



## CONVERSION KIT

## INSTRUCTIONS

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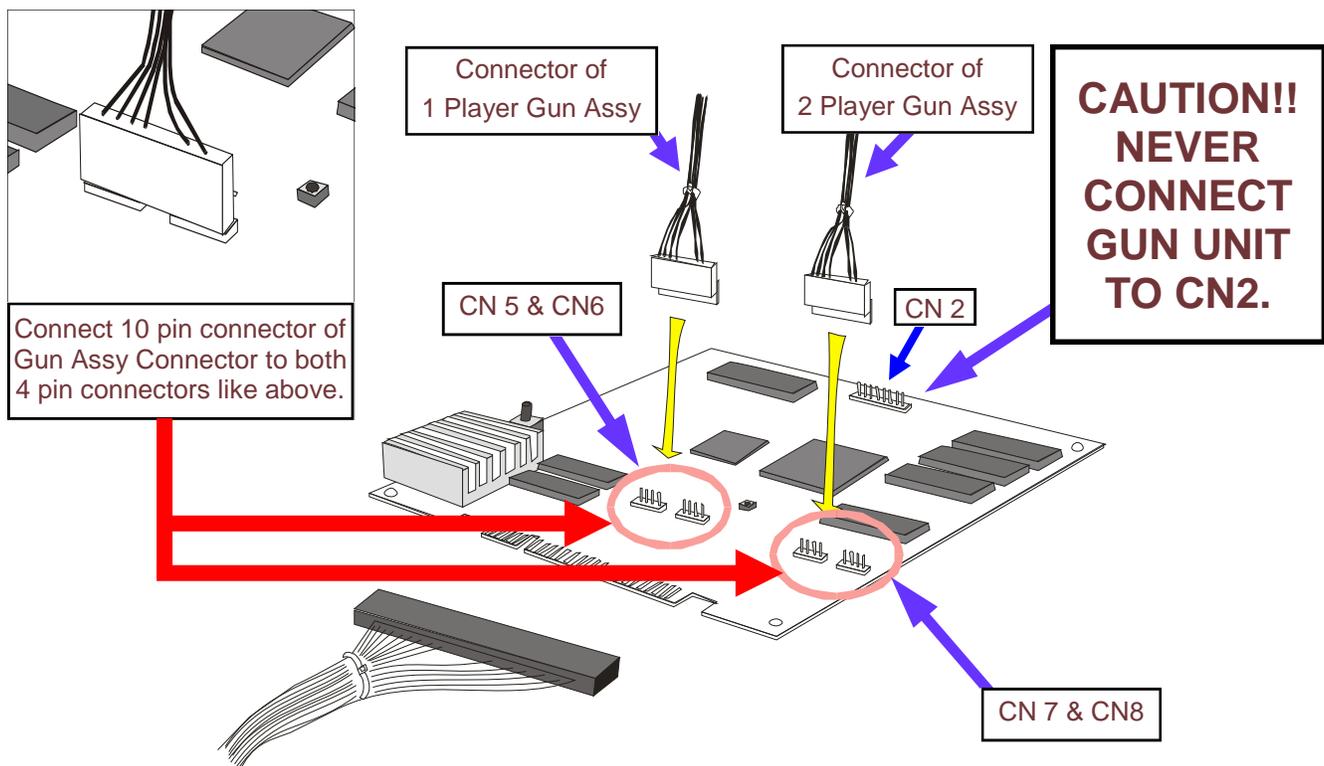
# PLEASE READ BEFORE INSTALLING THE WING SHOOTING CHAMPIONSHIP KIT

*The WING SHOOTING CHAMPIONSHIP KIT is designed only for a Normal resolution monitor. The High or Medium resolution monitor will not work for WING SHOOTING CHAMPIONSHIP KIT .*

## MIS-CONNECTING THE GUN CONNECTOR

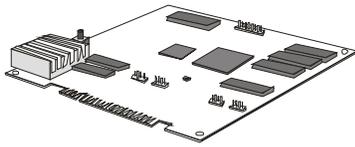
*When you connect the Gun unit to Main PCB, you must always make sure to connect to the correct connectors which are CN 5 & CN 6 and CN 7 & CN8 connectors.*

*If you connect Gun unit to CN 2, 8 pin connector, your PCB will sustain serious damage.*



