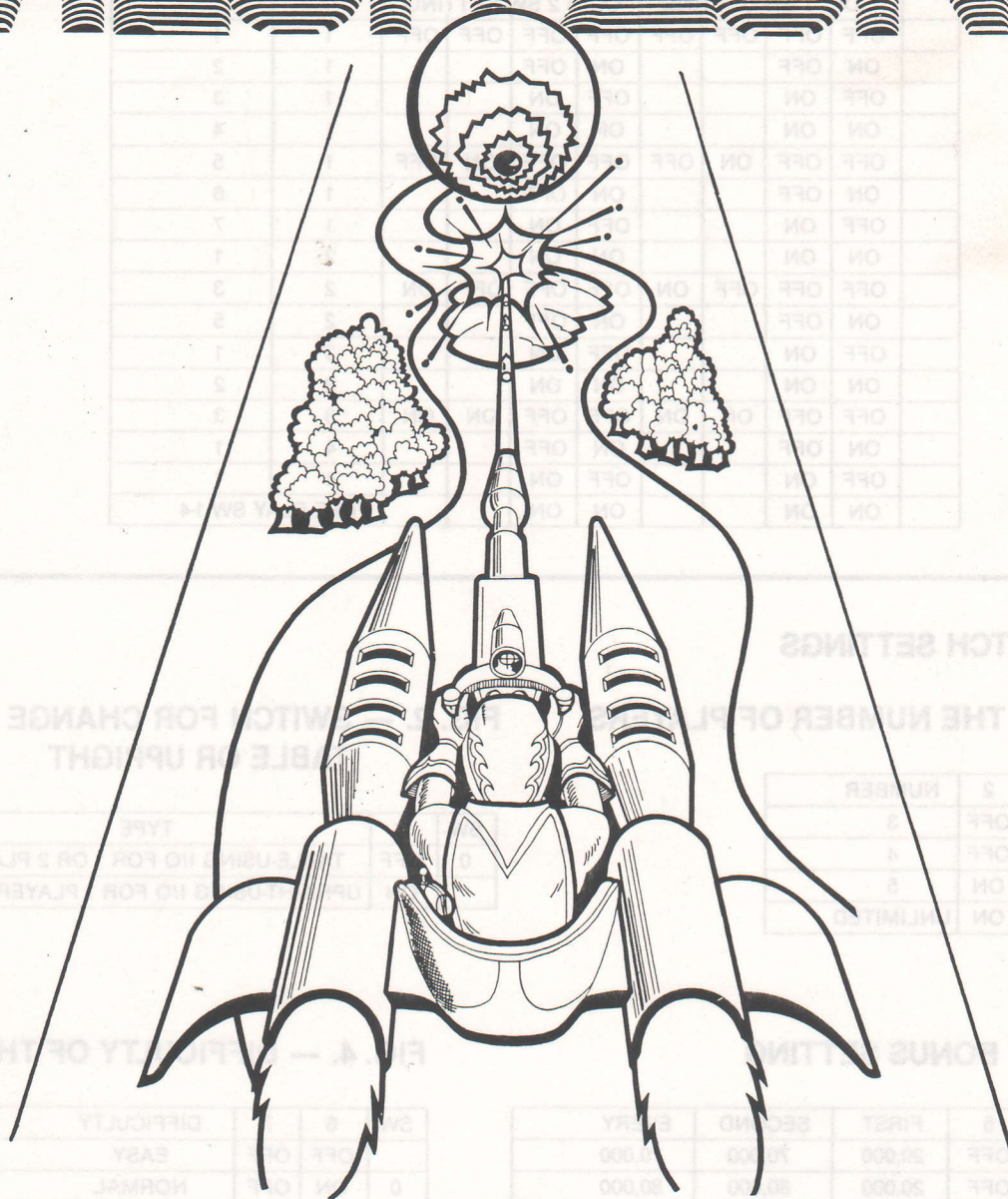


MEGA ZONE™



CONVERSION KIT INSTRUCTION MANUAL

FOR ANY VERTICALLY MOUNTED RASTAR SCAN MONITOR GAME

Konami®/Interlogic® ©1983

MEGA ZONE DIP SWITCH SETTINGS:

A. DIP 1 SWITCH SETTING

FIG. 1. — COIN 1 SW SETTING / COIN 2 SW SETTING

SW	1	2	3	4	5	6	7	8	COIN	PLAY
	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	1	1
	ON	OFF			ON	OFF			1	2
	OFF	ON			OFF	ON			1	3
	ON	ON			ON	ON			1	4
	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	1	5
	ON	OFF			ON	OFF			1	6
	OFF	ON			OFF	ON			1	7
	ON	ON			ON	ON			2	1
	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	2	3
	ON	OFF			ON	OFF			2	5
	OFF	ON			OFF	ON			3	1
	ON	ON			ON	ON			3	2
	OFF	OFF	ON	ON	OFF	OFF	ON	ON	3	3
	ON	OFF			ON	OFF			4	1
	OFF	ON			OFF	ON			4	1
	ON	ON			ON	ON			FREE PLAY SW 1-4	

B. DIP 2 SWITCH SETTINGS

FIG. 1. — THE NUMBER OF PLAYERS

SW	1	2	NUMBER
0	OFF	OFF	3
	ON	OFF	4
	OFF	ON	5
	ON	ON	UNLIMITED

FIG. 2. — SWITCH FOR CHANGE OF TABLE OR UPRIGHT

SW	3	TYPE
0	OFF	TABLE-USING I/O FOR 1 OR 2 PLAYER
	ON	UPRIGHT-USING I/O FOR 1 PLAYER ONLY

FIG. 3. — BONUS SETTING

SW	4	5	FIRST	SECOND	EVERY
	OFF	OFF	20,000	70,000	70,000
0	ON	OFF	20,000	80,000	80,000
	OFF	ON	30,000	90,000	90,000
	ON	ON	30,000	100,000	100,000

