



Setup and Operation Service Manual

For use with:
55" Deluxe Cabinet
42" Fixed Gun Cabinet

Revision AA-1.00-1.28.14-1



Aliens Armageddon™© 2014 Twentieth Century Fox Film Corporation
Aliens Armageddon™© Game Software Copyright 2013 Play Mechanix™ Inc.

This software is based in part on the work of the Independent JPEG Group.

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)

Table of Contents

Product Specifications.....	3
Safety	5
Deluxe Cabinet Setup.....	7
Fixed Gun Cabinet Setup.....	11
Cabinet Functionality Check	13
Maintenance	15
Regular Gun Maintenance Procedure.....	15
Fixed Gun Maintenance	16
Hard Drive Recovery	20
Diagnostic Menu System.....	21
Diagnostic Menu Interface.....	21
Menu Screens and Descriptions	22
Troubleshooting.....	41
Parts	43
55" Deluxe Cabinet	43
Fixed Gun	51
Fixed Gun Cabinet Assembly.....	53
Deluxe Gun Assembly	55
Electrical Wiring	57
Deluxe Cabinet Wiring Diagram.....	57
Fixed Gun Cabinet Wiring Diagram.....	58
Contact Information.....	59



Product Specifications

Electrical Power

Domestic 120 VAC @ 60 Hz, 5 amps

International 240 VAC @ 50 Hz, 2.5 amps

Japan 100 VAC @ 50 Hz, 5 amps

DC Power Fuse Guide

+5 VDC - 2 amp Slow Blow

+12 VDC - 7 amp Slow Blow

Temperature

32° to 100° Fahrenheit (0° to 38° Celsius)

Humidity

Must not exceed 95% relative humidity

Cabinet and Carton Specifications

Component	Height	Width	Depth
Assembled 55" Deluxe Cabinet	106.31" (2.7 meters)	52.02" (1.32 meters)	58.63" (1.49 meters)
Assembled 42" Fixed Gun Cabinet	100.50" (2.55 meters)	41.385" (1.05 meters)	51.48" (1.31 meters)



Figure 1: 55" Deluxe Cabinet



Figure 2: 42" Fixed Gun Cabinet



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

Cabinet is very heavy and contains fragile components. Use appropriate care when moving or transporting cabinet. 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 off power 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 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.

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 physician 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 PlayMechanix™ 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.



Deluxe Cabinet Setup

Unpack Cartons

1. Place the shipping crates on a flat stable surface.
2. Cut the banding straps and remove the cardboard lids.
3. Lift off the large cardboard container surrounding the cabinet and any shipping cleats.
4. Remove both guns from the carton situated on top of cabinet pedestal.
5. Place the guns in holsters on cabinet bezel.
6. With at least two people and a dolly, remove the cabinet from the shipping pallet.
7. Remove the coin door key from the coin return chute.
8. Open the top coin door.
9. Locate the key for the back door and the cash box.
10. Remove the items inside cash box: AC power cable, a bag of screws and tools, marquee power cable, this manual, registration packet, and cell antenna mount

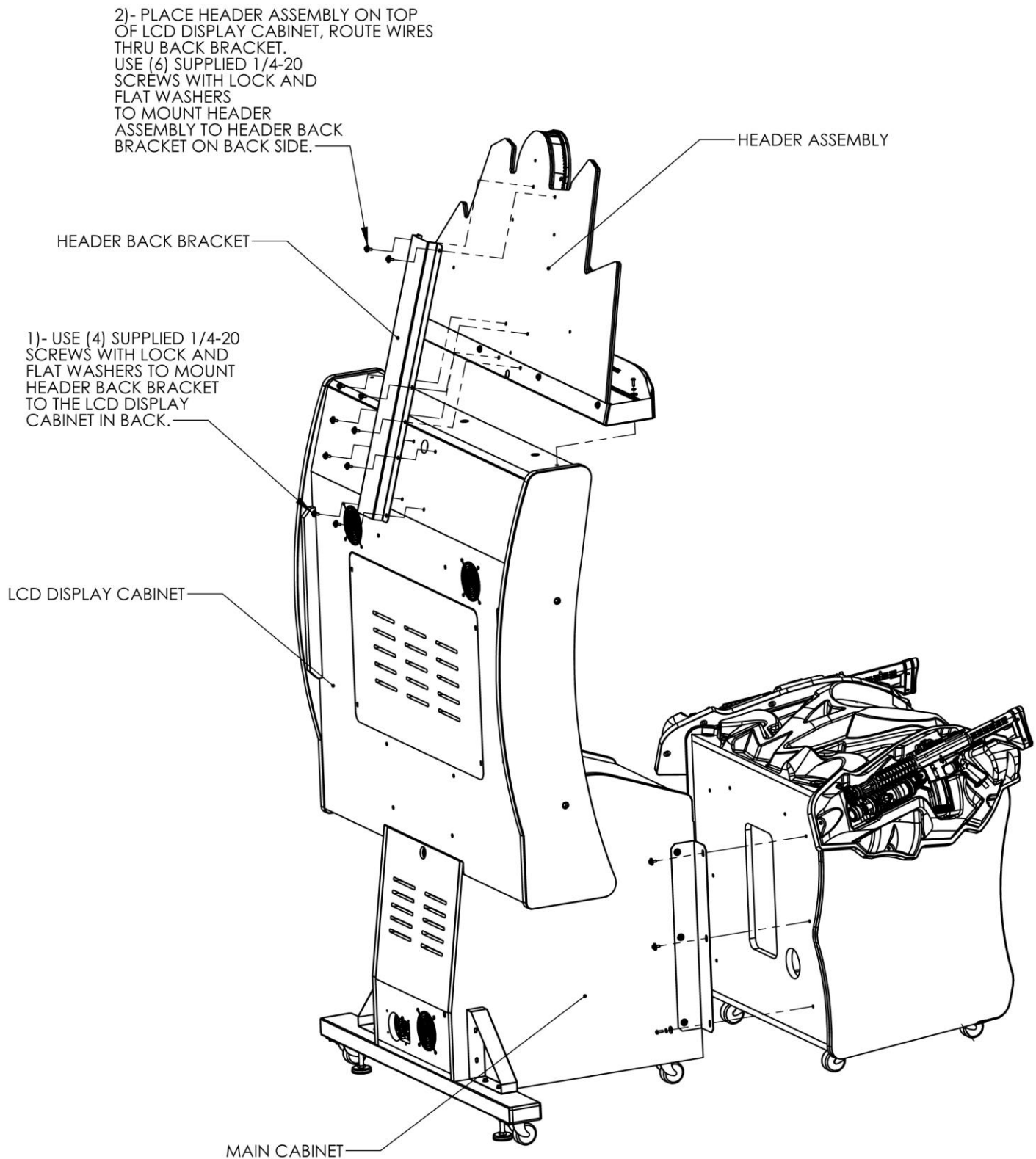
Setup Cabinet Pedestal

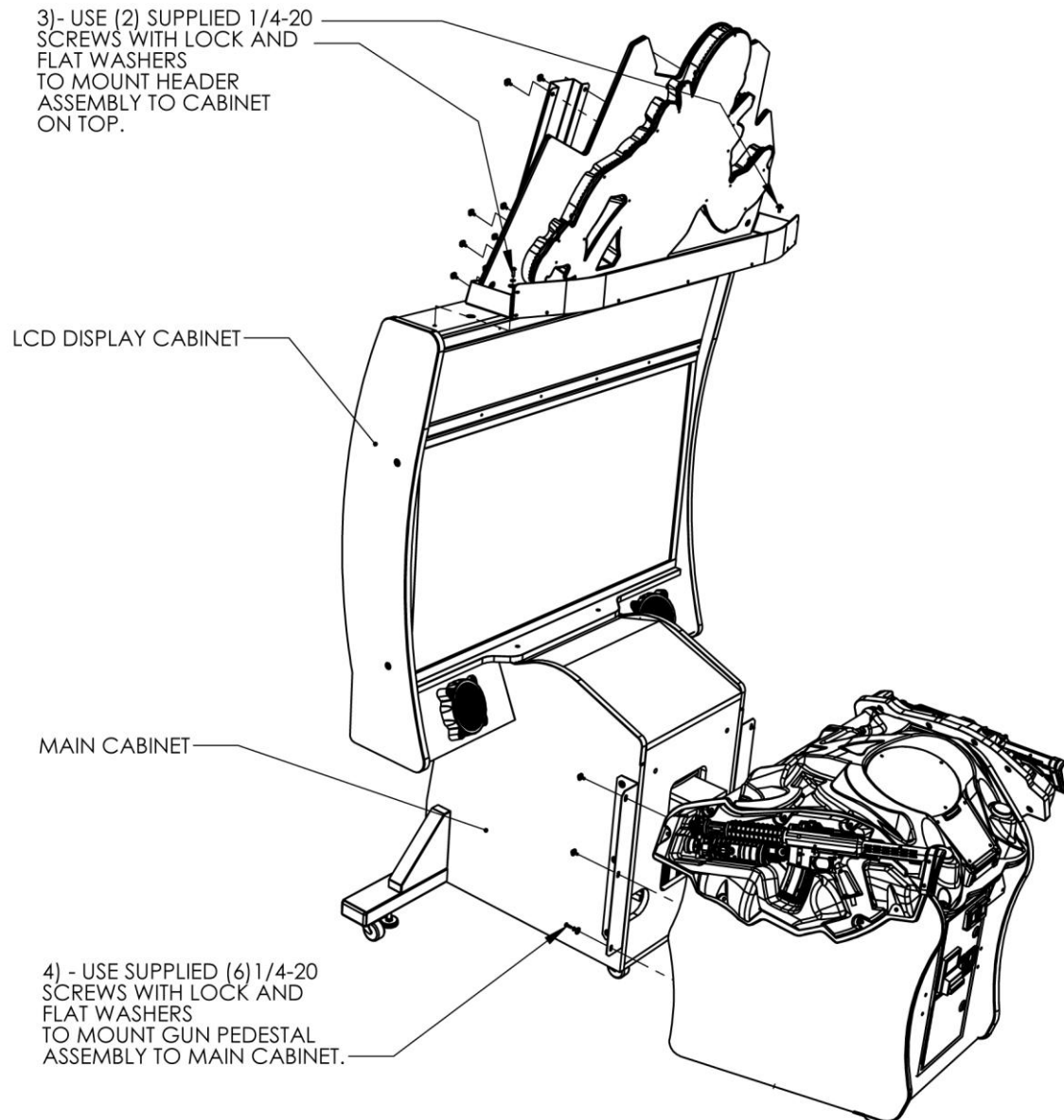
1. Using a wheeled cart and at least one assistant, transport the cabinet to a suitable playing area.
Proximity to Neon Lights
Neon lights may reduce the ability of the IR sensors to accurately track the guns. Place the cabinet far away from neon lights or turn off any nearby neon lights.
2. Ensure the game cabinet is level and stable.
With at least one assistant, adjust the leg levelers.
3. Check the AC line cord for visible signs of damage.
Pay particular attention to the plug and line cord insulation.
4. Check for shipping damage to the following:
 - Gun assembly: Left and right guns, gun holders, and cables
 - Cabinet Marquee
 - Cabinet back door
 - Cabinet coin door
 - Cabinet and gun decals

Attach Marquee to Deluxe Cabinet

1. With an assistant and two ladders, lift marquee on top of cabinet.
2. Affix four hex bolts with washers to secure marquee to top of cabinet.
Caution: Avoid pinching cables.
3. Connect four cables from marquee to cabinet.
4. Affix six ¼-20 TORX screws with washers to secure mounting bracket to back of cabinet.
Caution: Avoid pinching cables.
5. Affix four ¼-20 TORX screws with washers to secure mounting bracket to back of marquee.



**Deluxe Marquee Installation**



Deluxe Cabinet Setup

Attach Front Pedestal to Monitor Assembly

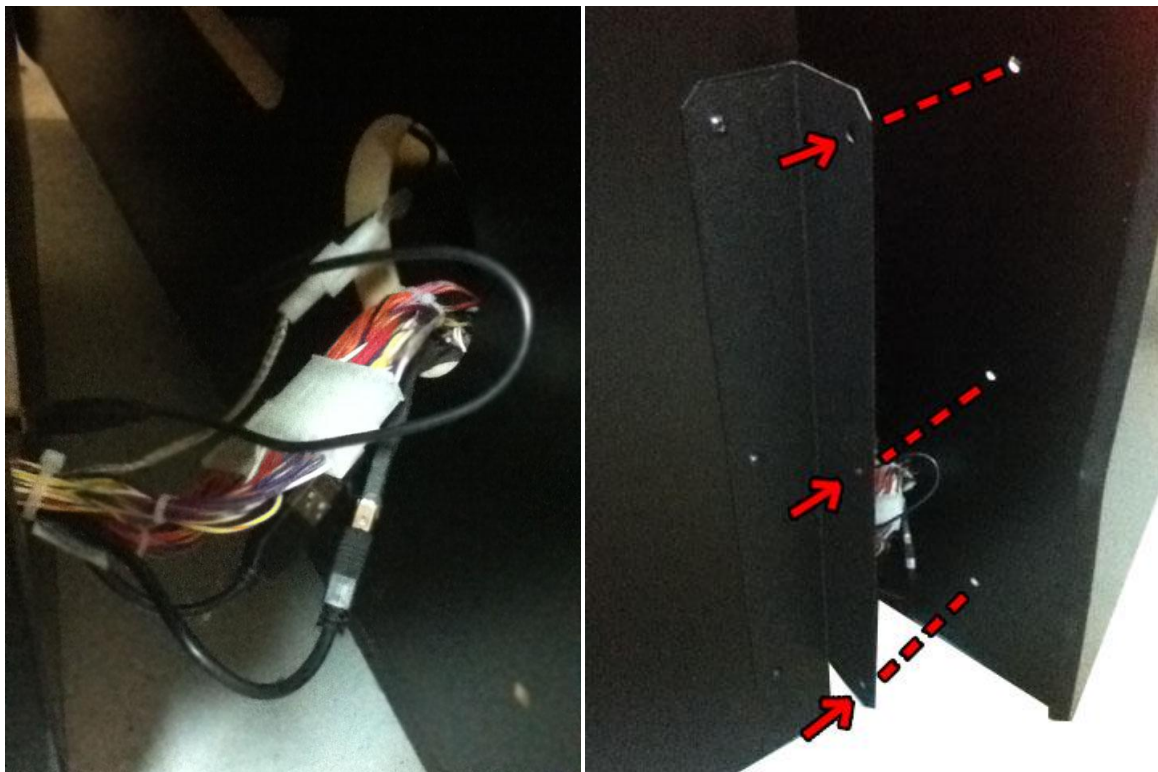
1. Move front pedestal assembly a few inches away from the monitor assembly.

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.

2. Gently pull all connectors through the round holes in the front pedestal and monitor assembly.
3. Connect single-pin ground cable from monitor assembly to front pedestal.
4. Connect two USB cables from monitor assembly to two USB cables from front pedestal.
Note: the USB gun cables are interchangeable. The PC will decide which is the right and left gun.
5. Connect the 10-pin and 16-pin data/power connectors from the monitor assembly to their mates from the front assembly
6. Move front pedestal so that it is flush with monitor assembly.



Caution: *make sure cables are not pinched. Tuck them back through openings into either cabinet.*

7. Align holes in monitor assembly brackets with holes in rear of front pedestal assembly.
Adjust leg levelers on front pedestal assembly as needed.
8. Insert three ¼-20 TORX screws with flat washers through each of the three holes at the front of the bracket into the three holes of the front pedestal.
Do not tighten screws.
9. Repeat with other bracket.
10. Tighten all screws with supplied TORX wrench.