# 1. KIT PACKAGE CONTENTS

**A** Main P.C.Board  
47-10-001



**B** START button  
Assy, Hunter 1  
47-50-013



**C** START button  
Assy, Hunter 2  
47-50-015



**D** Instruction Decal Sheet  
47-30-210



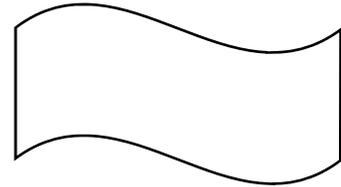
**E** "PUMP BEFORE SHOOTING"  
Decal  
47-30-224



**F** Marquee Styrene  
47-30-100



**G** Control Overlay  
99-30-150



**H** Side Decal (2 sheets)  
47-30-200



**I** Gun Holster (2 sets)  
99-50-303



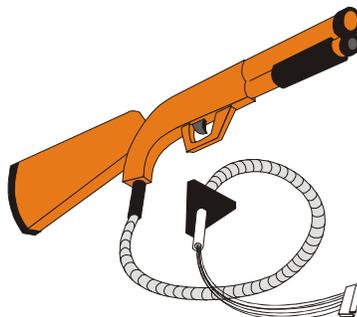
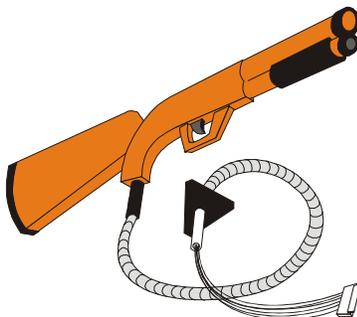
**J** Conversion Kit  
Instructions  
47-30-300



**K** AAMA Sticker  
99-30-750



**L** Gun Assy (2 guns)  
99-50-310



## 2. GAME PLAY

**Wing Shooting Championship** is a sports hunting game that has an exciting **COMPETITION MODE**. Two players can play at the same time in competition mode which is a first time for the market!

### HOW TO PLAY

- Insert coin(s)
- Press Hunter 1 or Hunter 2 button to start game.
- Use Sammy 27" Shotgun to select stage and weapon. (Pump the Shotgun before you shoot the screen each time.) There are 5 kinds of weapons.

**PUMP ACTION (5 bullets), SEMI-AUTO (3 bullets)**

**OVER&UNDER (2 bullets), SIDE BY SIDE (2 bullets)**

**SINGLE SHOT (1 bullet)**

- 6 different bird stages. (GREAT PLAINS QUAIL, RING-NECKED PHEASANT, CANADA GOOSE, AMERICAN BLACK DUCK, MALLARD DUCK and EASTERN BOB WHITE QUAIL)
- 12 areas with one bonus stage for each bird. The Bonus stage is CLAY SHOOTING.

**Perfect round in bonus stage advances to a SPECIAL STAGE!**

## How To Hunt

Shoot only birds in flight

Don't shoot any grounded birds ----- Lose one chance

When hunter misses all birds ----- Lose one chance

Don't shoot any female pheasants ----- Lose one chance



GREAT PLAINS QUAIL



MALLARD DUCK



CANADA GOOSE



RING NECKED PHEASANT



EASTERN BOB WHITE QUAIL



AMERICAN BLACK DUCK

## HEAD TO HEAD COMPETITION

Two players can play at the same time in competition mode.  
Perfect round in bonus stage advances to SPECIAL STAGE

