

BIG BUCK HUNTER *Pro* OPEN SEASON™



Play Mechanix™



27" DEDICATED GAME

Operation and Service manual

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Big Buck Hunter[®] Pro Open Season™ 27" Dedicated Game

Safety

OPERATION

Before operating game, read this manual. Failure to properly install and operate this game could result in malfunction or accident. Operate the game in accordance with the manual.

TRANSPORTING

The cabinet is very heavy. Because the monitor is high, the cabinet is also very top-heavy. Use appropriate care when moving or transporting cabinet. It contains fragile glass and electronic components. Avoid rough handling.

HANDLING COMPONENTS

Many components are extremely sensitive to handling, environmental and Electrostatic Discharge (ESD) events—especially the computer. Do not handle it roughly. Before servicing, call your distributor and inquire about the PC warranty. Use proper ESD procedures when servicing. Protect components from harmful environmental conditions, such as extreme temperatures, excessive moisture or other damaging effects.

DISCONNECT POWER

Always turn the power off and unplug the unit before servicing or making adjustments unless otherwise instructed. Installing or repairing components while power is on can damage the components and void the warranty.

GROUNDING

Avoid electrical shock. Do not plug in AC power until you have inspected and properly grounded the unit. Only plug into a grounded, three-wire outlet. Do not use a “cheater” plug or cut off the ground pin on the line cord.

ELECTRICAL SHOCKS

There is no isolation transformer in the cabinet. Disconnect AC power before servicing. However, be aware that lethal voltages can remain in the electronic components even when AC power is disconnected. Use extreme caution when servicing. Verify that there is a working ground connection. If the unit sustains water damage, cease using it immediately and unplug AC power.

MONITOR

Extremely high voltages exist in the video monitor at all times. These high voltages exist even when the monitor is off and the AC line cord is disconnected. These voltages are extremely lethal and will cause death. The monitor contains no user serviceable parts. Do not attempt to service the monitor.

POWER SELECTOR

Before installing game, ensure the voltage on the PC is set properly. There is a 115/230 VAC selector switch that must be set for the correct voltage for your site. Verify the fluorescent lamp rating. The rating must match the line voltage at the installation site.

CONNECTORS

Ensure all connectors mate properly. If connectors do not slip in easily, do not force them. Connectors are often keyed and only connect one way. Check for correct orientation.

COMPUTER

The computer contains sensitive components, including a hard drive. Do not handle it roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do not turn the PC power switch on or off. It should remain permanently in the ON position.

Cycle AC power on or off with the cabinet power switch.

A dongle has been inserted into one of the USB ports. This is required for game play.

Do not remove the dongle except for troubleshooting purposes.

FLUORESCENT TUBES

A dropped fluorescent tube may break and implode. Shattered glass from the implosion can travel long distances and cause bodily injury. Use proper procedures when handling broken materials, as these items can contain hazardous material such as mercury or lead.

POWER CORD

If the power cord is damaged or lost, replace it with an identical cord as supplied by the manufacturer or an authorized service agent.

WATER JETS

Do not install or operate game within operating perimeter of a water jet. Do not clean equipment using water jet.

HAZARD TO EPILEPTICS

A small portion of the population has an epileptic condition that may cause seizures. Affected persons experience seizure while watching some television pictures or playing certain video games. People who have not had seizures may still have an undetected epileptic condition. If anyone in your family has experienced epilepsy symptoms (seizures or loss of awareness), consult your physical before using video games. While children play video games, a parent should observe. Be alert to the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation or convulsions. If you or your child experiences these symptoms, discontinue use immediately and consult your physician.

MANUAL

Keep this manual available and ready for use. If the game fails to function properly, turn off the machine and unplug the AC line cord. Contact your local distributor. Your warrantee, when applicable, lasts 60 days from your purchase date. You may not reproduce this document or any of its contents without written authorization from Raw Thrills™, Inc. or Play Mechanix™ Inc.

SPECIFICATIONS

For reasons such as performance, this product's specifications may change without notice. Federal patent, copyright and other intellectual property laws protect the content, devices and design of the game and its equipment.

Big Buck Hunter[®] Pro Open Season[™] 27" Dedicated Game

Product Specifications

Electrical Power

Domestic, international users and Japan

120 VAC @ 60 Hz, 5 amps

240 VAC @ 50 Hz, 2.5 amps

100 VAC @ 50 Hz, 5 amps

DC Power Fuse Guide

+5 VDC 2 amp Slow Blow

+12 VDC 7 amp Slow Blow

Temperature

32 degrees F to 100 degrees F

(0 degrees C to 38 degrees C)

Humidity

Must not exceed 95% relative humidity

Dimensions

height: 76 3/16" (1.94 meters)

width: 29" (0.74 meters)

depth: 29 3/4" (0.76 meters)

Carton Weight

535 lbs. (242.67 kg)

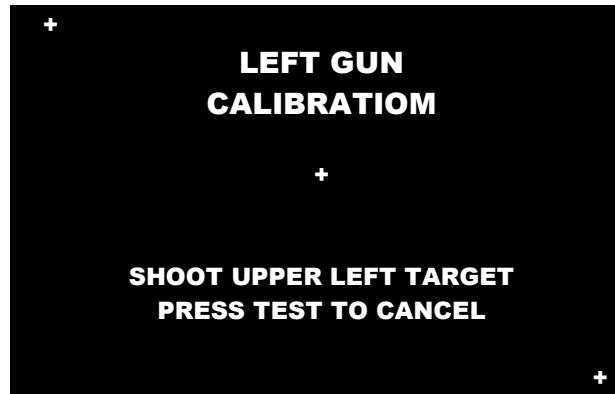
Setup

1. Place the shipping crate on a flat stable surface.
2. Cut the banding straps and remove the cardboard lid.
3. Lift off the large cardboard container surrounding the cabinet and any shipping cleats.
4. With at least two people and a dolly, remove the cabinet from the shipping pallet.
5. Remove the coin door key from the coin return chute.
6. Open the top coin door.
7. Locate the key for the back door and the cash box.
8. Open the cash box and remove the plastic tube.
9. Remove the items inside the tube. These include this service manual, AC line cord, bag of tools and a warranty card.
10. Using a wheeled cart and at least one assistant, transport the cabinet to a suitable playing area.
11. Remove packing material from the guns.
12. Ensure the game cabinet is level and stable.
With at least one assistant, adjust the leg levelers.
13. Check the AC line cord for visible signs of damage.
Pay particular attention to the plug and line cord insulation.
14. Check for shipping damage to the following:
 - Gun assembly: Left and right guns, gun holders, and cable
 - Cabinet glass: Marquee and monitor
 - Cabinet back door
 - Cabinet coin door
 - Cabinet and gun decals
15. Verify the voltage in the nearest AC outlet.
16. Verify the AC outlet ground connection is present and working.
17. Open the back door of the cabinet.
18. Near the AC power transformer, verify the voltage selector switch is set for the correct AC voltage.
19. Remove the marquee.
20. Verify the fluorescent fixture in the marquee is set for the correct voltage.
21. Plug the line cord into the AC outlet.
22. Replace the back door.
23. Turn the power switch to ON.
24. Verify that the cooling fan located on the bottom back of the VGM is working.
If not, turn off AC power and disconnect line cord. Refer to the diagnostic section of this manual.
25. Check that no component is excessively hot or emitting foul odors.
If not, turn off AC power and disconnect line cord. Refer to the diagnostic section of this manual.
26. Once software loads, you will be asked to calibrate the guns.
If not, enter the service menu by pressing the TEST button located on the bracket inside the top coin door.

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

First Calibration

Upon first startup and reboots, the game enters calibration mode. Note that weekly gun recalibration helps maintain gun performance, improve player enjoyment and enhance revenue.



1. Remove left gun from the rack and hold the muzzle about three feet from the monitor. Follow the on screen instructions to shoot the target.
2. Once satisfied with the calibration, press the START button corresponding with the gun color.
3. Replace the gun into its rack.
4. Repeat steps 1-3 with the right gun.

Other Tests

See the Diagnostic Section for further information.

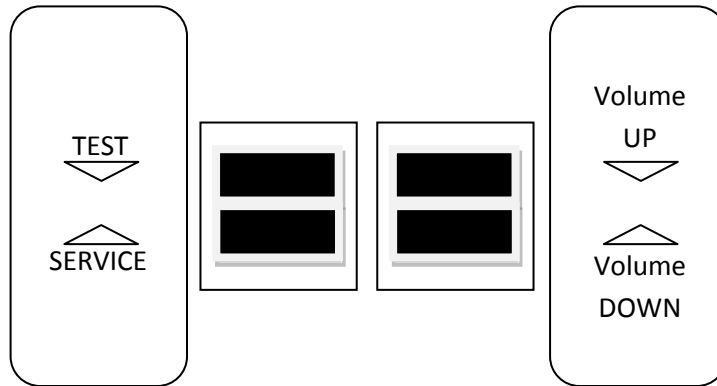
1. Enter the SWITCH TEST menu and verify all switches function.
2. Enter the SCREEN TEST menu and verify that video is acceptable.
3. Enter the SOUND TEST menu and verify the audio works and is not distorted.
4. Enter the COIN METER TEST menu and verify the operation of the coin meter.
5. Enter the START BUTTON LAMPS menu and verify that the lamps of the buttons work correctly.
6. Enter the WATCHDOG TEST menu, which re-boots the game.
7. Upon a successful re-boot, you are ready to make adjustments to pricing, volume and other functions found in the Diagnostic Section.

