

technical manual for

PIRANHA



INSTALLATION AND STARTING INSTRUCTIONS

Check carton for any damage that may have occurred during shipment. If any damage is noticed, contact the freight carrier for claim purposes. External damage could indicate damage to the cabinet and the internal components of the game. If no damage is noticed, remove the carton from the game.

Remove keys that have been secured to the top of the cabinet and open the cash box door. In the cash box you will find a set of leg levelers. Screw the levelers into the receivers at the bottom of the cabinet.

Unlock the rear door and remove the power cord from the bottom of the game. Check for any loose plugs or wires. The game was thoroughly tested at the factory, but vibration during shipment could cause the plugs to come apart. Plug the game into any 110V AC outlet and then pull the white button of the safety switch out. This will give power to the game. If the game does not go on, check the on/off switch just below the power cord notch. If you wish to use the game for 220V AC, remove the plug that is marked 110V from the transformer and replace with the plug with the 220V label.

The fuses that come with the game are 3 Amp Slow Blow. If you are going to use 220V AC, change them to $1\frac{1}{2}$ Amp Slow Blow.

All games shipped from U. S. Billiards are set for 110V AC with 3 Amp fuses.

MAINTENANCE

The CRT used in our games is like those employed on regular television sets. Therefore, please handle with care so as not to damage it.

- . Do not set up the game in open and very lighted areas, as the quality of image would be greatly reduced.
- . Do not set up the game close to heating sources and keep it 6 inches from the back wall.
- . If, when the game is on, no image appears on the screen, check power supply fuses and if connectors are properly connected.
- . If the screen is lit up but there is no image, check that C.P.U. board connectors are properly connected.
- . If the image slowly moves toward the side, it can be caused by a close magnet or by a transformer which might cause strong wavinesses.

If the game is rotated with power on, the image on the screen may change color. This is caused by the earth's magnetic field. To establish proper colors again, turn off the game for at least 5 minutes and then turn it on again.

F.C.C. NOTES

This equipment has not been tested to show compliance with new F.C.C. rules. Paragraph J of Part 15 of the F.C.C. rules is designed to provide reasonable protection against radio communication interference. The operation of this equipment may cause interference, in which case, the user will be required to take whatever steps are necessary to correct the interference.

PARTS LISTING - PIRANHA

<u>Part #</u>	<u>Description</u>
<u>General Parts</u>	
521	Coin Chute (25¢)
335	Dutch Cash Door, Frame with Cash Box
338	Cash Box Only for Dutch Cash Door
7002	Leg Leveler - each
11700	Back Service Door
11701	Speaker Grill - 6"x9"
11803	TV Monitor Cardboard Mask - Piranha
11804	TV Monitor Cardboard Side Panel - Right (Piranha)
11805	TV Monitor Cardboard Side Panel - Left (Piranha)
11806	Plastic Header Screened - Piranha
11807	Instruction Decal - Piranha
11707	Front Plastic Window - 23½x17½x3/16"
11708	Frame for Front Plastic Window
11808	Decal, Side - Right (Piranha)
11809	Decal, Side - Left (Piranha)
11816	Instruction Manual
2949	"Caution High Voltage" Label
11772	Warning Label

METAL PARTS

11825	Control Panel complete with buttons
11826	Control Panel with graphics without buttons
11810	Graphics alone for Control Panel (Piranha)
11819	California Switch Bracket
11716	Header Holding Spring
11820	Meter Bracket

TRIM

11719	Black T-Moulding for one side - 128"
11720	Aluminum Trim - 24"
11721	Black T-Moulding - 24"

LOCKS

1486	Random Lock with Key & Hardware
1487	#1150 Lock with Key & Hardware

HARDWARE

11761	Pal Nut for Push Button Switch
1296	3/18-16 T-Nut Pronged (for Leg Leveler)

PARTS LIST - PIRANHA (continued)