### 3. CONNECTOR TABLES

<b>JAMMA CONNECTOR</b>					
<b>MAIN P.C.BOARD</b>					
<b>SOLDER SIDE</b>			<b>COMPONENT SIDE</b>		
<b>FUNCTION</b>	<b>COLOR</b>	<b>PIN #</b>	<b>PIN #</b>	<b>COLOR</b>	<b>FUNCTION</b>
GROUND	BLK	<b>A</b>	<b>1</b>	BLK	GROUND
GROUND	BLK	<b>B</b>	<b>2</b>	BLK	GROUND
+5VDC	RED	<b>C</b>	<b>3</b>	RED	+5VDC
+5VDC	RED	<b>D</b>	<b>4</b>	RED	+5VDC
		<b>E</b>	<b>5</b>		
+12VDC	BLU	<b>F</b>	<b>6</b>	BLU	+12VDC
KEY		<b>H</b>	<b>7</b>		KEY
COIN METER B		<b>J</b>	<b>8</b>		COIN METER A
COIN LOCKOUT B		<b>K</b>	<b>9</b>		COIN LOCKOUT A
SPEAKER(-)	BLK	<b>L</b>	<b>10</b>	WHT/BLK	SPEAKER(+)
		<b>M</b>	<b>11</b>		
VIDEO GREEN	GRN	<b>N</b>	<b>12</b>	RED	VIDEO RED
VIDEO SYNC	WHT	<b>P</b>	<b>13</b>	BLU	VIDEO BLUE
SERVICE CREDIT SWITCH	BRN/WHT	<b>R</b>	<b>14</b>	BLK	VIDEO GROUND
		<b>S</b>	<b>15</b>	WHT/GRY	TEST SWITCH
COIN SWITCH B		<b>T</b>	<b>16</b>		COIN SWITCH A
2P START BUTTON		<b>U</b>	<b>17</b>		1P START BUTTON
		<b>V</b>	<b>18</b>		
		<b>W</b>	<b>19</b>		
		<b>X</b>	<b>20</b>		
		<b>Y</b>	<b>21</b>		
		<b>Z</b>	<b>22</b>		
		<b>a</b>	<b>23</b>		
		<b>b</b>	<b>24</b>		
		<b>c</b>	<b>25</b>		
		<b>d</b>	<b>26</b>		
GROUND	BLK	<b>e</b>	<b>27</b>	BLK	GROUND
GROUND	BLK	<b>f</b>	<b>28</b>	BLK	GROUND

<b>CN6 - 4 PIN SUB CONNECTOR</b>		
<b>MAIN P.C.BOARD (1P GUN)</b>		
<b>PIN #</b>	<b>COLOR</b>	<b>FUNCTION</b>
<b>1</b>		
<b>2</b>	GREEN	PUMP SWITCH
<b>3</b>	BLACK	PUMP SWITCH GND
<b>4</b>		

<b>CN8 - 4 PIN SUB CONNECTOR</b>		
<b>MAIN P.C.BOARD (2P GUN)</b>		
<b>PIN #</b>	<b>COLOR</b>	<b>FUNCTION</b>
<b>1</b>		
<b>2</b>	GREEN	PUMP SWITCH
<b>3</b>	BLACK	PUMP SWITCH GND
<b>4</b>		

<b>CN5 - 4 PIN SUB CONNECTOR</b>		
<b>MAIN P.C.BOARD (1P GUN)</b>		
<b>PIN #</b>	<b>COLOR</b>	<b>FUNCTION</b>
<b>7</b>	RED	+5VDC
<b>8</b>	WHITE	TRIGGER SWITCH
<b>9</b>	BROWN	GROUND
<b>10</b>	BLUE	OPTICAL

<b>CN7 - 4 PIN SUB CONNECTOR</b>		
<b>MAIN P.C.BOARD (2P GUN)</b>		
<b>PIN #</b>	<b>COLOR</b>	<b>FUNCTION</b>
<b>7</b>	RED	+5VDC
<b>8</b>	WHITE	TRIGGER SWITCH
<b>9</b>	BROWN	GROUND
<b>10</b>	BLUE	OPTICAL