Adjustments, Audits and Diagnostics

Diagnostic Menu System

The Service Button Panel should have four buttons, three of which can navigate the menu system.

But it is easiest to navigate with a Start button and trigger/ pump.



- Service Panel TEST button enters diagnostic system.
- Either Start button or TEST button selects the highlighted option.
- Service Panel VOL - button or Squeezing either trigger moves down through menu or setting choices.
- Service Panel VOL + button or Pumping either gun moves up through menu or setting choices.
- Highlight and select Exit to return to previous screen.

An on-screen message acknowledges changes or when you exit a selection without making a change.

At the bottom of each screen there is a brief description of the menu option's function. A complete description is available here for all menu functions.

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Menu Screens and Descriptions

Main Menu



For clarity, all subsequent menu screens in this manual will not include the header, footer or background image.

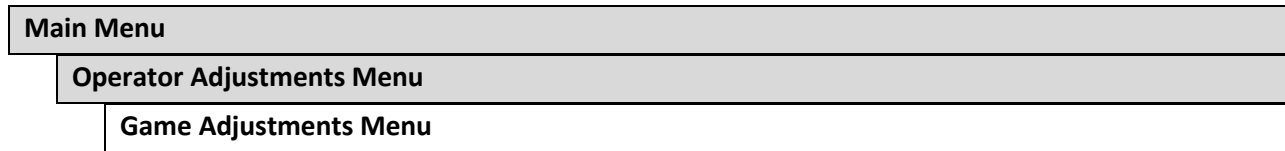
Main Menu

Operator Adjustments Menu

This menu controls gameplay, coinage and sound adjustments.

OPERATOR ADJUSTMENTS
EXIT
GAME ADJUSTMENTS
COIN ADJUSTMENTS
PLAYER COST
VOLUME

You can improve collections by customize performance with game adjustments. Each variable on an adjustment menu changes an aspect of game play or appearance. Optimizing these settings can maintain player interest and improve earnings. Monitor the effects of adjustments by comparing audit information and earnings before and after changes.



This controls elements of the player experience and the time the game contacts the CoinUp® server to check for software updates.



Settings, Defaults and Choices

Setting	Description	Default	Choices
Violence	Changes visual effect of shot animals. <ul style="list-style-type: none"> NORMAL. Some blood appears on shot animals. Red star appears on kills. NO BLOOD. No blood appears on shot animal. In No Blood Mode, small blue star replaces red star on kills. 	Normal	No Blood / Normal
Big Buck Girls	This setting allows operator to permit or eliminate images of Big Buck Girls. <ul style="list-style-type: none"> ON: Big Buck Girls appear in Attract and Gameplay modes OFF: No Big Buck Girls appear. 	On	On / Off
Skill Level	Adjusts game difficulty by changing how shotgun reloads after each trigger pull. <ul style="list-style-type: none"> EASY. After each trigger pull, shotgun reloads itself without pumping. To fire another shot, pull trigger again. NORMAL. After each trigger pull, reload by pumping. 	Normal	Normal / Easy
Initials Type	Adjusts how players can enter their names. <ul style="list-style-type: none"> FULL NAME. Players user two screens. The first name screen allows up to 13 characters. The last name screen allows up to 15 characters. INITIALS. Players can enter up to three characters. Warning: changing to Initials Only clears high score tables.	Initials Only	Full Name / Initials Only
Game Update Hour	The 60-minute period during which tournament-enabled games contact the server to check for software updates.	4-5 AM	24 hours

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

Operator Adjustments Menu

Coin Settings Menu

This menu does **not** set game price, but specifies how much game credit is given for money added to the machine. The smallest accepted coin is a quarter, the typical setting for both coin values in the U.S. The DBV value is also a multiple of 25¢.

COIN SETTINGS	
EXIT	
FREEPLAY	OFF
CURRENCY TYPE	Dollar
COIN 1 VALUE	\$0.25
COIN 2 VALUE	\$0.25
COIN 3 VALUE/DBV PULSE	\$0.25
MAXIMUM CREDITS	\$500.00
BONUS AWARD	\$0.00
UNITS FOR BONUS	\$0.00

Settings, Defaults and Choices

Setting	Description	Default	Choices
Freeplay	Players can start games without money by pressing START. Use this for promotions, non-commercial applications or to test the machine.	Off	On / Off
Currency Type	Changing currency type resets coin door values. The denomination symbol changes on screen with each currency.	Dollar	Yen, Won, Ruble, Real, Peso, Krona, Guilder, Franc, Can. Dollar, Coins, Euro, NZ Dollar, Rand, Pound, Aus. Dollar
Coin 1 Value	Lets you set coin slot pricing.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Coin 2 Value	Lets you set coin slot pricing.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Coin 3 Value / DBV Pulse	The bill validator (DBV) translates bills into electronic pulses. Every \$1 bill results in four pulses; each \$5 bill is 20 pulses; \$10 bill is 40 pulses, etc. This setting determines how much game credit is awarded per pulse. With default setting of \$0.25, every \$1 bill will award \$1 in game credit. Set to \$0.50, every \$1 bill will award \$2 in game credit.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Maximum Credits	The highest number of unplayed credits allowed.	\$500.00	\$125 - \$500 in \$.25 increments
Bonus Award	The amount of credit awarded per bonus unit (see below).	\$0.00	\$0.00 - \$63.75 in \$.25 increments
Units for Bonus	The value a player must enter to get bonus credit.	\$0.00	\$0.00 - \$50.00 in \$.25 increments

Bonus Award/Units for Bonus Example.

To give players \$1.25 in credit for every dollar put in the DBV, set Bonus award to \$.25 and Units for Bonus to \$1.

Main Menu
Operator Adjustments Menu
Player Cost Menu

PLAYER COST			
TYPE	-OPER FEE-	COINUP FEE	- - TOTAL
EXIT			
TREK	\$1.00	\$0.00	\$1.00
ADVENTURE	\$2.50	\$0.00	\$2.50
BONUS ONLY	\$1.00	\$0.00	\$1.00
TROPHY CLUB TREK	\$1.00	\$0.50	\$1.50
TROPHY CLUB ADV.	\$2.50	\$0.50	\$3.00
TROPHY BONUS ONLY	\$1.00	\$0.50	\$1.50
PLAYER CARD	\$0.25	\$2.75	\$3.00

Settings, Defaults and Choices

Setting	Description	Operator Fee Default	Choices
Trek	A <i>trek</i> lets players hunt at five sites and one bonus game.	\$1.00	\$0.00 - \$63.75 in \$0.25 increments
Adventure	An <i>adventure</i> is three treks (15 sites and three bonus games).	\$2.50	\$0.00 - \$63.75 in \$0.25 increments
Bonus Only	A <i>bonus only</i> is four bonus games.	\$1.00	\$0.00 - \$63.75 in \$0.25 increments
Trophy Club Trek	This is the online version of a trek (tracks player stats).	\$1.00	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Trophy Club Adv.	This is the online version of an adventure (tracks player stats).	\$2.50	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Trophy Bonus Only	This is the online version of bonus only.	\$1.00	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Player Card	The card holds player login information.	\$0.25	Cannot be modified

FEE ADJUSTMENT

Note that CoinUp® fee cannot be adjusted by the operator.

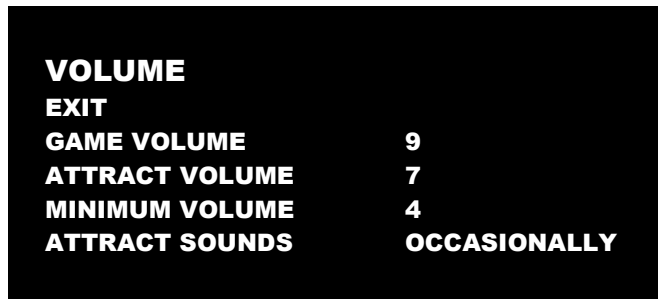
Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

Operator Adjustments Menu

Volume Menu

Rather than requiring a manual dial or up/down buttons, all volume adjustments can be made digitally with this menu. However, during Attract Mode, pressing the Service Panel Vol + and Vol – buttons only adjust Attract Mode volume.

