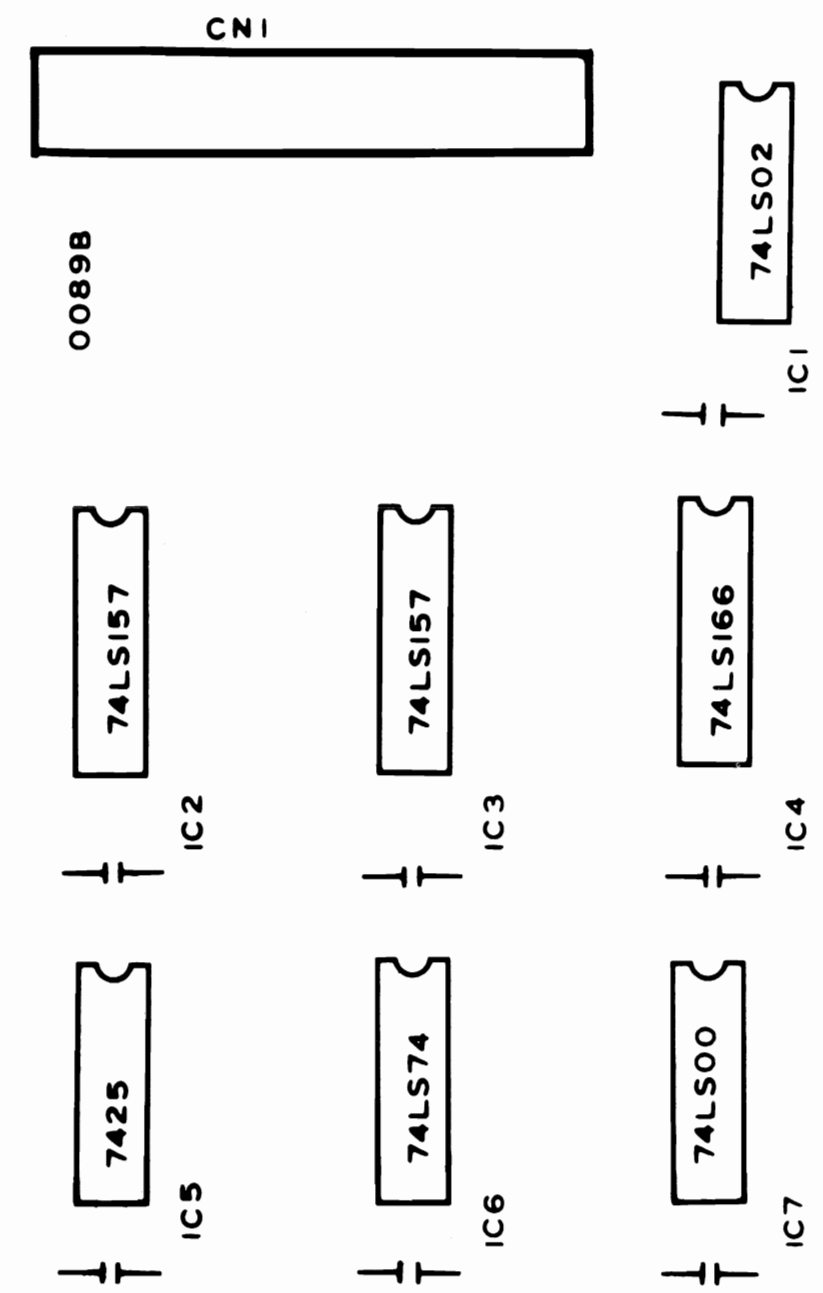