ELECTRICAL PARTS

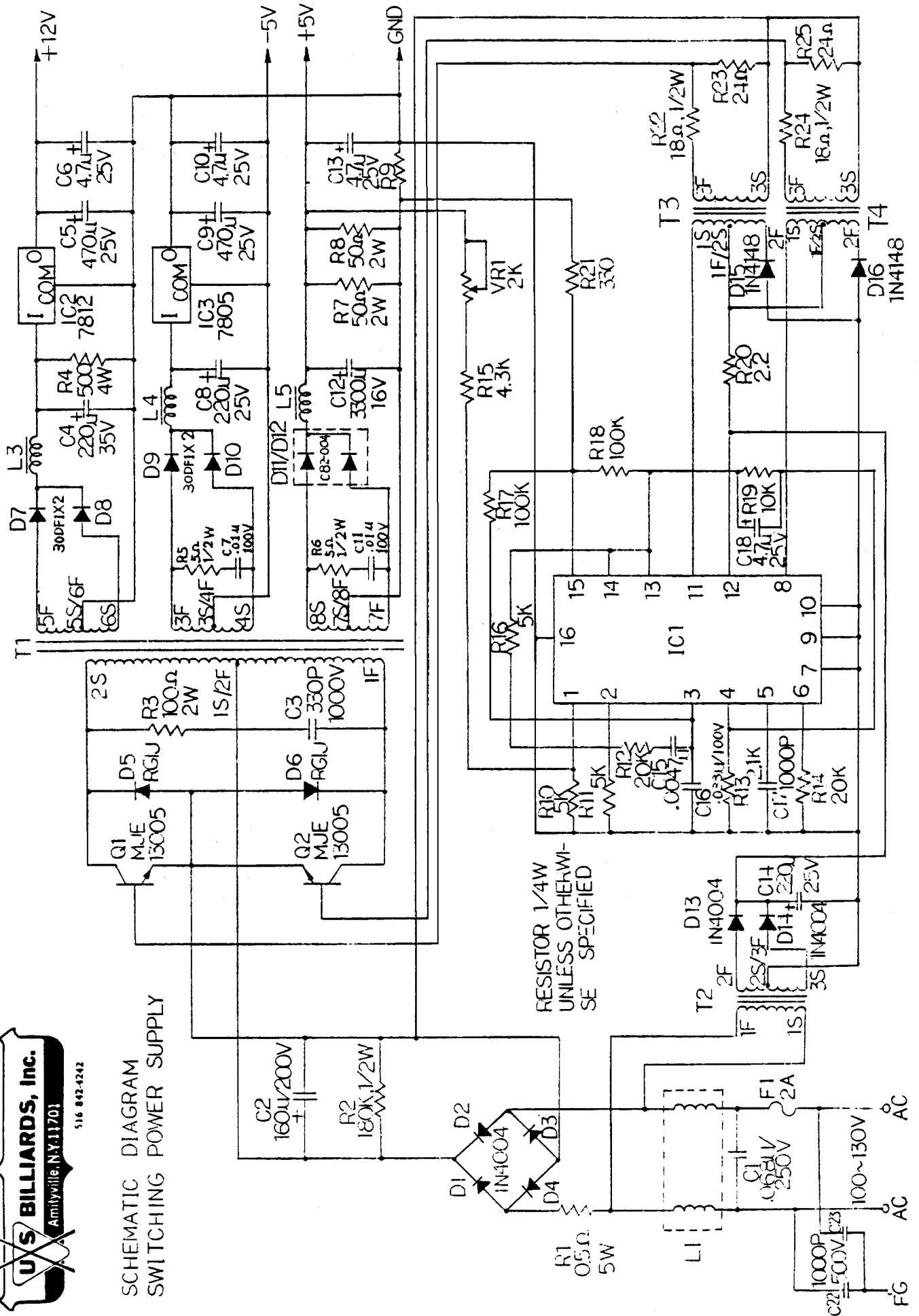
11814	Complete Game Board
11724	Bulb for Coin Chute - 63V
11725	Red Push Button Assembly (Fire)
11727	Green Push Button Assembly (Player 1, Player 2)
11728	Leaf Switch for Push Buttons & Holder Assembly
11729	Holder for Push Buttons
11801	Joystick Complete
11828	Joystick Handle Alone
11829	Joystick Round Spacer Alone
11830	Joystick Grey Actuator Alone
11831	Joystick Retainer Clip Alone
11832	Joystick Leaf Switch Alone
11802	Color Monitor
11731	Speaker - 6"x9"
11813	Power Supply Complete
11811	Transformer Group Complete With Connectors
11759	California Switch - B5050
11812	Wiring Harness Complete
11827	110V-220V Reversal Harness alone
10110	Fluorescent Fixture
10111	Fluorescent Bulb
2356	6V DC Counter
10529	Triple Outlet
11824	3 Amp Slo Blo Fuse
10153	Tilt Switch