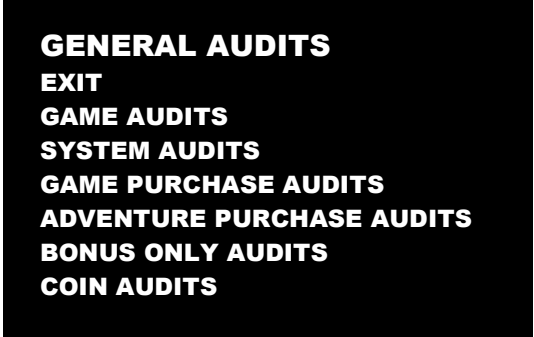


Settings, Defaults and Choices

Setting	Description	Default	Choices
Game Volume	This affects sound only while game is played.	9	0 – 32
Attract Volume	This can be silenced or turned up as an advertisement to draw in players.	7	0 – 32
Minimum Volume	Determines the lowest setting possible for both Game and Attract Volumes	4	0 – 32
Attract Sounds	This determines how often the game's "advertising" sounds will be heard.	Occasionally	Off/Occasionally/Always

Main Menu
General Audits Menu

Audit screens help assess game performance, find intermittent problems, decide whether to adjust game difficulty and free game award and help maximize game earnings.



Main Menu
General Audits Menu
Game Audits



Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

General Audits Menu

System Audits

SYSTEM AUDITS

EXIT

PLAY TIME 0 yr 0 dy—0:00:00

UP TIME 0 yr 0 dy—0:00:00

WATCHDOGS 0

EXCEPTIONS 0

BAD TRAPS 0

Main Menu

General Audits Menu

Game Purchase Audits Menu

GAME PURCHASE AUDITS

EXIT

LOCAL PLAY PURCHASES

ONLINE PLAY PURCHASES

Main Menu

General Audits Menu

Game Purchase Audits Menu

Local Play Purchases

LOCAL GAME PURCHASE AUDITS

EXIT

TREKS PURCHASED 0

ADVENTURES PURCHASED 0

BONUS ONLY PURCHASED 0

SHOOTOUT TREKS PURCHASED 0

SHOOTOUT ADV. PURCHASED 0

SHOOTOUT BONUS ONLY PURCHASED 0

Main Menu
General Audits Menu
Game Purchase Audits Menu
Online Game Purchase Audits

ONLINE GAME PURCHASE AUDITS	
EXIT	
TROPHY CLUB TREKS PURCHASED	0
TROPHY CLUB ADV. PURCHASED	0
TR. CLUB BONUS ONLY PURCHASED	0
TR. CLUB S.O. TREKS PURCHASED	0
TR. CLUB S.O. ADV. PURCHASED	0
TR. CLUB S.O. BONUS ONLY PURCH.	0
TOURNAMENTS PURCHASED	0
NATIONAL TOURNAMENTS PURCHASED	0
PLAYER CARDS PURCHASED	0

Main Menu
General Audits Menu
Adventure Purchase Audits Menu

ADVENTURE PURCHASE AUDITS
ADV PURCHASE AUDITS: TURN-BASED
ADV PURCHASE AUDITS: SHOOTOUT

Main Menu
General Audits Menu
Adventure Purchase Audits Menu
Turn-Based Adventure Purchase Audits

ADVENTURE PURCHASE AUDITS: TURN-BASED				
ADVENTURE	WHOLE	TREK 1	TREK 2	TREK 3
EXIT				
WHITETAIL	0	0	0	0
ELK	0	0	0	0
ANTELOPE	0	0	0	0
BIGHORN	0	0	0	0
MOOSE	0	0	0	0
CARIBOU	0	0	0	0
MULE DEER	0	0	0	0
BISON	0	0	0	0
MTN GOAT	0	0	0	0

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

General Audits Menu

Adventure Purchase Audits Menu

Shootout Adventure Purchase Audits

ADVENTURE PURCHASE AUDITS				
ADVENTURE	WHOLE	TREK 1	TREK 2	TREK 3
EXIT				
WHITETAIL SHOOTOUT	0	0	0	0
ELK SHOOTOUT	0	0	0	0
ANTELOPE SHOOTOUT	0	0	0	0
BIGHORN SHOOTOUT	0	0	0	0
MOOSE SHOOTOUT	0	0	0	0
CARIBOU SHOOTOUT	0	0	0	0
MULE DEER SHOOTOUT	0	0	0	0
BISON SHOOTOUT	0	0	0	0
MTN GOAT SHOOTOUT	0	0	0	0

Main Menu

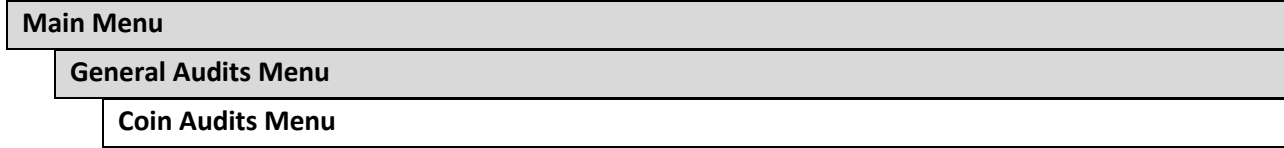
General Audits Menu

Bonus Only Audits Menu

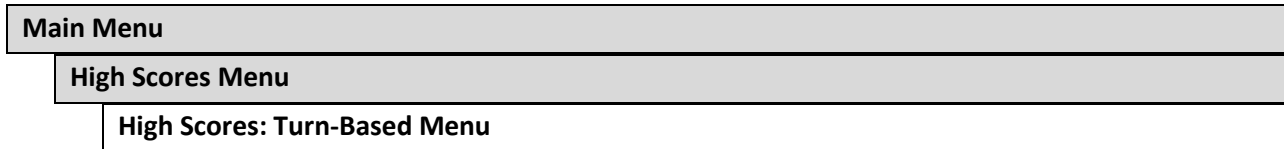
BONUS ONLY AUDITS			
BONUS NAME	PLAYED	BONUS NAME	PLAYED
EXIT			
			page 1 of 2
DUCK HUNT	0	DOVE HUNT	0
MOONSHINE BONUS	0	BOARS GONE WILD	0
PIE IN THE SKY	0	MUG SHOT BONUS	0
PHEASANT HUNT	0	TURKEY HUNT	0
LOGYARD BONUS	0	CLOCKWORK BONUS	0
MARS NEEDS CATTLE	0	FROG FLIPPIN' BONUS	0
QUAIL HUNT	0	GOOSE HUNT BONUS	0
WINDMILL MANIA	0	BARREL BONUS	0
GOPHER GARDEN	0	METEORITE BONUS	0

Squeezing the trigger reveals the second page.

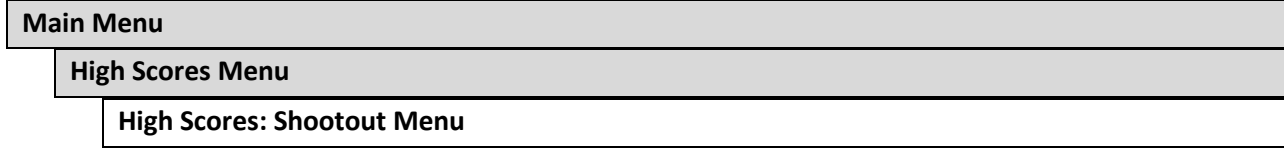
BONUS ONLY AUDITS			
BONUS NAME	PLAYED	BONUS NAME	PLAYED
EXIT			
			page 2 of 2
LUMBERJACK BONUS	0		
LEMMING BONUS	0		
CORN POPPER BONUS	0		
PUMPKIN BONUS	0		
OFF THE RAILS BONUS	0		
BARNSTORM BONUS	0		
FISH IN BARREL BONUS	0		
MOUNT BUCKMORE	0		
CHICKEN & EGG BONUS	0		



COIN AUDITS
EXIT
TOTAL COIN 1 **\$0.00**
TOTAL COIN 2 **\$0.00**
TOTAL COIN 3 DBV **\$0.00**
BONUS COINS **\$0.00**
LIFETIME COIN COUNT **\$0.00**
SERVICE CREDITS **\$0.00**



HIGH SCORES: TURN-BASED
EXIT
WHITETAIL ADVENTURE
ELK ADVENTURE
ANTELOPE ADVENTURE
BIG HORN SHEEP ADVENTURE
MOOSE ADVENTURE
CARIBOU ADVENTURE
MULE DEER ADVENTURE
BISON ADVENTURE
MTN GOAT ADVENTURE
PERFECT STREAK
PERFECT SITES

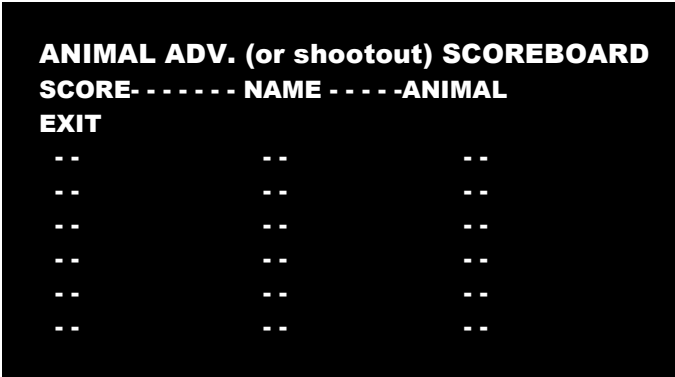


HIGH SCORES: SHOOTOUT
EXIT
WHITETAIL SHOOTOUT
ELK SHOOTOUT
ANTELOPE SHOOTOUT
BIG HORN SHEEP SHOOTOUT
MOOSE SHOOTOUT
CARIBOU SHOOTOUT
MULE DEER SHOOTOUT
BISON SHOOTOUT
MTN GOAT SHOOTOUT

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu
High Scores Menu
<i>Animal Scoreboard</i>

The high scores for a particular game are displayed in this format.