FIG. 4. — DIFFICULTY OF THE GAME

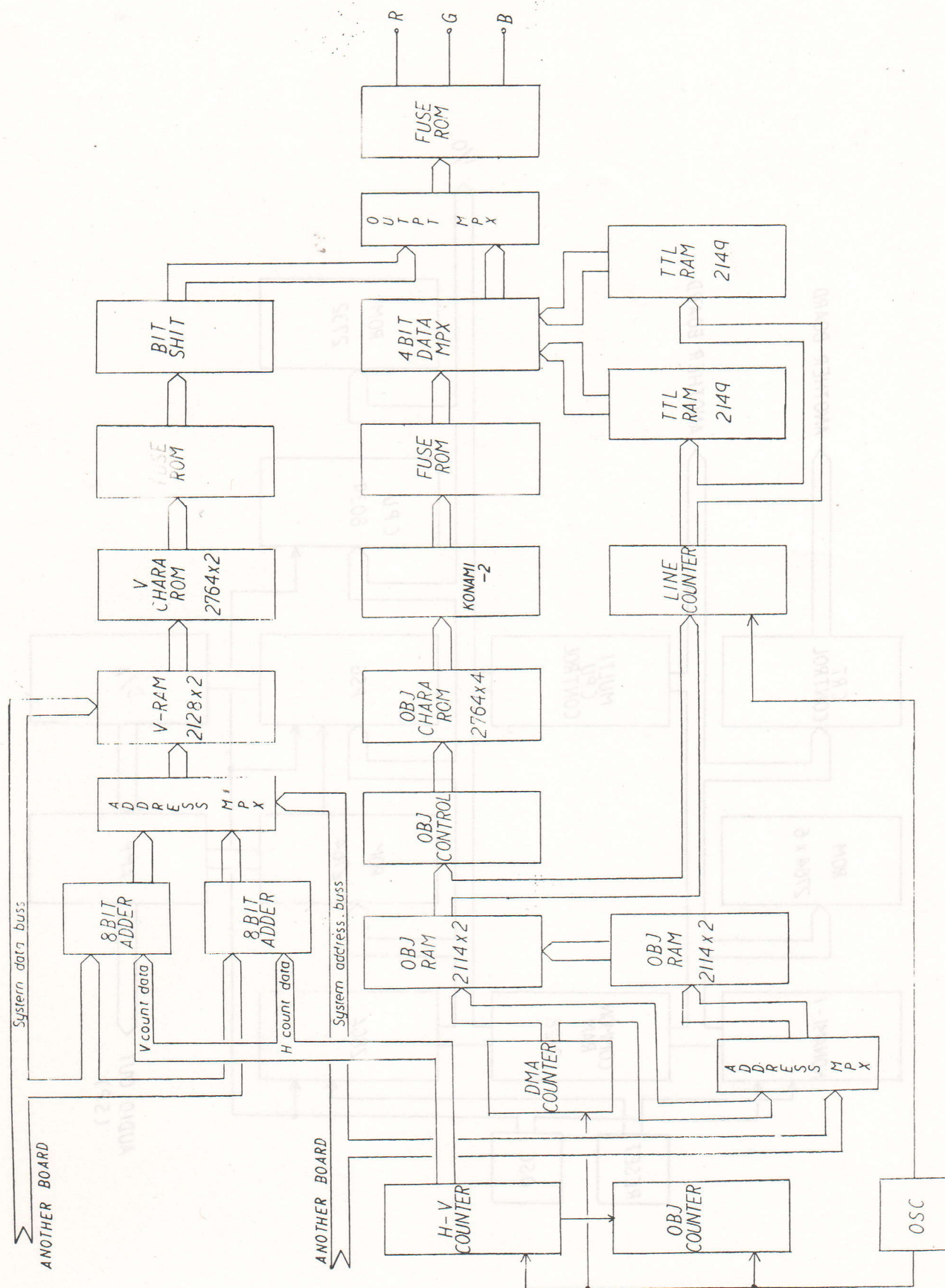
SW	6	7	DIFFICULTY
	OFF	OFF	EASY
0	ON	OFF	NORMAL
	OFF	ON	DIFFICULT
	ON	ON	VERY DIFFICULT

FIG. 5. — MUSIC IN ATTRACT MODE

SW	8	MUSIC IN ATTRACT MODE
	OFF	OFF
0	ON	ON

NOTE: "O" SHOWS NORMAL SETTING. THE LEVEL OF DIFFICULTY OF THIS GAME WAS SET BY KONAMI FOR THE AVERAGE PLAYER'S SKILL. SHOULD YOU CHOOSE TO INCREASE THE DIFFICULTY OF THE GAME, DO SO WITH DISCRETION.