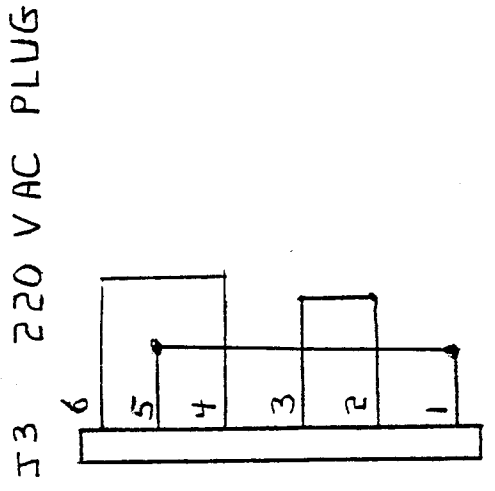
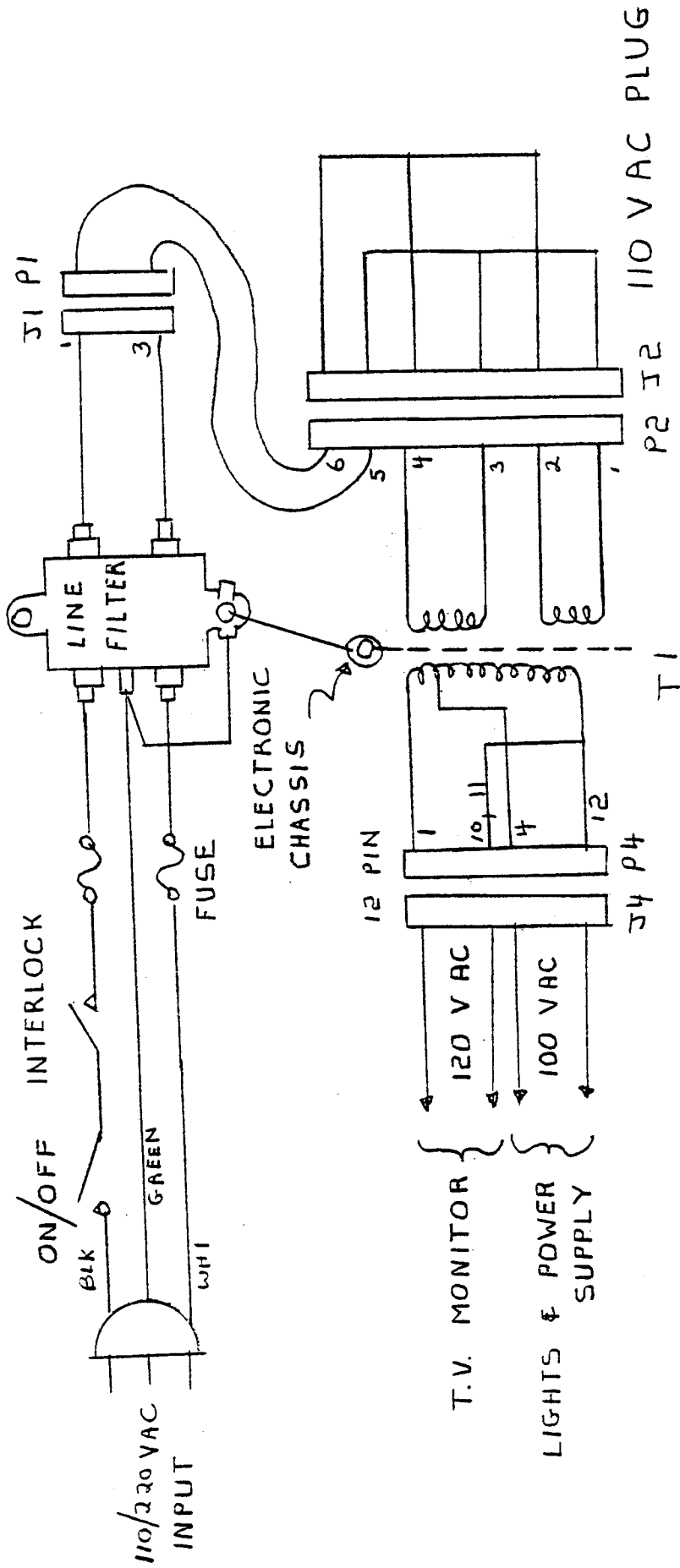
(PIRANHA) FUNCTION OF DIP Switch

No.	1	2	3	4	5	6	7	8
Game Charge	OFF	ON						Test Switch (Stop Motion)
1 Coin/1 Play	OFF	ON						Test Switch Demo Pattern (ADVANCE)
2 Coin/1 Play	OFF	OFF						
Free Play	ON	ON						
Piranha								
2			OFF	ON				
3			ON	OFF				
5			OFF	OFF				
Bonus Point								
0					OFF			
10,000					ON			ON
15,000					OFF			ON
20,000					ON			OFF