Fixed Gun Cabinet Setup

Unpack Carton

1. Place the crate on a flat stable surface, and cut the banding straps to remove cardboard.
2. Lift off the large cardboard container surrounding the cabinet and any shipping cleats.
3. With at least two people and a dolly, remove the cabinet from the shipping pallet.
4. Remove the coin door key from the coin return chute, and open the top coin door.
5. Locate the key for the back door and the cash box.
6. Remove the items inside cash box: AC line cord, a bag of screws and tools, and a warranty card.
7. Using a wheeled cart and at least one assistant, transport the cabinet to a suitable playing area.
8. With at least one assistant, adjust the leg levelers. Ensure the game cabinet is level and stable.
9. Check for shipping damage to the following: AC line cord, Left and right guns, Marquee/monitor glass, Cabinet back/coin doors, Cabinet and gun decals

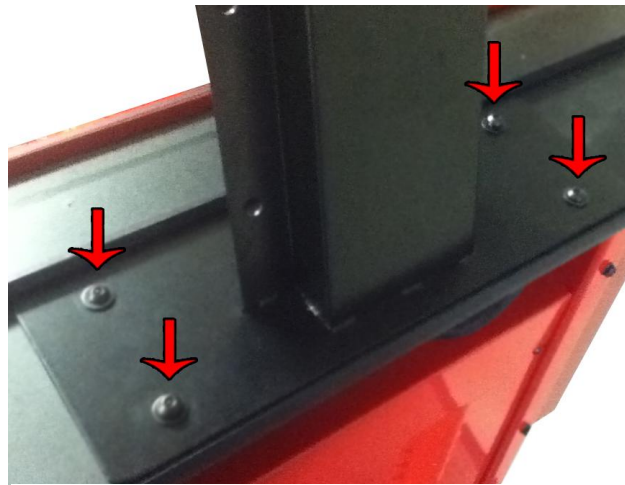
Attach Marquee Assembly to Fixed Gun Cabinet

1. Position back support on top of cabinet routing cables from cabinet through back support.

Caution: Do not pinch cables in mounting bracket.

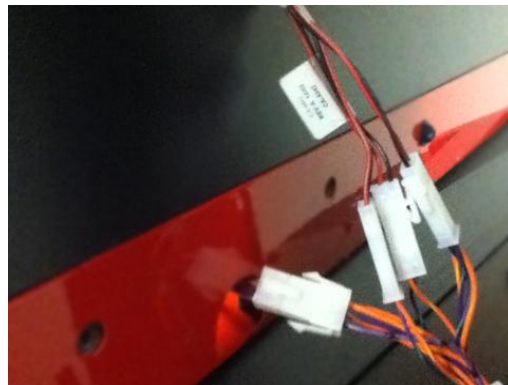


Step 1 - Position Mounting Plate



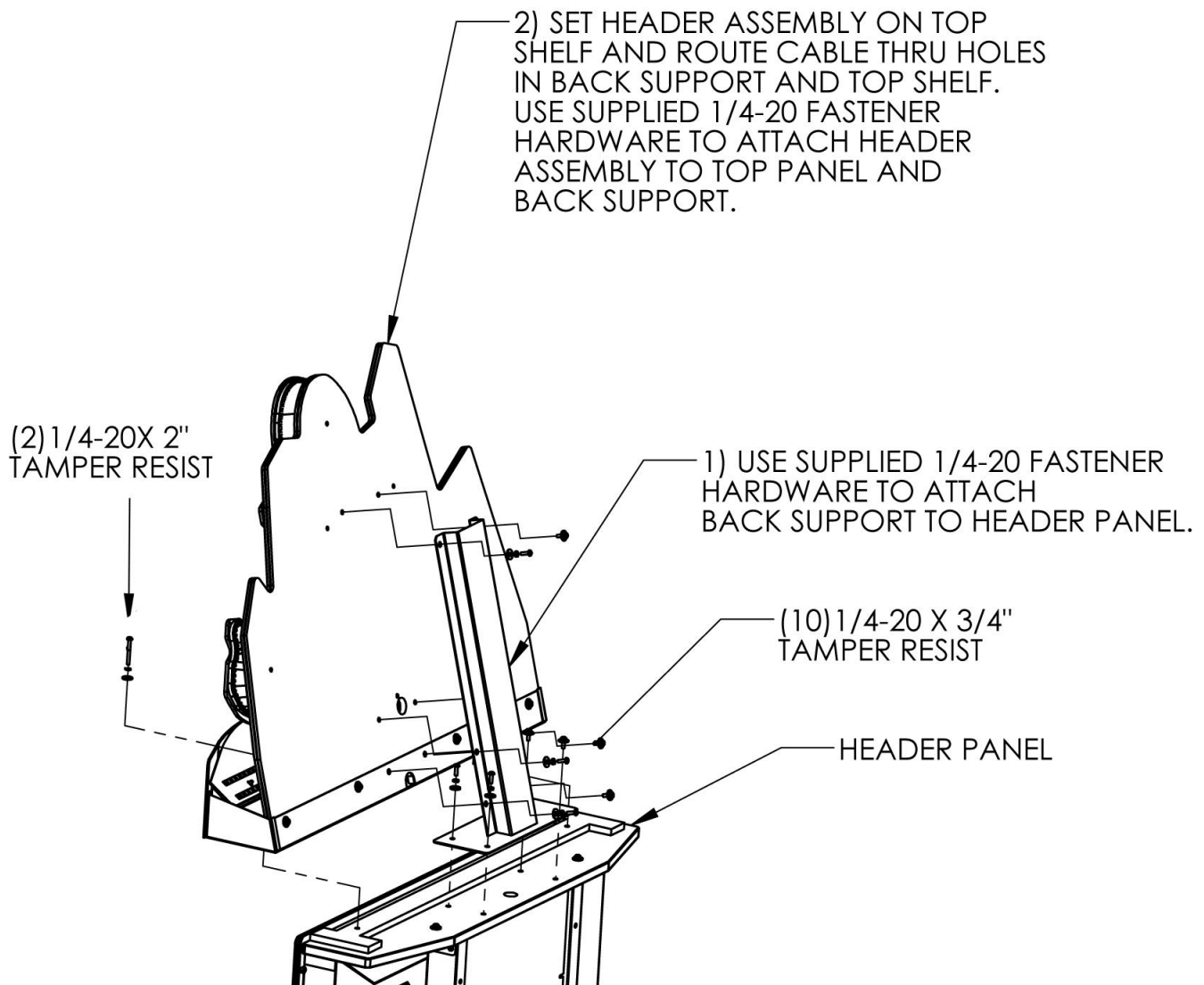
Step 2 - Secure Mounting Plate to Cabinet

2. Affix four ¼-20 torx screws with washers to secure back support to top of cabinet.
3. With two assistants and two ladders, lift marquee on top of cabinet and connect the four cables from marquee to cabinet. **Caution: Do not pinch cables in mounting bracket.**



Step 3 - Connect Cables

4. Affix two ¼-20 torx screws with washers through back support into metal bottom of marquee.
Do not fully tighten.
5. Affix two ¼-20 bolts with washers to secure marquee to top of cabinet. ***Do not fully tighten.***
6. Affix four ¼-20 torx screws with washers to secure back support to back of marquee.
7. Tighten all screws.



Fixed Gun Marquee Assembly



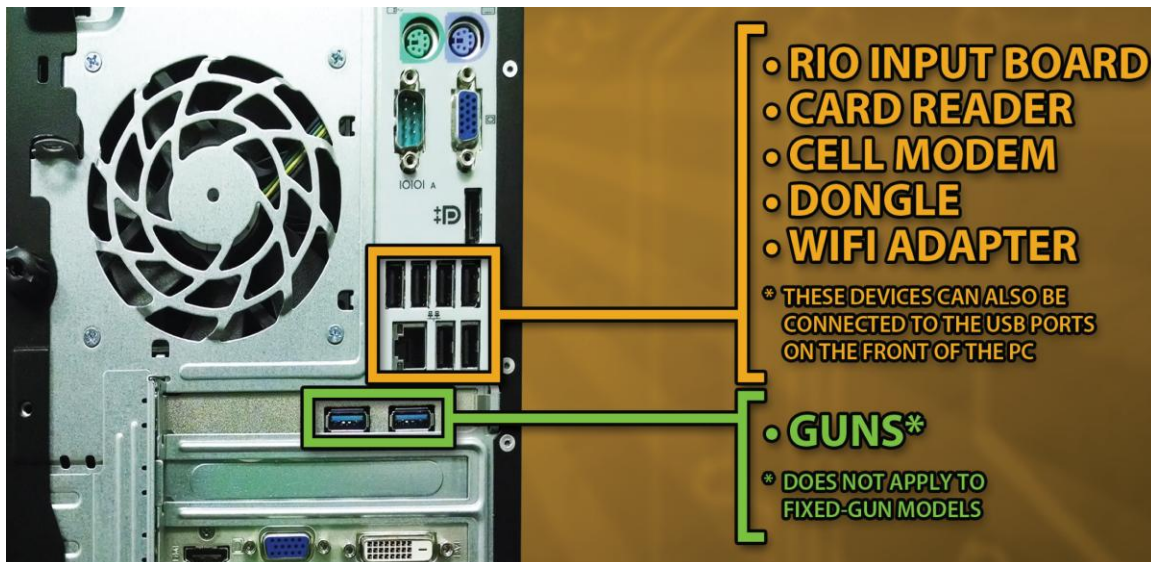
Cabinet Functionality Check

Verify Cabinet Functionality

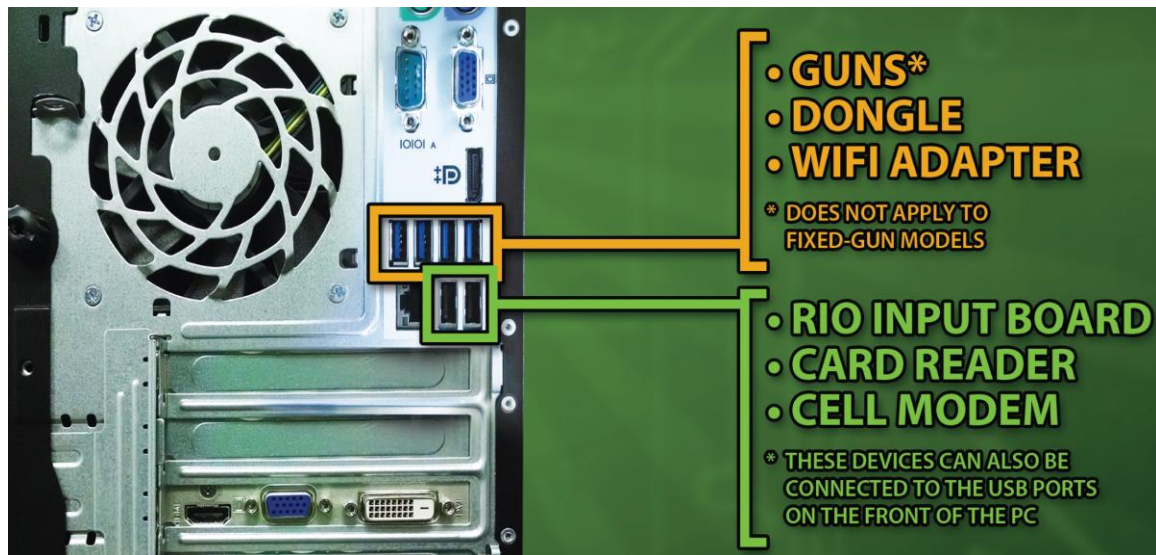
1. Verify the voltage in the nearest AC outlet.
2. Verify the AC outlet ground connection is present and working.
3. Inside back of cabinet, verify the voltage selector switch is set for correct AC voltage.
4. Plug the line cord into the AC outlet, and turn the power switch to ON.
5. Verify that the cooling fans on the cabinet are working.
6. Check that no component is excessively hot or emitting foul odors.
7. If there are any problems with cabinet functionality, contact the distributor.

Verify USB Connections

If USB connections are incorrect, an error screen will appear on start up. Reconnect devices to appropriate USB ports. **Wi-Fi adapter, card reader, and cell modem available in the Online Kit.*



HP 6005



HP 6305

Gun Calibration

1. Pull the trigger on the left gun to indicate that it is Player 1.
2. Aim and shoot as instructed.
3. The targeting reticle indicates the spot where the gun is aimed.
Verify accuracy by pointing at different areas of the screen.
4. Accept calibration by pressing start button.
5. Repeat steps 2-5 for right gun.
6. Press Start button when finished.

Verify Input and Output Functionality

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 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.



Maintenance

Regular Gun Maintenance Procedure

In order to maximize income potential, keep the guns in optimal working order by performing the following five-step procedure every time you empty the cash box.

1. **Check the camera lens**
Observe the tinted lens to ensure it has no cracks, scratches or dirt.
Clean or replace the lens, if necessary.
2. **Visually and manually inspect gun cable connections**
Open the coin door to see them. Reach in and ensure the cables are fully connected and are not pinched by any components.
3. **Verify switch functionality**
Press the Test button on the service panel, select Tests, select Input Tests, and then select Switch Test (described earlier in this manual) to ensure all the gun switches are functioning properly. Switches in the gun include
 - Trigger
 - Reload
 - Grenade
4. **Calibrate, calibrate, calibrate**
Return to the Main Menu screen and select Gun Calibration. Follow the instructions earlier in this manual or on screen to recalibrate both guns.
5. **Check IR sensors**
**Deluxe model only*
The IR sensors are directly below and above the printed marquee on the monitor assembly.
From the Main Menu, select Tests, select Input Tests, and select IR Gun Sensor Test. See pg 22

Recalibrate the guns any time the game is moved or the guns are repaired, replaced or swapped.
Note: It is not advisable to replace or swap guns while power is on. Shut AC power off before connecting or disconnecting any components. If, for some reason, guns are changed while power is on, shut off AC power and reboot after the guns are connected again. Failure to do so may result in incorrect gun functionality.

Following these procedures is critical to maintaining guns and maximizing revenue. Perform regular gun maintenance to keep your game in top working order.

Fixed Gun Maintenance

Opening the Gun Case

Open the gun case to service the trigger, buttons, and coil assembly. You do not need to open the case to service the pots that aim the gun.

1. To open the gun case, first remove the 12 Torx security screws, shown by the single arrows in the picture below. Remove the corresponding nuts from the other side of the gun.
2. Remove the four screws, shown by double arrows in the picture below. These screw into the frame, so there are no nuts to remove.
3. Carefully, remove the left side cover from the gun, being careful not to pull the wires from the grenade button. The wires are long enough that you can set the cover on the control panel near the gun without disconnecting the wires.