## 4. DIP SWITCH TABLES

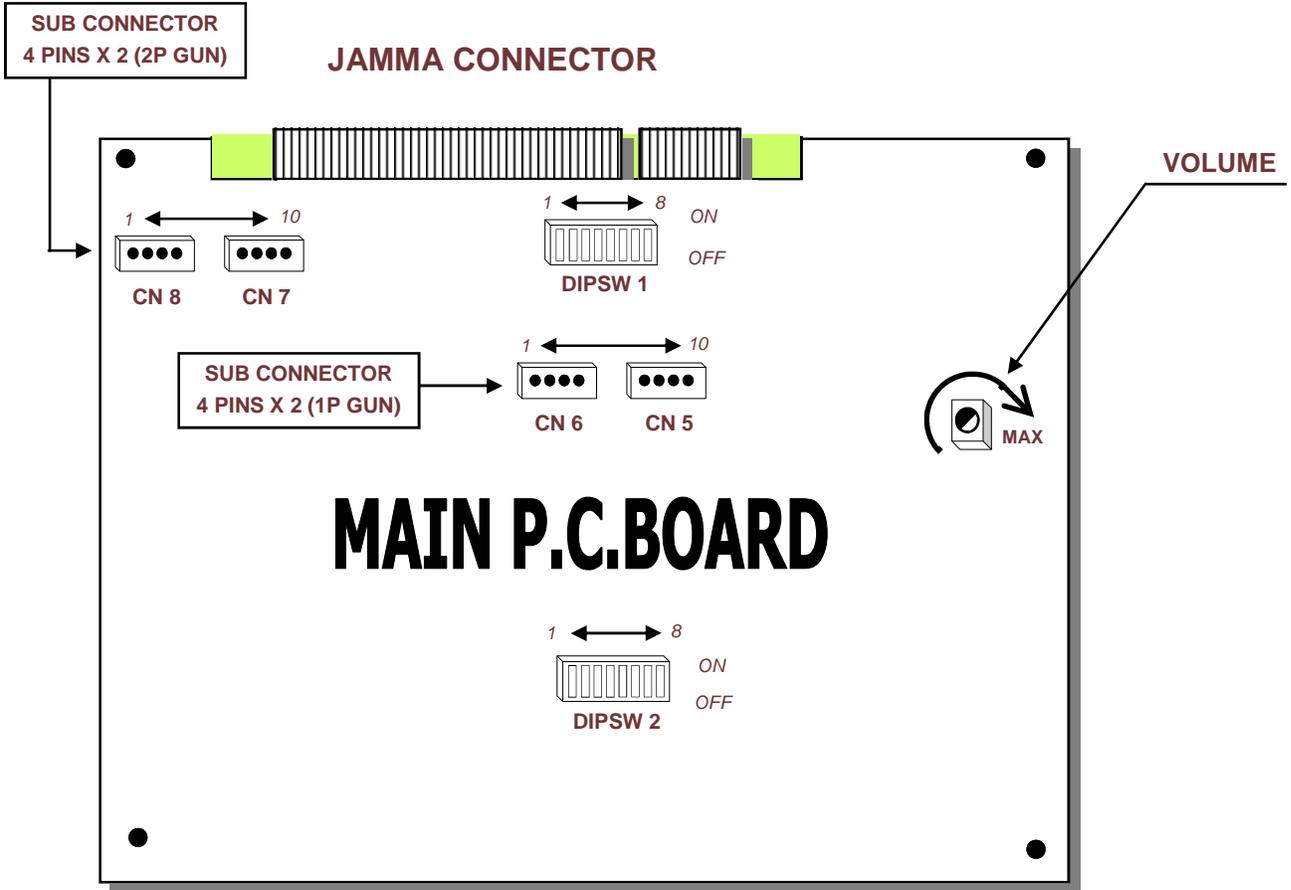
DIP SWITCH 1		SWITCH POSITIONS							
FUNCTIONS	SETTING	1	2	3	4	5	6	7	8
COIN CHUTE A, B	1 COIN START, 1 COIN CONTINUE	OFF	OFF	OFF	OFF				
	2 COINS START, 2 COINS CONTINUE	ON	OFF	OFF	OFF				
	2 COINS START, 1 COIN CONTINUE	OFF	ON	OFF	OFF				
	3 COINS START, 3 COIN CONTINUE	ON	ON	OFF	OFF				
	3 COINS START, 2 COINS CONTINUE	OFF	OFF	ON	OFF				
	3 COINS START, 1 COIN CONTINUE	ON	OFF	ON	OFF				
	4 COINS START, 4 COINS CONTINUE	OFF	ON	ON	OFF				
	4 COINS START, 3 COINS CONTINUE	ON	ON	ON	OFF				
	4 COINS START, 2 COINS CONTINUE	OFF	OFF	OFF	ON				
	4 COINS START, 1 COIN CONTINUE	ON	OFF	OFF	ON				
	1 COIN 2 CREDITS, 1 CREDIT START & CONTINUE	OFF	ON	OFF	ON				
	1 COIN 3 CREDITS, 1 CREDIT START & CONTINUE	ON	ON	OFF	ON				
	1 COIN 4 CREDITS, 1 CREDIT START & CONTINUE	OFF	OFF	ON	ON				
	1 COIN 5 CREDITS, 1 CREDIT START & CONTINUE	ON	OFF	ON	ON				
	1 COIN 6 CREDITS, 1 CREDIT START & CONTINUE	OFF	ON	ON	ON				
		FREE PLAY	ON	ON	ON	ON			
NOT USED						OFF	OFF	OFF	
TEST MODE	OFF								OFF
	ON								ON