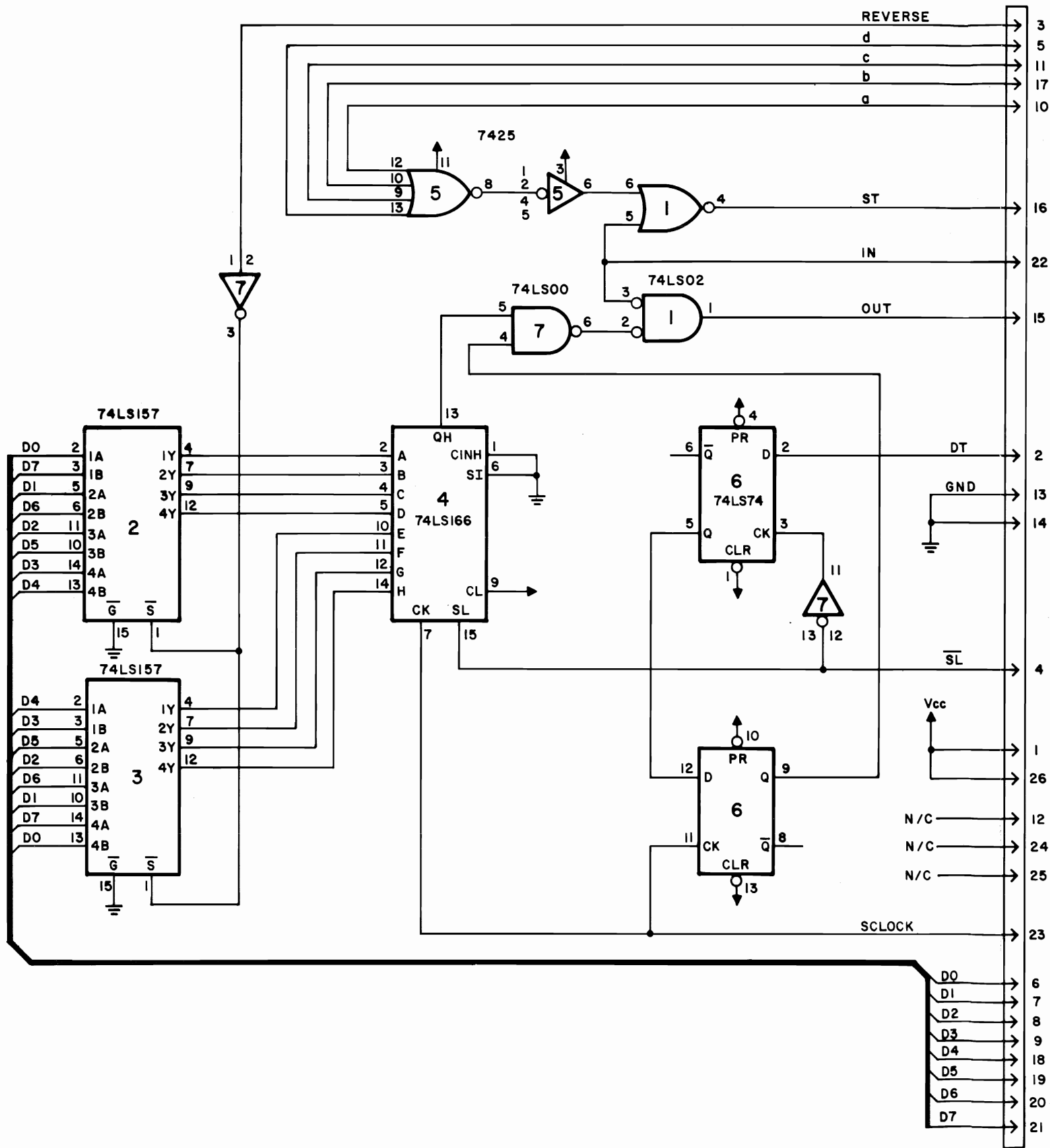
CONTROL BOARD COMPONENT LOCATION



