

*Meadows Games, Inc.*

181 Commercial Street

Telex No. 340902

Sunnyvale, California 94086

Telephone (408) 732-8110

National Toll Free (800) 538-1515  
538-1516

# INFERNO

**Service/Instruction Manual**

# *Meadows Games, Inc.*

181 Commercial Street  
Telex No. 340902

Sunnyvale, California 94086

Telex No. 1408, 702-8111

MEADOWS GAMES, INC.

INFERNO

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## I. GENERAL INTRODUCTION

INFERNO is a one or two player video game simulating every kids dream at one time or another of being a fireman (or a "fireperson" in keeping with the current vernacular).

The player(s) control the movement and position of the firefighter on the ladder moving in a vertical direction on the outside left and right edges of the T.V. monitor. The player(s) also control the movement and position of the firetruck moving in a horizontal direction on the extreme bottom edge of the T.V. monitor.

## II. NORMAL OPERATION

When INFERNO is first powered up, "INSERT COIN" is written across the middle of the T.V. screen, and "HIGH SCORE" is centered at the bottom of the screen. "HIGH SCORE" is also written across the top, right of the screen. This information will continue flashing during the attract mode. Both "HIGH SCORES" will read, 00000.

Upon completion of a game actually played, the attract mode information will appear as follows:

TIME _____	Score	HIGH SCORE _____
_____		_____
INSERT COIN		
High Score		
_____		

The information shown in both HIGH SCORE areas will be the highest score of the game(s) previously played either as a single player or two player. The HIGH SCORE will reset itself to display the highest score for that day until unplugged; at which time HIGH SCORE will not indicate any score and will remain this way until the first game is played.

In summary, HIGH SCORE will be shown without any score indication if the game has been unplugged. The microprocessor completely eliminates all previous information when power is disconnected.

When a coin is inserted into the coin slot, the attract mode disappears and the "INSTRUCTIONS" are displayed on the screen. The instructions read; "DON'T BE A TURKEY. READ INSTRUCTIONS ON PANEL BEFORE STARTING GAME," and "1 COIN PER PLAYER" provided this is the setting of the coin option selector switch. (See section "Coins per Game," Page 6 for complete range of operator coin options).

### III. GAME SEQUENCE

When start button is depressed, game image appears. Appearing on the far LEFT (Green); and far RIGHT (Yellow) of the screen is a fireman on a ladder. The fireman on the ladder is moved up and down (vertically) by pushing straight forward on the joystick control (fireman moves "UP" the screen); and pulling back on the joystick control (fireman moves "DOWN" the screen).

The two firetrucks appear at the extreme bottom of the playfield. The fire trucks are moved back and forth (horizontally) by pushing the joystick LEFT (firetruck moves left); and pushing joystick RIGHT (firetruck moves right).

The two players are color coded. The LEFT players fireman/ladder and firetruck is YELLOW. The RIGHT players fireman/ladder and firetruck is GREEN.

The INFERNO playfield consists of three windows of flames and one man in a window "waving his arms". The flames and man will appear randomly in different locations on the playfield until squirted out by a simulated stream of water coming from the fireman's hose. After all the flames only have been squirted out, a new, random pattern of flames and man in the window will appear. Players continue squirting out flames until GAME OVER.

#### SINGLE PLAYER GAME

When the player has read the instructions, START BUTTON is pressed and game begins. If single player is elected by the player, player can use either of the joystick controls, and will be playing Inferno against previous HIGH score. As a single player, whichever joystick control is first activated by the player, the remaining control is automatically locked out and cannot be played.

#### SCORING

For each flame squirted out, the player to squirt the flame FIRST, earns 100 points. If, accidentally, the player squirts the man in the window, that player loses 25 points.

As the game continues and each successive pattern of flames is extinguished, the score of each player is accumulated and displayed accurately in the SCORE indicator located at the top of the T.V. playfield.