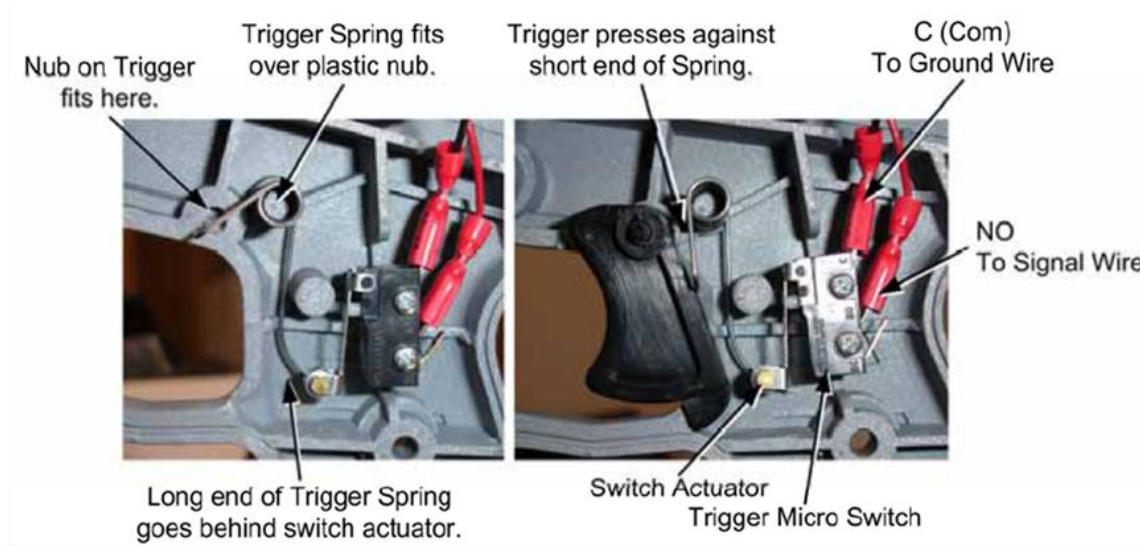
Closing the Gun Case

1. To close the gun case, align the slots that fit around the gun PCD, and then carefully put the two halves together. Make sure no wires or components get caught or pinched. Pay special attention to the area around the trigger and spring, the wires coming out of the frame shaft, and the wires attached to the coil and barrel light.
2. Insert the four screws shown with the double arrows. Partially tighten all four. Verify the case is mating properly, before tightening the screws fully.
3. Check the trigger to make sure it works properly. The trigger or spring could shift while assembling the case.
4. Replace the remaining 8 Torx screws and nuts, shown by the single arrows above.
5. Tighten all screws fully. Be carefully not to over tighten and crack plastic.



Gun Trigger Service

1. Install the plastic trigger pressing against the spring. The bottom part of the trigger will press the switch actuator when a player pulls the trigger.
2. To replace the micro switch, remove the two screws that secure it. Remove the two wires and install them on the same terminals on the replacement switch.
3. Connect the signal wire to the NO connector (middle connector) and the black ground wire to the C connector.



Gun Button LED Service

1. If you replace a button micro switch, connect the signal wire to the NO (middle) connector and the black ground wire to the C connector. Failure to do so will cause the buttons to not work.
2. To replace the LED bulb, pull the lamp assembly straight out of the button housing. Then, pull the bulb straight out of the lamp housing. The two lamp wires are interchangeable and can connect to either terminal on the lamp housing.

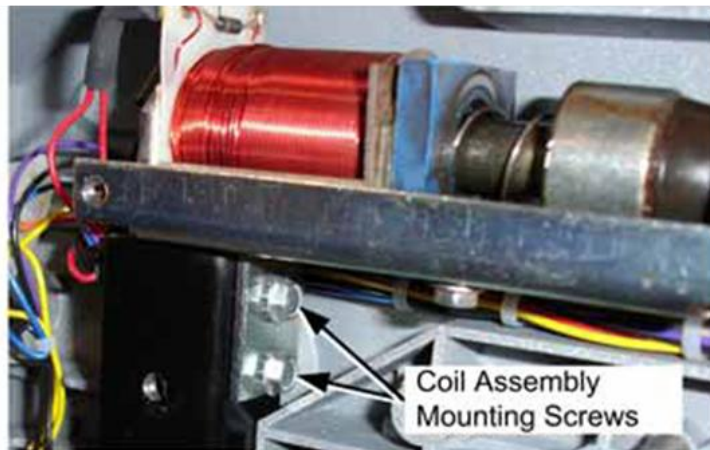
Gun Coil Assembly Service

The coil assembly provides the force-feedback recoil when the gun is fired.

1. Open the gun case as described earlier.



2. Remove the two screws shown below from the right side of the gun.
3. Remove the nut that secures the ground wire to the ground lug on the side of the coil assembly mounting plate.
4. Remove the two screws that secure the coil assembly mounting plate to the gun shaft.
5. Reverse the steps to install the coil assembly. Be sure to secure the ground wire to the ground lug of the coil assembly mounting plate.



Gun Pot and Gear Service

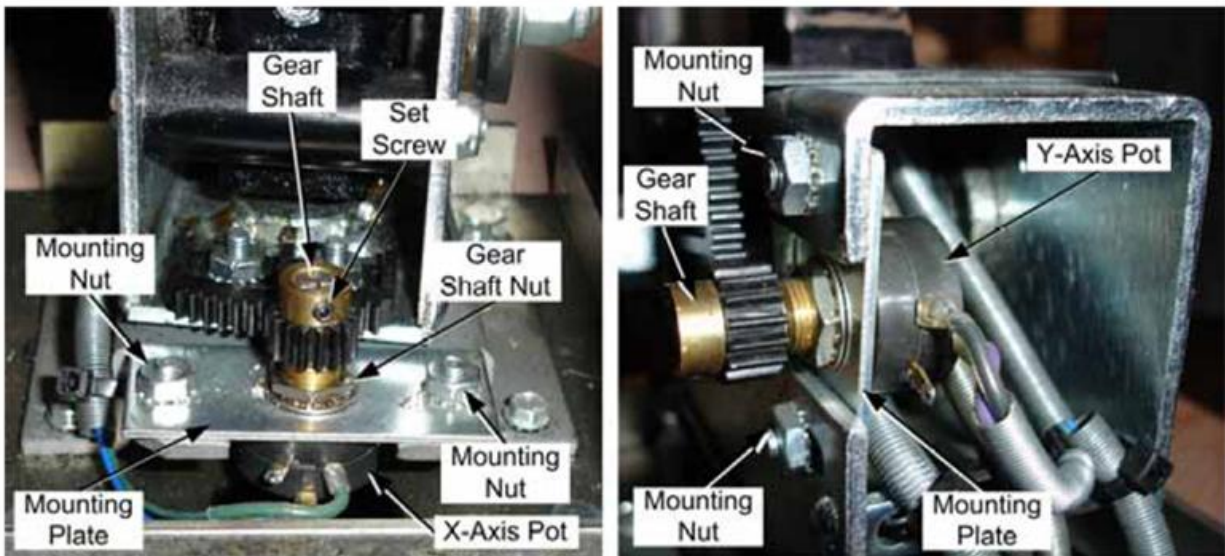
Each gun has two pots that measure the movement of the gun on the x-axis (left/right) and y-axis (up/down). The x-axis pot is located under the gun base below the trigger. The y-axis pot is located on the side of the gun base below the reload button.

Use the Gun Test & Calibration screen in the diagnostic menu to test gun motion. To test a pot, swivel gun along an axis paying attention to the resistance. There should be a steady linear increase or decrease in resistance with no jumps. Replace the gears, if they are worn or cracked.



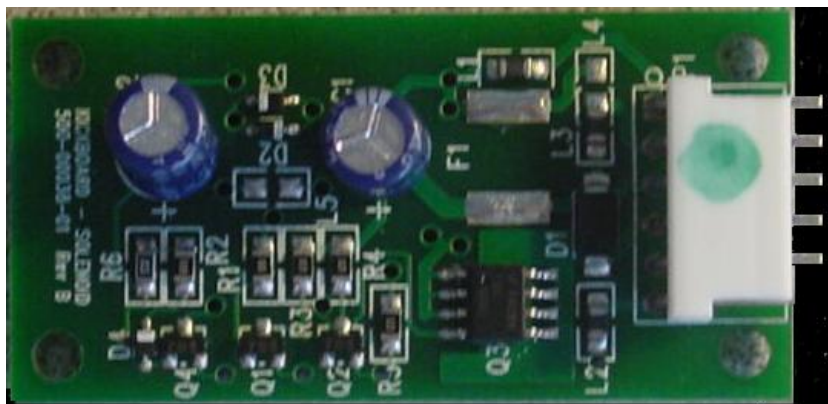
Replacing a pot or gear shaft

1. Remove the six Torx security screws that secure the front and rear covers over the gun base.
2. Remove both covers.
3. Remove the two mounting nuts and remove the mounting plate from the pot to be replaced.
4. Using an Allen wrench to loosen the set screw from the gear shaft, and remove the gear shaft.
5. Using a ½" wrench, remove the nut and lock washer that secure the pot to the frame.
6. De-solder the wires and solder them on the same terminals on the replacement pot.
7. Install the new 5k ohm pot with the same orientation. Make sure that the plastic keys on the pot mate properly with the metal.
8. Re-install the lock washer and nut, being careful not to over tighten.
9. Re-install the gear shaft and tighten the set screw.
10. Calibrate the gun using the diagnostic menu option after replacing a pot.



Gun PCB

The gun driver board is mounted remotely in the cabinet and controls the voltage to the gun coil. There is one for each gun. Disconnect the cabinet from AC power before making any connections to the gun PCB. Hot-plugging any connector will damage the PCB.



Hard Drive Recovery

Hard Drive Recovery is used to update your game with new software or return the game to factory

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:



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, insert recovery DVD, marked as Disc 1, into DVD-ROM drive tray.
2. Close tray and Turn cabinet AC power switch to OFF.
3. Wait 30 seconds, then turn AC power switch to ON. Recovery begins automatically.
If recovery fails to begin, check that disc is seated properly in DVD-ROM drive tray.
4. Initial software loading may take several minutes. Check progress periodically.
Do not interrupt power or reset the game during recovery.
5. At some point, the game will eject *Disc 1* and prompt you to insert *Disc 2*.
6. Swap discs and close the tray. **Do not interrupt power or reset the game.**
7. At some point, the game will eject *Disc 2* and prompt you to insert *Disc 3*.
8. Swap discs and close the tray. **Do not interrupt power or reset the game.**
9. When software has finished loading, a message indicates that restore is complete.
When instructed to remove *Disc 3*, open DVD-ROM drive tray and remove disk.
10. Turn cabinet power switch off.
11. After 30 seconds, turn cabinet power switch on.
12. After game restarts, it will enter calibration mode. Re-calibrate guns.
13. Settings will now be factory defaults – make changes as desired.



Diagnostic Menu System

Diagnostic Menu Interface

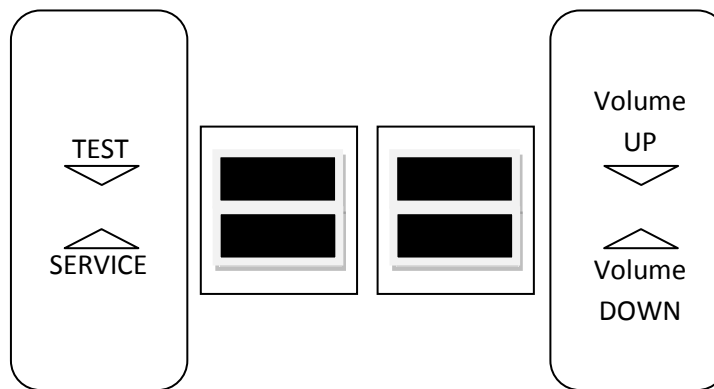
The Service Panel should have four buttons. Pressing the TEST button at any point while the game is running will enter the diagnostic menu. This menu can be navigated with the service panel or the gun.

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 highlighted menu option.

For clarity, all menu screens in this manual omit the header, background image, and control instructions.

Navigating with Service Panel Switches



- TEST enters diagnostic system or select highlighted menu option
- SERVICE exit current menu
- VOLUME DOWN moves down through menu or setting choices
- VOLUME UP moves up through menu or setting choices

Navigating with Gun

- The menu interface can be navigated with the gun by aiming and shooting.
- Shooting the right side options will perform the indicated action.
- Shoot scroll up or scroll down to highlight menu options.
- Shoot select to enter the highlighted menu or perform the highlighted option.
- Shoot exit to return to the prior menu or exit the diagnostic system.

Menu Screens and Descriptions

Main Menu

MAIN MENU

Adjustments
Audits
Online
Resets
System Information
Tests
Utilities

- **Adjustments** pg 22 - modify various game settings
- **Audits** pg 26 - view various tracking statistics
- **Online** pg 27 - setup and manage online functionality
- **Resets** pg 31 - used to restore game to factory defaults
- **Information** pg 31 - view various hardware and software information
- **Tests** pg 34 - execute various diagnostic and maintenance tests
- **Utilities** pg 38 - contains tools for managing game performance

Main Menu

Adjustments

These menus control gameplay, coinage and sound adjustments.

Adjustments

Game Adjustments
Online System Adjustments
Player Cost Adjustments
Sound Adjustments
Alternative Payment Adjustments
Hardware Adjustments
Coin Adjustments

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



Main Menu
Adjustments
Game Adjustments

Game Adjustments	
Minimum Game Time	03:00
Off-Screen Reload	Off

Setting	Description	Default	Choices
Minimum Game Time	Set the minimum play time.	2:30 minutes	Positive amount of time.
Off-Screen Reload	Allow the use of off-screen reload.	Off	Off/On

Main Menu
Adjustments
Online System Adjustments

ONLINE SYSTEM ADJUSTMENTS	
Online Maintenance Hour	4:00 am-5:00 am
Use Slow Network Wait Times	Off
DB Server Port	Automatic
File Server Port	Automatic

Setting	Description	Default	Choices
Online Maintenance Hour	The 60-minute period during which online-enabled games contact the server to check for software updates and synchronize with the game database.	4:00 am - 5:00 am	24 hours in one hour increments
Use Slow Network Wait Times	Extends duration before time out to accommodate slow network speeds.	Off	Off/On
DB Server Port	Adjusts the ports used to connect to the DB server.	Automatic	Automatic, 21, 80, 443, 7686
File Serve Port	Adjusts the ports used to connect to the File server.	Automatic	Automatic, 21, 80, 443, 8080, 8686

Main Menu

Adjustments

Player Cost Adjustments

Player Cost Adjustments

Freeplay OFF
 Player Cost \$1.00

Setting	Description	Default	Choices
Freeplay	Allows play without money	OFF	OFF / ON
Player Cost	Game start/continue cost	\$1.00	\$0.00 - \$63.75 incrementing by coin base unit setting

Main Menu

Adjustments

Sound Adjustments

Sound Adjustments

Game Volume 20
 Attract Volume 15
 Attract Sound Frequency Frequently

Setting	Description	Default	Choices
Game Volume	Modifies volume during game play	20	0-100
Attract Volume	Modifies volume during attract mode	15	0-100
Attract Sound Frequency	Determines how often attract mode music will be played	Frequently	Off, Occasionally, Frequently, or Always

Main Menu

Adjustments

Alternative Payment Adjustments

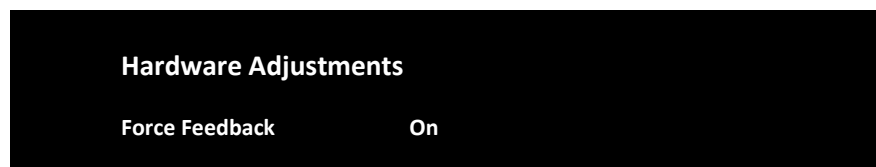
Alternative Payment Adjustments

Coin Meter on Credit Card On

Setting	Description	Default	Choices
Coin Meter on Credit Card	Determine if coin meter pulses when credit cards are used	On	On/Off



Main Menu
Adjustments
Hardware Adjustments



Setting	Description	Default	Choices
Force Feedback	Turn gun recoil on or off	On	On/Off

Main Menu
Adjustments
Coin Adjustments



Setting	Description	Default	Choices
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 Base Unit	Changes the amount by which monetary values increment	\$0.25	\$0.25 - \$63.75 in \$0.01 increments
Coin 1 Value	Sets the coin slot pricing	\$0.25	\$0.25 - \$63.75 incrementing by coin base unit setting
Coin 2 Value	Sets the coin slot pricing	\$0.25	\$0.25 - \$63.75 incrementing by coin base unit setting
DBV Pulse Value	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 incrementing by coin base unit setting
Service Credit Value	Set the amount of credit given by the service button	\$0.25	\$0.25 - \$63.75 incrementing by coin base unit setting

DBV PULSE VALUE

DBV must be set to award four pulses per dollar. Consult DBV for dipswitch settings or programming instructions.