**SCHEMATIC DIAGRAM
SWITCHING POWER SUPPLY**





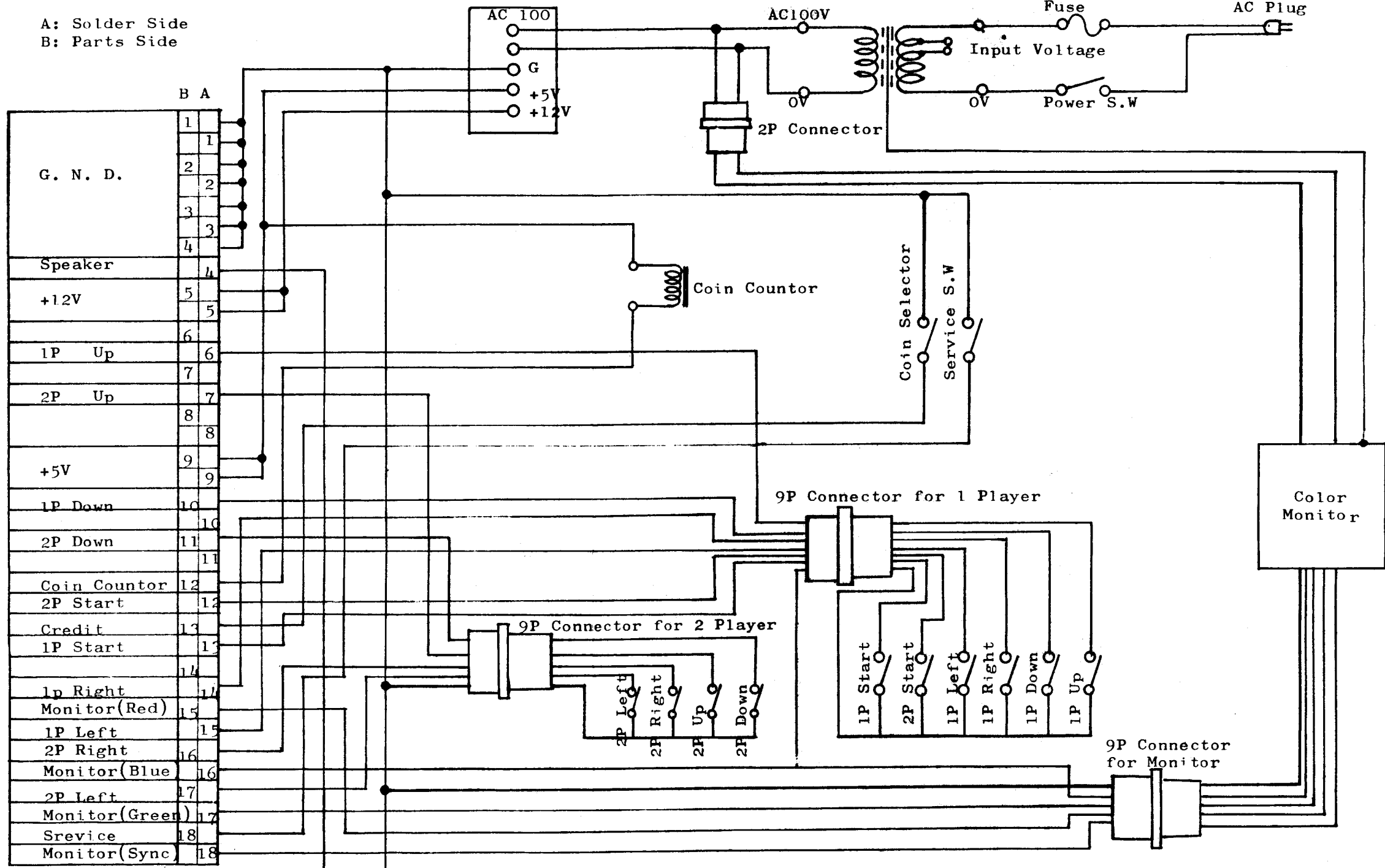
PIRANHA

120/220 POWER INTERLOCK

8/31/81

Switching Power Supply

A: Solder Side
B: Parts Side



G. N. D.	1	1
	2	2
	3	3
	4	3
Speaker	4	4
+12V	5	5
	6	6
1P Up	6	6
	7	7
2P Up	7	7
	8	8
	8	8
+5V	9	9
	10	10
1P Down	10	10
	11	11
2P Down	11	11
	12	12
Coin Counter	12	12
	13	13
Credit	13	13
	14	14
1P Start	14	14
	15	15
1P Right	15	15
Monitor(Red)	15	15
	16	16
2P Right	16	16
Monitor(Blue)	16	16
	17	17
2P Left	17	17
Monitor(Green)	17	17
	18	18
Srevice	18	18
Monitor(Sync)	18	18