DIP SWITCH 2		SWITCH POSITIONS							
FUNCTIONS	SETTING	1	2	3	4	5	6	7	8
MONITOR SETTING 1	NORMAL	OFF							
	REVERSE VERTICAL	ON							
MONITOR SETTING 2	NORMAL		OFF						
	REVERSE HORIZONTAL		ON						
ATTRACT SOUND	ON			OFF					
	OFF			ON					
DIFFICULTY LEVEL	NORMAL				OFF	OFF			
	EASY				ON	OFF			
	HARD				OFF	ON			
	HARDEST				ON	ON			
NOT USED							OFF		
							ON		
CHANCES	2							OFF	
	3							ON	
GUN TYPE	PUMP ACTION GUN UNIT								OFF
	HAND GUN UNIT								ON

**"FACTORY INSTALLED" SETTING**

# 5. LAYOUT OF P.C.BOARD

## MAIN P.C.BOARD



## 6. HOW TO ASSEMBLE THE KIT

### 1. Change the GAME CABINET

- **MARQUEE STYRENE**

Change the old marquee to the WING SHOOTING CHAMPIONSHIP Marquee Styrene.

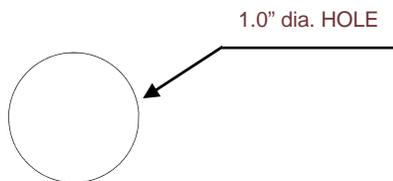
*NOTE: If the WING SHOOTING CHAMPIONSHIP Marquee Styrene does not fit your cabinet, you should cut the marquee to fit.*

- **CONTROL PANEL**

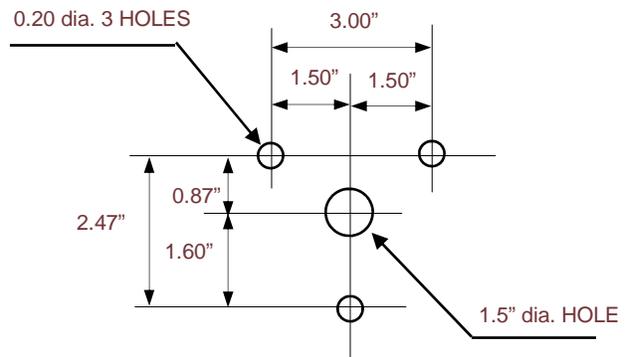
Change the parts on the control panel. Take off the old parts (Joystick or Gun unit assy) and the old push button assys from the control panel. Then put on the WING SHOOTING CHAMPIONSHIP Control Panel Overlay.

*NOTE: After you put on the WING SHOOTING CHAMPIONSHIP Control Panel Overlay, you must make the holes for the WING SHOOTING CHAMPIONSHIP Gun Assy, Gun Holster and Push Button Assy. See sample layout below. Or if you want, install Gun Assy or Gun Holster on the side of Cabinet.*

#### MOUNTING DIMENSIONS FOR PUSH BUTTON ASSY



#### MOUNTING DIMENSIONS FOR GUN ASSY



#### MOUNTING GUN HOLSTER

You can mount GUN HOLSTER to the top of the control panel or side of cabinet.

To mount it, use HOLSTER as a template for drilling holes. Use a hex wrench to tighten screws.

#### IF YOU WANT TO INSTALL A HAND GUN:

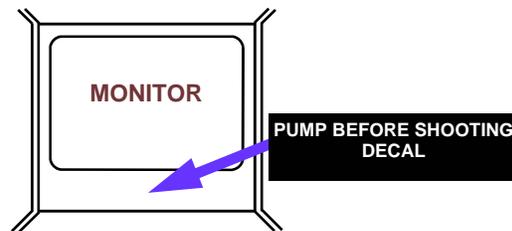
You can use a HAND GUN instead of the original pump action gun for this game.

**\*WARNING\***

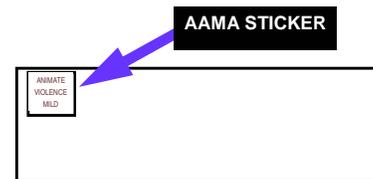
Be absolutely sure that the connector for the hand gun matches exactly the pin position for CN5 (1P Gun) and CN7 (2P Gun) as shown on page 4.

Connect 1P Gun connector to CN5, 2P Gun connector to CN7 and turn on Dip switch 2, #8. See page 5 for Dip switch table.