Main Menu

Audits

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

Audits

Coin Audits
System Audits
Gameplay Audits

Main Menu

Audits**Coin Audits****Coin Audits**

Total Money In	\$0.00
Coins in Left Coin Slot	0
Money in Left Coin Slot	\$0.00
Coins in Right Coin Slot	0
Money in Right Coin Slot	\$0.00
Number of DBV Pulses	0
Money in DBV	\$0.00
Number of Credit Card Swipes	0
Credit Card Money	\$0.00
Service Switch Presses	0
Service Credit Money	\$0.00

Main Menu

Audits**System Audits****System Audits**

Watchdogs	0
Exceptions	0
Bad Traps	0
Up Time:	0 days, 00:00:00



Main Menu
Audits
Gameplay Audits

Gameplay Audits	
Player Starts	0
Continues	0
Continues Offered	0
Games Started	0
Games Ended (not won)	0
Games Ended (won)	0
Average Game Time (playing)	00:00:00
Total Game Time (playing)	0 days, 00:00:00
Average Game Time (total)	00:00:00
Total Game Time (total)	0 days, 00:00:00

Main Menu
Online

These menus cover all online interaction with CoinUp®.

Online
Connection Details and Test
Cellular Information
Wi-Fi Information
Online Synchronization
Connection Wizard
Cabinet Location/Registration
Software Update
Online Debug

Main Menu

Online

Connection Details and Test

Use the Test Connection button to refresh the ping results.

Connection Details and Test			
Connection Interface	Wired (Ethernet)	eth0	00:18:d3:ff:c2:d6
Connection IP Info	10.0.1.2	255.255.255.0	10.0.1.1
Server Info	games.playmechanix.net	67.217.33.153	80
File Server Info	files.playmechanix.net	67.217.33.153	443
Test Results			
Server Ping	0	ms	Success
Database Ping	295	ms	Success
File Server Ping	840	ms	Success
Queued Messages	0		
Last Successful DB Query	04.05.2012 10:57:13	Last Successful FS Transfer	04.05.2012 10:57:13
Last Successful DB Query	04.05.2012 10:58:13	Last Successful FS Connection	04.05.2012 10:57:13
Last Failed DB Query	Never	Last Failed FS Connection	Never

Main Menu

Online

Cellular Information

Cellular Information provides all relevant information if a cell modem is being used.

Cellular Information	
Device Model	Not Found
Service Provider	N/A
ESN	N/A
Mobile Number	N/A
Mobile Line	Unknown
Connection Status	Not Connected
Roaming	No
Signal Strength	Bar Graph (0.0dBm)

Main Menu

Online

Wi-Fi Information

Wi-Fi Information provides all relevant information if a wireless device is being used.

Wi-Fi Information	
Adapter Model	Not Found
Adapter MAC Address	N/A
SSID	N/A
Connection Status	Not Connected
Access Point MAC Address	N/A
Signal Strength	Bar Graph



Main Menu
Online
Online Synchronization
This option executes synchronization with the online database. It will try to update the system clock, game registration, and other online features. This synchronization is also executed when the game is rebooted. Use this option to force any changes that have been made via coinup.com.

Main Menu
Online
Connection Wizard
The Connection Wizard is a step by step setup process for selecting and configuring the game's internet connection.

Main Menu
Online
Cabinet Location/Registration
This option displays current registration status for the machine. It allows the operator to register the machine to a location or change the registered location of the game. Game registration allows a variety of helpful interactions with coinup.com and online gameplay.

Main Menu
Online
Software Update
This option contacts database and file servers to check for new software updates.

Main Menu
Online
Online Debug

Online Debug
View Online Permissions
Server Details
Certificate Details
Activate Cell Modem
Accept Cell Contract
Purge Query Cache

Main Menu

Online

Online Debug

View Online Permissions

This page displays information regarding permitted online activity.

View Online Permissions

Online:	ENABLED
Registered:	ENABLED
Full Connection:	ENABLED
Active Connection:	ENABLED
Credit Cards:	ENABLED
Quick Switch:	DISABLED

Main Menu

Online

Online Debug

Server Details

Displays server name, IP, and port for both database and file servers.

Main Menu

Online

Online Debug

Certificate Details

This screen displays the client's authorization certificate.

Main Menu

Online

Online Debug

Activate Cell Modem

This option activates the cell modem line for use.

Main Menu

Online

Online Debug

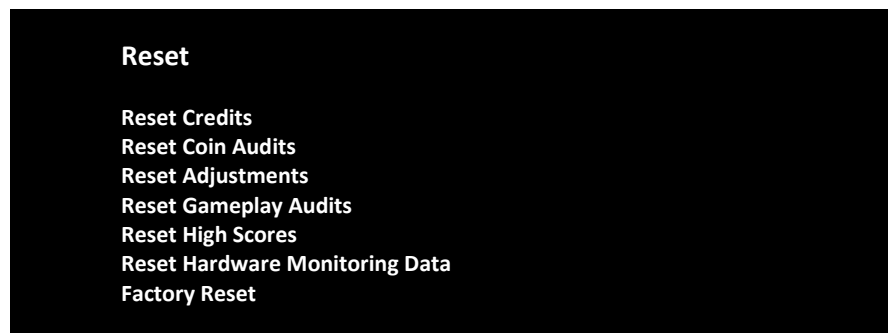
Accept Cell Contract

This option accepts the cellular contract.

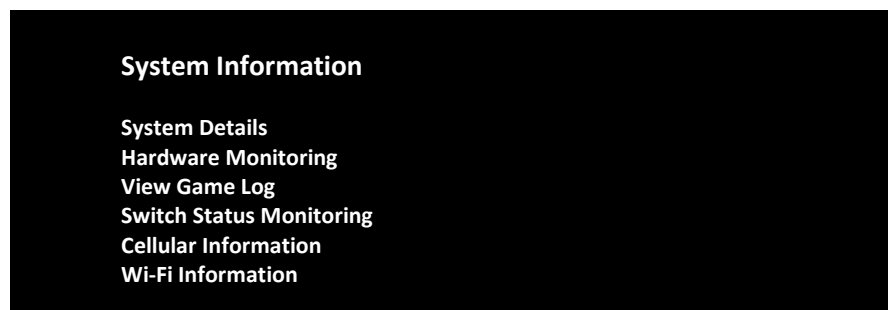


Main Menu
Online
Online Debug
Purge Query Cache
Purging the query cache will clear any online information stored locally forcing the game to pull down the most current information.

Main Menu
Resets
This menu allows for clearing of various settings and information. <i>Factory Reset</i> clears everything and restores the machine to factory defaults.



Main Menu
System Information



Main Menu

Information

System Details**System Details**

BIOS	Vendor: Hewlett-Packard	Version: 786G6	Date: 03/27/12
Kernel	2.6.39-jl2		
Processor	Intel® Celeron® CPU G530 @ 2.40GHz		
Memory	4147244 kb		
G5 Rev	14639		
Library Rev	2269		
Engine version	01.31.00		
I/O lib	01.02.02		
IR Track	03.04.00		
SDL	1.2.14		
Sound Lib	1.2.11		
RIO	HW: FFFC SW: 0.15		
Card Reader	1.6.3		
Game Version	2.00		

Main Menu

Information

Hardware Monitoring**Hardware Monitoring**

System Uptime:	0 days, 00 hours, 00 minutes
Connection Audits Since:	01.01.2014 12:00:00
IO Board Connection:	Pass
IO Board Disconnects:	0
IO Board Last Disconnect:	Never
Card Reader Connection:	Pass
Card Reader Disconnects:	0
Card Reader Last Disconnect:	Never

Main Menu

Information

View Game Log

This page displays any logged events or errors that occur during the game.



Main Menu
Information
Switch Status Monitoring

Switch Status Monitoring	
Left Start Button Status	OK
Right Start Button Status	OK
Left Gun Trigger Status	OK
Right Gun Trigger Status	OK
Left Gun Reload Status	OK
Right Gun Reload Status	OK
Left Gun Grenade Status	OK
Right Gun Grenade Status	OK

Main Menu
Information
Cellular Information

See pg 28 – same screen as in Online Menu

Main Menu
Information
Wi-Fi Information

See pg 28 – same screen as in Online Menu

Main Menu**Tests**

These various tests check cabinet and game functionality.
They are divided into submenus for input and output tests.

Tests

Input Tests
Video Tests
Coin Meter Test
Lamp Tests
Sound Tests
File Test
Watchdog Test

Main Menu**Tests****Input Tests****Input Tests**

Gun Force Feedback Tests
Switch Tests
Card Reader Test
Gun Camera Test

Main Menu**Tests****Input Tests****Gun Force Feedback Tests**

Test the various recoil settings for each gun.



Main Menu
Tests
Input Tests
Switch Tests

This checks input switch performance. By default, all switches should indicate inactive. When a switch is pressed, it should indicate active and be highlighted on screen.

Switch Tests			
Coin Slot 1	Inactive	Service	Inactive
Coin Slot 2	Inactive	Test	Inactive
DBV	Inactive	Gun 1 Trigger	Inactive
Player 1 Start	Inactive	Gun 1 Pump	Inactive
Player 2 Start	Inactive	Gun 1 Grenade	Inactive
Vol +	Inactive	Gun 2 Trigger	Inactive
Vol -	Inactive	Gun 2 Pump	Inactive
		Gun 2 Grenade	Inactive

The Switch Test menu has a unique exit procedure, because it checks the switches normally used for navigation. To exit the switch test menu, press the test button five times.

Main Menu
Tests
Input Tests
Card Reader Test

On swipe, card reader should read the card type and indicate success/failure for track 1 & 2. If results indicate failure, that card might be worn. If results indicate failure across several cards, card reader might be faulty.

Card Reader Test	
Card Type:	Player Card
Track 1 Data:	Success
Track 2 Data:	Success
Total # of Swipes:	0
# of Successful Swipes:	0
# of Failed Swipes:	0
Swipe Card At Any Time.	

Main Menu

Tests

Input Tests

Gun Camera Test

Only Present on DELUXE unit This test displays the IR array information as interpreted by the gun's camera. This will be displayed onscreen as two rows of dots. If these dots do not display, there may be a problem with the camera or IR array boards. If any grouping of dots is not present or flickers, IR board should be replaced.

Main Menu

Tests

Video Tests**Video Tests**

Screen Color Test
Screen Color Calibration

Main Menu

Tests

Video Tests

Screen Color Test

Screen Color test provides a full screen of a solid color. Press start button to cycle colors.

Main Menu

Tests

Video Tests

Screen Color Calibration

Screen test provides a static picture and color bars to assist in adjusting monitor settings.

Main Menu

Tests

Coin Meter Test

Press a start button to increment the coin meter.



Main Menu

Tests

Lamp Tests

This test checks for burned-out cabinet lamps. Use volume +/- to cycle through all the lamps.

Main Menu

Tests

Sound Tests

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. 100 and 1000 Hz tests generate specific frequency sounds on the indicated channel. Cancel these sounds by selecting another test or exiting the menu.

Main Menu

Tests

File Test

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

Tests

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

Utilities

Utilities

Gun Calibration
Cabinet Suspend
Collection

Main Menu

Utilities

Gun Calibration

This is the same procedure described earlier on pg13.

Main Menu

Utilities

Cabinet Suspend

This option toggles a suspended state for maintenance to avoid online service changes.

Main Menu

Utilities

Collection

Collection

Take Collection
View Credit Card Fee Details
View Coinup Service Details



Main Menu
Utilities
Collection
Take Collection

Take Collection		
Date of Last Collection:	01.10.2012 (0.0 days)	
Gross Collection		\$0.00
Cash	\$0.00	
Cash Card	\$0.00	
Credit Card	\$0.00	
Player Account	\$0.00	
Service Credits	\$0.00	
<u>Balance (Cash Card not included)</u>		<u>\$0.00</u>
Credit Card Fees		- \$0.00
CoinUp Fees		- \$0.00
<u>Net Collection</u>		<u>\$0.00</u>
Operator Split	(50.0%)	\$0.00
Location Split	(50.0%)	\$0.00

Main Menu
Utilities
Collections
View Credit Card Details

View Credit Card Details	
Attempted Credit Transactions	0
Successful Credit Transaction	0
<u>Total Charged</u>	<u>\$0.00</u>
Transaction Fees	\$0.00

Main Menu
Utilities
Collections
View Coinup Service Details

View Coinup Service Details

Online Subscription Service	(0.0 days)	\$0.00
Cell Modem Charge	(0.0 days)	\$0.00
Operations Charge	(0.0 days)	\$0.00
<u>Credit Card Fees</u>		<u>\$0.00</u>
Total Coinup Service		\$0.00



Troubleshooting

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

General Troubleshooting

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.
Screen not powering on with game	TV Auto On not set	Consult TV manual for details.
NO VIDEO message	Video cables not plugged in properly	Reattach and/or tighten video cable to monitor. Reattach and/or tighten video cable to PC.
	Faulty video cable	Replace video cable
	PC not turned on.	Turn PC power switch on.
No sound	Bad Connection	Check connection to speakers.
Game does not load	Hard drive failure	Recover hard drive. See procedure on pg 16.
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.		
WARNING! Data Files Corrupted. (Game Operation May Become Unstable.) Use “Test” Switch to Enter Test Mode and Run “File Test.” Press Start To Continue.		
Game resets	Bad file.	Run File Test. Restore hard drive.