### IV. SWITCHABLE OPTIONS

#### A. Coins per Play (See Page 6)

<u>Coinage</u>		
1 player per 1 coin	SW 4	OFF
2 players per coin	SW 4	ON

B. TIME (Seconds/Game) (See Page 6 )

	<u>SW 1</u>	<u>SW 2</u>
60 seconds	OFF	OFF
90 seconds	ON	OFF
120 seconds	OFF	ON
180 seconds	ON	ON

C. EXTENDED PLAY (See Page 6 )

If extended play feature is selected by the operator, "EXTENDED PLAY" will flash on the T.V. screen at the end of the game, according to thresholds of extended time offered as set by the operator, with a 2-3 second momentary game stop, and players continue to play the extended time awarded. This extended play score is applied to existing game score. Extended play cannot be won on extended play.

Additionally, if Extended Play is selected to be used by operator, the player will be told he can win extended play (how much), and what score he must reach in order to be rewarded with extended play. This information will appear during the "Game Instruction" mode which is after coin(s) has been inserted, and prior to pushing START BUTTON.

The "Instruction Mode" will therefore read:

DON'T BE A TURKEY  
READ INSTRUCTIONS  
BEFORE STARTING GAME

X COIN PER PLAYER

TODAYS HIGH SCORE  
XXXX

FOR EXTENDED PLAY  
SCORE MORE THAN XXXX

(For the complete range of "Extended Play" available as selectable operator options, please refer to Page 6 ).

D. ATTRACT MODE - AUDIO

The sounds accompanying game play are two distinctively different fire truck sounds to distinguish two players, and the "clatter" of the fireman traveling up and down on the ladder.

As offered in Switchable Options, the operator may select to have an intermittent firetruck siren sound during the attract mode of the game, which will come on for 4 seconds every 2 minutes. This is an excellent attract feature, and its volume can be controlled. Please refer to Page 8 , Audio Board Adjustment Points.

To select the audio during the "Attract Mode," set Switch 3 in the ON position.

#### V. TO REMOVE MONITOR

- A. Disconnect power cord from AC outlet.
- B. Open and remove top back and bottom back doors.
- C. Remove connector from monitor by pinching side tabs and pulling straight back from monitor. Connector removal accessible from top back door.
- D. Remove four bolts from monitor chassis flang mounts; accessed by top and bottom back doors.
- E. Lift monitor and slide out of cabinet.
- F. For trouble-shooting and service, see MOTOROLA Service Manual, Section XIII.

#### VI. TO REMOVE MICROPROCESSOR PRINTED CIRCUIT BOARD

- A. Disconnect power cord from AC outlet.
- B. Open and remove bottom back door.
- C. Disconnect edge connector from microprocessor PCB.
- D. Remove screw holding PCB securely to inside cabinet wall and slide out of slotted cleat.

#### VII. TO REMOVE AUDIO BOARD

- A. Disconnect power cord from AC outlet.
- B. Open and remove bottom back door.
- C. Disconnect edge connector from audio board.
- D. Remove screw holding audio PCB securely to inside cabinet wall and slide out of slotted cleat.

#### VIII. JOYSTICK CONTROL PANEL

##### A. TO OPEN PANEL

- 1) Open front double coin door.
- 2) Reaching up through coin door, remove right and left Hex bolts from underside of control panel.

##### B. TO REMOVE COMPLETE PANEL

- 1) Firmly grasp both joysticks from the top of the control panel and carefully remove from main cabinet.
- 2) Carefully turn entire panel upside down and lay flat on cabinet projecting joysticks from the top of panel down into the panel opening. The joystick handles will hold the inverted panel stationary.

##### C. TO SERVICE SWITCHES

- 1) Check to make sure connectors are securely fastened to terminals.
- 2) Check crimps on connectors.
- 3) Lastly, refer to harness diagram (Page 9) making sure correct color wire is affixed to right connections.