Main Menu
Online Menu

See the CoinUp® manual for a full explanation of these menu functions.

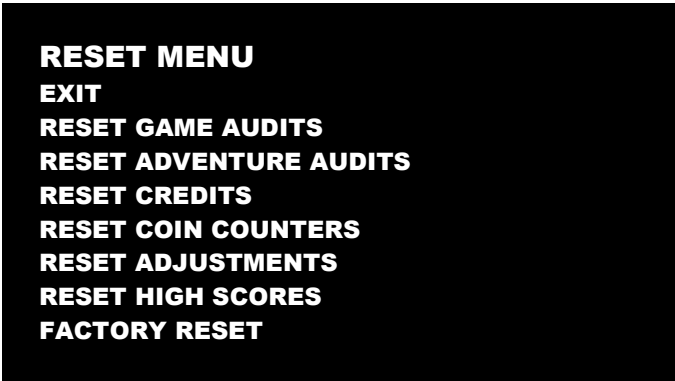
Main Menu
Gun Calibration Menu

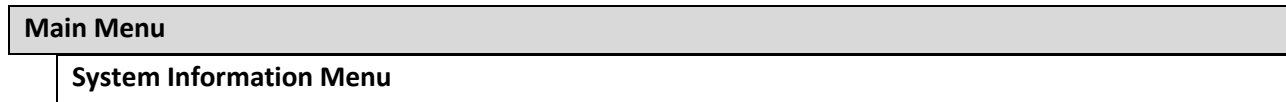
This is the same procedure described earlier in the **First Calibration** section.

Main Menu
Reset Menu

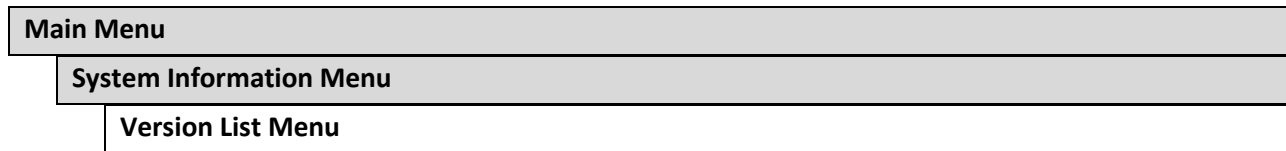
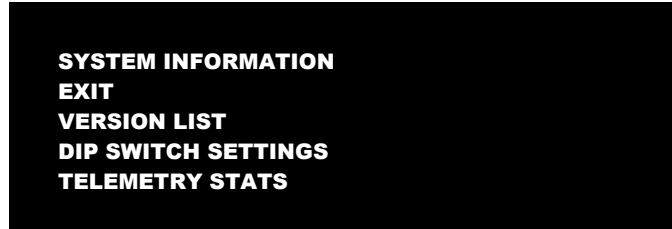
In addition to resetting individual counters and audits, this menu erases most of your changes. *Factory Reset* clears all audit data and restores most defaults. The following data, however, is not cleared:

- Calibration
- Registration
- Game activation
- Lifetime coin count

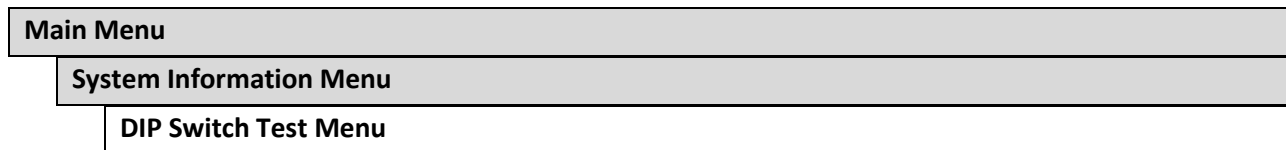




These tests verify system version and check the functioning of peripherals.



This checks the game's hardware and software versions.



This checks the DIP Switch settings on the I/O Board



Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

System Information Menu

Telemetry Stats

These tests check thermal qualities and electrical conductivity.

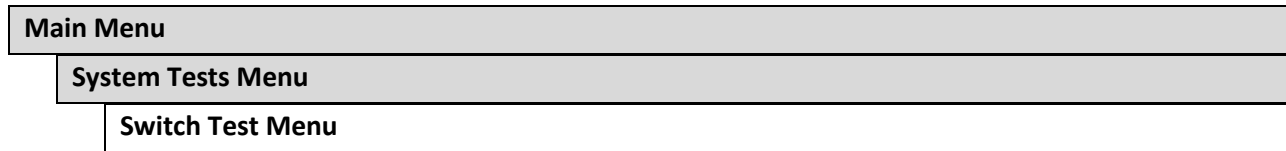
TELEMETRY DATA	
EXIT	
SYSTEM TEMPERATURE	N/A
CORE TEMP1	23C
CORE TEMP2	26c
TEMPERATURE STATE	N/A
CPU FAN SPEED	N/A
CASE FAN SPEED	N/A
+3.3V:	N/A
+5.0V:	N/A
+12V:	N/A
-5.0V:	N/A
-12.0v	N/A

Main Menu

System Tests Menu

These tests check the functioning of peripherals.

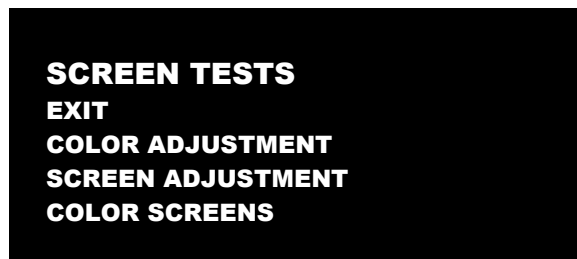
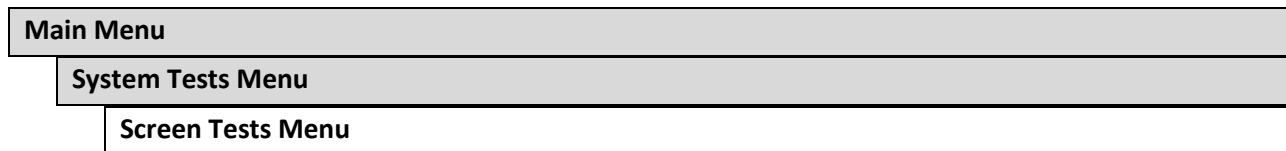
SYSTEM TESTS
SWITCH TEST
SCREEN TESTS
SOUND TEST
FILE TEST
COIN METER TEST
START BUTTON LAMPS
WATCHDOG TEST
GUN TRACKING TEST
ETHERNET PORT TEST
CARD TEST



This checks input switch performance. The activated switch is highlighted on screen and the system generates a “switch active” alert sound.



The Switch Test menu has a unique exit procedure because it checks the switches normally used for navigation. To exit to the main menu, simultaneously press a Start button and squeeze a trigger.



Big Buck Hunter[®] Pro Open Season[™] 27" Dedicated Game

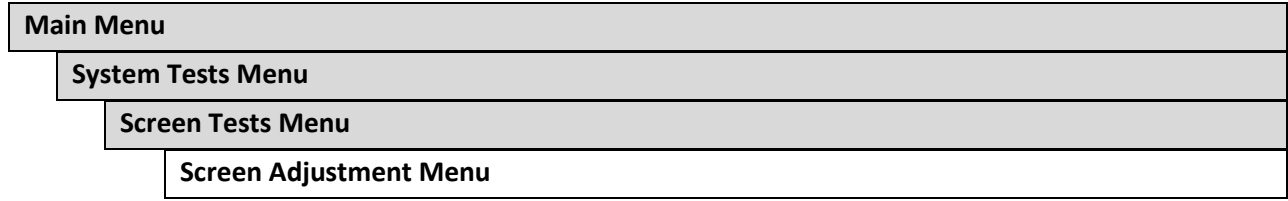
Main Menu
System Tests Menu
Screen Tests Menu
Color Adjustment

This color bar screen of gray, yellow, cyan, green, magenta, red and blue helps identify missing colors. Missing color bars may indicate bad video RAM in the PC, or a problem with the monitor.