Problem	Possible Cause	Solution
Guns won't register or function poorly	Bad calibration	Calibrate guns.
	Dirty/damaged lens	Clean gun lens.
	Gun disconnected	Check USB connections.
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>Dongle Not Present</i>	Dongle missing or disconnected	Find dongle USB connection and reseal in USB port
	Faulty USB port	Connect dongle to another 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 Try connecting to a different USB port
	Blown fuse	Verify 5V and 12V fuses are not blown
	No power to RIO board	Check for proper voltage (+5V, +12V) at RIO P2 connector
	Bad RIO Board	Replace RIO board with known functional board

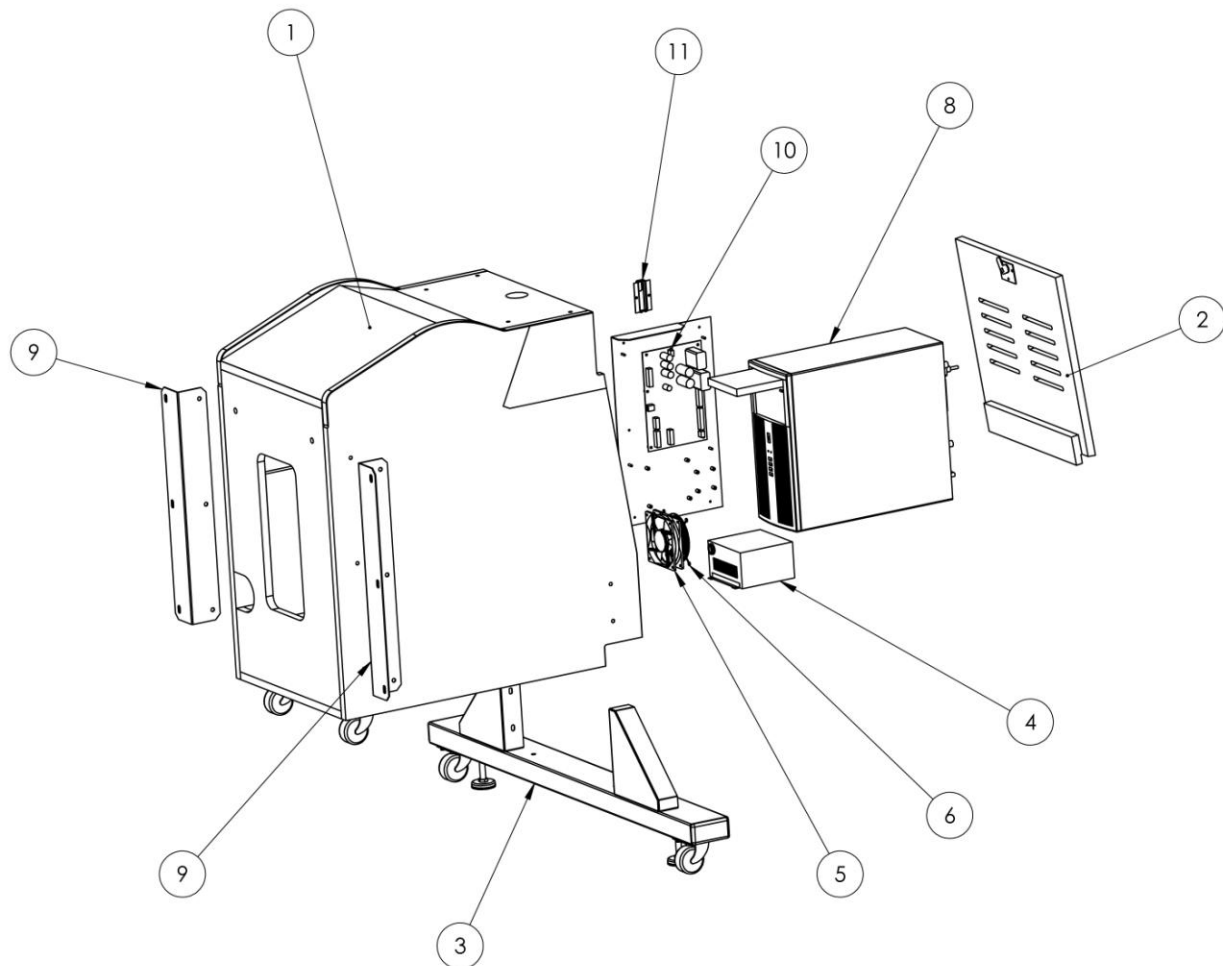


Parts

55" Deluxe Cabinet

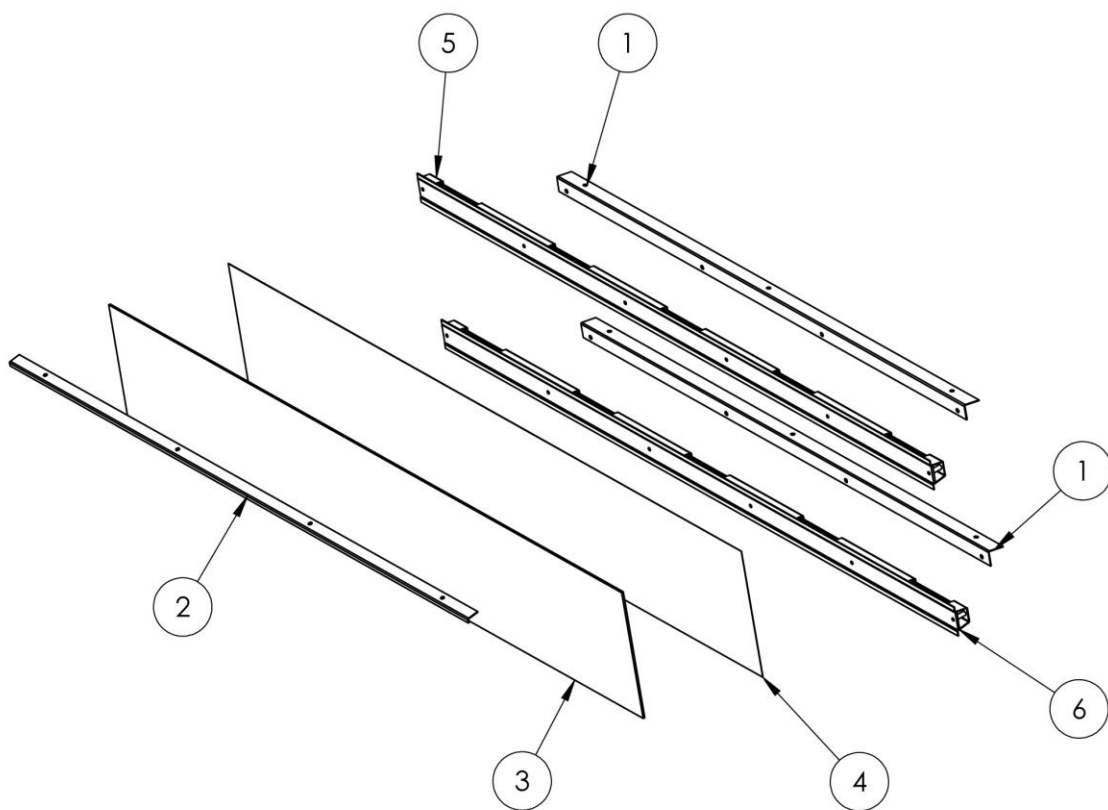
Deluxe Rear Pedestal

Item	Part No.	Description	QTY
1	601-00646-01	55" wood cabinet – rear pedestal	1
2	601-00649-01-ALIENS-DOOR-MAINCAB	Wood rear door 55" cabinet	1
3	OutriggerAssem-RED	Outrigger assembly 55" cabinet	1
4	2-1-02-00-00-017	APS Power Supply (Bracket #90-AP 188)	1
5	820-00001-00	Fan 120mm – 120V AC 15/19w	1
6	800-00001-00	Fan wire guard	1
7	Main cab Side molding	Side molding	2
8	HP6005	Computer	1
9	600-00171-01	Cabinet brace – T4/Aliens	2
10	RIO_Aliens_ASSY	Rio board assembly	1
11	600-01354-01	Dongle Holder Bracket	1



Deluxe Marquee Assembly

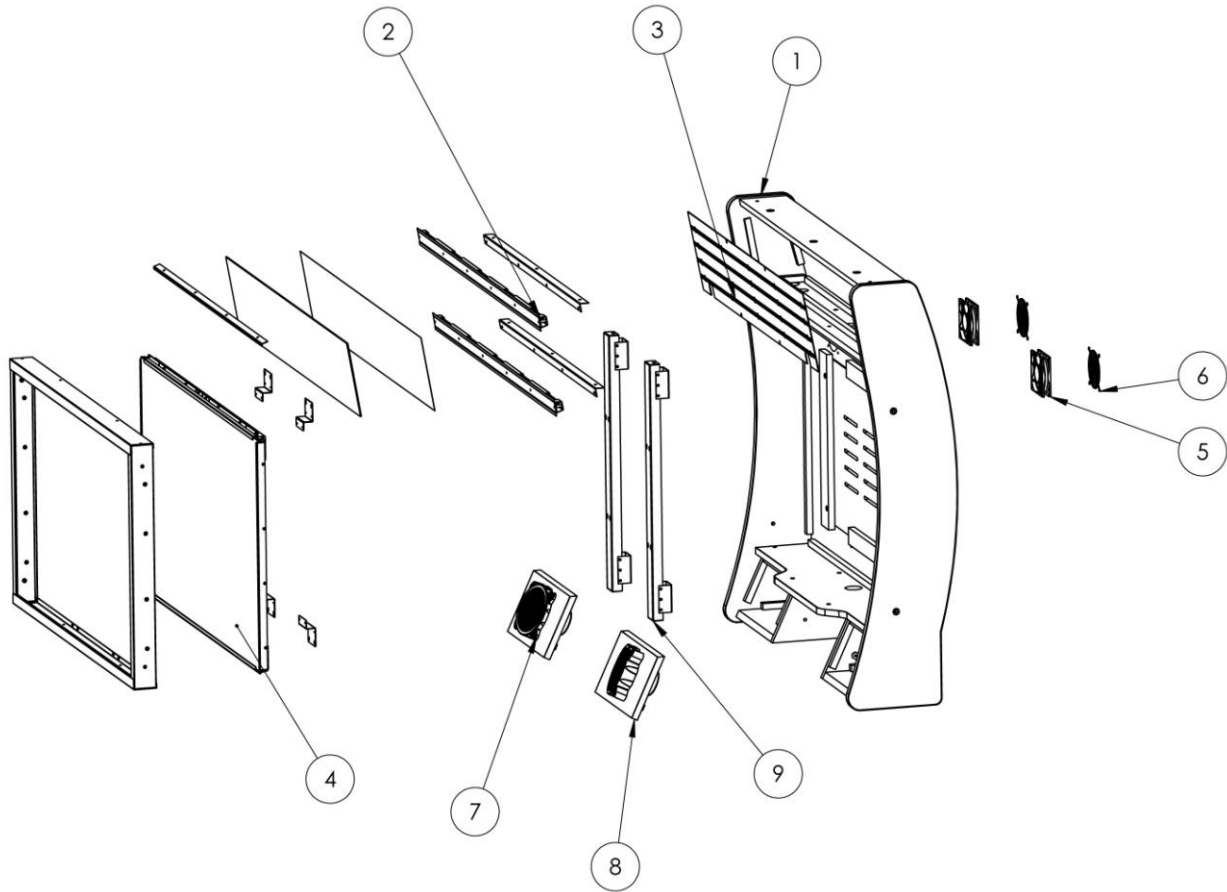
Item	Part No.	Description	QTY
1	600-01128-01	55" Cabinet IR U-channel mounting bracket	2
2	600-01129-01	55" cabinet marquee top retainer	1
3	603-00674-01	Petg Aliens Marquee	1
4	606-00844-01	Translite Aliens Marquee	1
5	ASSY-55-U-CHANNEL-TOP	55" cabinet top U-channel	1
6	ASSY-55-U-CHANNEL-BOTTOM	55" cabinet bottom U-channel	1





Deluxe Cabinet Monitor Assembly

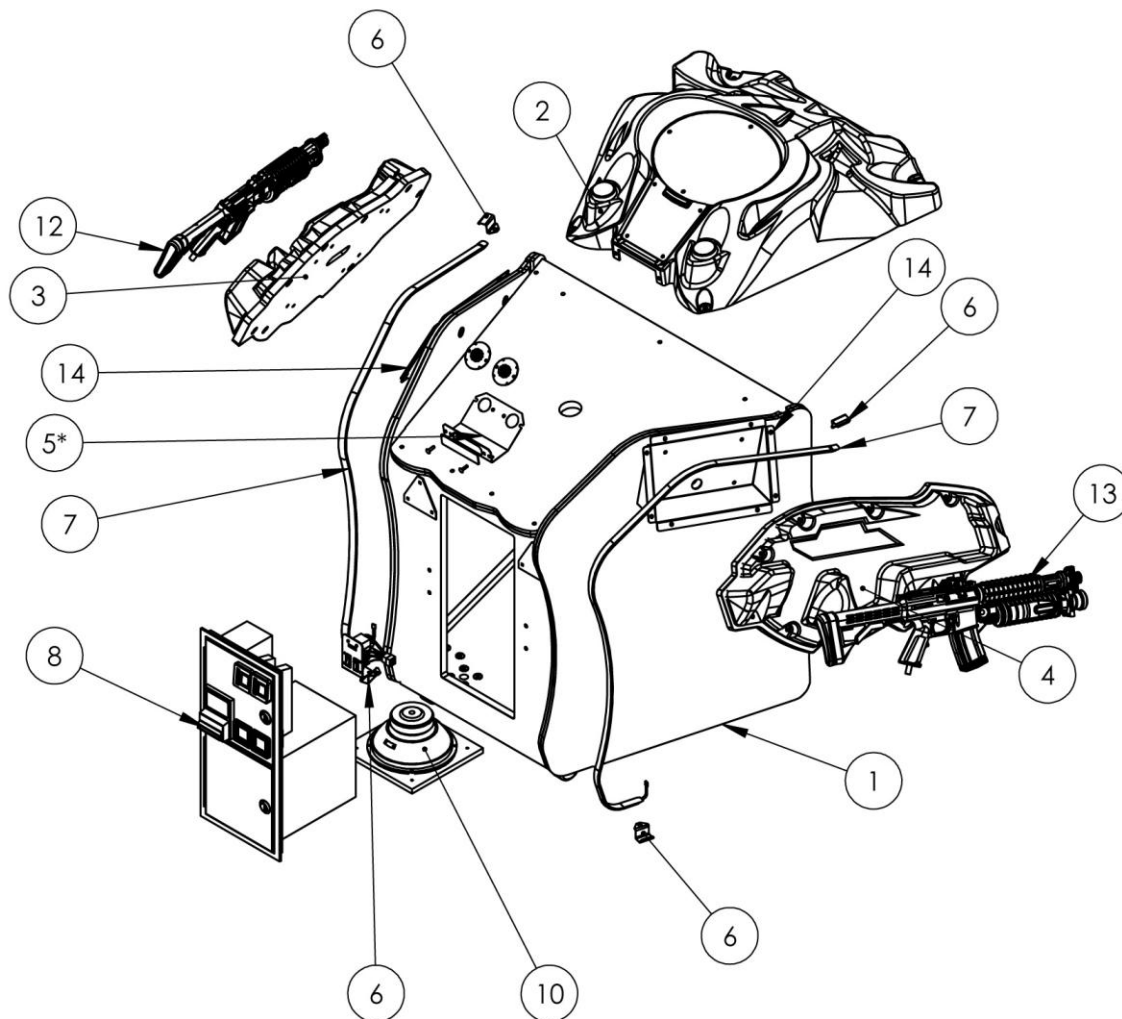
Item	Part No.	Description	QTY
1	601-00647-01	55" wood cabinet – monitor enclosure	1
2	55-ALIEN-MARQ-ASSY	55" cabinet – marquee assembly	1
3	ASSY-MARQUEE-LED-LIGHTS	55" cabinet LED lights	1
4	ALIENS-55-LCD-ASSY	55" LCD monitor	1
5	820-00001-00	Fan 120mm 120v ac 15/19w	2
6	800-00001-00	120mm wire fan guard	2
7	ALIENS 55 SPEAKER ASSY (L)	Left speaker	1
8	ALIENS 55 SPEAKER ASSY (R)	Right speaker	1
9	600-01207-01-STRUT-55LCD	55" LCD mounting struts	2