IX. REMOVAL AND SERVICING - ALL OTHERS

- A. JOYSTICK, REMOVAL (Page 7)
- B. FIRE BUTTON (Page 7)
- C. START GAME BUTTON (Page 7)

X. ADJUSTMENTS

A. POWER SUPPLY ADJUSTMENT (See Motorola Service Manual)

B. AUDIO ADJUSTMENTS

- 1) SIREN (Page 8)
- 2) LADDERS (Page 8)
- 3) WATER SQUIRT (Page 8)
- 4) POWER SUPPLY (Page 8)

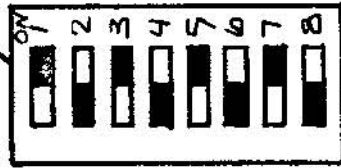
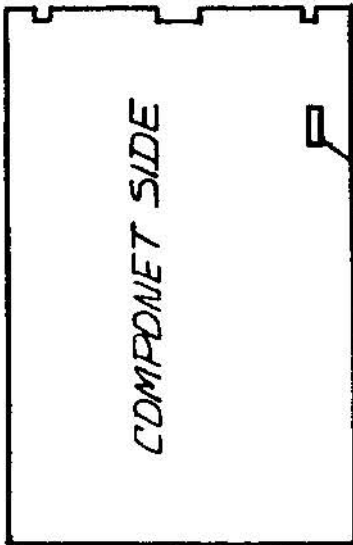
XI. OVERSEAS OPERATION - VOLTAGE REQUIREMENTS

- 1) T.V. monitor - slide switch located on bottom left side. Slide switch indicates voltage. (Section XIII)
- 2) Audio PCB - slide switch to adjust voltage requirements (Page 8),

XII. WARRANTY

Contact the distributor from whom your game was purchased for warranty and/or repair information.

NOTE: ALL EQUIPMENT RETURNED TO THE FACTORY MUST HAVE A RETURN AUTHORIZATION NUMBER, OBTAINED FROM MEADOWS, AND TRAVEL FREIGHT PRE-PAID. TO ASSIST YOURSELF IN EXPEDITING THE RETURN OF ANY ITEM TO BE REPAIRED, PLEASE BRIEFLY LIST SYMPTOMS OR PROBLEMS. YOUR COOPERATION IS GREATLY APPRECIATED. GOOD LUCK, AND ENJOY THE MANY PROFITS OF OWNING AND OPERATING MEADOWS GAMES.



60 SEC. 90 SEC. 120 SEC. 180 SEC.

SWITCH 1	OFF	ON	OFF	ON	GAME TIME
SWITCH 2	OFF	OFF	ON	ON	GAME TIME

SWITCH 3	OFF	ON	OFF	ON	ATTRACT MODE SIREN
----------	-----	----	-----	----	--------------------

1 PLAYER 1 GAME PER COIN PER COIN

SWITCH 4	OFF	ON	COIN OPTION
----------	-----	----	-------------

TIME 60-90 SEC 3000 4000  
 TIME 120-180 SEC 6000 7000 8000 9000

SWITCH 5	OFF	ON	OFF	ON	EXTENDED PLAY SCORE
SWITCH 6	OFF	OFF	ON	ON	EXTENDED PLAY SCORE

OFF 20 SEC. 40 SEC. 60 SEC.

SWITCH 7	OFF	ON	OFF	ON	EXTENDED PLAY TIME
SWITCH 8	OFF	OFF	ON	ON	EXTENDED PLAY TIME

Shade K. Dwyer 1-27-78

A.K.B. 1-30-78

INFERNO  
 OPERATOR SELECTION SWITCH  
 OPTIONS

016-0129  
 NONE



REVISIONS		DATE	APPROVED
LTR	DESCRIPTION		

- 1 KICKER SCREW
- 2 KICKER
- 3 SEPARATOR SCREW
- 4 SEPARATOR
- 5 MAINPLATE ASSEMBLY
- 6 GATE ASSEMBLY
- 7 COVERPLATE ASSEMBLY
- 8 RAIL
- 9 CRADLE ASSEMBLY
- 10 UNDERSIZE LEVER
- 11 MAGNET GATE ASSEMBLY
- 12 MAGNET GATE ADJUSTER SCREW
- 13 LOWER GATE PIVOT SPRING
- 14 UPPER GATE PIVOT SPRING
- 15 GATE PIVOT PIN
- 16 WIPER LEVER SPRING
- 17 WIPER LEVER
- 18 WIPER