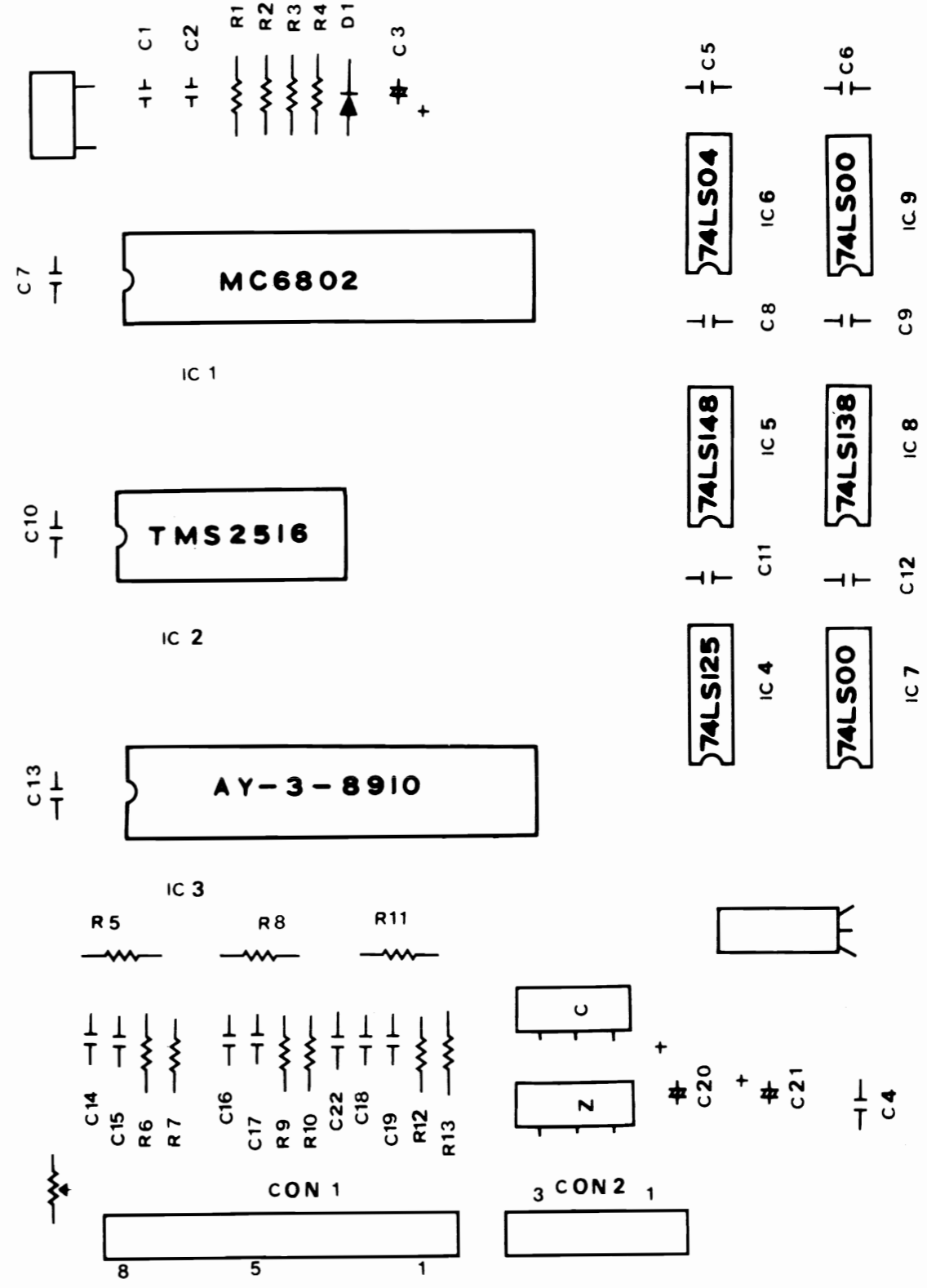