Deluxe Front Pedestal Assembly

Item	Part No.	Description	QTY
1	601-00648-01	55" wood cabinet – front pedestal	1
2	ASSY-CONTROL-PANEL-ALIENS	Aliens control panel assembly	1
3	ASSY-LEFT-HOLSTER-ALIENS	Aliens left holster assembly	1
4	ASSY-RIGHT-HOLSTER-ALIENS	Aliens right holster assembly	1
5*	ASSY-CARDSWIPE-ALIENS	Aliens card swipe with blanking plate assembly	1
6	600-01134-01	LED T-molding clip	4
7	603-00718-01	LED T-molding approximately 60"	2
8	800-00005-00 (RED)	Red coin door	1
9	601-00685-01	8" woofer plate	1
10	2-1-18-00-00-000	8" woofer 4 ohm	1
11	Triangle Gun Plate	Gun plate (included with gun assembly)	2
12	820-00022-00	Aliens left dark grey gun	1
13	820-00023-00	Aliens right dark grey gun	1
14	600-00172-01	Gun bracket	2
15	810-00053-01	Service Button Assembly	1

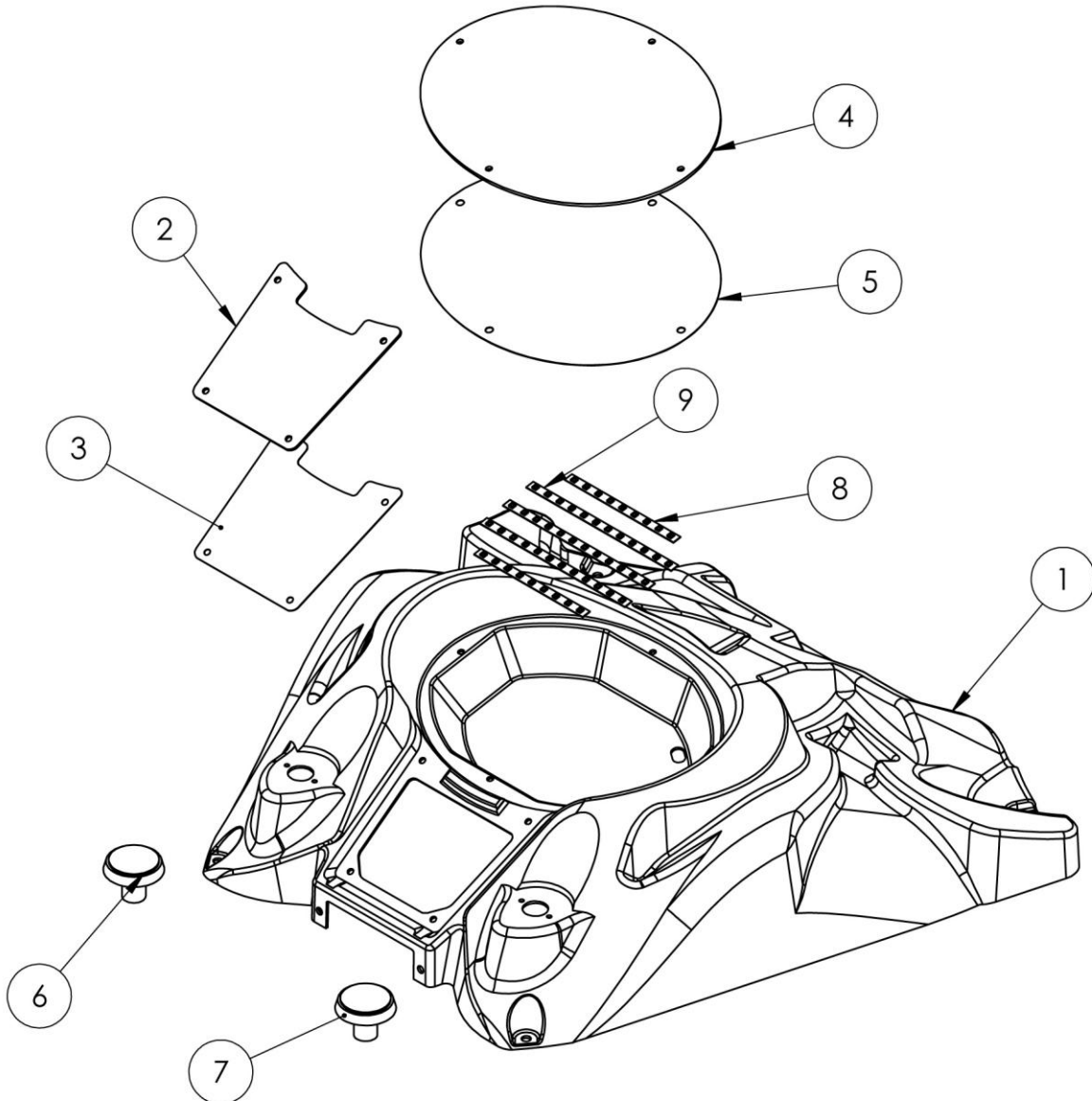
*See pg 50 for more info on card swipe assembly and blanking plate





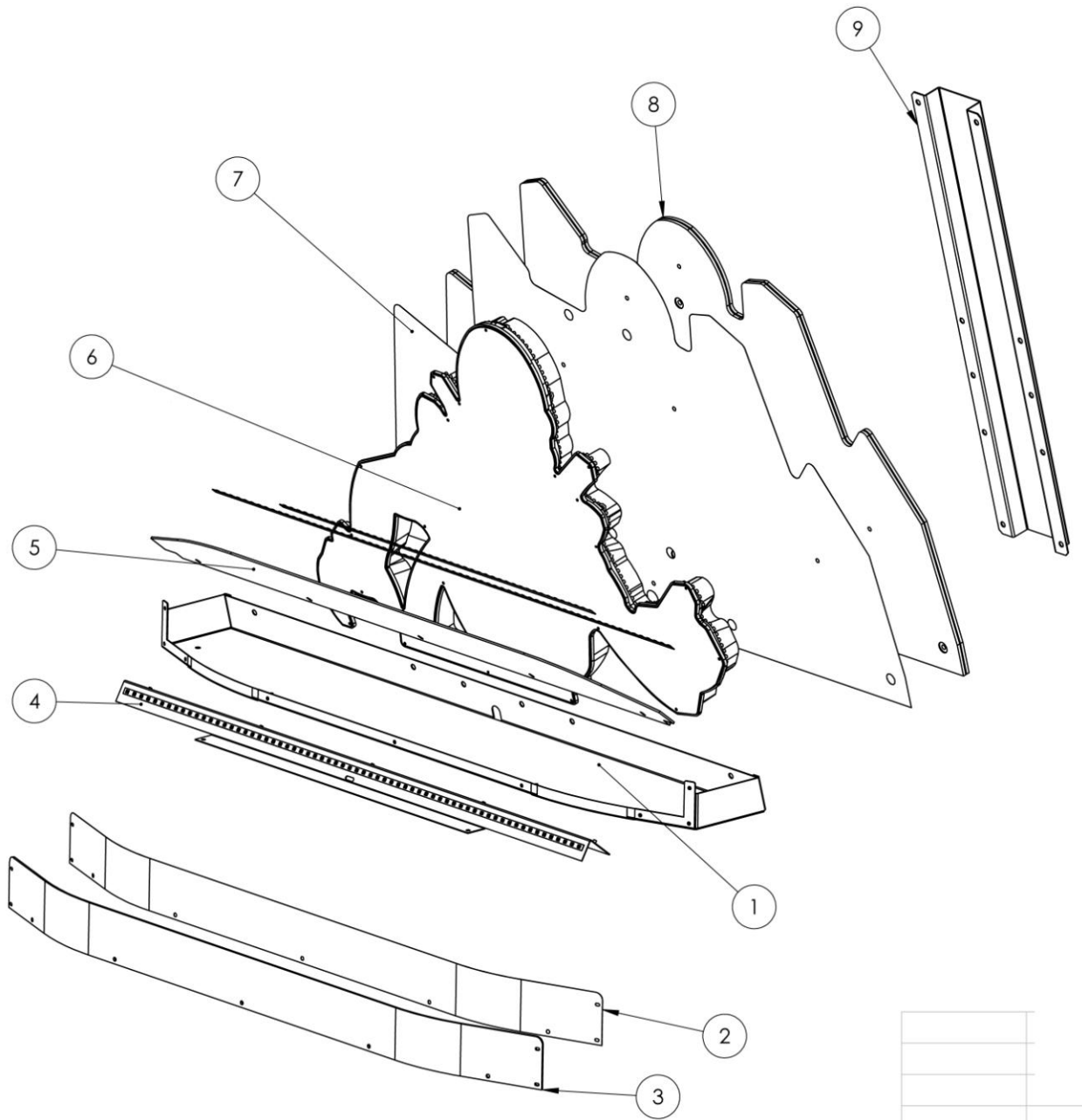
Deluxe Control Panel Assembly

Item	Part No.	Description	QTY
1	603-00669-01	Aliens 55" cabinet control panel vacform	1
2	603-00668-01	Aliens 55" cabinet control panel decal	1
3	606-00853-01	Aliens 55" cabinet control panel translate instructions	1
4	603-00670-01	Aliens 55" cabinet control panel polycarb oval	1
5	606-00854-01	Aliens 55" cabinet control panel translite oval	1
6	702-0007-01	Aliens left player start button	1
7	702-00008-01	Aliens right player start button	1
8	500-00158-01	5.91" (15cm) LED Strip (white)	2
9	500-00157-01	9.84" (25cm) LED Strip (White)	3



Deluxe Alien Topper Assembly

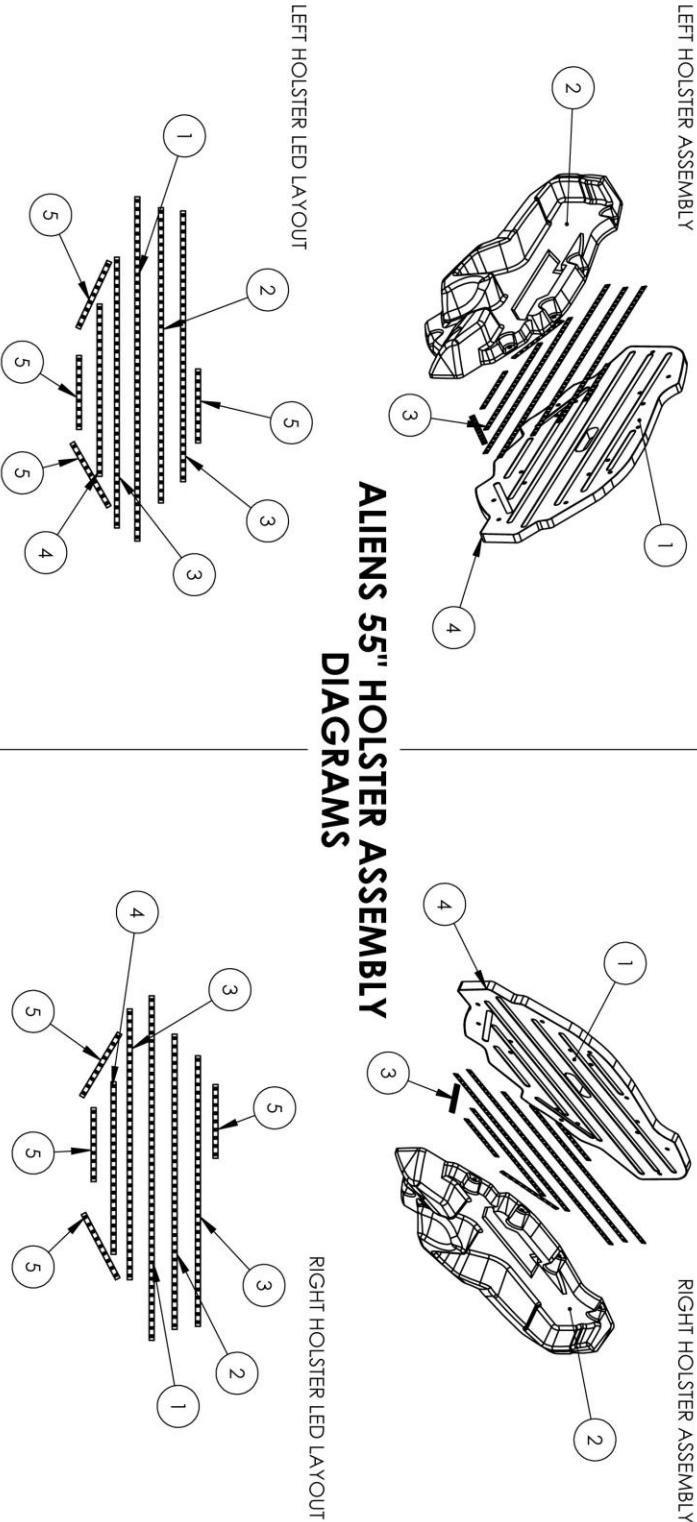
Item	Part No.	Description	QTY
1	600-01135-01	Aliens 55" cabinet header bracket	1
2	606-00860-01	Aliens 55" cabinet topper front decal	1
3	603-00679-01	Aliens 55" cabinet formed topper	1
4	ALIENS 55-Header Marquee Backlight Assy	Aliens 55" cabinet marquee backlight assembly	1
5	Header-LED Shroud-ASSY	Aliens 55" Header LED shroud assembly	1
6	ALIENS-Marquee-Pan-Assy	Aliens 55" marquee pan assembly	1
7	606-00859-01	Aliens 55" topper back panel decal	1
8	601-00655-01	Aliens 55" topper back panel	1
9	600-01136-01	Aliens 55" topper bracket support	1





Deluxe Holster Assembly

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	601-00653-01	PANEL-HOLSTER-ALIENS	1	1	601-00680-01	ALIEN 55- RIGHT HOLSTER PANEL	1
2	603-00708-01	VACFORM-HOLSTER-LEFT-ALIENS	1	2	603-00709-01	VACFORM-HOLSTER-RGT-ALIENS	1
3	ASSY-LEFT-HOLSTER-ALIENS	ASSY-LEFT-HOLSTER-ALIENS	1	3	ASSY-RGT-HOLSTER-ALIENS	ASSY-RGT-HOLSTER-ALIENS	1
4	Holster_tmolding	T-MOLDING-RED 3/4"	1	4	Holster_tmolding	T-MOLDING-RED 3/4"	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	65cm LED Strip (RED)	55cm LED Strip (RED)	1	1	65cm LED Strip (RED)	55cm LED Strip (RED)	2
2	60cm LED Strip (RED)	60cm LED Strip (RED)	1	2	60cm LED Strip (RED)	60cm LED Strip (RED)	2
3	55cm LED Strip (RED)	55cm LED Strip (RED)	2	3	55cm LED Strip (RED)	55cm LED Strip (RED)	4
4	35cm LED Strip (RED)	35cm LED Strip (RED)	1	4	35cm LED Strip (RED)	35cm LED Strip (RED)	2
5	20cm LED Strip (RED)	25cm LED Strip (RED)	4	5	20cm LED Strip (RED)	25cm LED Strip (RED)	8

Card Swipe Assembly with Blanking Plate

Item	Part No.	Description	QTY
1	600-01133-01	Bracket Control Panel	1
2	600-00758-01	Blanking plate	1
3	RHBOLT 0.19-24X0.75X0.75-C	Bolt	2
4	MSHXNUT 0.190-24-S-N	Nut	2
5	500-00035-01	White LED Spotlight	2

Card Swipe Assembly with Card Swipe*

Item	Part No.	Description	QTY
1	600-01133-01	Bracket Control Panel	1
2	600-00758-01	Blanking plate	1
3	813-00012-01	Card Swipe	1
4	RHBOLT 0.19-24X0.75X0.75-C	Bolt	2
5	MSHXNUT 0.190-24-S-N	Nut	2
6	90272A108	4-40 x 3/8 Panhead Phillips #1	2
7	500-00035-01	White LED Spotlight	2