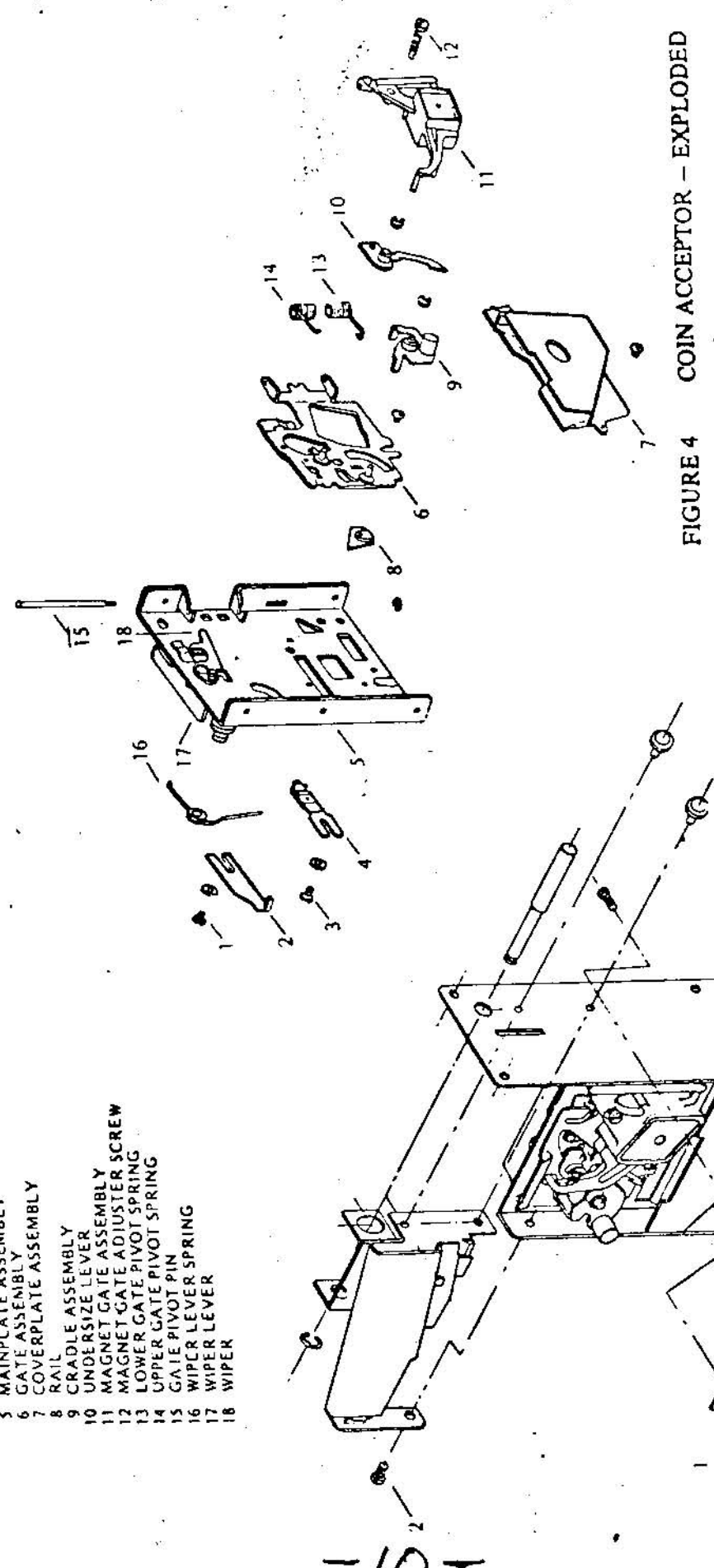


FIGURE 4 COIN ACCEPTOR - EXPLODED

TOLERANCES UNLESS OTHERWISE SPECIFIED	±	±	±
FRACTIONS DEC ANGLES			
APPROVALS	DATE	SCALE	DRAWING NO.
DRAWN B.F.	1/21/76	A	16-0009
CHECKED			