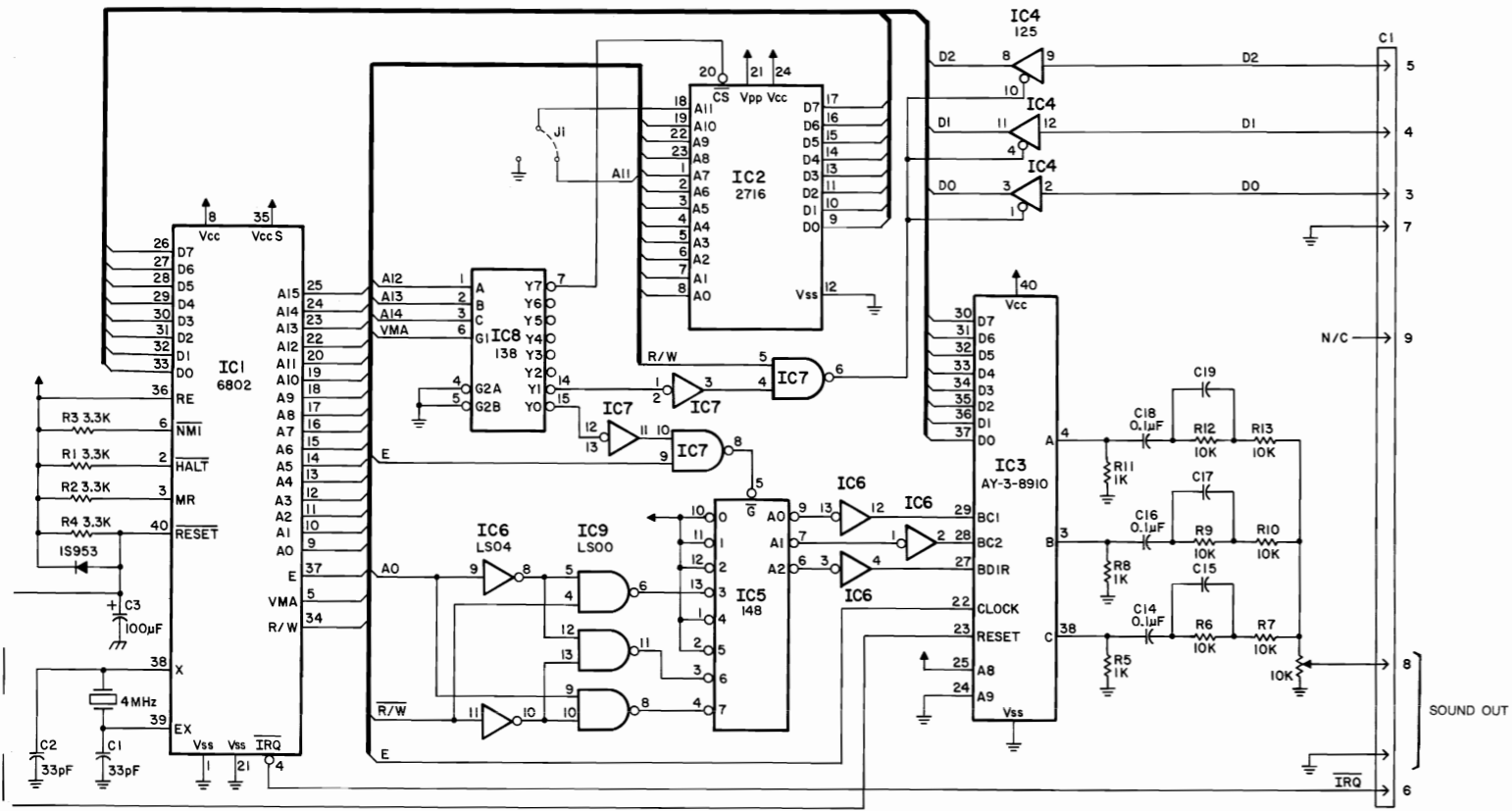
3 OF 3