Color bars can also help

- Peak the brightness and black levels
- Balance red, green and blue drives
- Check purity problems (color contamination)
- Compensate for barrel or pincushion distortion
- Adjust size controls
- Test for video noise sources (such as bad cables)





This crosshatch screen helps adjust width, height, static convergence and purity, brightness and focus.

Width and Height

Adjust height and width of the crosshatch pattern until the grid fills the screen. Keep all the lines visible, though. If part of the grid goes off the screen, then the game image will, too.

Static Convergence and Purity

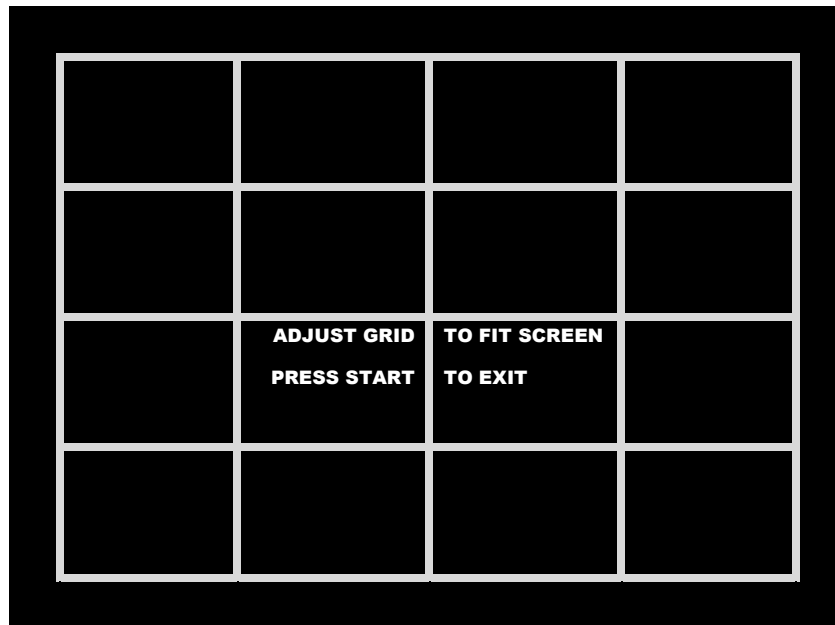
All lines in the crosshatch pattern must be white. Else, there is a convergence or purity problem. Slight color tinges at the extreme edges of the screen are okay.

Brightness

Ensure the bars are a fairly strong white.

Focus

Bars with fuzzy edges indicate a focus problem. Adjust the focus control for best sharpness.



Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Main Menu

System Tests Menu

Screen Tests Menu

Color Screens

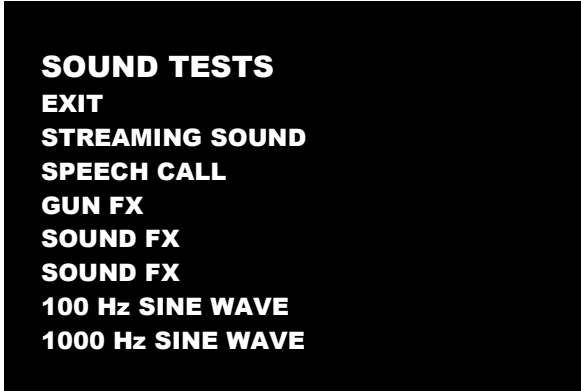
These are solid, one-color images that help adjust color drive controls for proper intensity. The screens are black, white, red, green and blue. Press the Start button to cycle through the screens. The white screen helps adjust brightness and color output balance.

Main Menu

System Tests Menu

Sound Test Menu

This checks sound volume and quality. Missing sounds indicated digital flaws. Distorted sounds suggest analog flaws. Lack of sound suggests disconnected or bad cables or speakers.



SOUND TESTS
EXIT
STREAMING SOUND
SPEECH CALL
GUN FX
SOUND FX
SOUND FX
100 Hz SINE WAVE
1000 Hz SINE WAVE

- STREAMING SOUND is a sample of the game music.
- SPEECH CALL includes talking commentary.
- GUN FX is the shotgun blast.
- The first Sound FX is a whistle.
- The second Sound FX is a guitar riff.
- 100 and 1000 Hz Sine Waves generate specific frequency sounds. Cancel these sounds by selecting another test.

Main Menu

System Tests Menu

File Tests

This tests the integrity of the contents of the hard drive, searching for corrupt or missing game files. Damaged or missing files register as failed and are listed. The only solution to this problem is to restore the system from the DVD-ROM, as described in the Restore the Hard Drive section.

Main Menu
System Tests Menu
Coin Meter Test

In this test, the System Tests Menu is the bottom-level menu. Watch the mechanical coin meter, which should increment by one count. If it does, it has passed the test. If it does not, it may not be receiving a pulse from the game. See Troubleshooting for more details.

Main Menu
System Tests Menu
Start Button Lamps

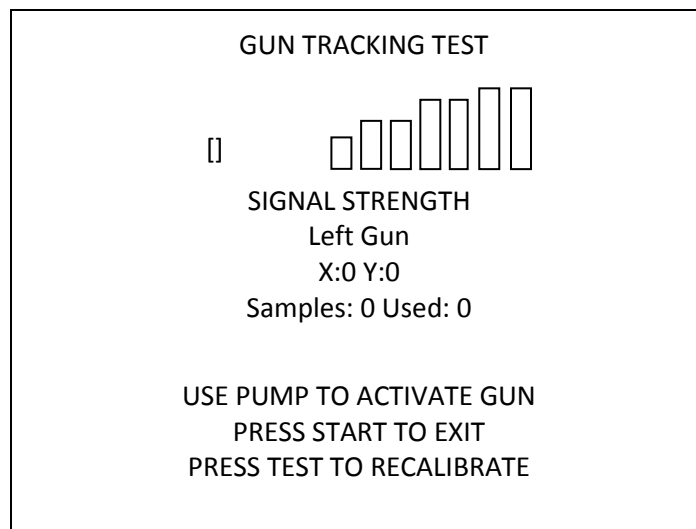
This tests for burned-out Start button lamps by alternately blinking the LEDs.

Main Menu
System Tests Menu
Watchdog Test

This tests the Watchdog circuit, which protects the game against screen freezes (infinite loops). After a countdown, the game resets. To exit before the reset, press either Start or Volume button, squeeze a trigger or pump a gun. If the test succeeds, the game resets normally. If the test fails, the reset process loops or ends abnormally. See the Troubleshooting Chapter to diagnose and correct this problem.

Main Menu
System Tests Menu
Gun Tracking Test

This test tracks the gun with a square and indicates the strength of the signal with color intensity on a bar graph. It also shows the x/y coordinates of where the gun is aiming. Squeeze the trigger to show how many samples are being taken,



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Main Menu

System Tests Menu

Ethernet Port Test

If Ethernet is used, this test sends attempts to send data packets to the server and reports on how many were received and how many were dropped. Note that running this test requires a loopback adapter.

Main Menu

System Tests Menu

Card Test

Insert a valid card to reveal the card type (player or operator) and the cardholder's name.

```
CARD TEST  
EXIT  
PLEASE INSERT CARD  
CARD FOUND:           Card Type  
NAME:                 Cardholder Name
```

Main Menu

View Log Menu

This lists history of significant events or errors in file system.

Main Menu

Collections

```
COLLECTIONS  
EXIT  
SEND COLLECTIONS MESSAGE  
SHOW COINUP FEE DETAILS  
LAST COLLECTION DATE           NEVER  
GROSS COLLECTIONS             $0.00  
COINUP FEES                   $0.00  
NET COLLECTION                 $0.00
```

Send Collections Message contacts the server and delivers the latest collections information.

Main Menu
Collections Menu
CoinUp Fee Details

COINUP FEE DETAILS	
EXIT	
LAST COLLECTION DATE	2009-07-30 11:21:45
TROPHY CLUB PLAY	\$0.00
CUSTOM CONTEST PLAY	\$0.00
COINUP CONTEST PLAY	\$0.00
PLAYER CARD PURCHASES	\$0.00
CUSTOM CONTEST DOWNLOADS	\$0.00
COINUP CONTEST DOWNLOADS	\$0.00
CUSTOM ADVERTISEMENTDOWNLOADS	\$0.00
COINUP ADVERTISEMENT DOWNLOADS	\$0.00
COMMUNICATIONS CHARGE	\$0.00
UPGRADE CHARGE	\$0.00
TOTAL COINUP FEES	\$0.00

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Maintenance

Hard Drive Recovery

Symptoms requiring hard drive recovery include

- File Test reports bad or missing files.
- Game fails to finish loading during startup.
- After resetting the AC power, an error is reported.
- You are prompted to insert a boot DVD.
- Erratic Game or Attract Mode.
- The following screen:



To identify corrupt files, press Test, choose System Test Menu and run the File Test.