MEGA ZONE: Block Diagram 1/2



MEGA ZONE: Block Diagram 2/2

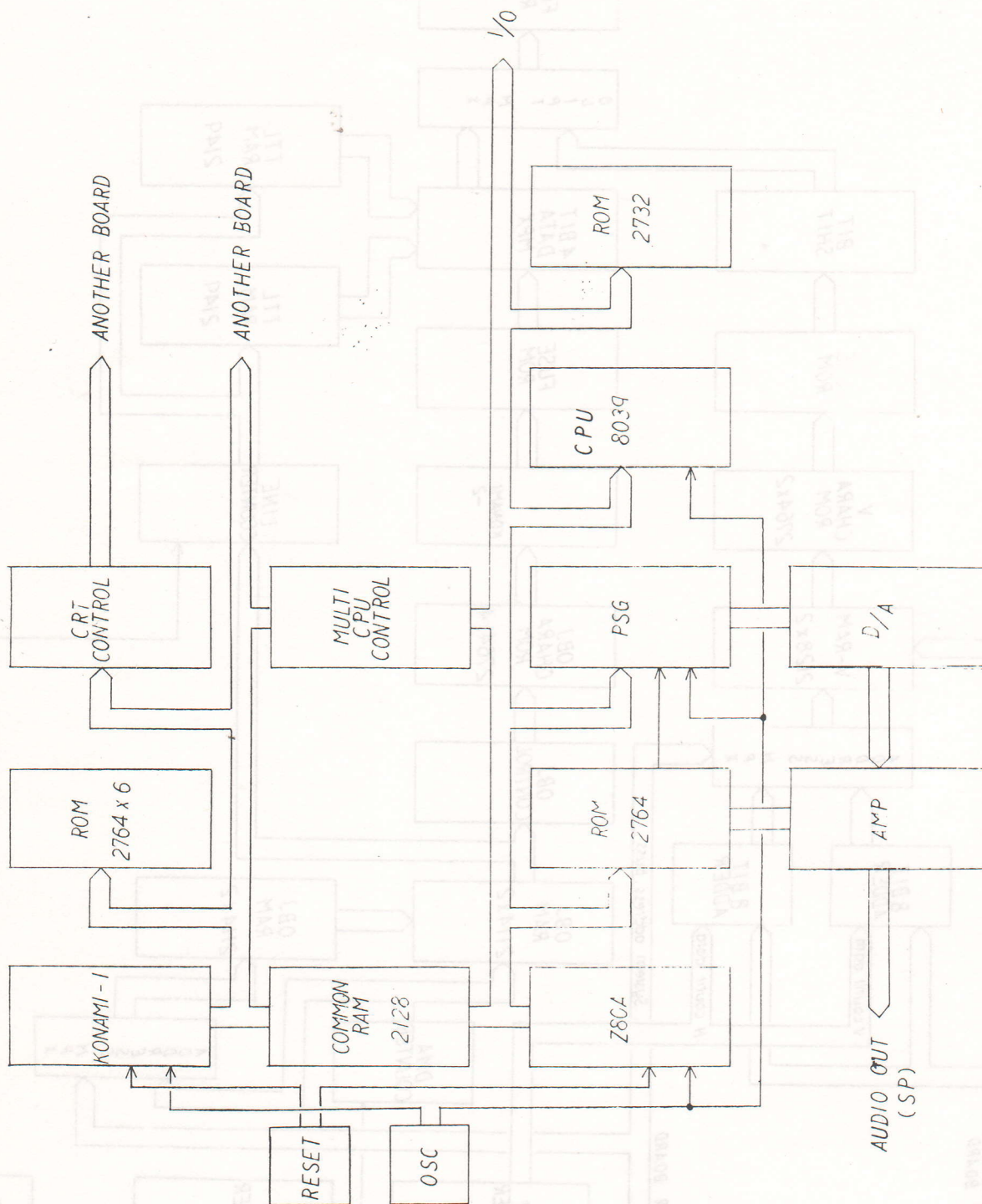


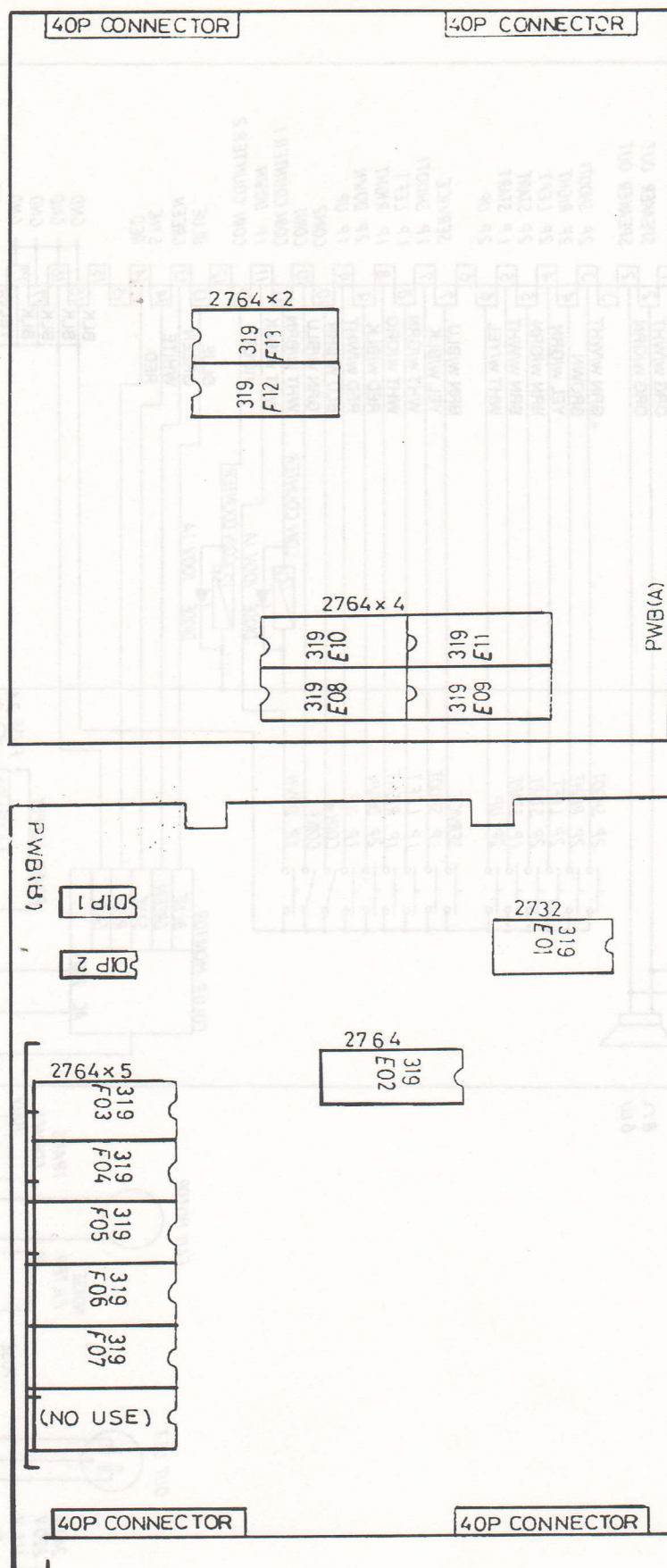


Diagram of an SV cable connector. The connector is shown with two wires: a red wire and a black wire. The red wire is labeled "RED" and the black wire is labeled "BLACK". The wires are bundled together and labeled "SV CABLE".