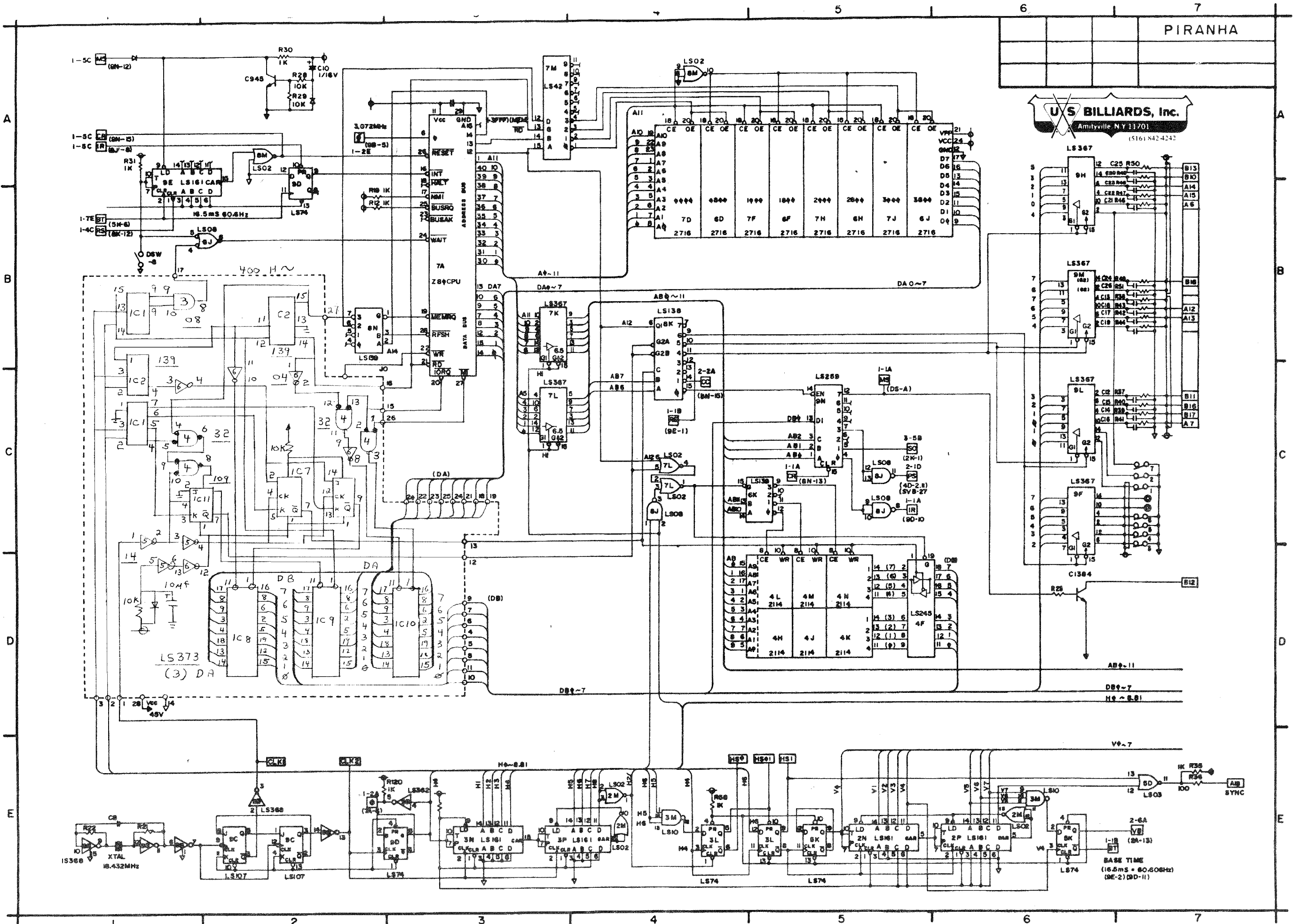
5" Round Speaker

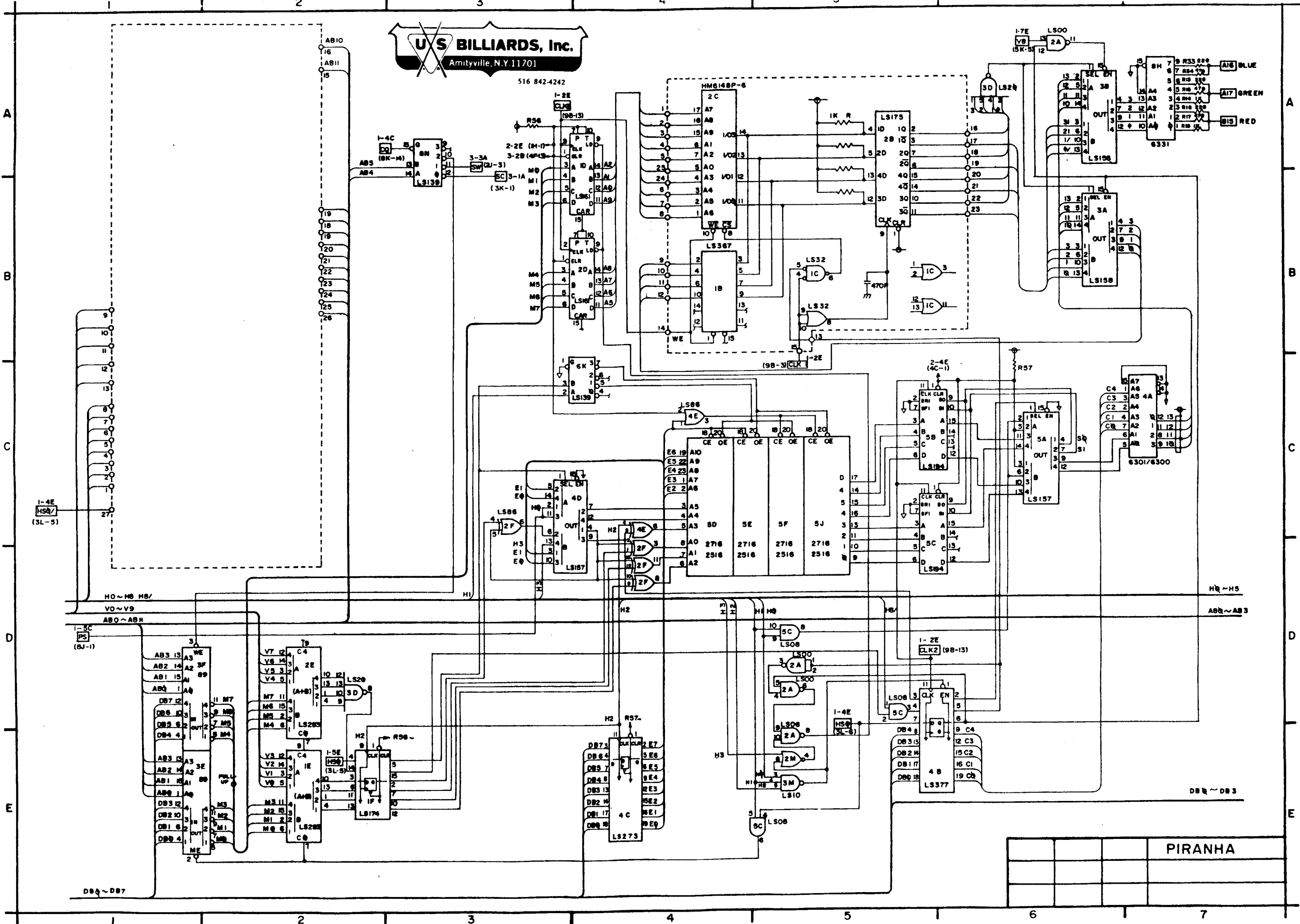
Volume 100 ohm

This P.C.B is set to Up Right, for the Table type, soldering this jamper wire.