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AUXILIARY BOARD

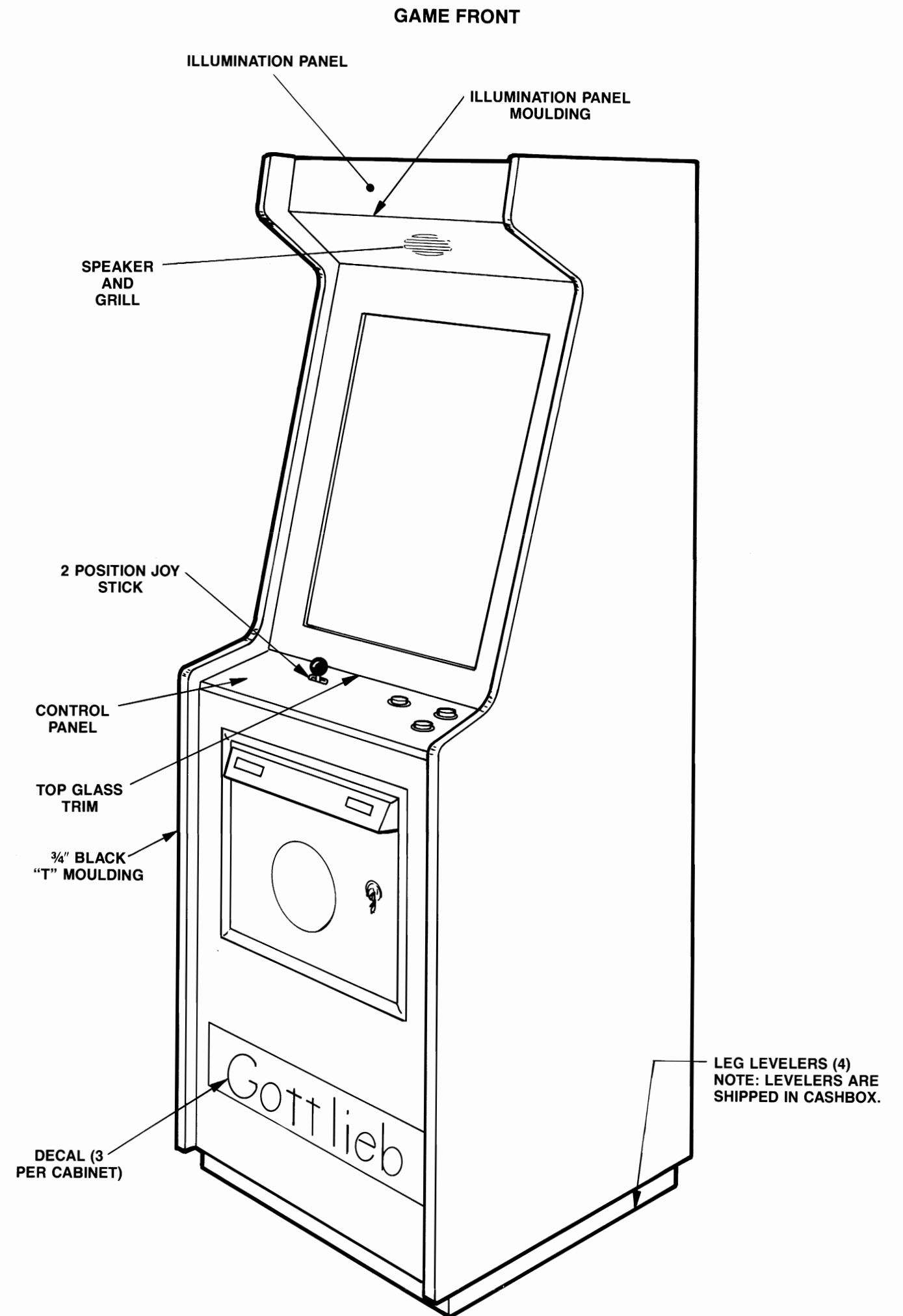


SOUND BOARD



PARTS LIST

QTY.	DRAWING NO.	DESCRIPTION	PURCHASE NO.
1	MAV-5	CONTROL BOARD	
1	MAV-6	SOUND BOARD	
1	D-V2002	ILLUMINATION PANEL, NEW YORK, NY	
1	D-V2119	PLASTIC MASK	
1	E-V2004	MONITOR TOP GLASS, NEW YORK, NY	
1	D-V2003	GREY PLEXIGLAS FILTER	
1	EL-81	19" COLOR MONITOR	
2	EL-72	COIN SWITCH-CHERRY E51-00E	
1	XO-462	5 V. REGULATOR LAS 1405	
1	XO-463	12 V. REGULATOR MC7812CK	
1	EL-66	INTERLOCK SWITCH 2DM409-CHERRY	
1	XO-464	-5 V. REGULATOR MC7905CK	