The only way to repair corrupt files is to recover the hard drive, as detailed below.

COMPUTER

The computer contains sensitive components, including a hard drive. Do not handle roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do **not** use the PC on/off switch. Turn AC power on or off with the cabinet power switch.

1. With game and PC on, verify that the I/O board has power. If not, see Troubleshooting.
2. Open the Coin door.
3. Open the PC DVD-ROM tray by pressing the Open/Close button on the drive bay.
4. Insert the recovery DVD into the tray.
5. Close the tray by pressing the Open/Close button again.
6. Turn cabinet power switch to OFF. Wait 30 seconds.
7. Turn cabinet power switch to ON.
8. Recovery begins automatically when PC boots up.

9. If recovery does not begin, check to ensure disc is inserted correctly and is not damaged.
10. After 30-40 minutes, check game progress.
Do not interrupt power or reset the game during recovery.
11. A message indicates that recovery is complete.
When instructed to remove disk, open DVD-ROM drive tray and remove disk.
12. Turn cabinet power switch off.
13. After 30 seconds, turn cabinet power switch on.
14. Game will reboot and enter calibration mode.
15. Re-calibrate guns.

BIOS Settings/Power Management

NOTICE

The PC ships with correct BIOS settings. Making changes to the BIOS different from the description below may adversely affect game functions.

This BIOS setting lets the PC automatically power up. With the setting enabled, the PC reboots when it detects AC power. This eliminates the need to manually turn the PC back on after power disruption.

Do **not** use the PC on/off switch. Turn AC power on or off with the cabinet power switch.

1. Turn cabinet power switch off.
2. Open rear of cabinet.
3. Connect a USB keyboard to the PC.
4. While holding the Delete key on the keyboard down, turn cabinet power switch on.
5. When the BIOS menu screen appears, make the following adjustments.

Feature	Set to
Standard CMOS Feaures > Drive A.....	[none]
Standard CMOS Features > HALT ON.....	[No Errors]
Advanced BIOS Features > Boot Sequence.....	1 st CD-ROM 2 nd Hard Disk
Advanced BIOS Features > APIC Mode	Disabled
Advanced Chipset Features > Frame Buffer	[16M]
Advanced Chipset Features > PMU > CPU Frequency	[200.0]
Power Management Setup > PWRON After PWR-Fail.....	[On]

6. Follow instructions on screen to save and exit.
7. PC will reset and load the game.

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Monitor Adjustments

MONITOR

Extremely high voltages exist in the video monitor at all times. These high voltages exist even when the monitor is off and the AC line cord is disconnected. These voltages are extremely lethal and will cause death. The monitor contains no user serviceable parts. Do not attempt to service the monitor.

Big Buck Hunter™ Pro uses sensitive electronic optical technology. These optics detect the position of the guns during game play. It is critical that the monitor is adjusted and maintained. Proper contrast and brightness settings will improve gun performance. As the monitor ages, it is important that you review and adjust its settings. The monitor face should be free of dirt and dust. Reliable gun operation depends on display quality.

Familiarize yourself with the settings. Settings differ slightly between manufacturers and even between displays of the same manufacturer. Display adjustments can compensate, to some extent, for display aging. The information below serves as a reference.

Setting	Adjustment
Brightness	Function: Background brightness or black level. Set Level: Black background should appear dark and not gray.
Contrast	Function: Definition or sharpness of character against background. Set Level: Outer edges of character or text should not distort.
H-Position	Function: Horizontal position. Side-to-side centering. Set Level: From side to side, picture should center properly.
H-Size	Function: Horizontal Size. Side-to-side dimension. Set Level: From side to side, picture should fill CRT frame.
V-Position	Function: Vertical Position. Up and down centering. Set Level: Picture should center in up and down direction.
V-Size	Function: Vertical Size. Up and down dimension. Set Level: From top to bottom, picture should fill CRT frame.
Pin Cushion	Function: Linearity along vertical sides of picture. Set Level: Both sides of picture should be straight, without bowing.
Degauss	Function: Degaussing eliminates picture distortion.

Wiring

JAMMA I/O Board Connector Table

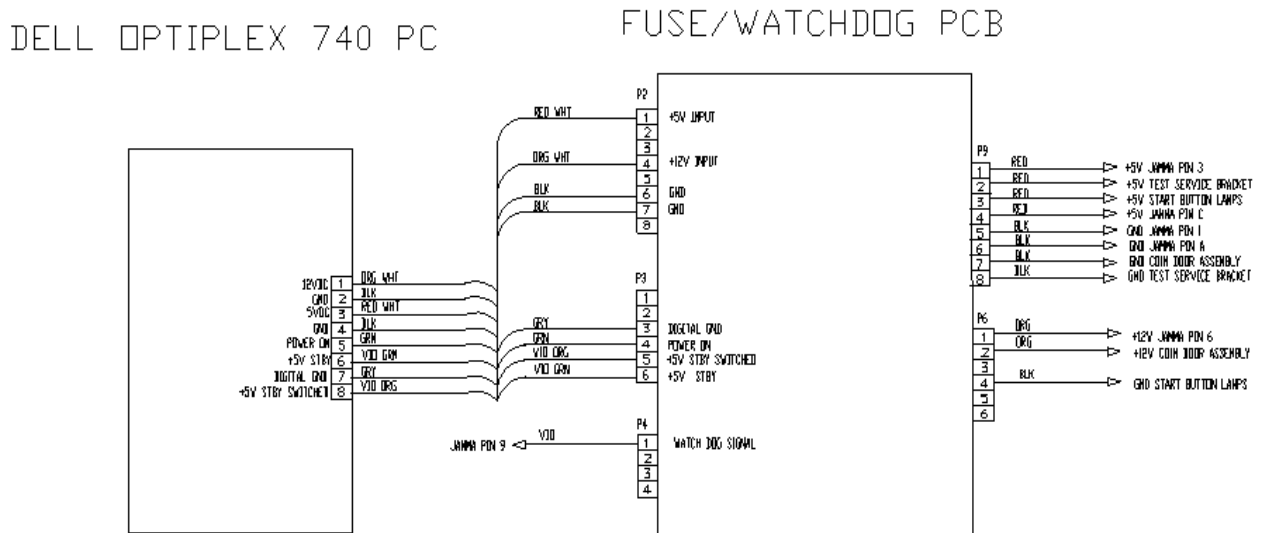
JAMMA Edge Connector Component Side			JAMMA Edge Connector Solder Side		
Function	Wire Color	Pin	Pin	Wire Color	Function
Ground	Black	1	A	Black	Ground
Ground	Black	2	B	Black	Ground
5 Volts	Red	3	C	Red	5 Volts
5 Volts	Red	4	D	Red	5 Volts
		5	E		
12 Volts	Orange	6	F	Orange	12 Volts
12 Volts	Orange	7	H	Orange	12 Volts
Coin Meter	Brown Yellow	8	J	Violet Brown	P1 Lamp
Reset	Violet	9	K	Violet Red	P2 Lamp
		10	L		
Speaker (+)	Brown Red	11	M	Brown Black	Speaker (-)
		12	N		
		13	P		
		14	R	Violet White	Service
Test	Blue	15	S		
Coin 1	Gray Brown	16	T	Gray Blue	Coin 2
P1 Start	White Brown	17	U	Green Brown	P2 Start
		18	V		
		19	W		
		20	X		
		21	Y		
		22	Z		
		23	a		
Volume (+)	Orange Red	24	b	Orange Green	Volume (-)
DBV	Gray Orange	25	c		
		26	d		
Ground	Black	27	e	Black	Ground
Ground	Black	28	f	Black	Ground

