



LIZARD

WIZARD

Conversion Kit Instruction Manual



INTERNATIONAL INDUSTRIES, INCORPORATED

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- PARTS LIST -

<u>Item #</u>	<u>Qty.</u>	<u>Description</u>
1	1	Auxiliary Logic Board Module
2	4	Lizard Wizard Program Roms
3	2	Lizard Wizard Character Roms
4	2	Lizard Wizard Bi-Polar Color Proms
5	1	Marquee Overlay
6	1	Control Panel Overlay
7	2	Side Panel Graphics
8	2	8 Way Joystick
9	2	Button/Switch Assemblies
10	6	Joystick/Button Hookup Wires
11	1	8" Tie Wrap
12	1	Instruction Manual
13	2	Phillips Wood Screws to Mount Auxiliary Module
14*	1	Wooden Control Panel, Unassembled, Predrilled Holes.

* Optional

LIZARD WIZARD

CONVERSION PROCEDURE

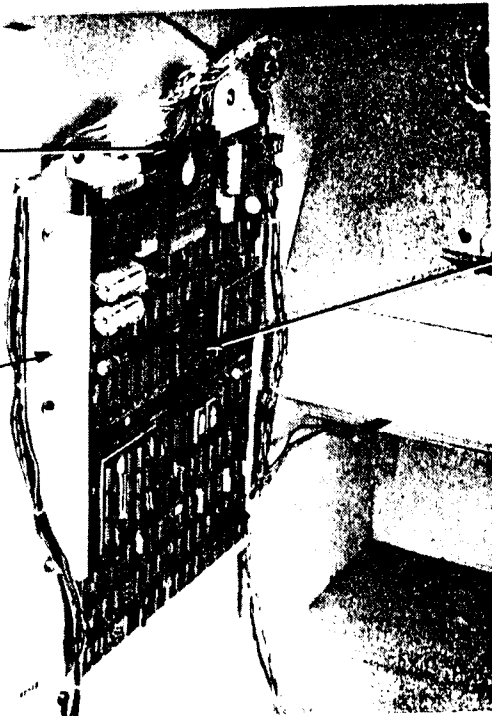
The following steps should be followed to convert your Pac Mac/ Ms. Pac Man game to Lizard Wizard.

Main Logic P.C.B. Removal:

- 1.) Disconnect the Main Game Logic Board from all its cabling.
- 2.) Remove the P.C.B. clamps and slide the Main Game Logic Board out of the cabinet.