1	LA-2	LAMP GE-F15T8WW	
2	EL-67	FLUORESCENT LAMP SOCKET	
1	EL-69	STARTER FS-2	
1	D-V2000	ILLUMINATION PANEL TRIM MOULDING	
1	B-V2070	VOLTAGE REGULATOR HEAT SINK	
1	B-V2014	POWER TRANSFORMER	
1	C-V2061	MONITOR ISOLATION TRANSFORMER	
1	EL-68	FLUORESCENT LAMP STARTER SOCKET	
1	XO-388	MB14282 CUSTOM I.C.	
1	EL-74	SPEAKER EAS-18D45SKG	
2	C-20625	GOTTLIEB CABINET DECAL	
1	MAV-4	COIN DOOR	
1	D-V2038	BACK DOOR	
1	D-V2096	GAME CABINET WITH NEW YORK, NY ARTWORK	

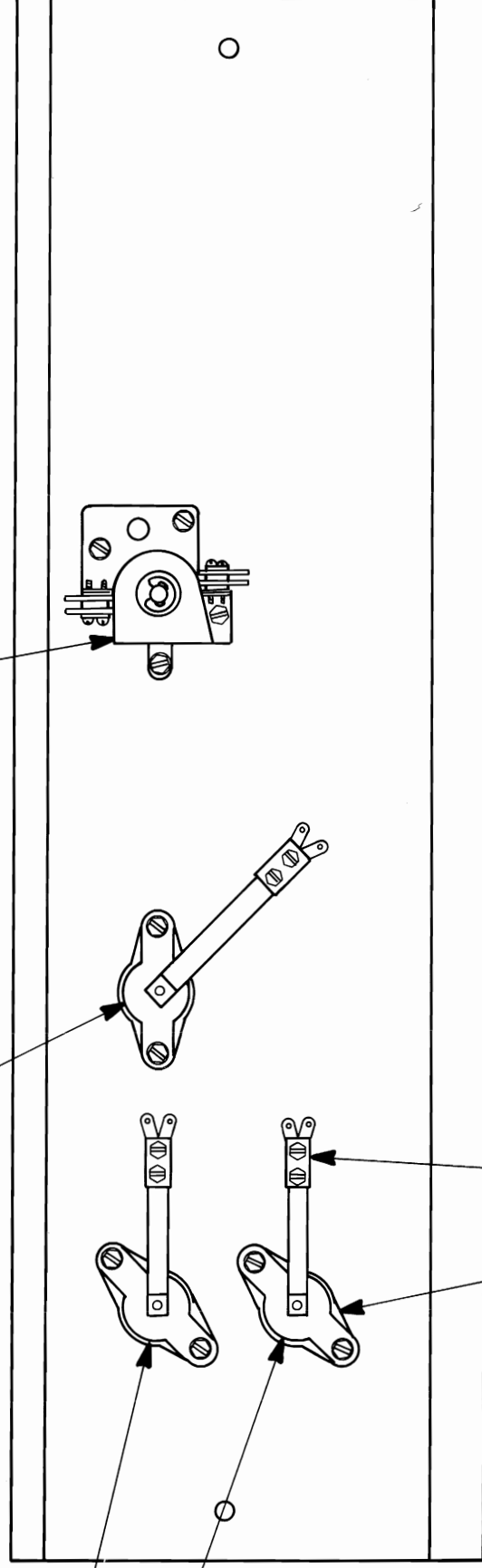


TWO-WAY JOY STICK
(SEE ATTACHED DIAGRAM
FOR PARTS INFORMATION)