Meadows Games, Inc.  
 Coin Acceptor  
 Exploded View

DO NOT SCALE DRAWING SHEET 1 OF 1

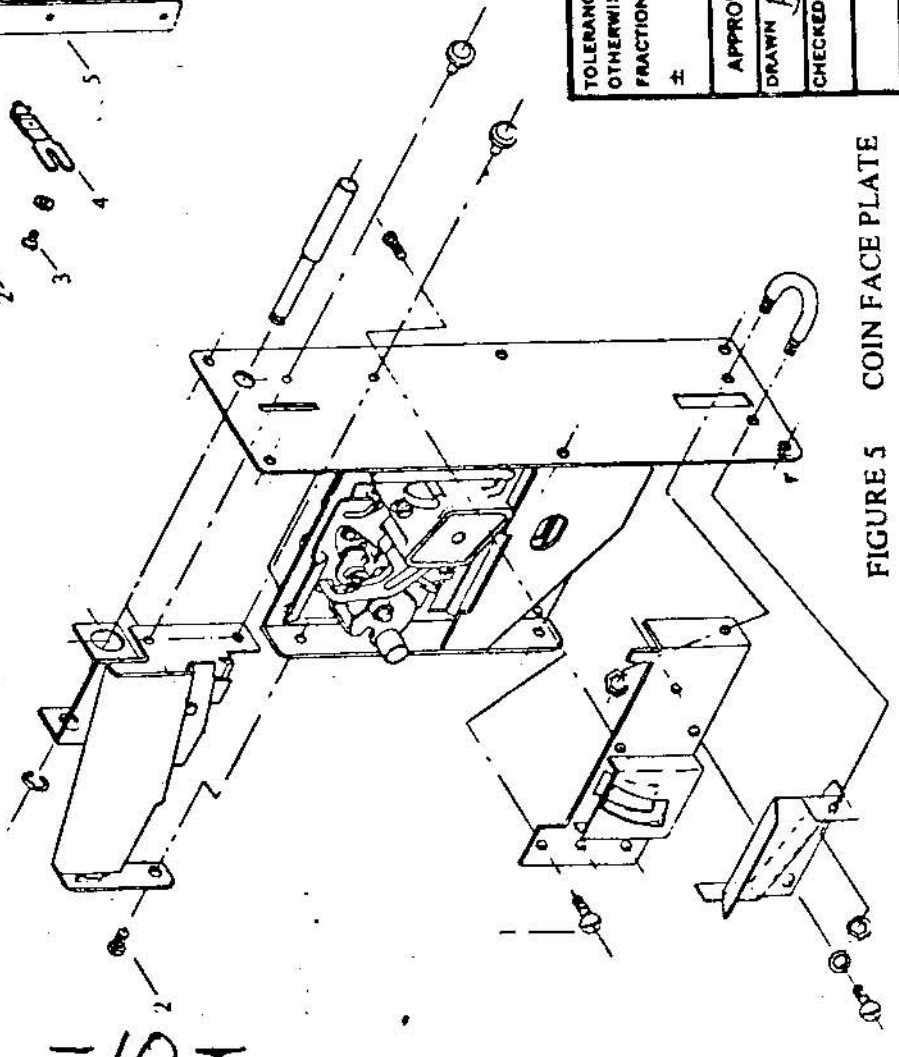
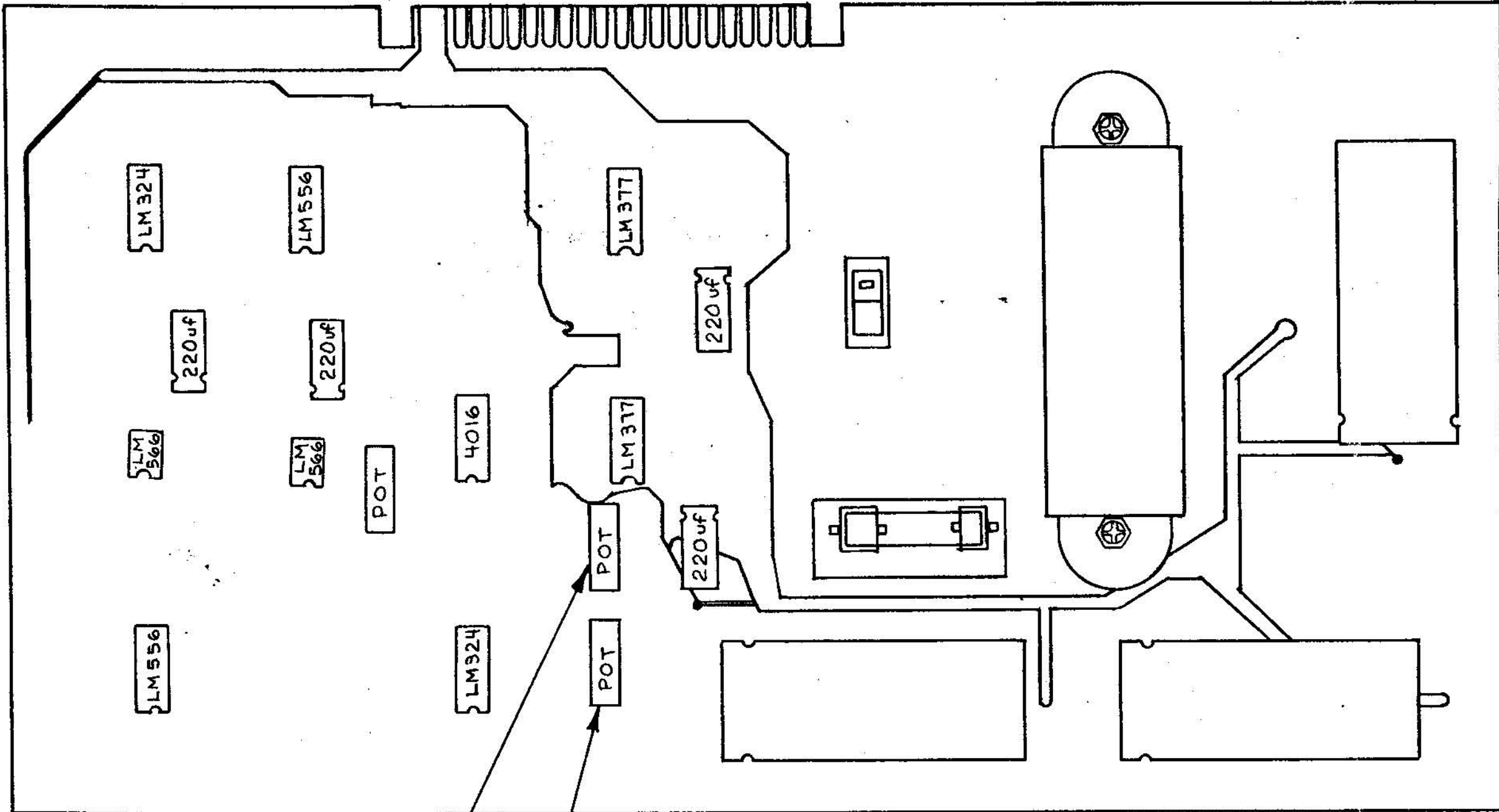