DISCONNECT
CABLING

REMOVE
CLAMP TO
P.C.B. OUT

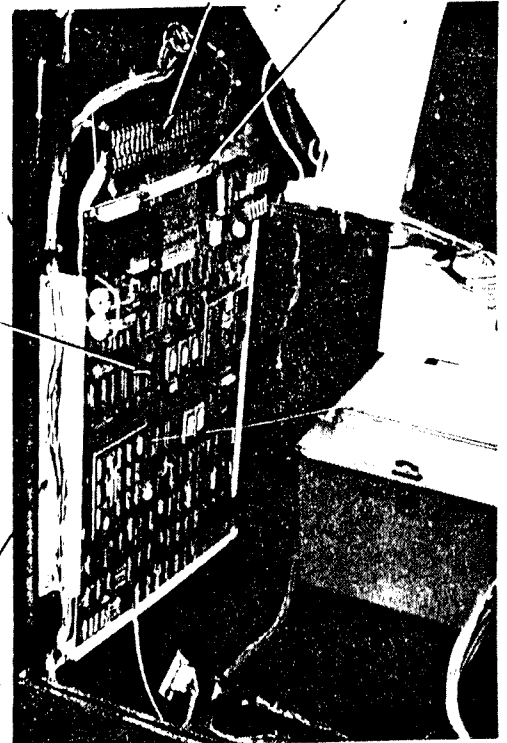


UPRIGHT

DISCONNECT
CABLING

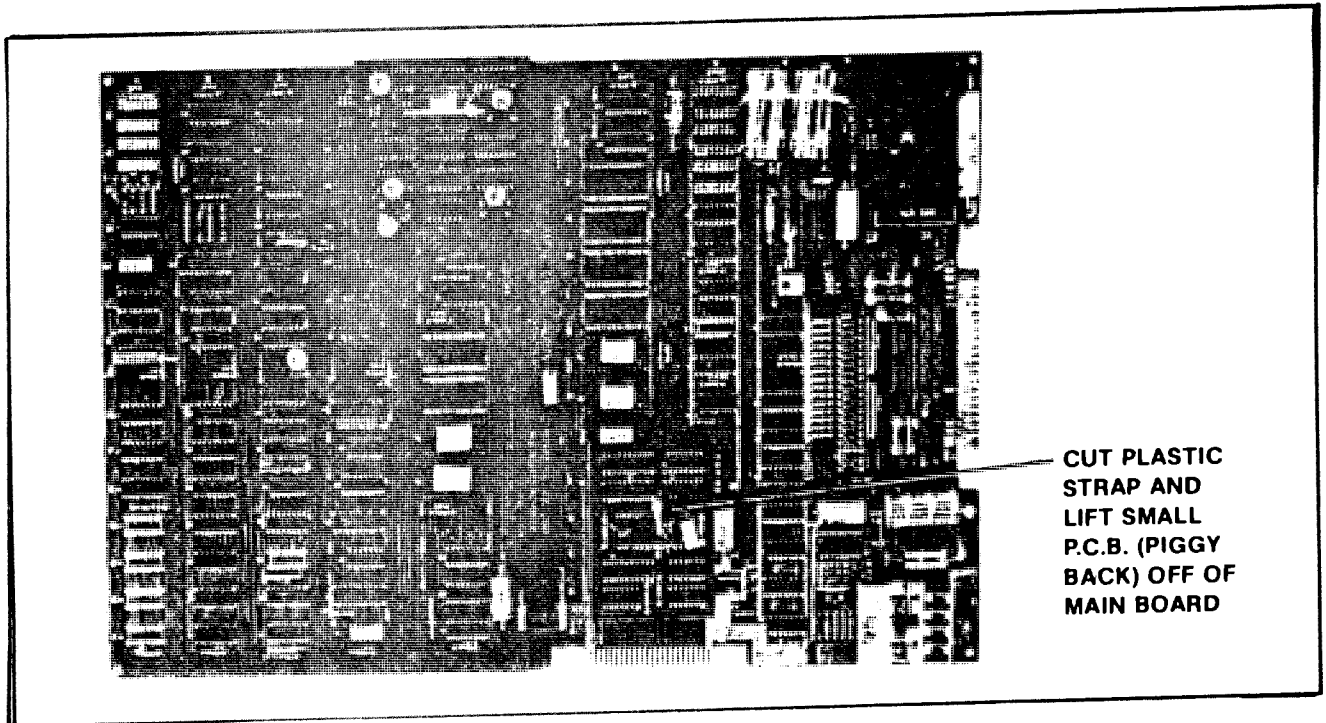
MAIN LOGIC
P.C.B.

REMOVE CLAMP
TO SLIDE
P.C.B. OUT

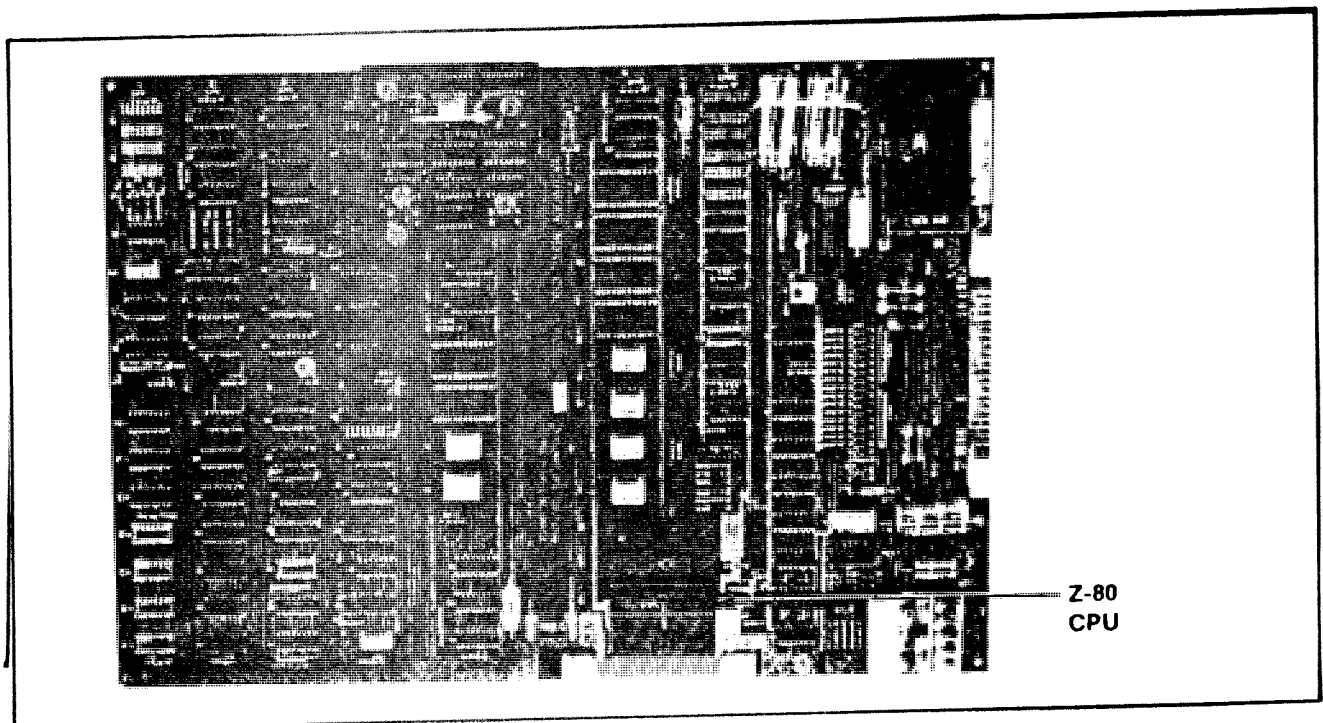


MINI

- 3.) Cut the plastic securing strap and remove the "PIGGY-BACK" module. **IF YOUR GAME IS EQUIPPED WITH ONE.** If it **IS NOT** equipped with one, simply proceed to Step 4 below.