FIRE

PLAYER 1

PLAYER 2



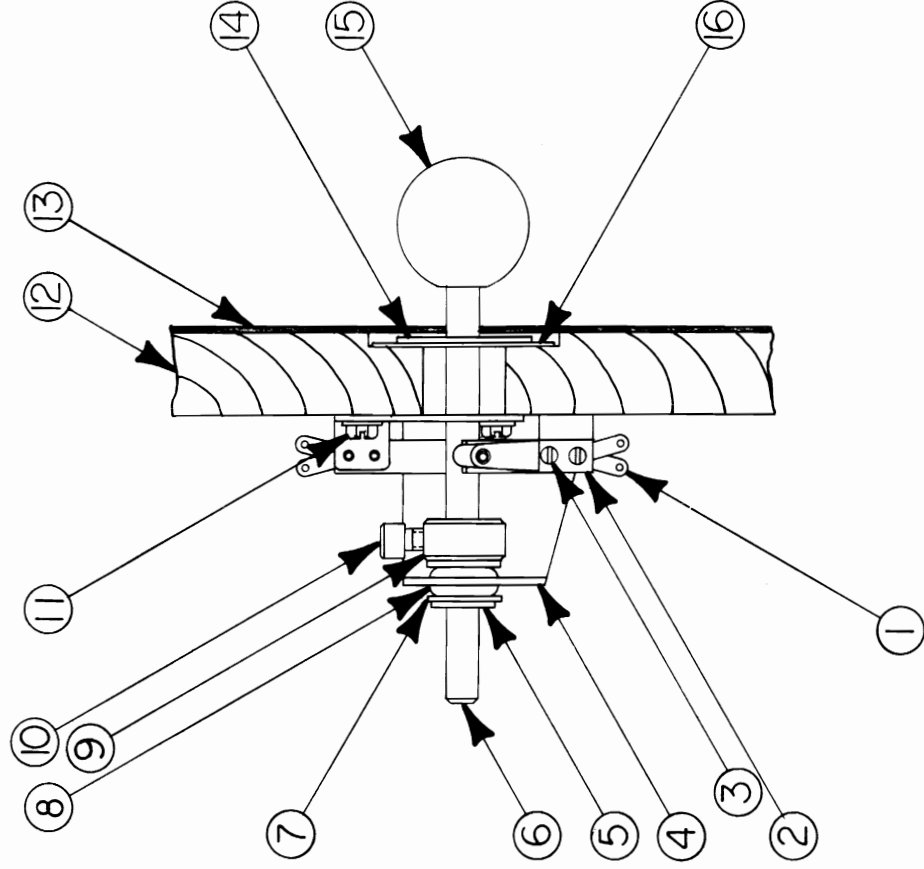
CONTROL PANEL

B-20525

CABLE ASSY. F-V1008 (NOT SHOWN)

- C-13900 WHITE BUSHING (3)
- B-16680 RED BUTTON (3)
- A-13898 BACK PLATE (3)

CONTROL STICK



16	1	A-V2030	JOY STICK STEEL WASHER
15	1	B 25	REID PLASTIC CONTROL BALL HANDLE
14	1	A-V2025	JOY STICK NYLON WASHER
13	1	D-V2073	FRONT PANEL
12	1	D-V2068	FRONT PANEL FILLER
11	4		#8 x 1/2 LG. HEX WSHR. HD. TYPE AB SHT. MT'L. SCR.
10	1		#10-32 x 3/8 LG. S.H.C.S.
9	1	A-V2066	JOY STICK COLLAR
8	1	G-598	SALISBURY RUBBER GROMMET
7	2		5/16 N TYPE 'A' FLAT WASHER
6	1	A-V2065	JOY STICK SHAFT
5	1	5144-31	TRU-ARC RETAINING RING
4	1	B-V2064	JOY STICK FRAME
3	4		#3-48 x 5/8 LG. FILLISTER HD. MACH. SCR.
2	2	A-4981	SWITCH COVER PLATE
1	2	B-V2067	SWITCH ASSEMBLY 1A
		ITEM QTY. PART NO.	DESCRIPTION

NOTE: The Stick may be assembled in an extended position by placing Retaining Ring (5) above the Frame Assm., and the Collar (9) below the Frame. The tension or "feel" of the Joy Stick is adjustable by moving the Collar (9) up or down the Shaft to change pressure on the Grommet (8).

MONITOR