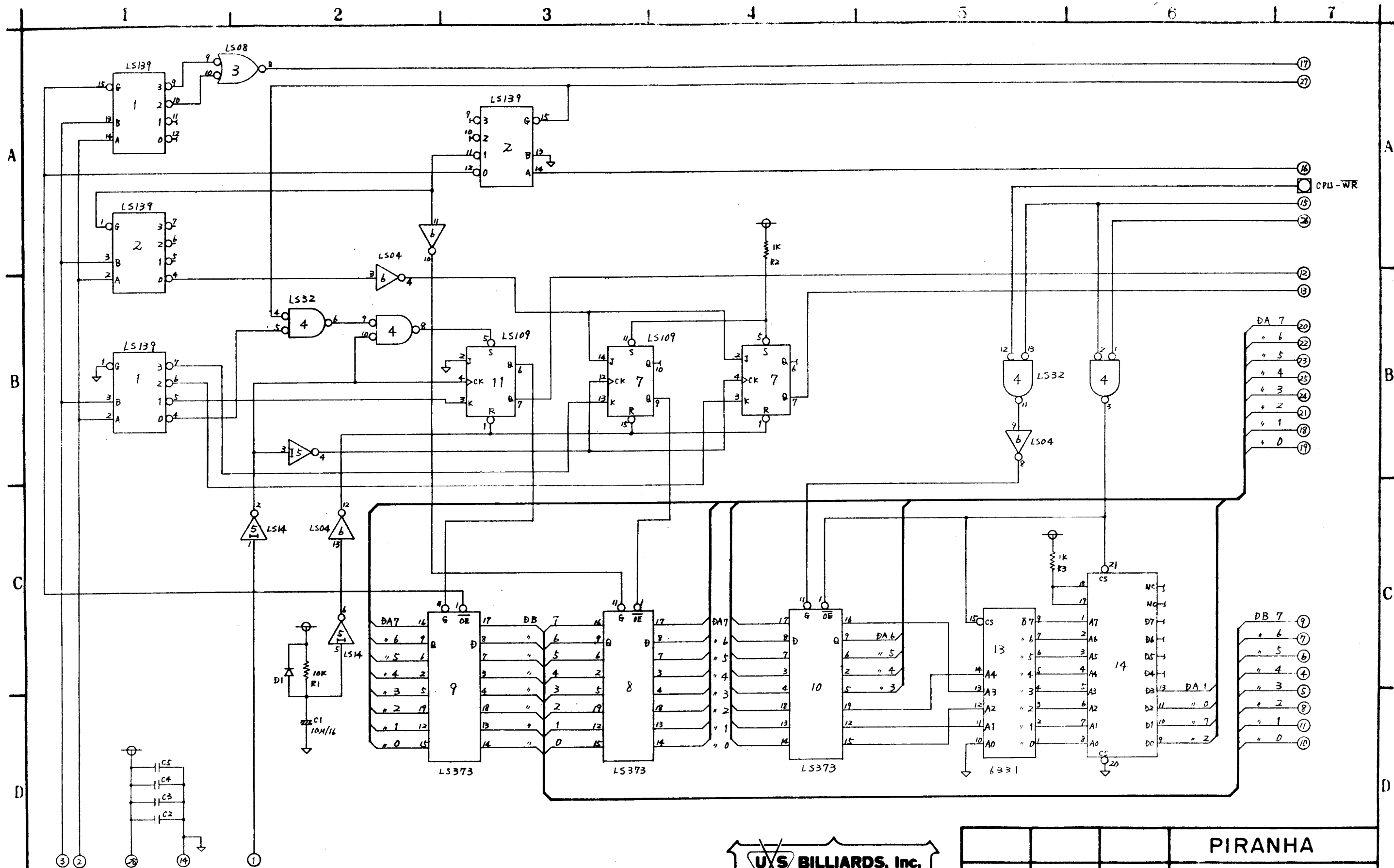


PIRANHA
WIRING DIAGRAM

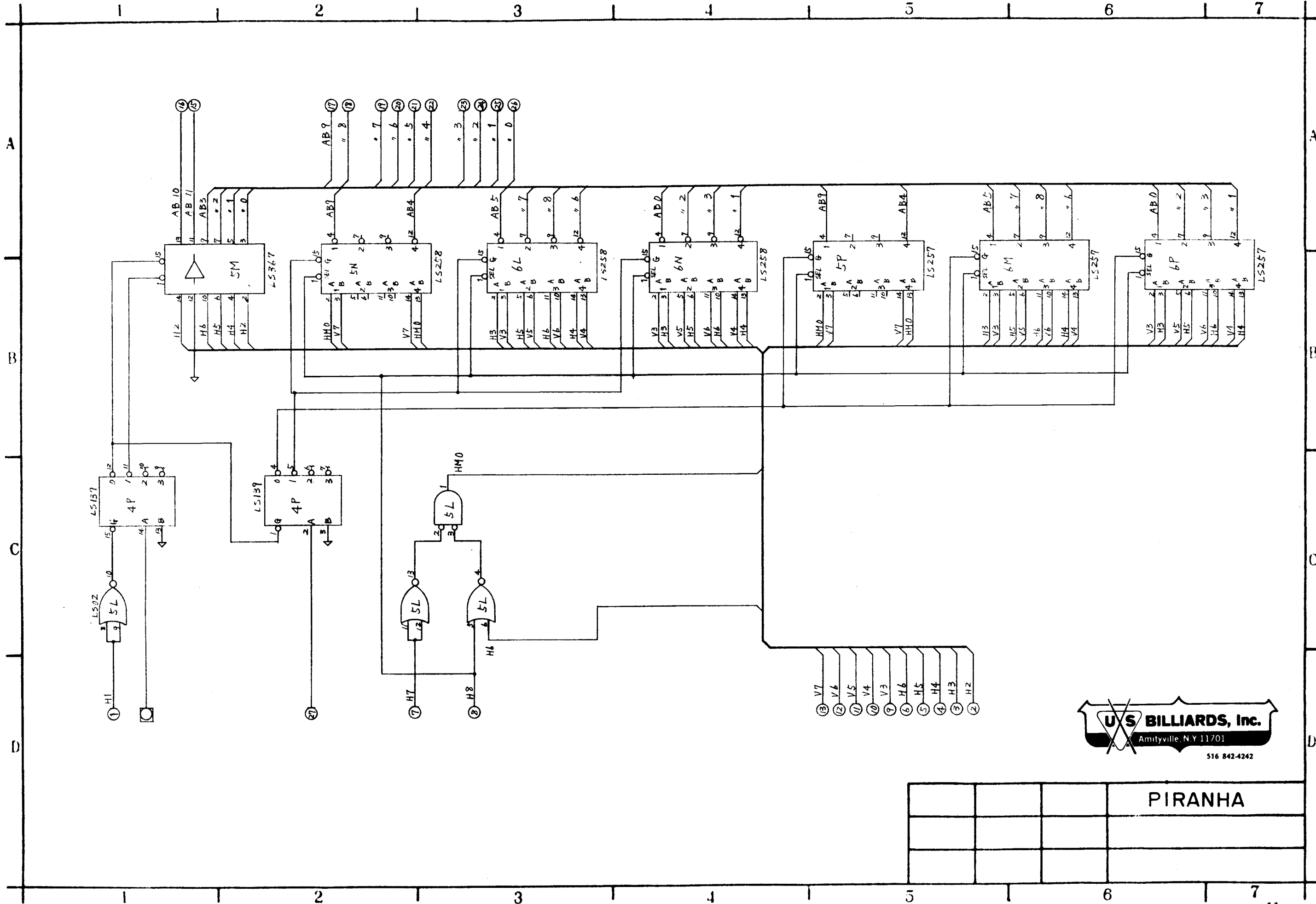