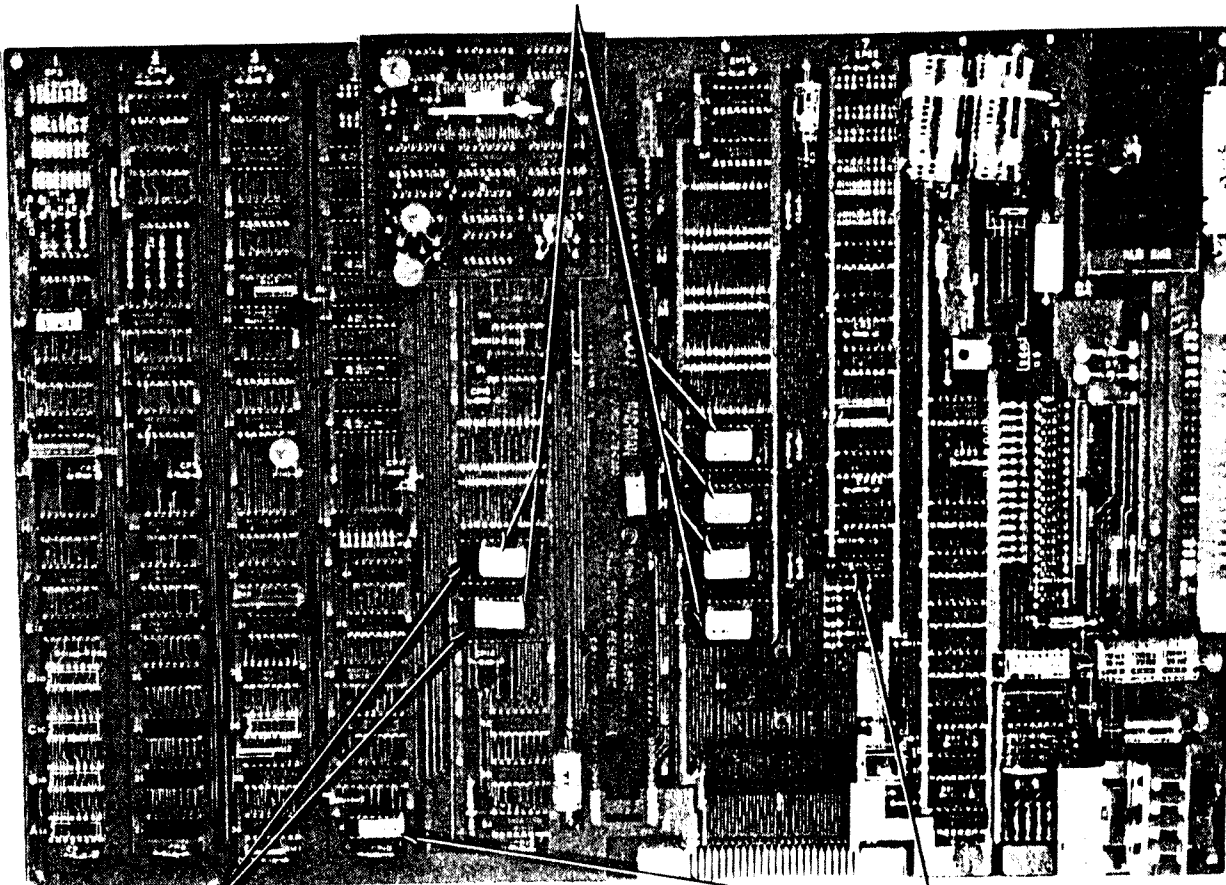


- 4.) Remove the Z-80 CPU from the Main Game Logic Board. **BE CAREFUL NOT TO BEND ITS PINS!!** Return this CPU to your stock. It may be used as a spare part.



5.) Remove the six **EPROMS** and 2 **PROMS** located as shown below and set them aside. **BE CAREFULL NOT TO BEND THEIR PINS!!**. Replace the removed **EPROMS** and **PROMS** with the ones supplied in your conversion kit.

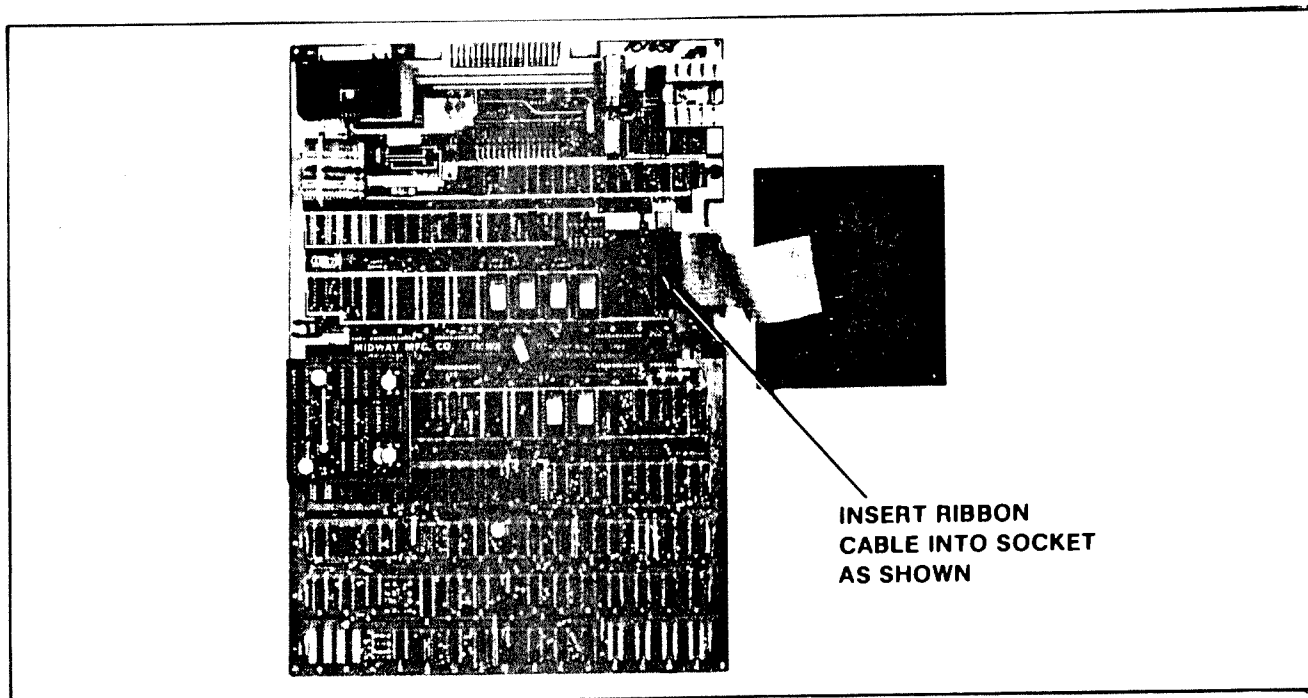
REMOVE (6) EPROMS
AND REINSERT NEW
EPROMS SUPPLIED
WITH KIT.
(LOCATIONS 5E, 5F, 6E, 6F, 6H & 6J)