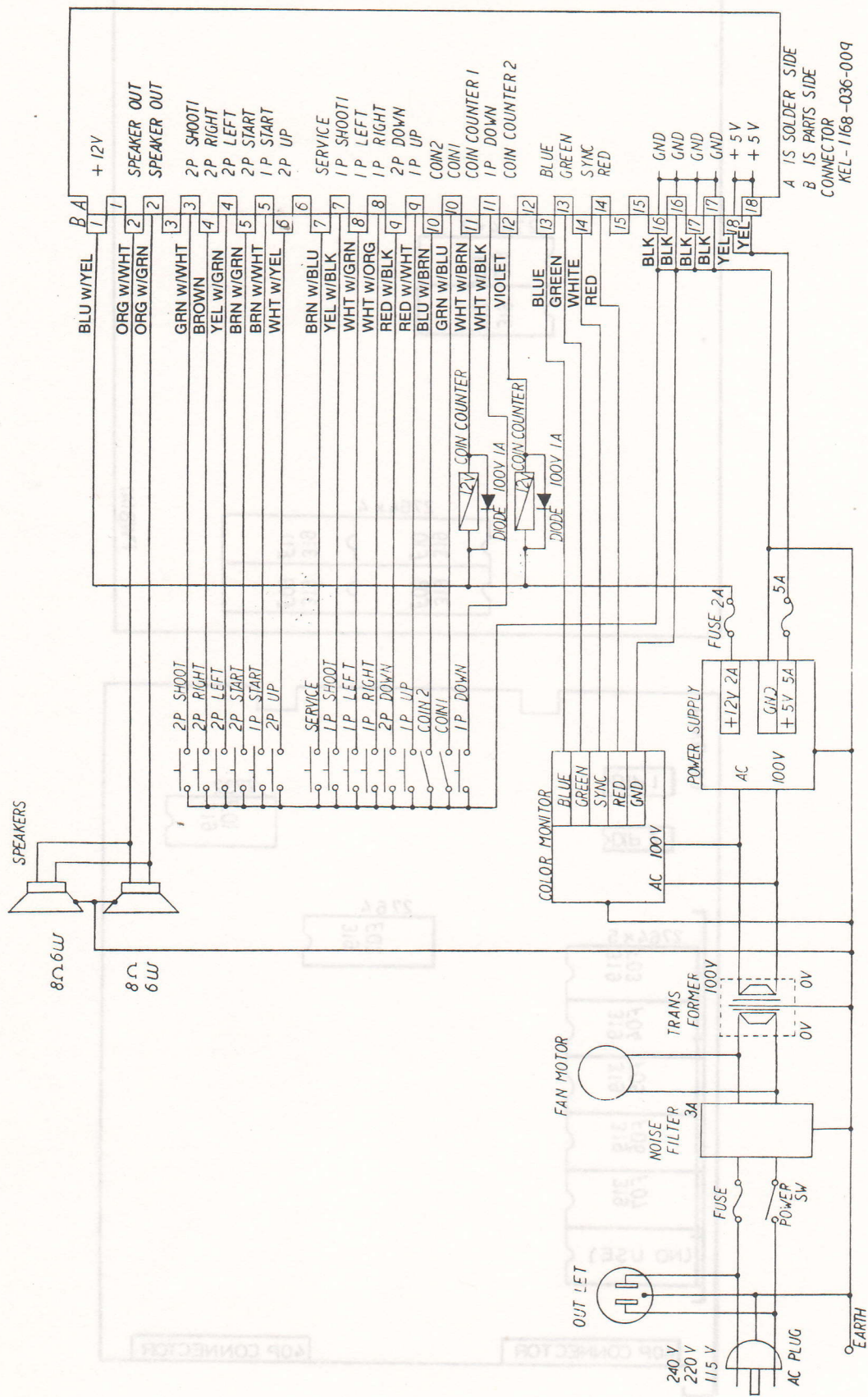


(S) : IC SOCKET
 (C) : CERAMIC CAPACITOR
 (E) : ELECTROLYTIC CAPACITOR
 (M) : MYLAR CAPACITOR
 (T) : TANTALUM CAPACITOR
 $\frac{1}{2}$: NO MARK : 0.1 μ CERAMIC CAPACITOR
 () : NO LAYOUT PARTS

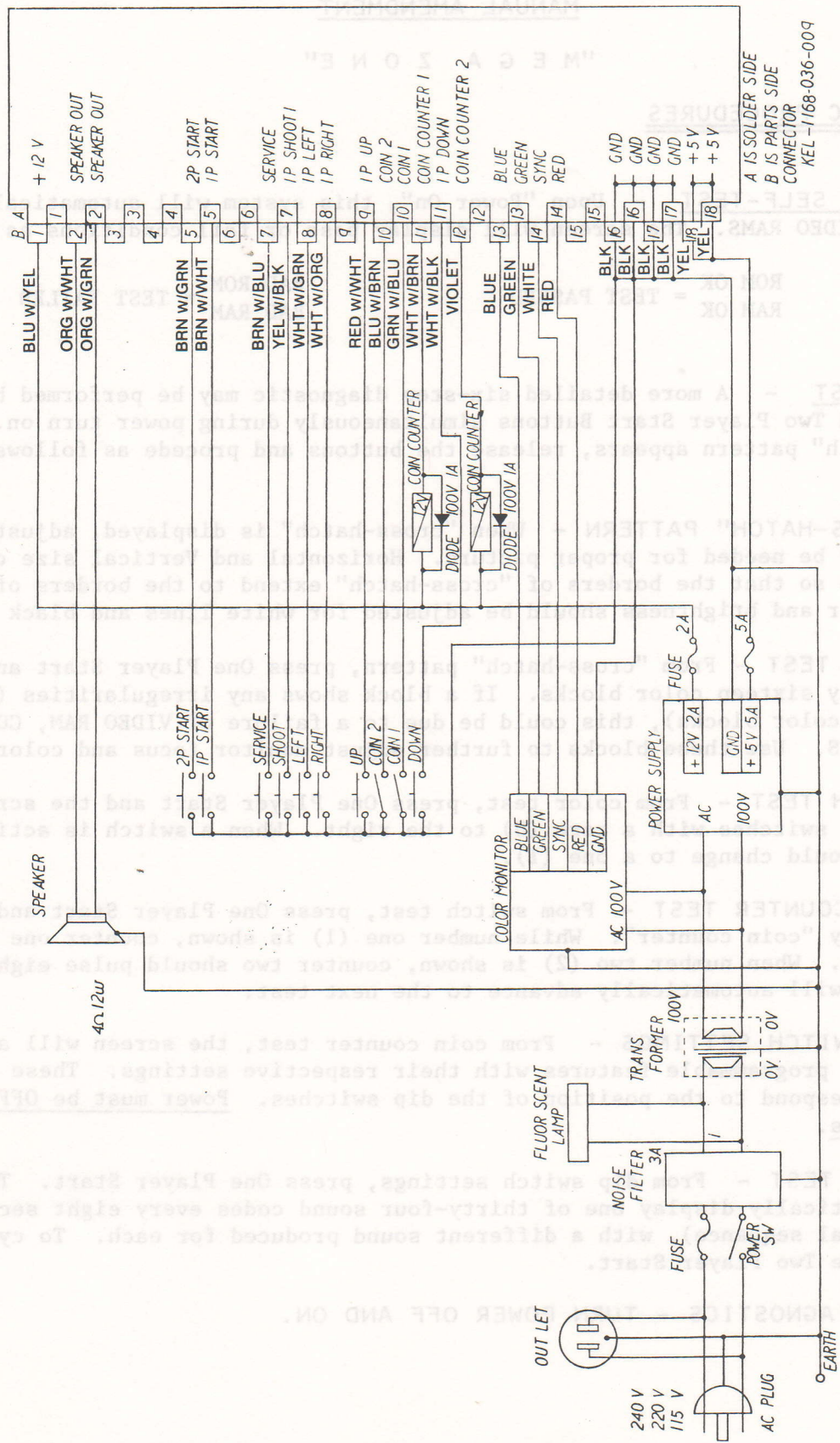
MEGA ZONE: Number of ROM and Disposition



