Important Note to Operators

If the operators manual was not included in this game when you unpacked it, contact your distributor to get a free copy. (All Atari manuals for coin-operated games also include complete illustrated parts lists).

Self-Test Displays

Turn on the self-test switch on the utility panel inside the coin door to obtain Screen 1 (Operator Information Display). Screen 1 shows the condition of the gamma microprocessor RAM and ROM and its location. Press the auxiliary coin switch to end each display and obtain the next display.

NOTE

If a locked condition (blank screen) occurs, turn the self-test switch off and on again. If the game does not restart, troubleshoot the game reset circuitry.

Gamma Processor Faulty Component Locations (see Screen 1: Operator Information Display).

Identifier	Meaning	Location			
R	Gamma RAM Error	9P/Q			
O	Gamma ROM Error	98			
P	Custom IC Error	13Q			
E	EEROM Error	9Q/R			

Alpha Processor Faulty Component Locations (see Screen 2: Alpha Processor Display)

Iden- tifier	Hex Location	Definition	PCB Location
A	0000-07FF	RAM Error	1J/K
В	0800–08FF & Swap 0200–0700	RAM	1H/J
C	Vector Gen.—Low	RAM Error	6M/N
D	Vector Gen.—High	RAM Error	6L/M
E	Commun. RAM	Error	1F

Checksum Error

ROM Locations

3 5

2-Coin-Minimum Option

Not Used

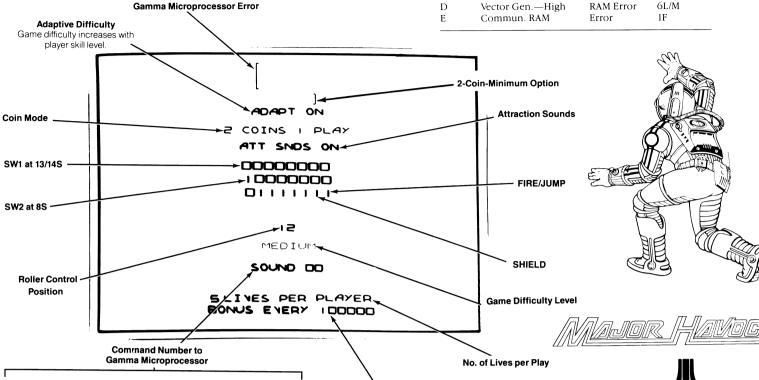
Auxiliary Coin Counter

Left Coin Mechanism

Right Coin

Mechanism

Not Used



Bonus Life Earned

Every xx Points

RAM Locations

E Always Appears; Ignore E.

Not Used

Press SHIELD button to advance through sounds or functions.

Press FIRE/JUMP button to

activate the sound or function. **Reset High Scores**

Activating this function replaces the game High-Score Table with the default set of high scores. To see the High-Score Table, enter the Attract Mode and spin the Roller Control to the left. Spin the Roller Control to the right to re-enter the Attract Mode.

To reset high scores to default settings, hold down the right coin switch. Then, depress and release FIRE/JUMP button. You will hear a loud hissing sound. Wait for this sound to finish before exiting self test. Wait 10 seconds before turning the game off or leaving the Self-Test Mode.

> **Left Coin Counter Right Coin Counter** Sounds Off **Sound Values**

- NOTE -

If the ROM checksum is correct, neither the self-test ROM identifier (a single character) nor the checksum (a double character) appears on the screen.

ROM Locations of Checksum Errors (see Screen 2: Alpha Processor Display)

Identifier	PCB Location	
A	IN P	
9	1N/P	
8	1Q	
7	1Q	
6	1L*	
5	1M/N*	
4	6J/K	
3	6J/K	
2	6Н	
1	6Н	
0	6K/L*	

*This ROM must be good for self test to function.

Switch Settings for Play Options

ettings	of 8-Tog	gle Swit	ch on Ga	ıme PCB	(SW1 at	location	13/145)			
1	2	3	4	5	6	7	8	Option		
									Starting Lives	s
								Free Play	1 Coin Setting	2 Coin Setting
Off	Off							2	3	5◀
On	On							3	4	4
On	Off							4	5	6
Off	On							5	6	7
								Game Diff	iculty	
		On	On					Hard	•	
		Off	Off					Medium◀		
		Off	On					Easy		
		On	Off					Demo		
								Bonus Life	<u>:</u>	
				On	On			Bonus Life a	t 50,000 points	
				Off	Off				t 100,000 points◀	
				Off	On				t 200,000 points	
				On	Off			No Bonus L		
								Attract Mo	de Sound	
						On		Silence		
						Off		Sound◀		
$\blacktriangleleft \Lambda$	Manufact	urer's rec	ommend	ed setting	gs.			Adaptive D	oifficulty*	
	-			h player s	-		On	No	,	
Ü		,					Off	Yes◀		

etting	gs of 8-To	oggle Sw	itch on (
1	2	3	4	5	6	7	8	Option
						On	Off	Free Play
						Off	Off	1 coin for 1 game (or 1 player)
						On	On	1 coin for 2 games (or 2 player)
⋖ Man	ufacture	r's recom	mended .	settings		Off	On	2 coins for 1 game (or 1 player◀
								Right Coin Mechanism
				Off	Off			Right coin mech × 1◀
				Off	On			Right coin mech \times 4
				On	Off			Right coin mech \times 5
				On	On			Right coin mech \times 6
								Left Coin Mechanism
			Off					Left coin mech \times 1 \triangleleft
			On					Left coin mech \times 2
								Bonus Coin Adder
Off	Off	Off						No Bonus coins◀
Off	On	Off						For every 4 coins, game logic adds 1 coin
Off	On	On						For every 4 coins, game logic adds 2 coin
On	Off	Off						For every 5 coins, game logic adds 1 coin
On	Off	On						For every 3 coins, game logic adds 1 coin

^{*} This game has the ability to select the 2-coin-minimum capability, which requires the player to pay for two games in advance.

soldering a short piece of wire from ground to this point.