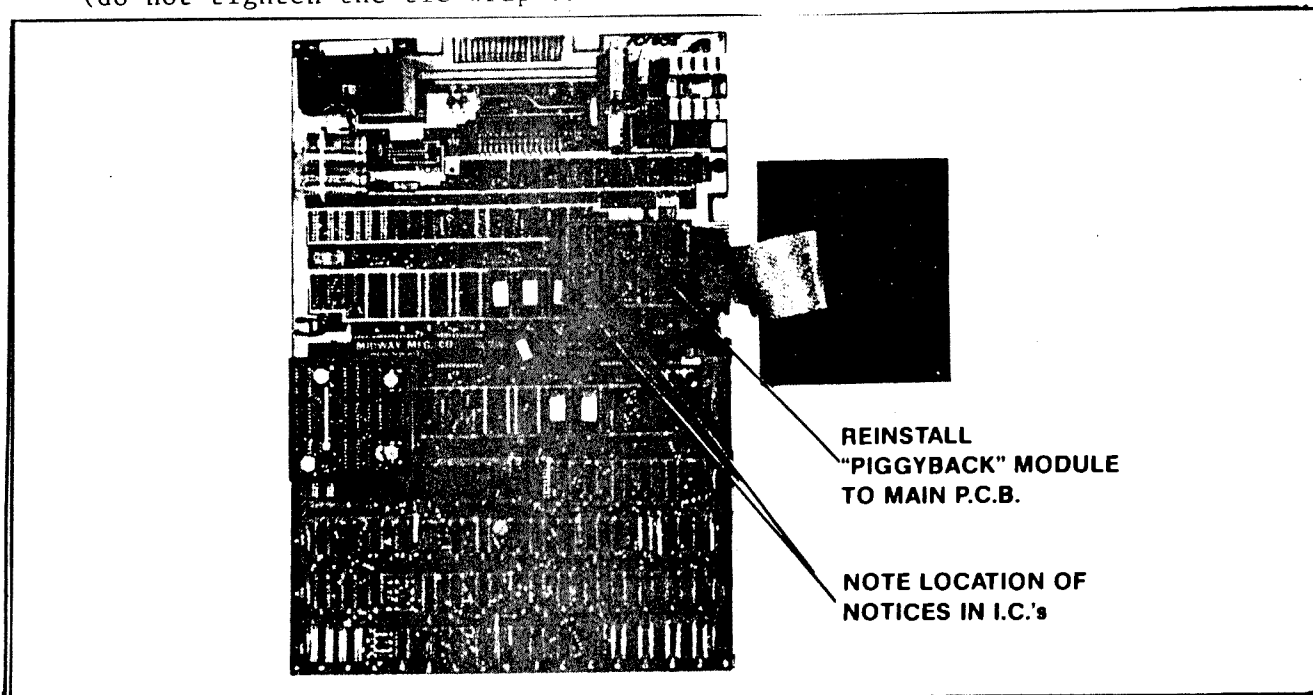
IMPORTANT!
NOTE LOCATION
OF NOTCH ON
ALL I.C.s REMOVED
BEFORE INSERTING

REMOVE (2) PROMS
AND REINSERT NEW
PROMS SUPPLIED
WITH KIT.
(LOCATIONS 4A & 7F)

- 6.) Plug the ribbon extension cable for the Auxiliary Game Logic Board into the empty socket on the Main Game Logic Board that was left when you removed the Z-80 CPU from it in Step 4. Connect the Black wire from the module to ground.



- 7.) If your game is equipped with a "PIGGY-BACK" module that you removed in step 3 reinstall it at this time. If it was not equipped with one, simply proceed to Step 8. Reinstall 8" tie wrap to secure the "PIGGY-BACK" module (do not tighten the tie wrap until the board is tested.)



8. Reinstall the Main Game Logic Board and the Auxillary Game Logic Board (now attached to it by the ribbon cable) back into the game cabinet. Auxiliary Board should be attached to cabinet with wood screws provided.