MEGA ZONE: General Wiring Diagram - Table Type



MEGA ZONE: General Wiring Diagram - Upright



MANUAL AMENDMENT

"M E G A Z O N E"

DIAGNOSTIC PROCEDURES

AUTOMATIC SELF-TEST - Upon "Power On", this system will automatically test ROMS and VIDEO RAMS. The screen will display pass or fail conditions as follows:

ROM OK = TEST PASSED
RAM OK

BAD ROM = TEST FAILED
BAD RAM

MANUAL TEST - A more detailed six-step diagnostic may be performed by depressing the One and Two Player Start Buttons simultaneously during power turn on. When the "cross-hatch" pattern appears, release the buttons and procede as follows:

(1) "CROSS-HATCH" PATTERN - When "cross-hatch" is displayed, adjustments to the monitor may be needed for proper picture. Horizontal and Vertical size controls should be adjusted so that the borders of "cross-hatch" extend to the borders of the picture tube. Color and brightness should be adjusted for white lines and black background.

(2) COLOR TEST - From "cross-hatch" pattern, press One Player Start and the screen will display sixteen color blocks. If a block shows any irregularities (e.g., lines or dots in color blocks), this could be due to a failure of VIDEO RAM, COLOR RAM, or OBJ CIRCUITS. Use these blocks to further adjust monitor focus and colors.

(3) SWITCH TEST - From color test, press One Player Start and the screen will display all switches with a zero (0) to the right. When a switch is activated the zero (0) should change to a one (1).

(4) COIN COUNTER TEST - From switch test, press One Player Start and the screen will display "coin counter". While number one (1) is shown, counter one should pulse eight times. When number two (2) is shown, counter two should pulse eight times and the screen will automatically advance to the next test.

(5) DIP SWITCH SETTINGS - From coin counter test, the screen will automatically display all programmable features with their respective settings. These settings should correspond to the position of the dip switches. Power must be OFF when changing dip switches.

(6) SOUND TEST - From dip switch settings, press One Player Start. The screen will automatically display one of thirty-four sound codes every eight seconds (in a hexadecimal sequence), with a different sound produced for each. To cycle the codes, quickly, use Two Player Start.

TO EXIT DIAGNOSTICS - TURN POWER OFF AND ON.

SERVICE INFORMATION

VIDEO SYNC. OPTIONS - MEGA ZONE

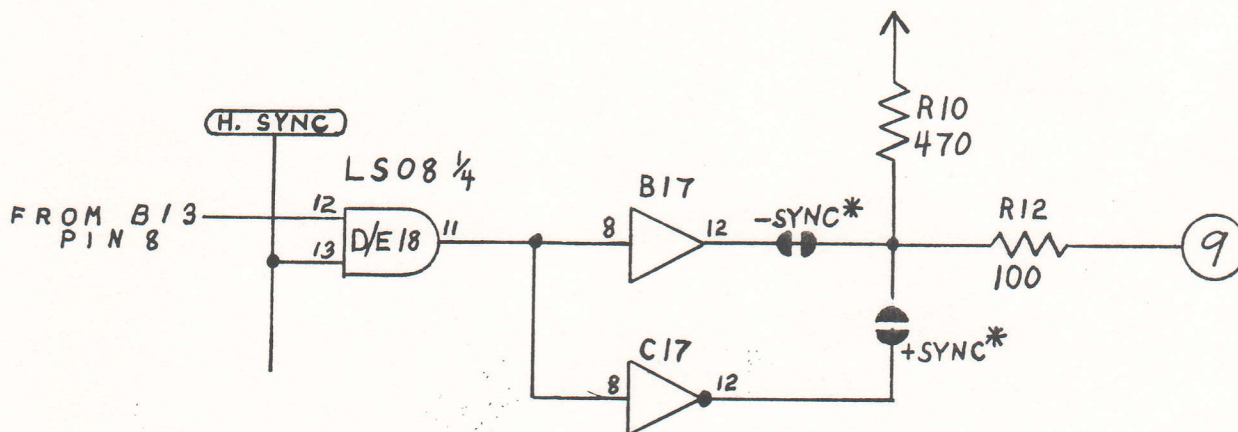
MEGA ZONE has been fully engineered to provide you with ease in doing your game conversion and this includes an "on board" video sync. inverter circuit.

VIDEO SYNC. FACTS YOU SHOULD KNOW:

1. MEGA ZONE can provide either positive or negative composite video sync. output by changing a single "on board" jumper.
2. MEGA ZONE is shipped with the negative sync. connected.
3. MEGA ZONE has a composite sync. output which is a single line that provides both horizontal and vertical sync. signals to the monitor.
4. The sync. conversion jumpers are located on the circuit board labeled PWB (A) 200079 (lower PCB).

To change the sync. signal from negative to positive you must first cut the center of the jumper pad foil connected to the output of chip B-17, pin 12 (74LS244). Secondly, you must resolder the jumper pad connected to the output of chip C-17, pin 12 (74LS240). This now provides positive sync. output. FIGURE 1 (below) shows a partial drawing of the sync. circuit output taken from schematic sheet 1 of 2, PWB (A) 2000079.

FIG. 1



*For positive sync, connect + sync pad and disconnect - sync pad

(OVER)

SERVICE INFORMATION

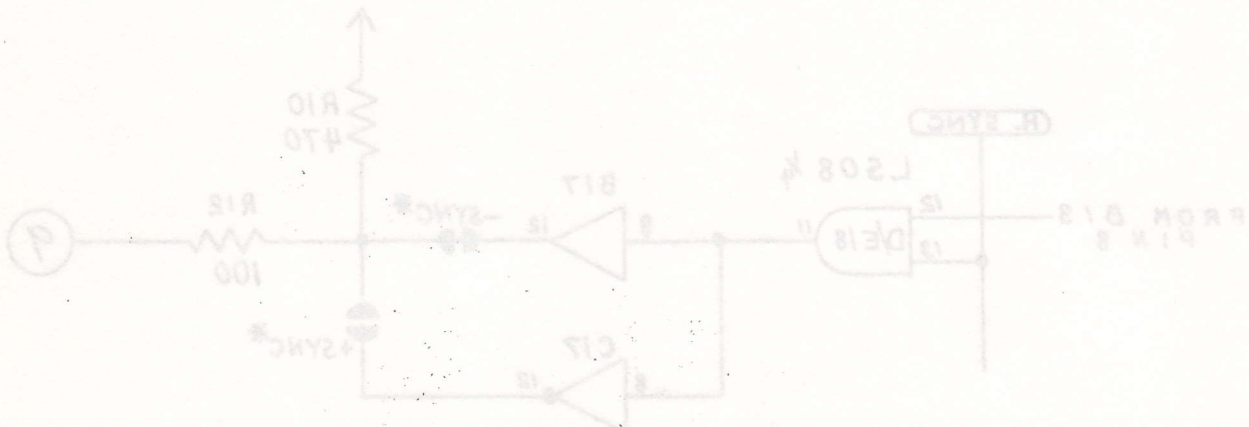
VIDEO SYNC. OPTIONS - MEGA ZONE

ADDITIONAL SYNC. AIDS:

1. Certain monitors have only one sync. input. This input may be either positive or negative. A monitor having a single sync. input, means that it requires a signal line going to it which has a composite video sync. signal. MEGA ZONE provides this type of signal. All that is required of you, is to determine if you need positive or negative sync. To find out, connect the board as it exists. If the picture locks in (note: some adjustment may be necessary at the monitor), then no changes are required. If the picture will not lock in - then change the sync. jumper on the MEGA ZONE board.
2. Other monitors have two sync. inputs. These are for vertical and horizontal. When connecting a MEGA ZONE to such a monitor, it is necessary to install a jumper wire at the monitor plug between the two sync. inputs. Connect the MEGA ZONE sync. line to either input.

To change the sync. signal from negative to positive you must first cut the center of the jumper pad connected to the output of chip B-17, pin 12 (74LS244). Secondly, you must resolder the jumper pad connected to the output of chip C-17, pin 12 (74LS244). This now provides positive sync. output. FIGURE 1 (below) shows a partial drawing of the sync. circuit output taken from schematic sheet 1 of 2.

FIG. 1



*For positive sync, connect to sync pad and disconnect - sync pad

(OVER)

KEEPING MEGA ZONE AT TOP PERFORMANCE

MEGA ZONE has been engineered with 4 GAME DIFFICULTY LEVELS.* (Not to be confused with the normal progression of increasing difficulty throughout the game.) These levels are set by the use of operator-adjustable Dip Switches.

MEGA ZONE is shipped pre-set at DIFFICULTY LEVEL "2" ("1" — easiest to "4" — most difficult). For Maximum Earning Power, increase or decrease the difficulty commensurate with the average player's skill. The small amount of extra time involved in utilizing the dip switches will show up in your cash box, which is what MEGA ZONE is all about — MAKING YOU MONEY!

*There are actually 64 different combinations of settings that are possible (BONUS × NUMBER OF PLAYERS × DIFFICULTY).

BONUS SETTING

SW	4	5	FIRST	SECOND	EVERY
	OFF	OFF	20,000	70,000	70,000
0	ON	OFF	20,000	80,000	80,000
	OFF	ON	30,000	90,000	90,000
	ON	ON	30,000	100,000	100,000