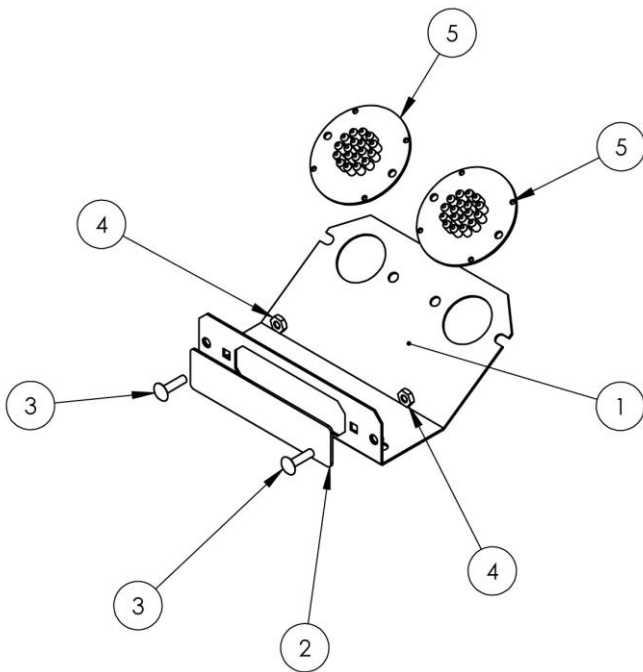


Figure 3: Card Swipe with Blanking Plate

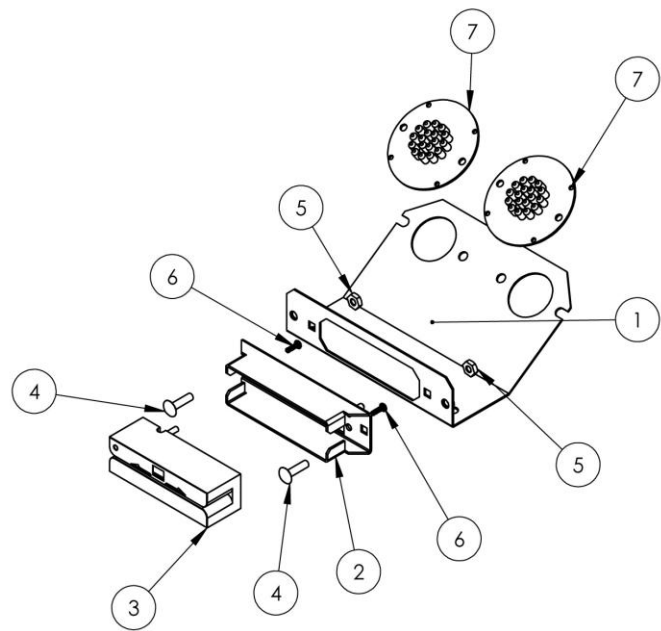
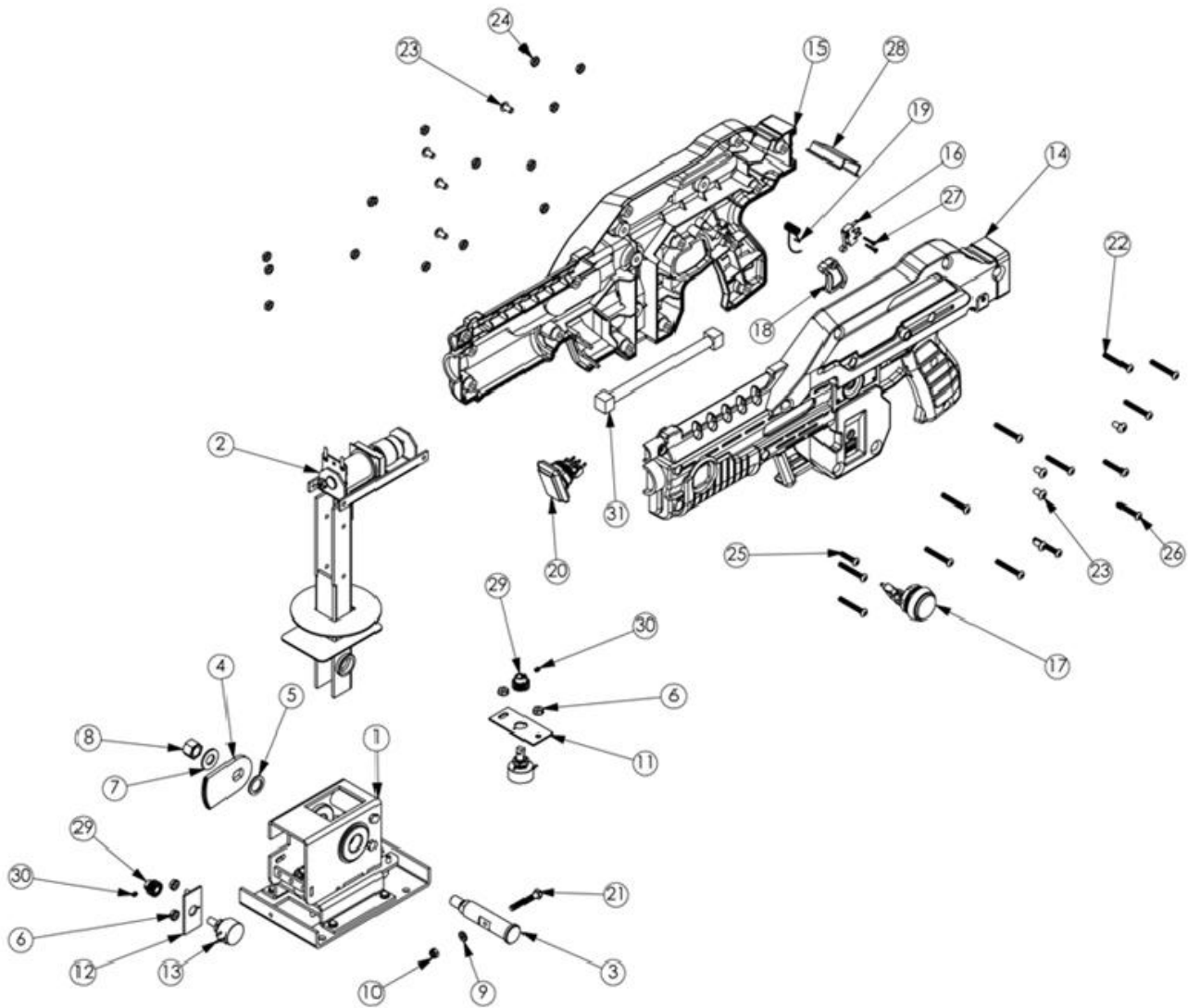


Figure 4: Card Swipe Assembly

*Note: Card Swipe is part of Online Kit. Contact distributor for information regarding Online Kit.

Fixed Gun

Fixed Gun Assembly



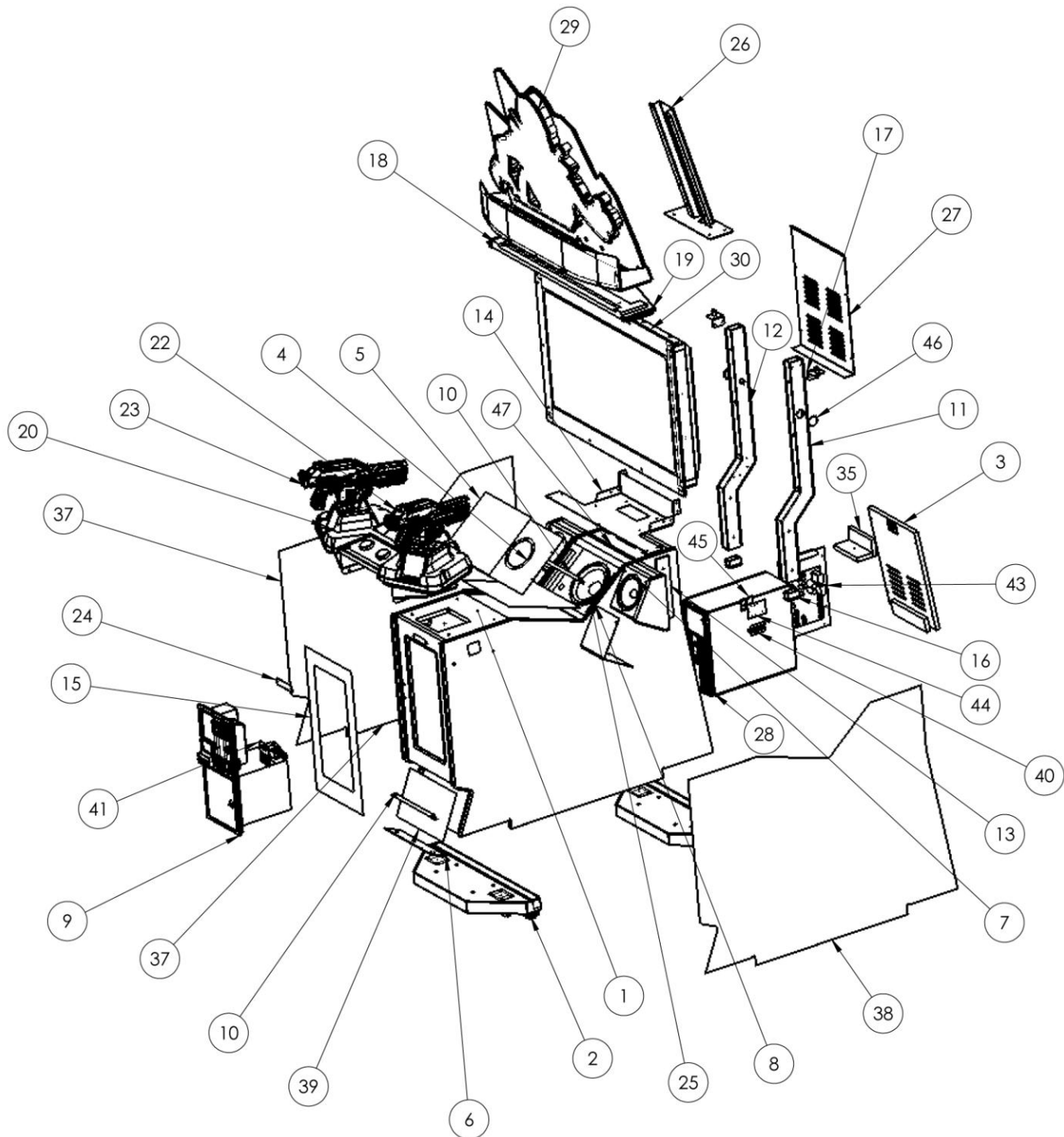
Fixed Gun Assembly Part Numbers

Item	Part No.	Description	QTY
1	96-0853-30	Bottom and base bracket sub assembly with bumper	1
2	96-0854-30	Bracket sub assembly with handle & mounting bracket coil pads	1
3	96-4923-00	Shaft 5/8" diameter	1
4	96-4907-00	Gear segment with hub	1
5	96-4960-00	Spacer segment gear	1
6	42-0082-00	Nut Keps 8-32	5
7	43-0003-00	3/8 SAE flat washer zinc plated	1
8	43-0092-00	Nut 3/8-16 nylock	1
9	43-0037-00	Lock washer ext #10	2
10	43-0253-00	Nut hex 10-32 jam nylock zinc plated	1
11	96-4904-00	Bracket pot mounting horizontal	1
12	96-4913-00	Bracket pot mounting vertical	1
13	96-4916-00	Long life pot with nut & washer	2
14	96-1084-00	Left gun half	1
15	96-1083-00	Right gun half	1
16	95-4142-00	Switch assembly ball detect	1
17	75V-L012-20	IPB with sub min sw sm cir red rd cap db ms 12v wht led lamp	1
18	96-2515-06	Trigger black new style	1
19	96-0005-00	Spring trigger return	1
20	77-2NLO-577	Vlt button rec amber no led	1
21	43-0280-00	Hex head cap screw 10-32 x 1-1/4	1
22	43-2327-00	Screw 8-32 x 1-1/14" button head machine screw torx	11
23	96-2516-00	Screw 10-32 x 3/8" button head torx	8
24	43-0264-00	Nut 8-32 hex nylock black	14
25	4008-01100-12	Screw 8-32 x 3/4 button head machine screw torx	1
26	43-0099-00	Screw 8-32 x 1" button head machine screw torx	2
27	43-0172-00	Screw #2 x 1/2 type B. PPH	2
28	96-0831-10	Cover	1
29	96-4917-01	Gear 32DP 16T .25 bore .5 long	2
30	43-0011-00	Set Screw 6-32" x 3/16 cup point	2
31	96-1080-10	LED light tube	1
-	96-1081-00	Main harness	1
-	90-1013-00	Tie wrap 4"	10
-	43-0127-00	Tie plate	1
-	96-0703-01	Shrink tubing	6
-	96-0078-01	Tubing Heat Shrink 3/16 x 3/4	2



Fixed Gun Cabinet Assembly

Fixed Gun Cabinet Parts and Assembly



Fixed Gun Cabinet Parts List

Item	Part No.	Description	QTY
1	601-00686-01	Aliens 42" Fixed Gun Cabinet	1
2	AP -480	Base Assembly with casters & levelers	2
3	Rear Door w-lock	Rear door with lock	1
4	600-00585-01	Woofer Grill	1
5	606-00910-01	Aliens-42 Woofer panel decal	1
6	26093-00	Kick panel	1
7	2-1-10-00-00-000	5.25 Speaker	2
8	600-00586-01	Side Speaker Grill	2
9	800-00047-00	Aliens-coin door mid width – red with black bezels	1
10	702-00027-00	CCFL Red Kit 2 bulbs and 1 in- verter	2
11	AP-486	42" LCD Strut – right side	1
12	AP-487	42" LCD Strut – left side	1
13	23-410	Wood spacer – 42" strut	2
14	600-00803-01	Top Plate – Main cabinet	1
15	606-00915-01	Aliens 42" top plate decal	2
16	603-00563-01	1.5 x 2.5 rect tube cap/alliance plastic rcr25151216a	2
17	01-1826	Mounting bracket – t 600	2
18	601-00676-01	Alien 42" marquee adapter panel	1
19	Aliens 42-T-Molding	Header Support Panel	1
20	Aliens 42 Control Panel Assembly	Control Panel Bezel & Assembly	1
21	2-1-02-00-00-017	APS Power Supply (90-AP-188)	1
22	820-00023-00(R)	Aliens 42 Fixed Gun / Happ 96-7751-00	1
23	820-00023-00(L)	Aliens 42 Fixed Gun / Happ 96-7751-00	1
24	600-00758-01	Card Swipe Bracket	1
25	2-1-18-00-00-000	8" woofer, 4 ohm, poly-mica cone	1
26	600-01136-01	Aliens Topper Support Bracket	1
27	600-01304-01	42" Monitor Back Door	1
28	850-00017-01	HP 6005 PC	1
29	Alien-header-assy-42fixed-md	Aliens 42" Fixed Gun Header Assembly	1
30	42-LCD-ASSY	42" Monitor Assembly	1
31	Torx 2 INCH	2" Torx screw, lock and flat washer	2
32	Torx 3_4	¾" Torx screw, lock and flat washer	10
33	93827A211	¼-20 nut	2
34	Torx 1-1_4	1-1/4" Torx screw, lock and flat washer	2
35	601-00690-01	Wood clamp	1
36	601-00580-01	PC Wood Cleat	1
37	606-00909-01	Aliens 42" Fixed Gun Left side cabinet decal	1
38	606-00908-01	Aliens 42" Fixed Gun Right side cabinet decal	1
39	606-00920-01	Kick Panel Decal	1
40	600-01354-01	01-1668, dongle holder	1
41	810-00053-01	Test Service Button Assembly	1
42	606-00918-01	Aliens 42" Fixed Gun Center Angle panel decal	1
43	Aliens_42 RIO Assembly	Rio board assembly	1
44	600-01361-01	Kick Board Mounting Plate/01-1696	1
45	500-00054-01	Kickboard PCB (24V/5A)	2
46	603-00603-01	1-1/2" Sheet metal cap plug	2
47	93275k12	Foam Tape, 1/8" thick x ½" wide, 39" length	1