INSTRUCTIONS FOR USING EXISTING MIDWAY CONTROL PANEL

- 1.) Disconnect control panel harness from main harness and remove control panel.
- 2.) Unsolder wires to Joystick (these will be used on the new first player joystick) and remove joystick.
- 3.) Remove the Pac Man / Ms. Pac Man overlay and apply Lizard Wizard control panel overlay.
- 4.) Locate and drill new joysticks & lazer button holes. See Drawing "C" (A helpful tool in cutting the holes in the metal control panel is a Greenlee Tool Company punch type 730, 1 5/16").
- 5.) Install kit buttons & Joysticks as shown in drawing "B".

Note: Joysticks require eight (8) carriage bolts with nuts & star washers. Size- 10-24 x 1".

- 6.) Solder the wires from the Midway control panel harness to the same connections on the first player joysticks.
- 7.) Connect the ground (common) side of all the switches with the black wire provided to the Red wire (common) from the original harness.
- 8.) Solder the six (6) pre-cut & pre-terminated wires provided to the appropriate switch.

<u>Wire Color</u>	<u>Function</u>	<u>Insert in connector #</u>
Green /Black/White	2nd Player Up	12
Yellow	" " Down	V
Violet/Black/White	" " Left	P
Blue/Black/White	" " Right	13
Orange/Blue/White	" " Lazer	R
Orange/White	1st Player Lazer	Test Switch

- 9.) The wires that terminate in Amp Edge card terminals plug directly into the Midway connector as listed above. The wire without a terminal (Orange/White) must be soldered to what was the test switch input.
 - A.) Remove the White/Yellow wire from the test switch located just inside & to the right of the coin door.
 - B.) Solder the Orange/White wire from 1st player lazer to the White/Yellow wire. Insulate your solder splice.

Instructions for Optional Control Panel

A wooden control panel is available to ease your conversion of **Pac Mac/ Ms. Pac Man** to **Lizard Wizard**.

The new control panel utilizes the following items from your original Midway panel:

- 1.) Harness
- 2.) Mounting Pins (2)
- 3.) Latch Clamp Catch (2)
- 4.) $\frac{1}{4}$ " hex Screw (8)
- 5.) Start Buttons, Pal Nuts, Switches & Mounting Bracket (2)

Assembly:

- 1.) Properly position control panel overlay onto new dash and affix via pressure sensitive backing.
- 2.) Cut Joystick Mounting holes thru overlay with sharp knife or razor knife.
- 3.) Install mounting pins and latches in the precise position as on your original Midway control Panel. See drawing "A".
- 4.) Unsolder wires from Midway Joystick.
- 5.) Remove Midway start buttons from original panel with harness and install in the new panel. Solder the wires from the Midway harness to the same connection on the 1st player Joystick. (See wiring diagram)
- 6.) Install kit buttons and joysticks as shown in drawing "B".
- 7.) Connect the ground (common) side of all the switches with the black wire provided to the red wire (common) from the original harness.
- 8.) Solder the six (6) pre-cut & pre-terminated wires provided to the appropriate switch. The wires that terminate in **AMP EDGE CARD TERMINALS** plug directly into the Midway connector as listed below.

<u>WIRE COLOR</u>	<u>FUNCTIONS</u>	<u>INSERT IN CONNECTOR #</u>
Green/Black/White	2nd player Up	12
Yellow	2nd Player Down	V
Violet/Black/White	2nd Player Left	P
Blue/Black/White	2nd Player Right	13
Orange/Blue/White	2nd Player Lazer	R

9.) The **1st Player Lazer** uses the included **Orange/White** wire and must be tied to what was the **Test** switch input.

- A.) Remove the **White/Yellow** wire from the test switch located just inside and to the right of the coin door.
- B.) Solder the **Orange/White** wire from **1st Player Lazer** to this **White/Yellow** wire from the test switch. Insulate your solder splice.

MARQUEE

Preparation:

- 1.) The Marquee artwork should be affixed to a piece of clear plexiglass measuring 23" x 9 1/16" x 1/8".
- 2.) A second piece of plexiglass measuring 23" x 9 1/16" x 1/16" should be placed on top of the other plexiglass to "sandwich" the artwork between them.

INSTALLATION

- 1.) Turn the power off
- 2.) Remove the screws from the top marquee bracket.
- 3.) Remove the Midway marquee
- 4.) Install Lizard Wizard marquee and replace top bracket and screws.

LIZARD WIZARD DIP SWITCH TABLE

METHOD OF PLAY

SW #1	SW #2		
OFF	ON	2 COIN	1 PLAY
ON	OFF	1 COIN	2 PLAY
OFF	OFF	1 COIN	1 PLAY
ON	ON		FREEPLAY

NUMBER OF SPACEMEN PER GAME

SW. #3	SW. #4	
ON	ON	5 SPACEMEN
OFF	ON	4 SPACEMEN
ON	OFF	3 SPACEMEN
OFF	OFF	2 SPACEMEN

BONUS SPACEMAN

SW. #5	SW. #6			
ON	ON	BONUS SPACEMEN AT	-----	150,000
OFF	ON	BONUS SPACEMEN AT	-----	125,000
ON	OFF	BONUS SPACEMEN AT	-----	100,000
OFF	OFF	BONUS SPACEMEN AT	-----	75,000