FIGURE 5 COIN FACE PLATE

LTR		ZONE		DESCRIPTION	BY/DATE	APP. DATE

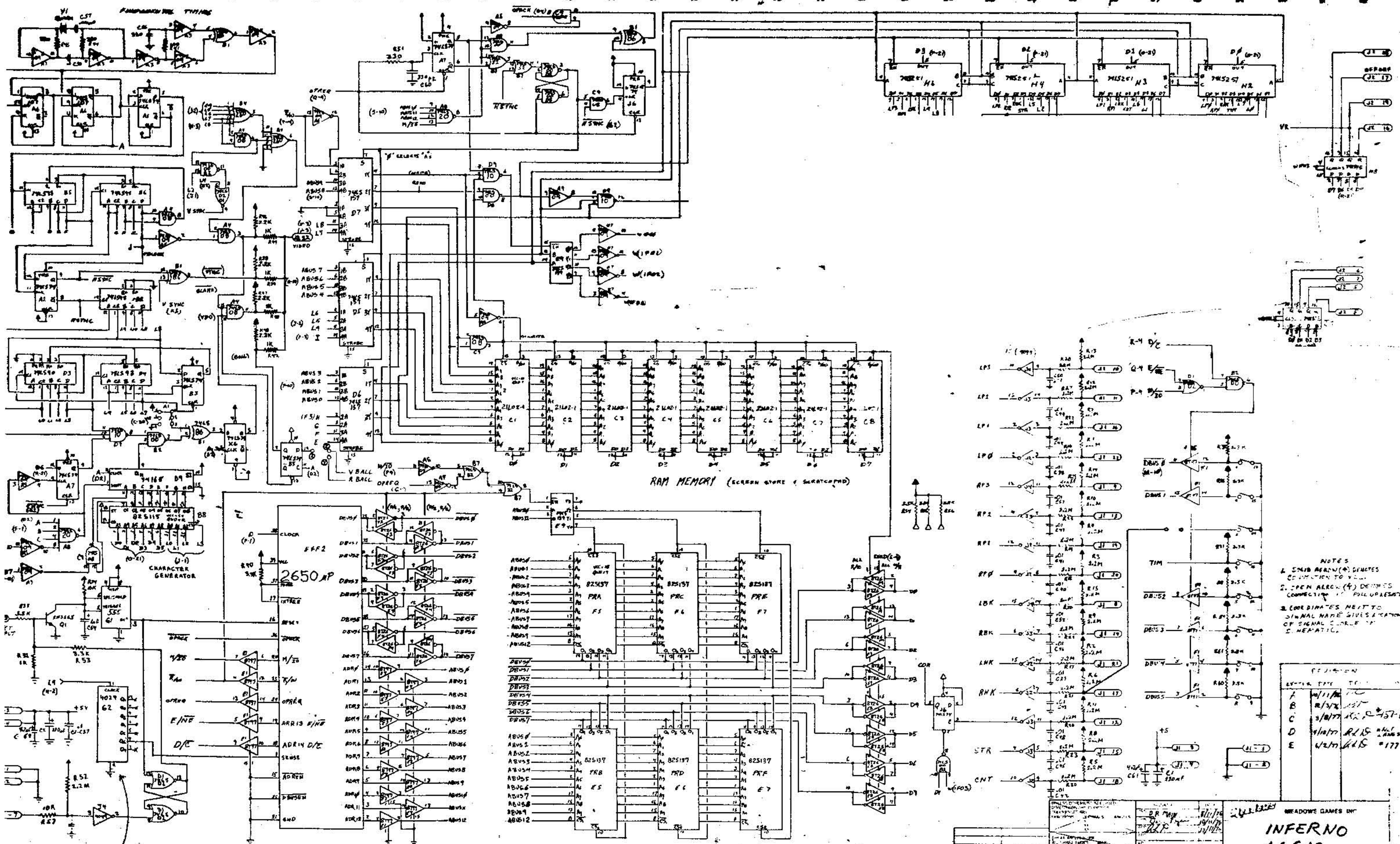


VOLUME CONTROL RIGHT SIDE

VOLUME CONTROL LEFT SIDE

MATERIAL		QUANTITY		DATE	

*[Signature]*  
 MEADOWS GAMES, INC.  
 VOLUME CONTROL FOR  
 INFERNO SOUND PCB

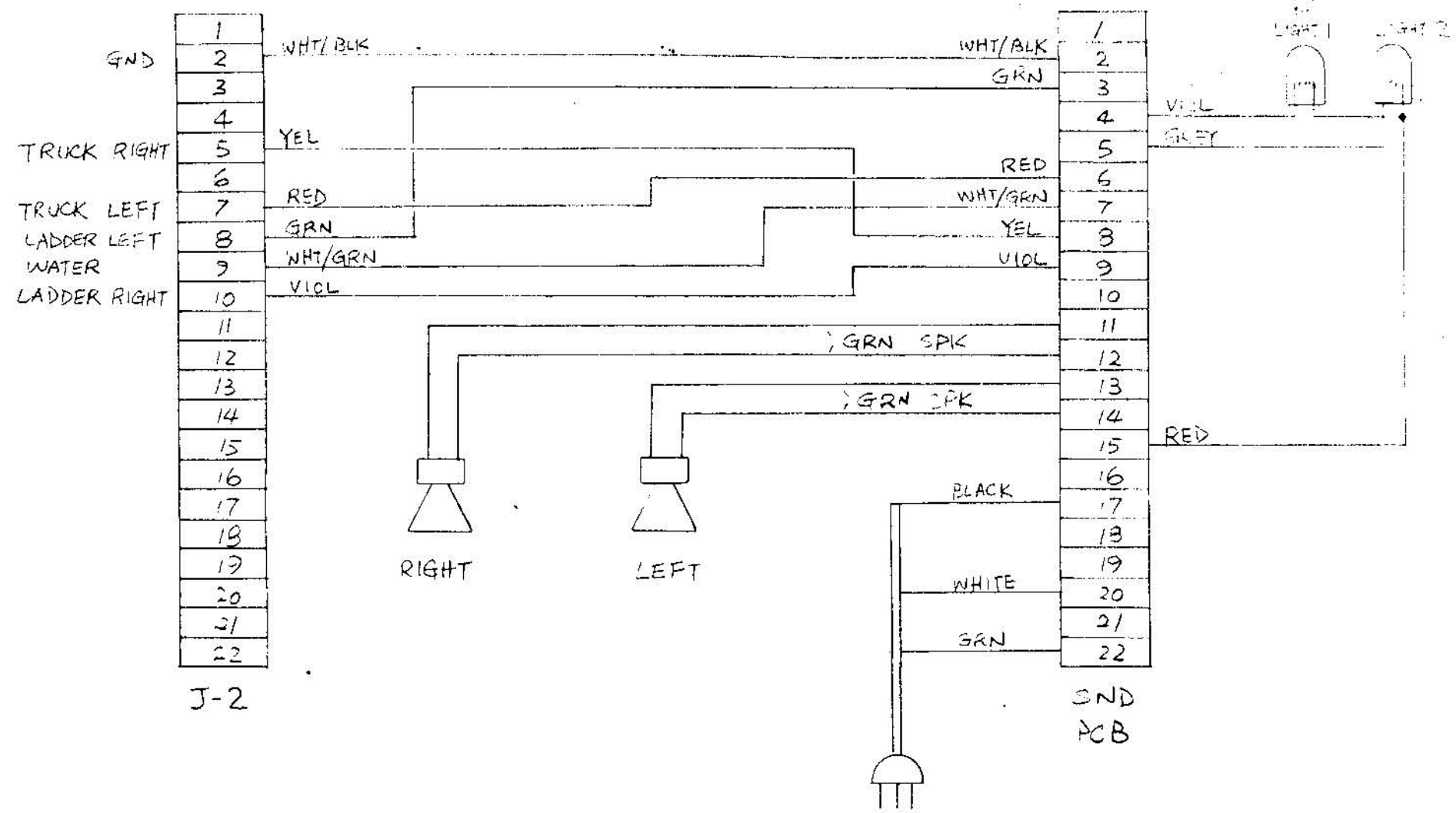


- NOTES
1. SMALL ARROW (A) DENOTES CONNECTION TO VCC.
  2. OPEN ARROW (B) DENOTES CONNECTION TO PULLUP RESISTOR.
  3. COORDINATES HEAT TO SIGNAL NAME GIVES LOCATION OF SIGNAL CORRELATE TO SCHEMATIC.

REVISION

REVISION	DATE	BY	DESCRIPTION
A	11/11/77	TC	
B	11/15/77	TC	
C	11/17/77	TC	R45 R46
D	11/17/77	TC	R45 R46
E	11/17/77	TC	R45 R46

MEADOWS GAMES INC  
**INFERNO LOGIC**



to 11/29/77

ALLIANCE CLASS INC

# INFERNO

LOGIC-SOUND HARNESS