NUMBER OF PLAYERS

SW	1	2	NUMBER
0	OFF	OFF	3
	ON	OFF	4
	OFF	ON	5
	ON	ON	UNLIMITED

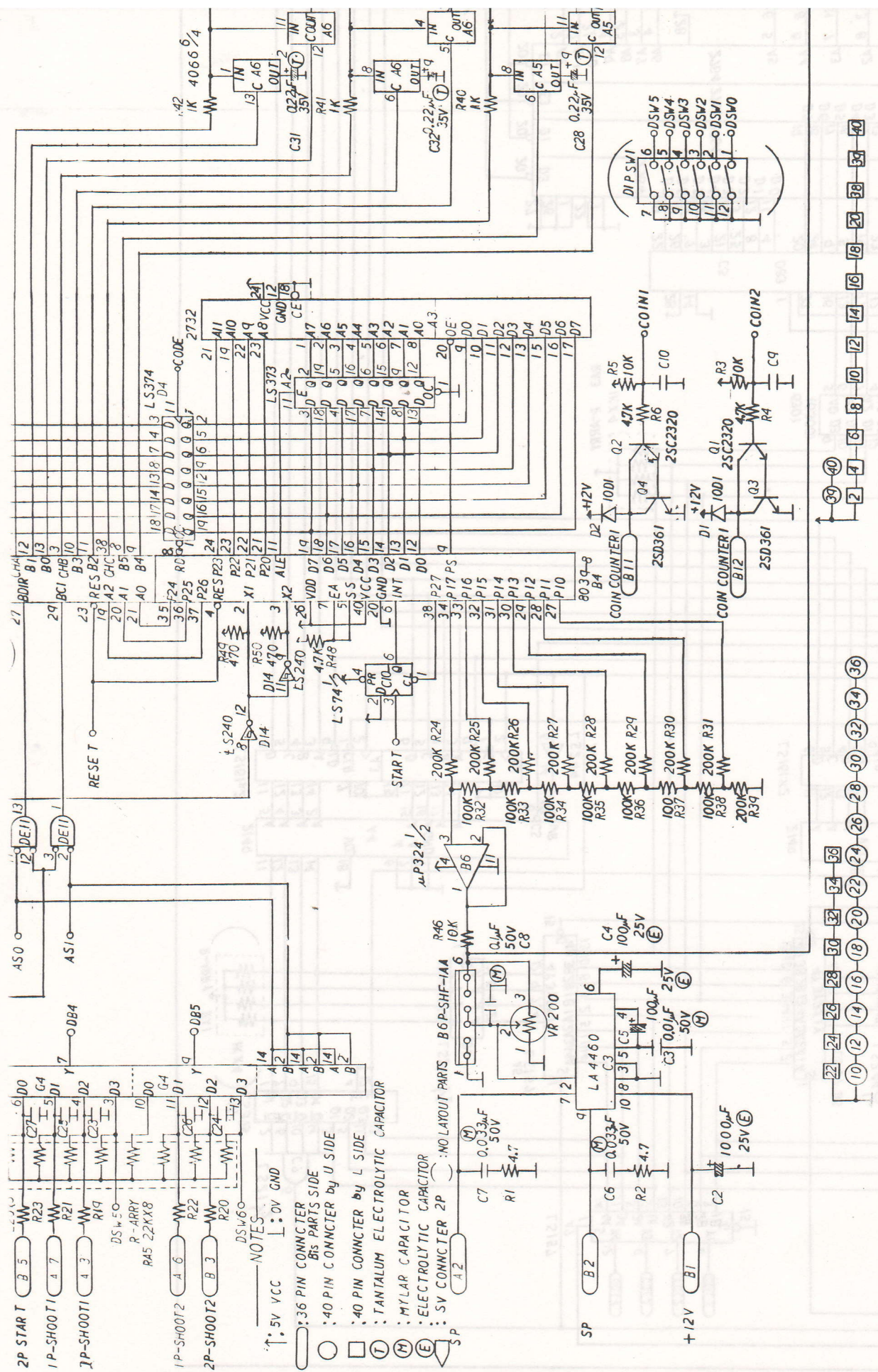
DIFFICULTY OF THE GAME

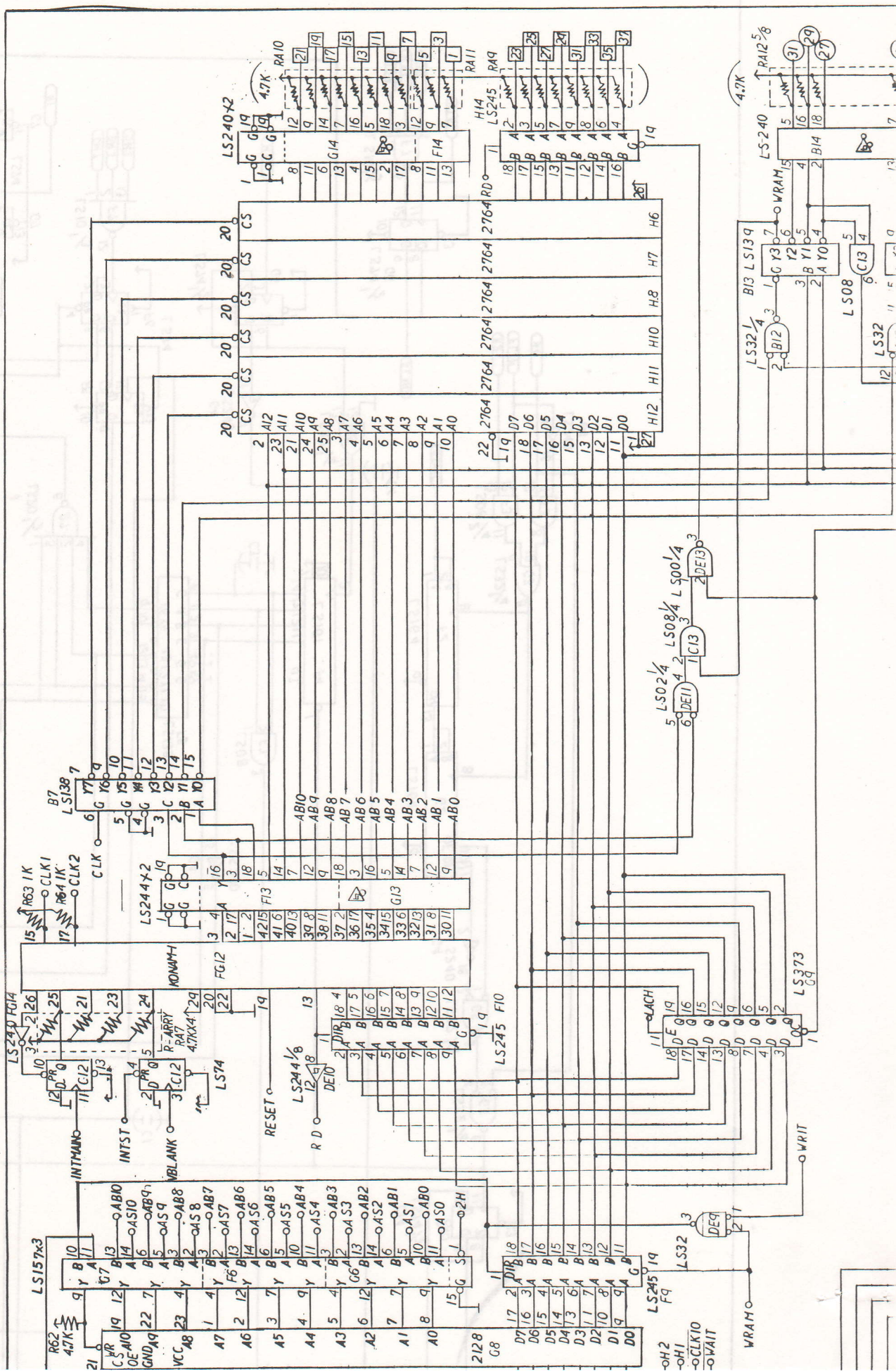
SW	6	7	DIFFICULTY
	OFF	OFF	EASY
0	ON	OFF	NORMAL
	OFF	ON	DIFFICULT
	ON	ON	VERY DIFFICULT