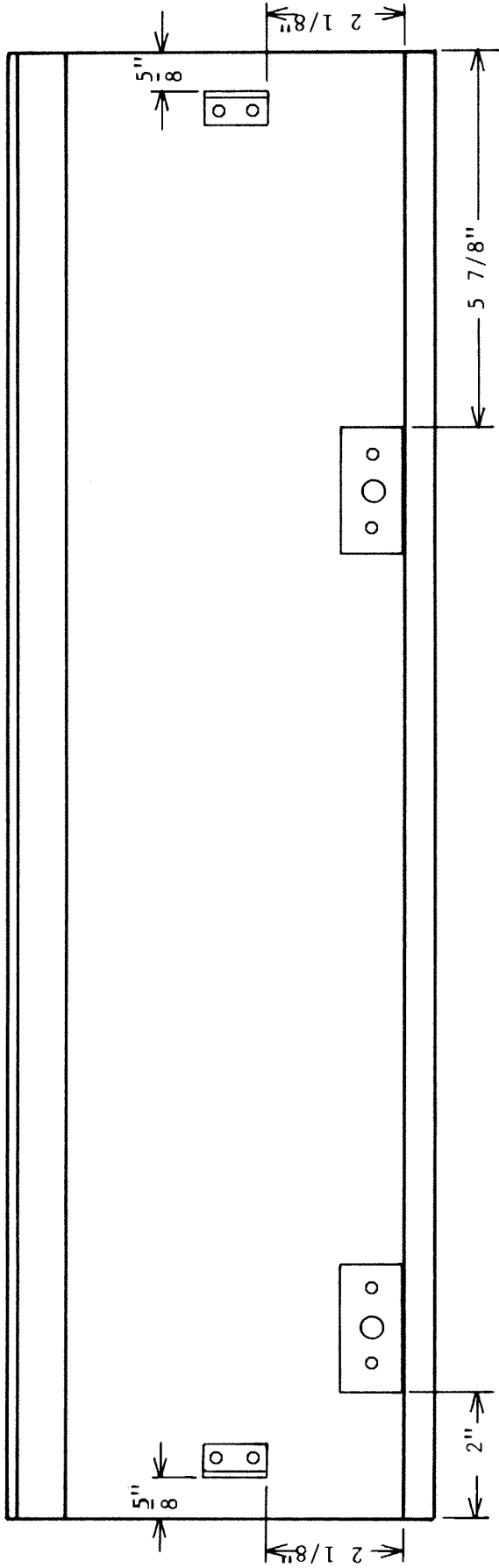
SW. #7	SW. #8	
OFF	OFF	PLAY MODE
ON	OFF	ROM & RAM TEST
OFF	ON	LOCKS PICTURE

Lizard Wizard Conversion Kit

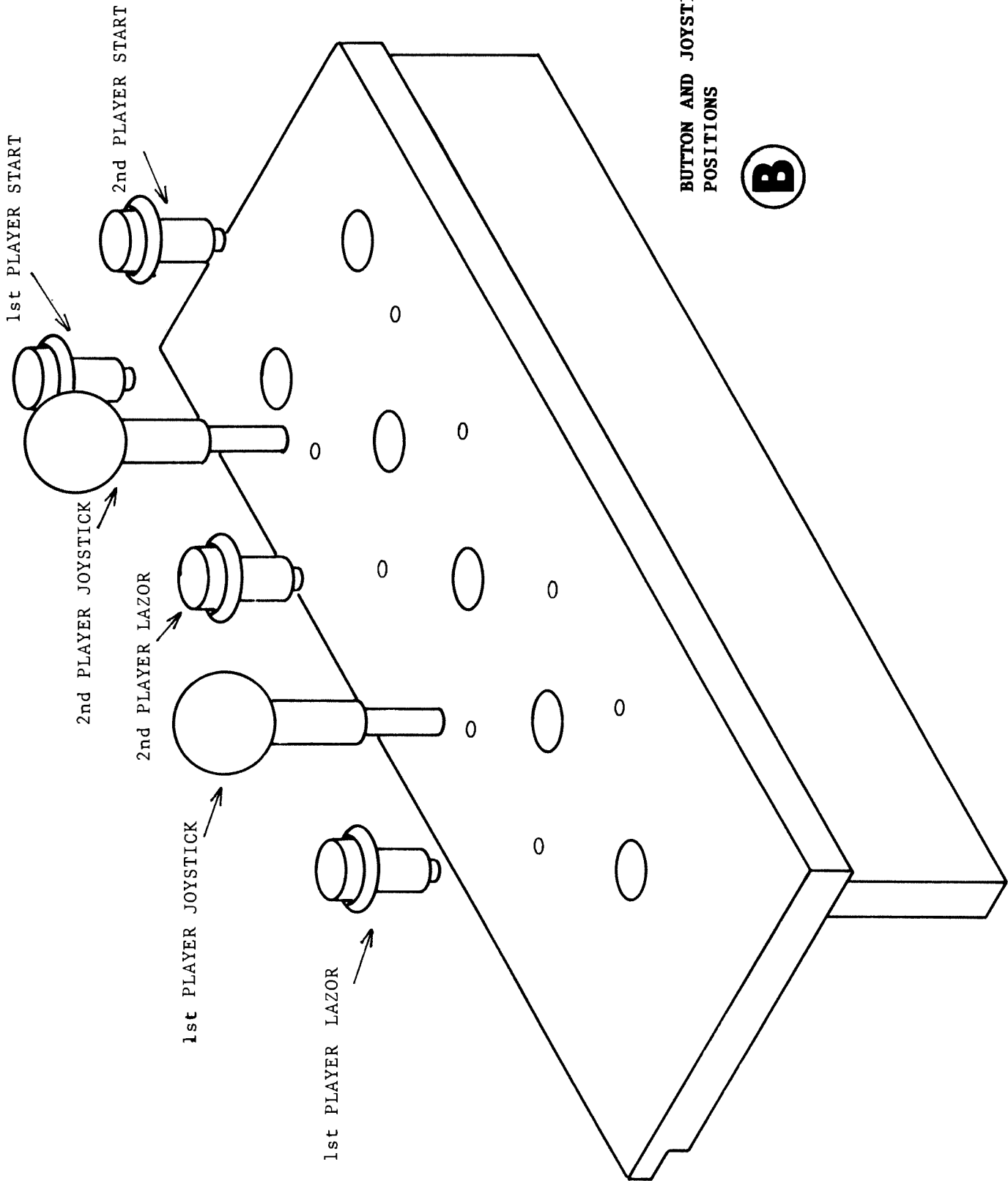
Miscellaneous Information you may want to know:

- 1.) The front glass measures 23" x 21 1/8" x 3/16". If you replace this with plexiglass, use either clear or Light Smoke #2412.
- 2.) The Marquee glass measures 23" x 9 1/16" x 3/16".
- 3.) The cabinet color is Sun Yellow #30912
- 4.) The carriage bolts used to mount the joysticks are #10-24 x 1".
- 5.) If you make your own control panel, the holes are as follows:
 - * Joystick Center = 1 3/16"
 - * Joystick Mounting = 3/16"
 - * Button Mounting = 1 3/16"
- 6.) An attractive monitor bezel is available from Wico Corp., Chicago, Ill. 60678

as: Universal Bezel Display #26-3157-00 @ \$11.95
- 7.) A helpful tool in cutting the holes in the Midway metal control panel is a Greenlee Tool Company punch type 730, 1 3/16".
- 8.) A monitor bezel is also available from J-S Sales Company, Mt. Vernon, New York, 1-800-431-2944, catalog # 8063.

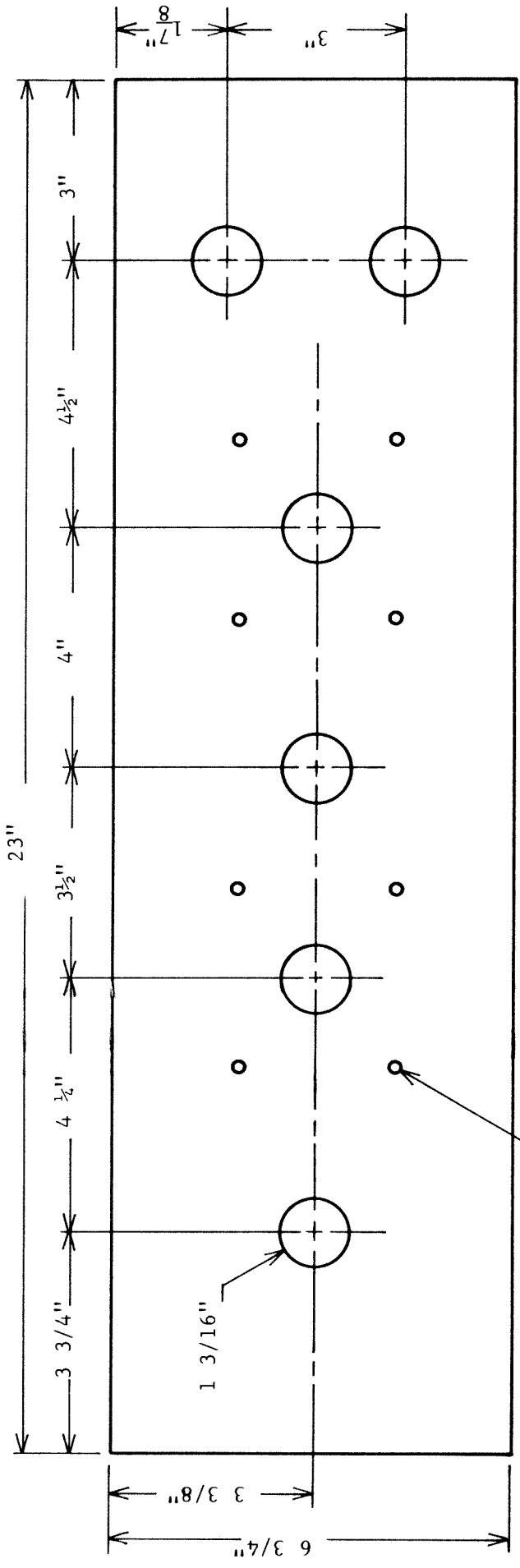


MOUNTING PIN AND
LATCH POSITIONS



**BUTTON AND JOYSTICK
POSITIONS**



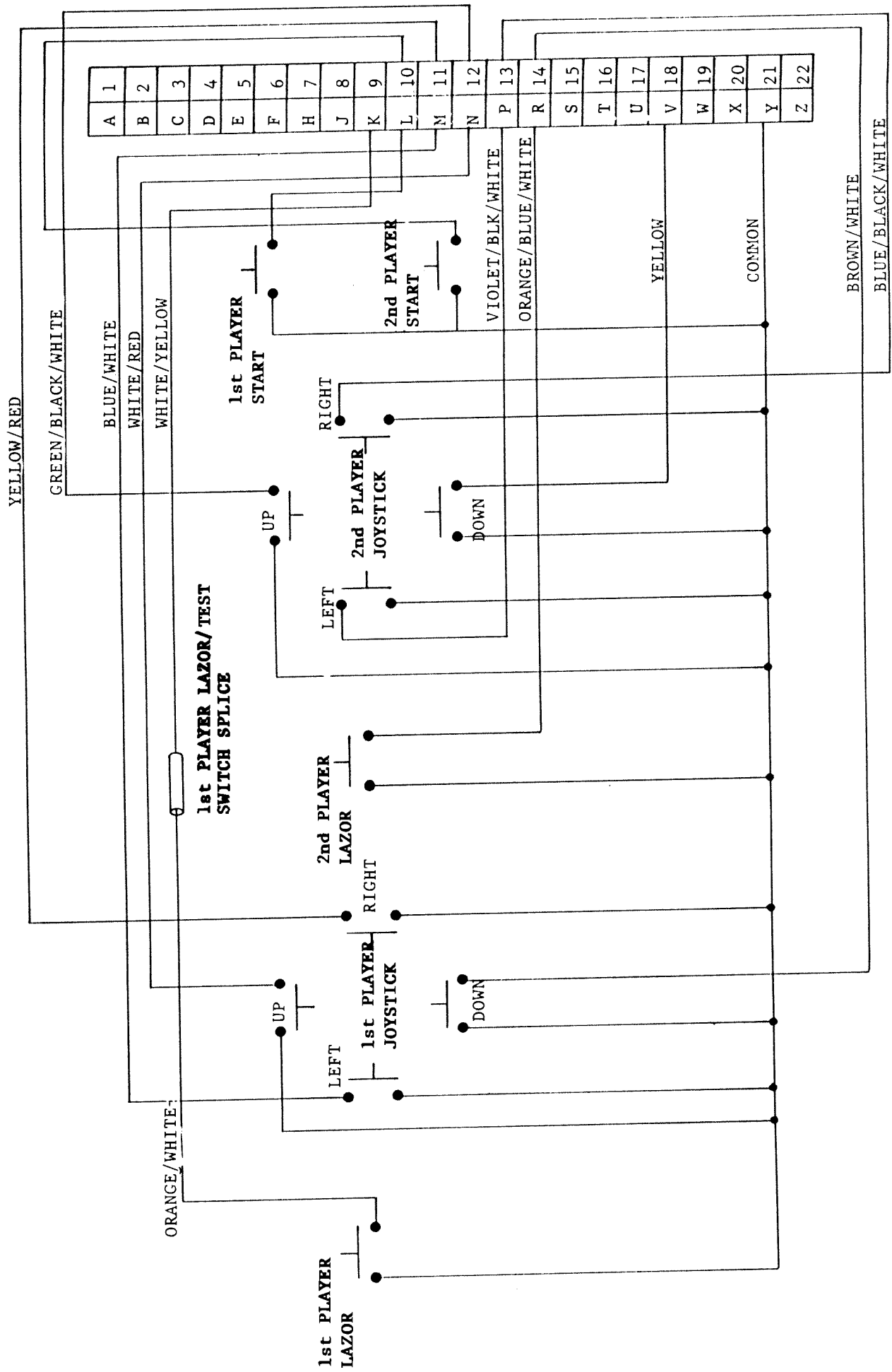


NOTE: AFTER JOYSTICK HOLES
 HAVE BEEN DRILLED, ALIGN
 JOYSTICK SWITCH ASSEMBLY
 WITH HOLE AND MARK MOUNTING
 HOLES



**BUTTON AND JOYSTICK
 HOLE LOCATIONS**

3/16" DIA.



CONTROL PANEL WIRING DIAGRAM

SUNN INTERNATIONAL INDUSTRIES, INC.

LIMITED WARRANTY

Company warrants that the equipment will be free from defects in material and workmanship and meet product specifications for a period of 60 days from the date that purchaser accepts delivery of the equipment.