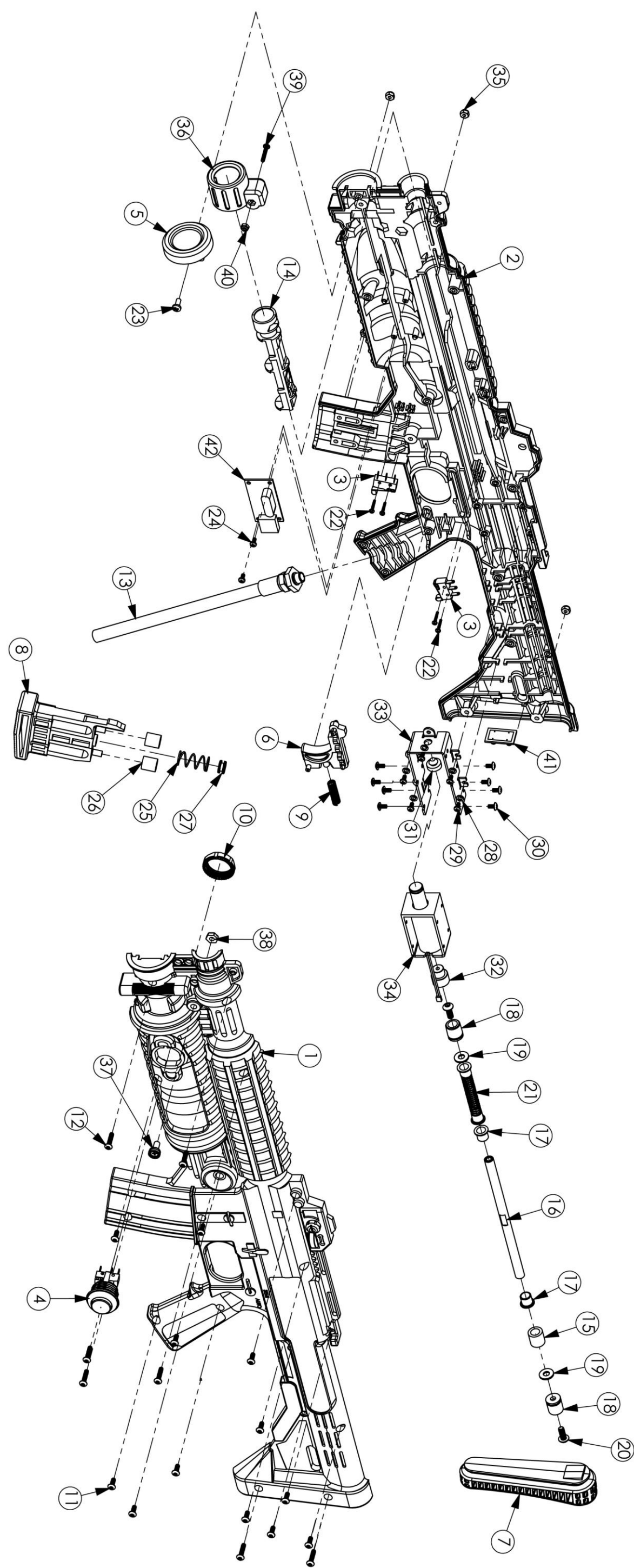


Deluxe Gun Assembly

Deluxe Gun Parts List

Item No.	Qty.	Part No.	Description
1	1	603-00721-01	Rifle Half Left F/Raw Thrills Dark Grey
2	1	603-00720-01	Rifle Half Right F/Raw Thrills Dark Grey
3	2	95-4142-10	Switch Assy Ball Detect
4	1	77-2L12-300SPCL	IPB SM Cir Red Vlt Red Cap 6V Lamp DA3 MS No Printing
5	1	96-0985-00	Barrel Cap
6	1	96-0988-00	Trigger Raw Thrills Rifle
7	1	96-0981-00	Plastic Butt Cap
8	1	96-0983-00	Plastic Reload Cap
9	1	96-1045-00	Trigger Spring
10	1	77-2014-00	Nut F/Vlt PB
11	12	43-0095-00	Screw 6-32 x 3/8 BHMS T-10 TORX
12	7	43-1247-00	Screw 6-32 x 5/8 BH TORX Black
13	1	96-1047-20	Hose and Harness Assembly USB 12 Cond
14	1	820-00010-01	Camera Assembly (Complete)
15	1	96-1106-00	Urethane Bumper 5/16 ID x 5/8 OD x ¾ L
16	1	96-1041-00	Recoil Rod for Raw Thrills Rifle
17	2	43-2365-00	Bushing Flange JFI-0506-06
18	2	96-1049-00	Miner General Bumper Ref. # GBA-098S
19	2	43-0995-00	#10 Flat Washer
20	2	43-0740-00	Screw 10-32 x ½ BHCS
21	1	96-1044-00	Recoil Rod Spring for Raw Thrills Rifle
22	4	43-0172-00	Screw, #2 x ½ Type B. PPH
23	1	43-0067-00	Screw, 8 x 3/8 Phil Hi-Low PH
24	2	43-0436-00	Screw #4 x ¼ PH Pan Head
25	1	96-1051-00	Reload Spring F/Raw Thrills Rifle
26	2	96-1109-00	Urethane Stop F/Raw Thrills Reload
27	1	95-4372-00	Grommet for ¼ Dia. Hole .44 OD x .44 LG
28	13	43-0429-00	Washer, M3 Split Ring Lock Washer
29	5	43-0492-00	Screw, 4-40 x .25 PH Pan Head
30	8	43-1061-00	Screw, M3 x 6 mm
31	1	95-4466-00	Grommet Bumper F/.25 dia. Hole .50 OD x .15 LG
32	1	96-0987-00	Brass Knocker
33	1	96-0986-00	Solenoid Housing Bracket F/Raw Thrills Rifle
34	1	96-1040-00	Solenoid F/Raw Thrills Rifle
35	7	43-0375-00	Nut 6-32 Hex Nylock Black
36	1	96-0985-10	Front Cap Upper F/T4 Rifle
37	1	43-2927-00	Threaded Snap 10-32 F/T4 Rifle
38	1	43-2350-00	Nut Hex 10-32 Jam Nylock Black Oxide
39	1	43-2851-00	Screw 4-40 x 11/16 Torx Black Oxide
40	1	43-1322-10	Nut Nylock, 4-40 Hex Black Oxide
41	1	520-00025-01-ALIENS	Free issue LED PCB for Aliens
42	1	520-00024-01-ALIENS	Free issue Kick board f/ Thrills Aliens
	1	96-0019-00	Right Side Decal
	1	96-0019-10	Left Side Decal
	5	90-1013-00	Tie Wrap
	1	96-0294-00	Connection Instruction Tag F/ Raw Thrills T4

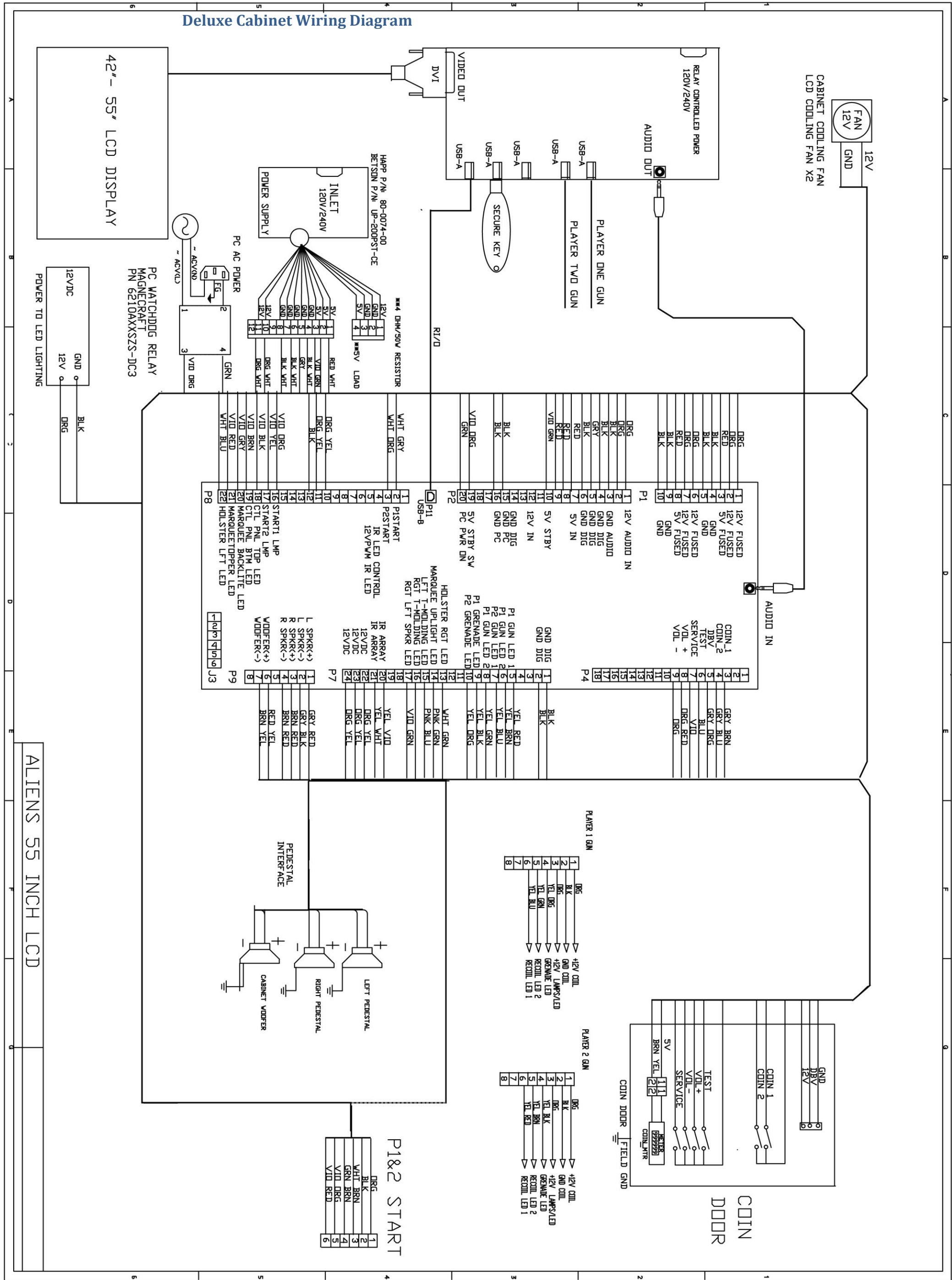
Deluxe Gun Parts and Assembly



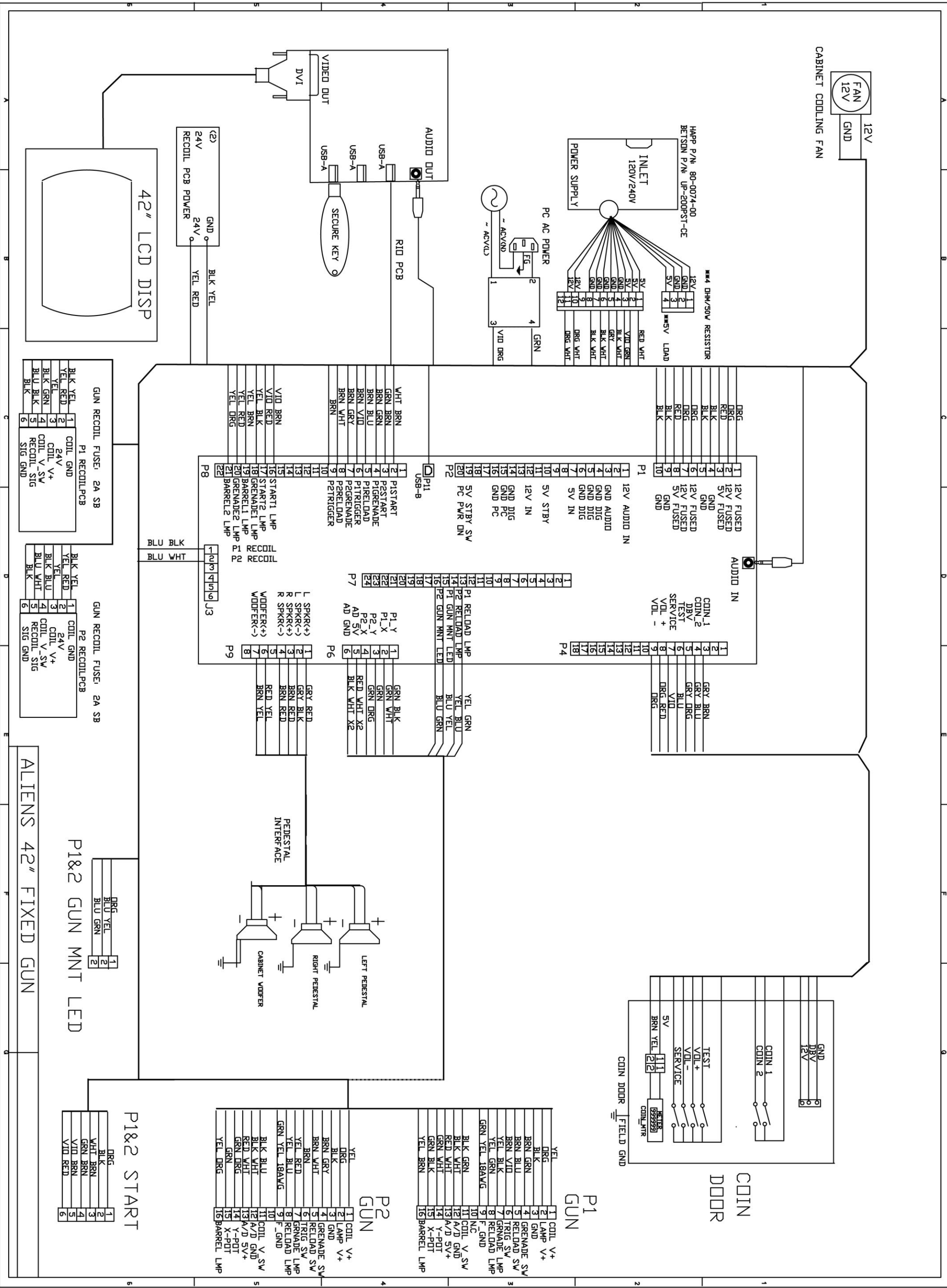


Electrical Wiring

Deluxe Cabinet Wiring Diagram



Fixed Gun Cabinet Wiring Diagram





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

CoinUp® Service

PlayMechanix™ www.playmechanix.com

800 Roosevelt Road, Suite D-103

Glen Ellyn, IL 60137

(866) 646-1975 fax (630) 942-1073

Betson Enterprises Headquarters

303 Paterson Plank Rd.

Carlstadt, NJ 07072

(800) 524-2343 or (201) 438-1300

fax (201) 438-4837