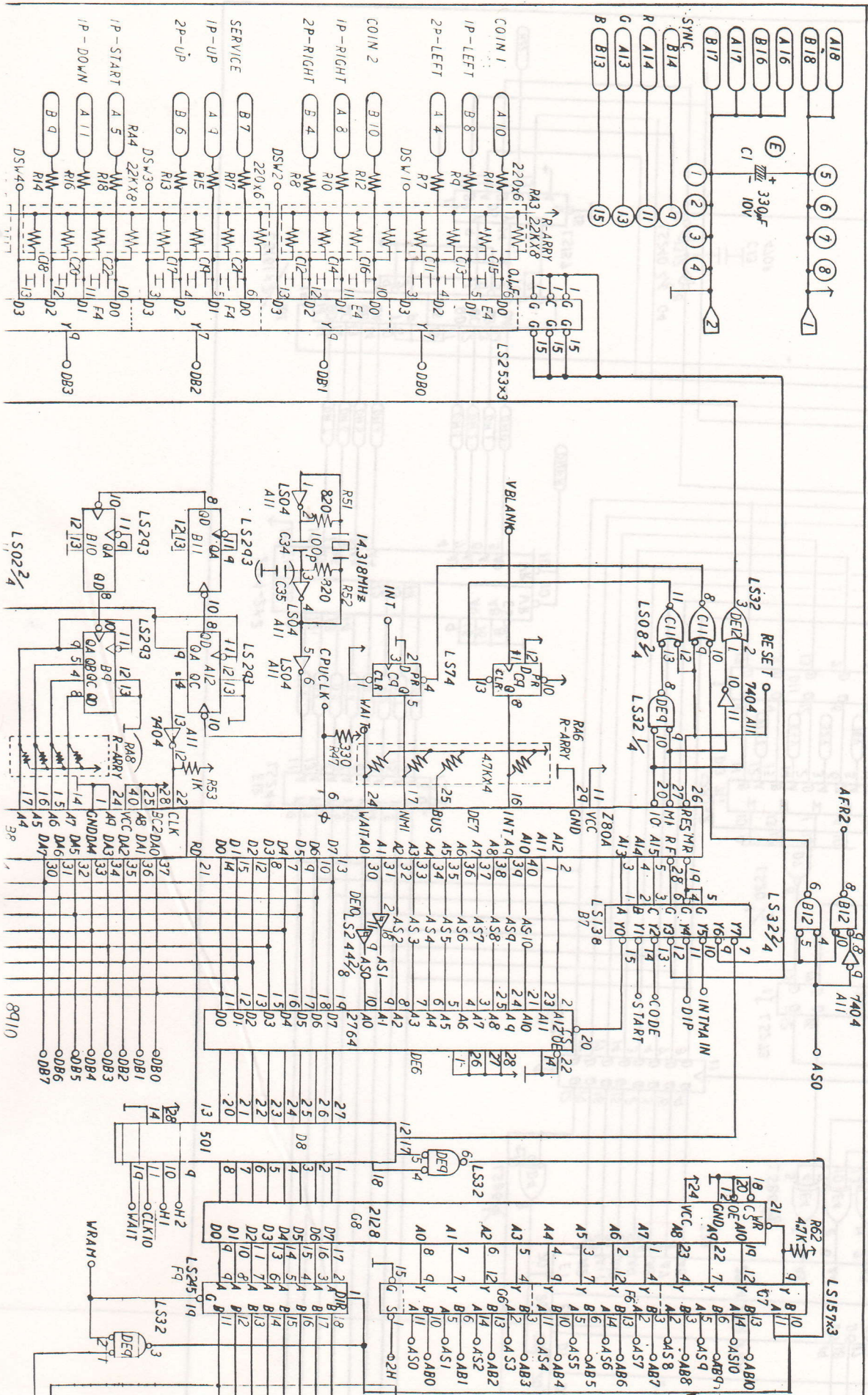
As with ALL games, in order to keep them functioning properly and keep that "cash flowing," they must be checked periodically. It is essential to player maneuverability that you be sure that the 8-way joystick is in top working order. The joystick provided in the MEGA ZONE conversion kit does effect actual 8-way movement and will affect the player's game if not maintained.

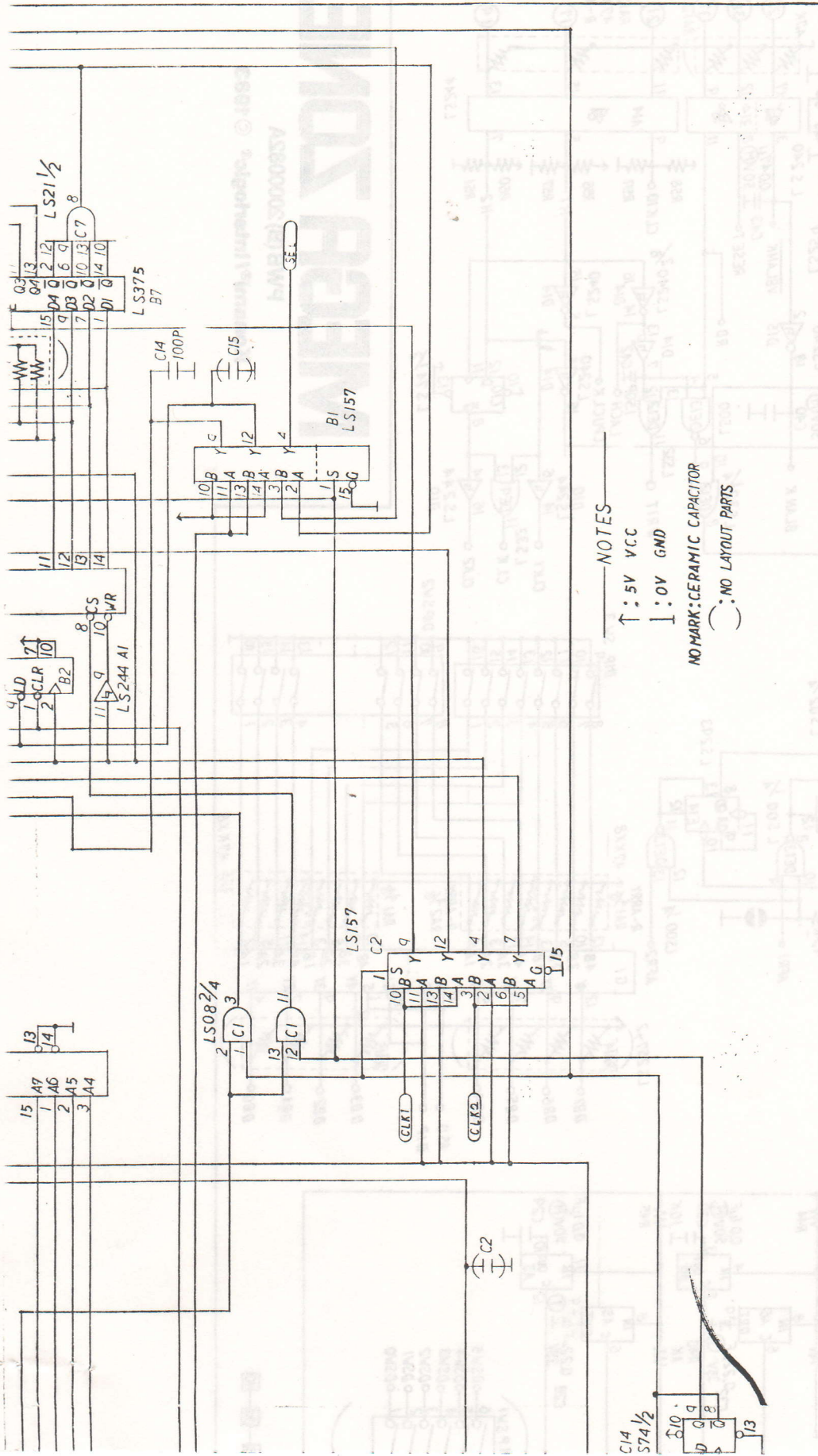

**Have you hugged
your Mega Zone lately?**











NOTES

↑ : 5V VCC

↓ : 0V GND

NO MARK : CERAMIC CAPACITOR

() : NO LAYOUT PARTS

MEGA ZONE™

PWB (A) 2000079A Sheet 2 of 2

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