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

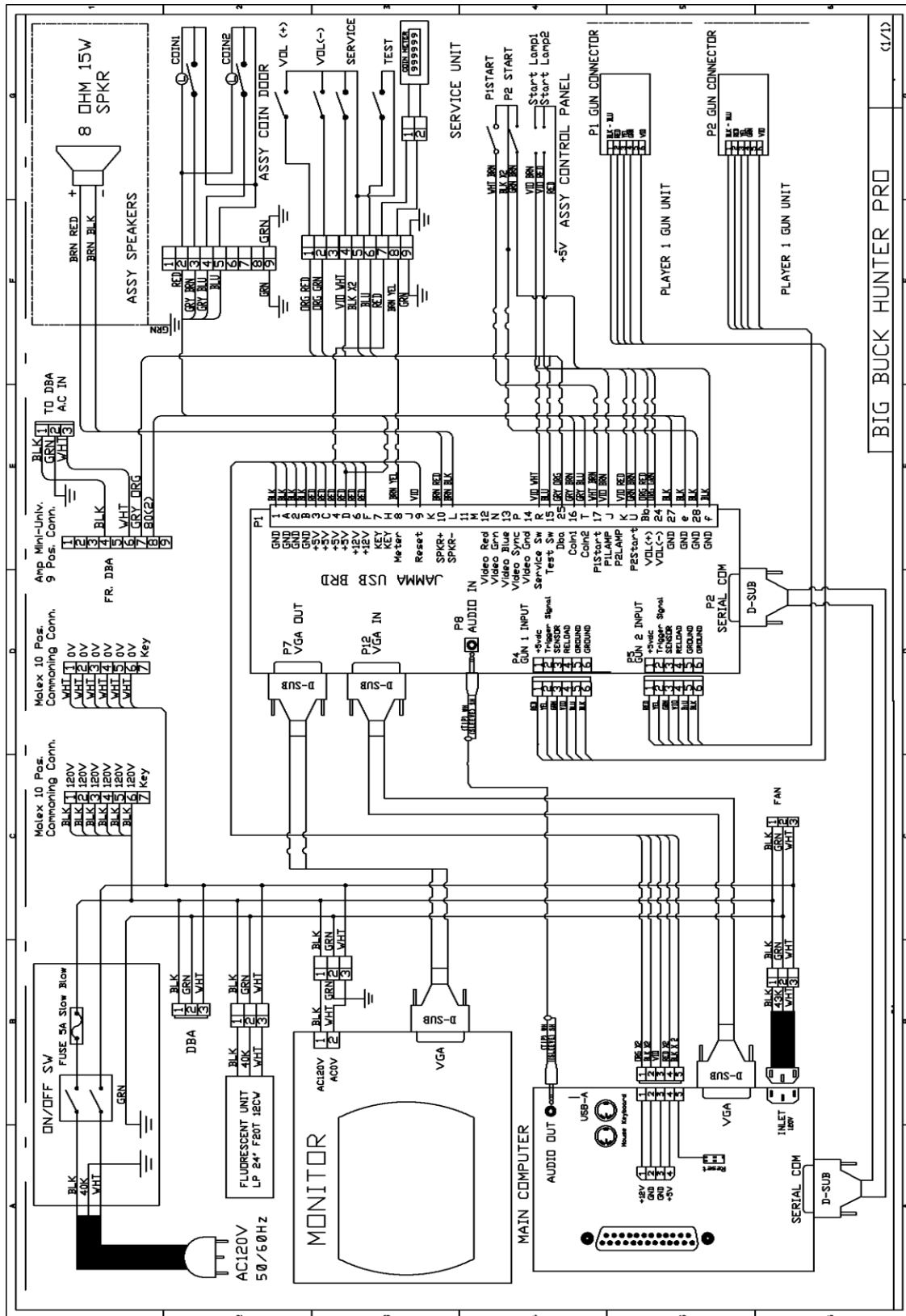
Gun I/O Board Connection Table

Player 1			P4	P5	Player2	
Function	Wire Color	Pin	Pin	Wire Color	Function	
5 Volts	Red	1	1	Red	5 Volts	
Trigger	Yellow	2	2	Yellow	Trigger	
Sensor	Green	3	3	Green	Sensor	
Pump	Violet	4	4	Violet	Pump	
Ground	Blue	5	5	Blue	Ground	
Ground	Black	6	6	Black	Ground	

PC to Watchdog Board Wiring Diagram



Cabinet Wiring Diagram



Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Troubleshooting

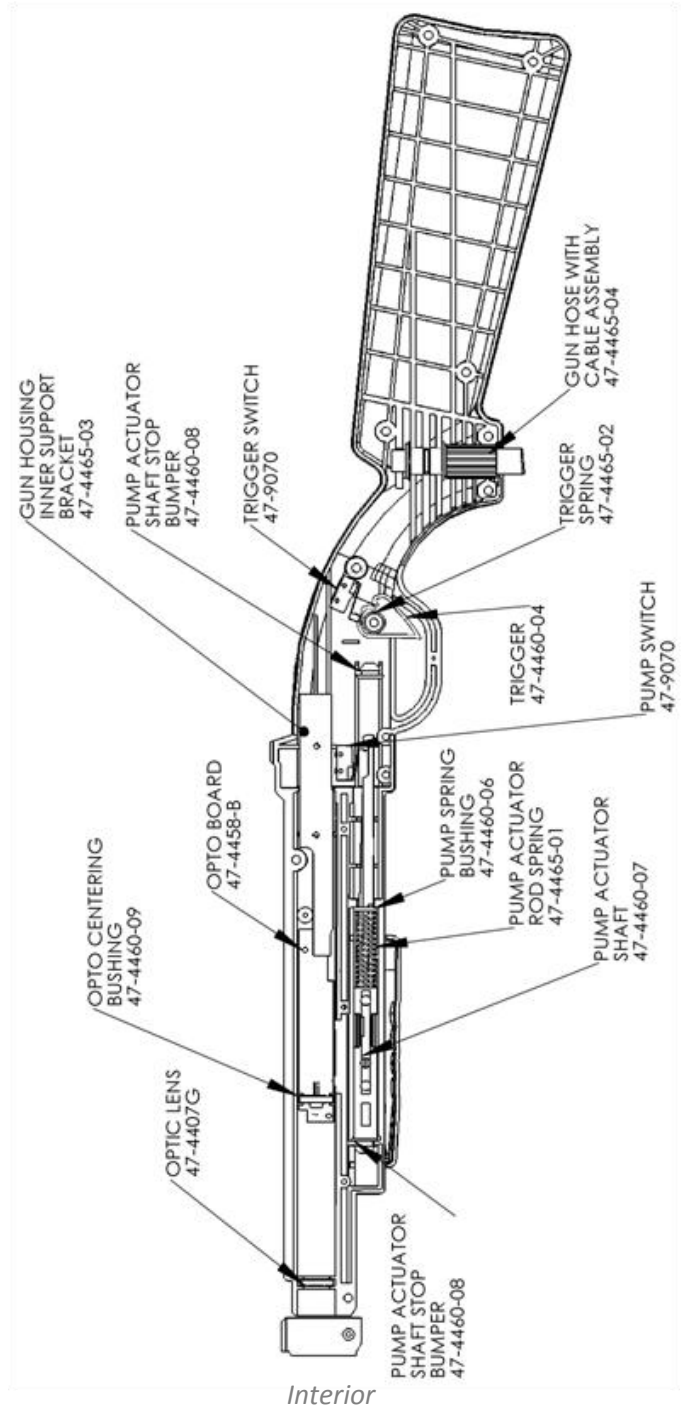
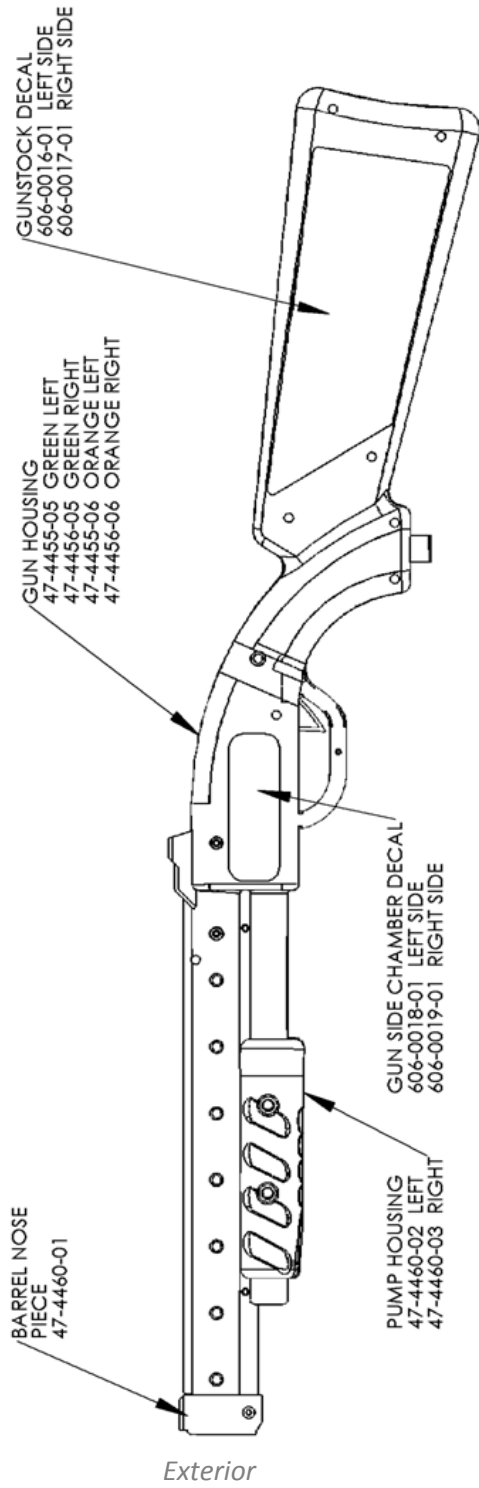
Warning: Review safety chapter before making any adjustments to game.