THIS WARRANTY DOES NOT COVER

1. Misuse or damage by Purchaser or a third party. Purchaser shall promptly report such defects to Company upon discovery. Company, at its option, shall either repair or replace such defective part or the entire item.
2. Damage caused by neglect, abuse, improper operation, improper repairs, accidents or damage caused by fire, flood, acts of God or other casualties beyond the control of Sunn International Industries Inc. (SUNN).
3. Game components or parts thereof which have had the identifying names and/or numbers removed, altered, defaced or rendered illegible.
4. Components or parts not manufactured, installed, sold or authorized for use by SUNN, or modifications to game not authorized by SUNN. Use of such components, parts or modifications voids this Warranty in its entirety.
5. In transit damage claims must be filed with the carrier by the Purchaser.

This Warranty is in lieu of all other warranties, guarantees or agreements whether expressed or implied. No other person, agent, authorized service center or company is authorized to change, modify or extend its terms in any manner whatsoever.

SERIAL NO. _____

MODEL NO. _____

DATE SHIPPED _____

TO: SUNN. Fill out this stub completely and mail within ten (10) days. Please type or print. Detach stub from warranty and return.

NAME: _____

ADDRESS: _____

DATE SHIPPED: _____

CITY: _____ STATE: _____ ZIP: _____

SERIAL NO. _____ MODEL NO. _____