- **INSTRUCTION DECAL SHEET**  
Put "PUMP BEFORE SHOOTING" Decal Sheet on the front glass of the monitor.



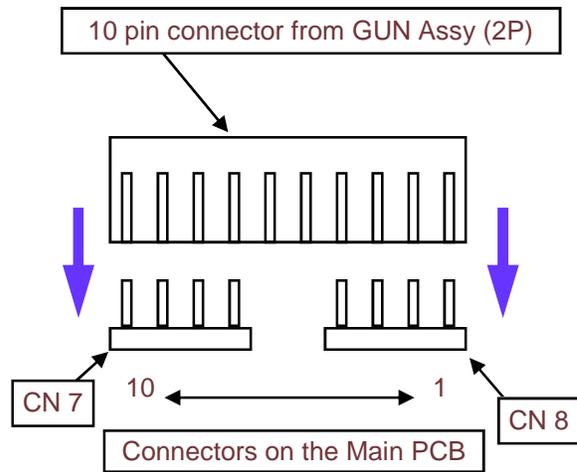
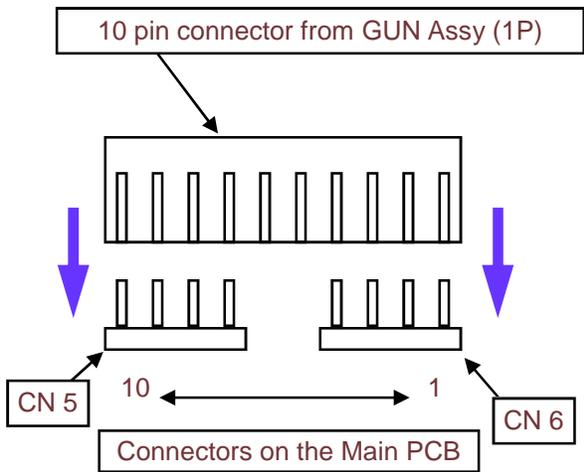
- **AAMA "ANIMATED VIOLENCE MILD" STICKER**  
Place AAMA sticker on the upper left hand side corner of the marquee.



**Remove old P. C .Boards and install new P. C. Board in its place.**

**2.Connect the HARNESSES**

- **JAMMA HARNESS**  
Connect the JAMMA Harness to the edge connector on the Wing Shooting Championship Main P.C.BOARD.
- **GUN HARNESS**  
Connect the Gun Harness to the Gun Connectors located on the Main P.C. Board components side, at CN5 & 6 and CN7 & 8 connectors on the P.C. BOARD. Connect Gun Connector to CN5 & 6 and CN7 & 8, correctly, as shown below.



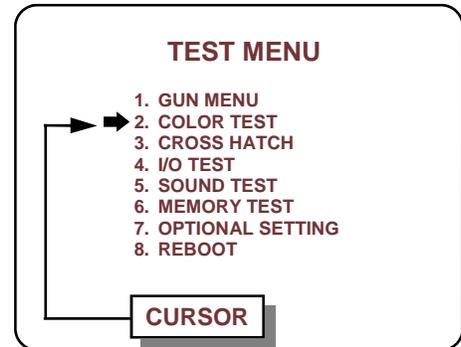
## 7. TEST MODE

### Entering the TEST MODE

If you need to check the condition of the game circuitry and controls, you can use the TEST MENU. Turn ON "DIP SWITCH 1, #8" and re-power on the game. The game will go into TEST MODE (diagnostics) and the screen appears as follows:

### Select TEST

Use this screen to choose which of the 7 screens you want to see. Move cursor using the START BUTTON. Then pull the TRIGGER to enter the function.



### 1. GUN MENU

You can adjust GUN unit in GUN ADJUST mode.

#### Gun Adjust

1. Enter TEST MENU and select GUN ADJUST.
2. Shoot center mark only with gun sight.
3. If you need more accuracy, try again.
4. Press START button to save Gun accuracy and enter GUN TEST mode, press START button again to go back to Main menu.



You can test accuracy in GUN TEST mode.

#### Gun Test

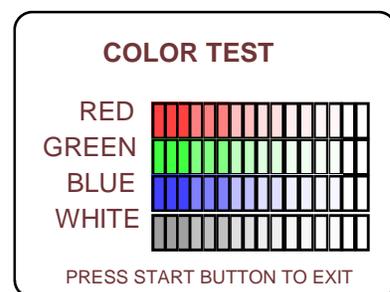
1. At Gun Adjust screen, press START button to go to test mode.
2. Shoot all around the screen to see Gun's accuracy.
3. Press START button to go back to Main menu.