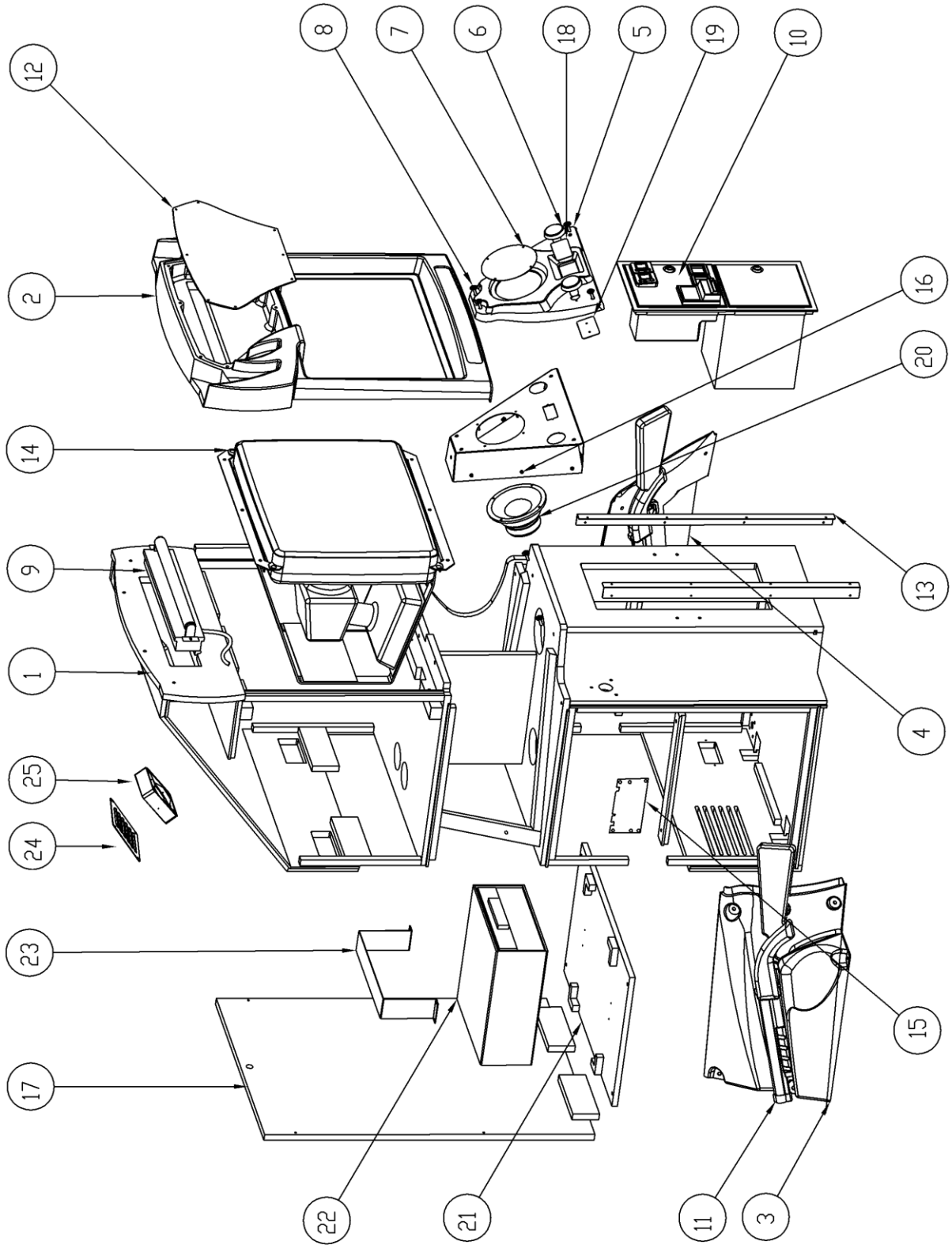
Problem	Possible Cause	Solution
Game will not power up	Game not plugged in.	Plug game into outlet.
	Game not turned on.	Turn on main power switch.
	Game fuse is blown.	Check and replace fuse.
	No power to receptacle.	Test outlet and plug game into powered outlet.
	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
	PC BIOS set incorrectly.	See BIOS Settings chapter.
Scrambled or scrolling display	Sync Polarity incorrect.	Change DIPswitch settings for HSYNC and VSYNC.
NO VIDEO message	Video cables not plugged in properly	Reattach and tighten power and video cable to monitor.
No sound	Bad Connection	Check connection to speakers.
Game does not load	Hard drive failure	Recover hard drive. See procedure at end of this chapter.
Hard drive test reports "bad" or "missing" files.		
Game fails to finish loading.		
After resetting, game still reports an error.		
Game suggests inserting a boot DVD.		
Erratic game mode or attract mode.		
<p style="text-align: center;">WARNING! Data Files Corrupted. (Game Operation May Become Unstable.) Use "Test" Switch to Enter Test Mode and Run "File Test." Press Start To Continue.</p>		

Message	Possible Cause	Solution
Guns won't register, or function poorly	Bad calibration	Calibrate guns.
	Dirty/damaged lens	Clean gun lens.
	Gun disconnected	Check connections.
	Monitor glass dirty	Clean glass with slightly damp rag.
	Display out of adjustment	Enter display diagnostics and repair.
	Bad I/O board	Replace with known working board.
Game resets	Bad file.	Run File Test. Restore hard drive.
Coin meter does not click during Test	No pulse to meter	Check all wiring from meter to I/O board
	Faulty meter	Replace coin meter
Exits Test Mode every 3 seconds	Test button stuck in ON position	Slide or toggle button off after Test Menu appears
<i>No Signal</i>	Video or power cables not secure.	Check and secure cable.
	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
	Sync Polarity incorrect.	Change DIPswitch settings for HSYNC and VSYNC.
<i>Dongle Not Present</i>	Dongle missing or disconnected	Find dongle and reseal in USB port
	Faulty USB port	Insert dongle in different USB port
<i>Connect I/O Board or I/O Board Missing</i>	USB cable disconnected	Check USB connection from PC to I/O board
	No power to JAMMA I/O board	Check for proper voltage (+5V, +12V) at JAMMA connector
<i>Watchdog Disabled or Watchdog Failed</i>	Watchdog defeated by JAMMA I/O DIP switch	Set DIP switch 8 to OFF
	No power to Reset PCB	Connect power to Reset PCB
	Reset input to motherboard disconnected	Connect 2-pin reset connector from Reset PCB to motherboard reset pin input
	Violet or black wire from Reset PCB disconnected or faulty	Check reset wire connection to JAMMA connector.

Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Parts





Big Buck Hunter® Pro Open Season™ 27" Dedicated Game

Part Numbers

Item	Part No.	Description	Qty.
1	601-00012-01	Cabinet	1
2	603-00053-01	Monitor Bezel	1
3	603-00024-01	Left Gun Holster	1
4	603-00023-01	Right Gun Holster	1
5	603-00018-01	Vacuum Form Control Panel	1
6	702-00008-01/702-00008-01	Orange/Green Button Assembly	1 each
7	600-00018-01	Speaker Grille	1
8	#25-20X1 Torx	Hardware	6
9	812-00002-01	18" fluorescent light	1
10	800-00005-00	Mid Width O/U Door Assembly	1
11	8120-00003-00/820-00002-00	Green/Orange Shotgun	1 each
12	600-00017-01	Marquee Plexiglass	1
13	602-00011-00	Corner Angle Bracket	2
14	809-00002-00	27" Flat VGA Display	1
15	500-00001-01	I/O Board	1
16	603-00054-01	Control Panel/Speaker Bezel	1
17	601-00012-01	Back Door	1
18	602-00008-00	Card Reader Faceplate	1
19	602-00009-00	Card Reader Backplate	1
20	807-00002-00	6.5" Woofer Speaker	1
21	601-00012-01	Personal Computer (PC) Shelf	1
22	650-00001-01	PC	1
23	2-1-16-00-00-06	PC Mounting Bracket	1
24	800-00002-01	Vent Fan Louver	1
25	820-00001-00	120VAC Vent Fan	1

Contact Information

For an authorized distributor near you, check the Raw Thrills website at www.rawthrills.com

Contact Betson Enterprise Headquarters or your local Betson office for sales, technical information, warranty or repair. Betson can be reached at (800) 524-2343 Fax (201) 438-4837 www.betson.com

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fax (201) 438-4837

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