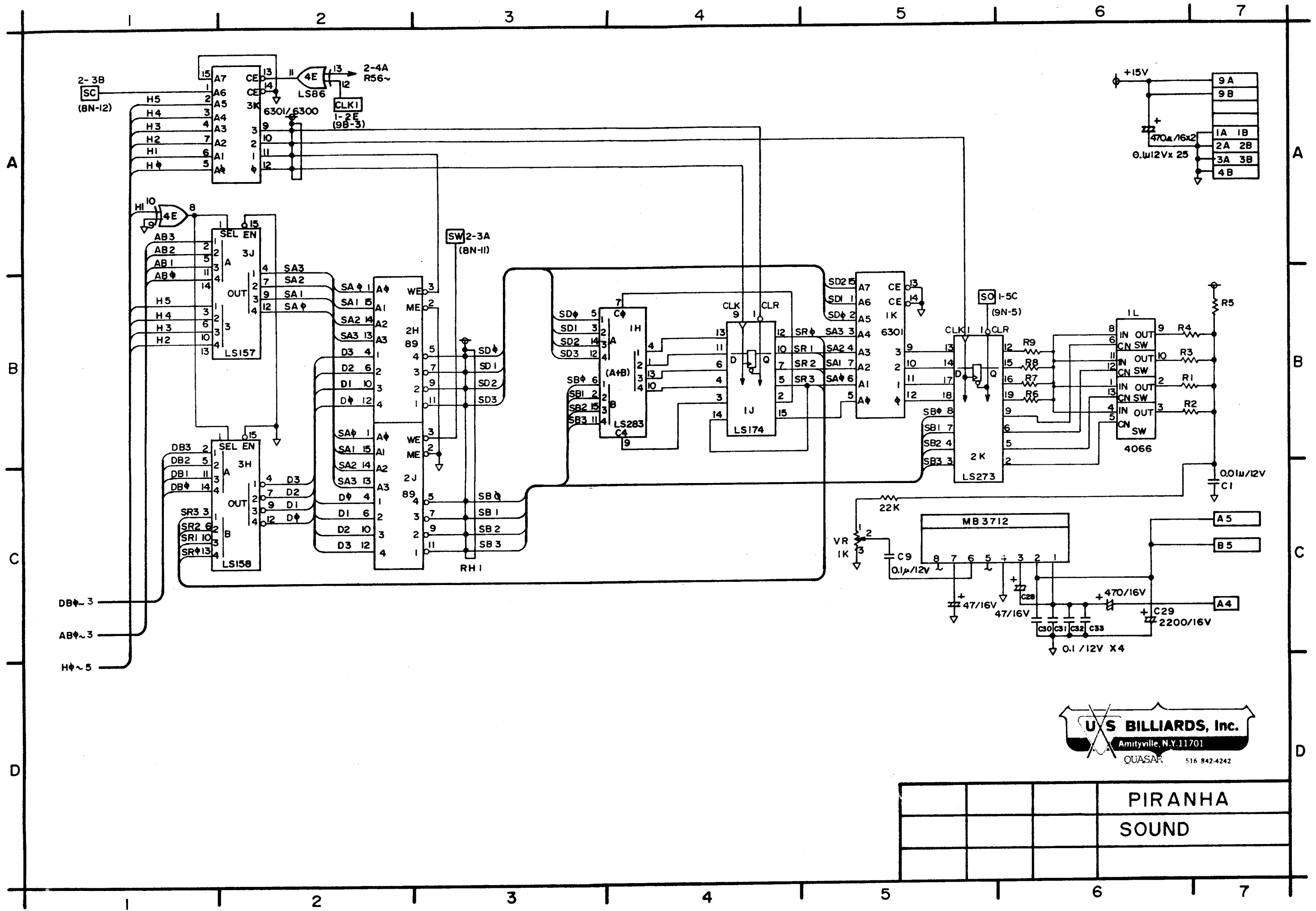
PIRANHA			



			PIRANHA



						PIRANHA



				PIRANHA
				SOUND