### 2. COLOR TEST

Use this screen to check the color of monitor. The color blocks in the center should be four bands (Red, Green, Blue and White from top to bottom), each with a color scale from dark to bright, left to right. If the screen does not match this description, adjust the Monitor as described in the Monitor's manual.

\* Press the START button to exit and go back to the TEST MENU screen.



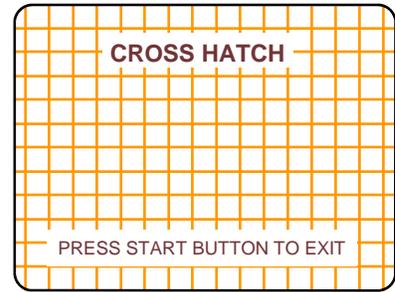
### 3. CROSS HATCH

Use this screen to check the size of picture. The CROSS HATCH test pattern has a White grid on a Black background. Check following:

- The grid line should be straight, and the lines should not have excessive pincushion or barrel distortion.
- "Out"line of grid line is the same size as "Out"line of game screen. So, "Out"line should be able to be seen with no overflow of grid lines on screen.

If these are not as above, adjust the Monitor as described in the Monitor's manual.

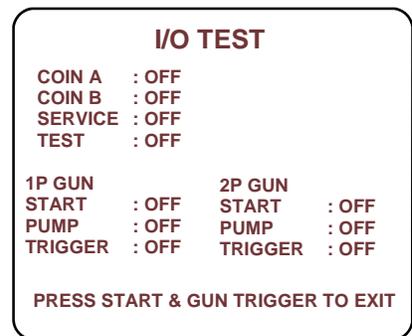
- \* You can exit and go back to the TEST MENU screen by press START button.



### 4. I/O TEST

Use this screen to check the switches in this game. To check the functioning of each switch, activate it and watch the corresponding OFF letters change to ON. If the ON and OFF letters do not appear correctly, check the Harness connections and Switches.

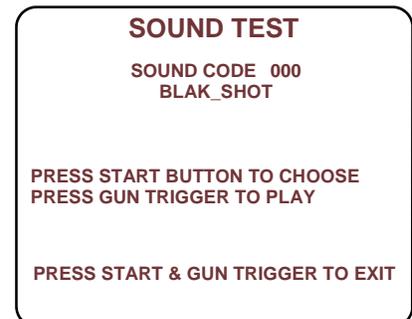
- \* Press START button and Gun trigger simultaneously to exit.



### 5. SOUND TEST

Use this screen to check all game sounds. Choose a sound with the START buttons. (Hunter 1 = forward, Hunter 2 = Back) Then pull the TRIGGER. You can check each sound in this game.

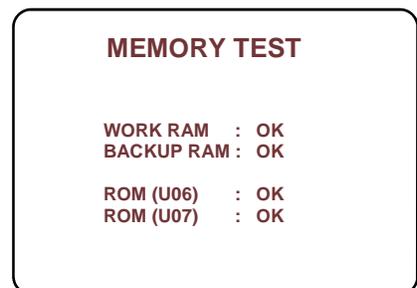
- \* Press START button and Gun trigger simultaneously to exit.



### 6. MEMORY TEST

Use this screen to check RAM and ROM on the Main P.C.B. The Main P.C.B. will automatically check them when you enter this screen. If there are no problems, the word **OK** will appear on screen. If you get the word **ERROR**, check the mounting of RAMs or ROMs on the Main P.C.B. and if **ERROR** reappears, it needs to be replaced.

- \* This mode will automatically exit after testing is finished.



## 7. OPTIONAL SETTING

### HIGH SCORE CLEAR

If you desire to clear HIGH SCORE data, do the following.

#### HOW TO SET UP

1. Enter TEST MENU and select OPTIONAL SETTING.
2. Press START BUTTON to choose HIGH SCORE CLEAR.
3. Select YES by pressing START BUTTON and pressing GUN TRIGGER to clear HIGH SCORE data.
4. The screen will return to previous screen automatically after clearing HIGH SCORE data.

#### OPTIONAL SETTING

1. HIGH SCORE CLEAR
  2. GUN ADJUST DEFAULT
  3. RETURN TO TEST MENU
- PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

#### HIGH SCORE CLEAR

ARE YOU SURE YOU WANT TO CLEAR HIGH SCORE?

YES  
NO



PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

**NOTE: Do not proceed if Gun test is accurate.**

### GUN DATA DEFAULT

If you have problem with Gun sighting, you may have to clear the Gun data.

After clearing Gun data, the game will be reset to **factory default setting**.

See the following for how to clear saved data.

1. Enter TEST MENU and select OPTIONAL SETTING.
2. Press START BUTTON to choose GUN ADJUST DEFAULT.
3. Select YES by pressing START BUTTON and pressing GUN TRIGGER to clear Gun data.
4. The screen will return to previous screen automatically after clearing Gun data.

#### GUN ADJUST DEFAULT

ARE YOU SURE YOU WANT TO SET GUN ADJUST DEFAULT?

YES  
NO



PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

## 8. REBOOT

Use this screen to go back to normal game mode. After selecting this function, the game will automatically take you to the normal game screen.

Make sure to turn OFF "DIP SWITCH 1, #8" or you will return to test mode upon powering on.

## Returning to GAME MODE

You can return to normal game mode by doing one or the other of the following:

Turn OFF "DIP SWITCH 1, #8" and re-power on the game.

Select REBOOT at TEST MENU. (But you will have to make sure to turn OFF "DIP SWITCH 1, #8".)



## 8. TROUBLE WITH GUN SHOOTING

If you have trouble because you can't shoot to the corner of the screen, you may have to adjust the monitor brightness. Turn up the monitor brightness until you can shoot the corner of screen.

Plus, monitors tend to develop a magnetic field from continuous use, which would cause the gun unit not to function properly. Therefore, it is recommended that the monitor is demagnetized [degaussed] every so often in order to keep the gun unit functioning properly.

In addition, the following conditions of the monitor may result in Gun shooting problems:

- Picture burned on monitor screen
- Over gauzed monitor
- Non adjustable brightness feature

Also, the following conditions of the cabinet may result in Gun shooting problems.

- Combination of low performing adjustable brightness monitor and low reflection mirror
- Dirty monitor screen or monitor grass

## GUNSHOT ACCURACY IMPROVEMENT

If you have trouble because you can't calibrate the gun unit properly. For example you can't shoot corner of screen or you can shoot only in the center of the screen, do the following:

1) CHECK THE +5V LINE **ON THE PCB**. YOU CAN CHECK VOLTAGE AT THE JAMMA EDGE CONNECTOR BETWEEN PIN #2 AND #3.

2) ADJUST +5V LINE TO +5.25V BY TURNING UP POTENTIOMETER ON THE POWER SUPPLY.

**WARNING: DO NOT TURN UP VOLTAGE MORE THAN +5.25V OTHERWISE YOUR PCB WILL SUSTAIN SERIOUS DAMAGE.**

3) ENTER BACK UP CLEAR IN TEST MODE, THEN SELECT YES TO CLEAR BACK UP DATA.

**NOTE: YOU DON'T HAVE TO DO "GUN ADJUST" IN TEST MODE.**

4) ENTER GUN TEST IN TEST MODE TO CHECK GUNSHOT. IF THE GUNSHOT IS NOT CORRECTED REPEAT STEP #3.



## 9. WARRANTY

### Limited warranty, Repair and Return Policy

Sammy USA Corporation warrants all products to be free from defective materials and workmanship for a period of thirty (30) days from the Sammy USA Corporation invoice date unless otherwise specified in writing by Sammy USA Corporation. The extent of this warranty applies to all electronic assemblies only, and does not include lamps and fuses.

This limited warranty is invalid for any product that upon examination, is deemed to have been subject to misuse, improper repair or installation, neglect or violation of specification or other instructions published by Sammy USA Corporation.

There are no additional warranties which extend beyond those limited warranties described above. The limited warranties described above shall be in lieu of any other warranty, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

### Return Merchandise Authorization

1. Contact your authorized Sammy USA distributor to receive a Return Merchandise Authorization for return.
2. You must obtain RMA numbers from Sammy USA Corporation through an authorized Sammy USA distributor. Please have your serial number available when calling for an RMA number.
3. All items must have an RMA number marked clearly on the outside of the package.
4. Products must be shipped prepaid. Products returned without an RMA number will not be accepted.
5. Credits to accounts are subject to inspection of products for damage and suitability for resale.