# Angry Birds Boom!

## Setup and Operation
## Service Manual

Revision ABB-1.4-10.23.24

# Table of Contents

# 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 units 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
The monitor contains no user serviceable parts. Do not attempt to service the monitor.

### 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.

### SURGE SUPPRESSOR
It is recommended that you plug your game's power cord into a surge suppressor to help protect from power surges that may damage sensitive electronic components.

### WATER AND OTHER LIQUID
Do not install game near sprinkler or other water jet sources.  Do not use water jet to clean game.  Keep minimum clearance behind game and wall for proper ventilation but also prevent accesss of liquid from spills and sprays from entering ventilation holes.

### 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.
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.

### TEMPERED GLASS WARNING

When handling the LCD display glass cover take special care and set the glass down softly on a flat surface free of debris.  The edge of the glass is sensitive to hard impact.  Shattered glass from the monitor can travel long distances and cause bodily injury.  Use proper procedures when handling broken materials.

### 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.  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.

# Product Specifications

**Electrical Power**

| United States, Canada (ETL) | International (CE) |
|---|---|
| Voltage: 120VAC, 60 Hz | Voltage: 230VAC, 50/60 Hz |
| Operating AC Current: 4 Amps | Operating AC Current: 2 Amps |

**Temperature**

50° to 104° Fahrenheit (10° to 40° Celsius)

**Humidity**

Must not exceed 95% relative humidity

**Cabinet Dimensions**

| Component | Height | Width | Depth |
|---|---|---|---|
| Assembled | 90"<br>(228.6 cm) | 60"<br>(152.4 cm) | 106"<br>(269.24 cm) |
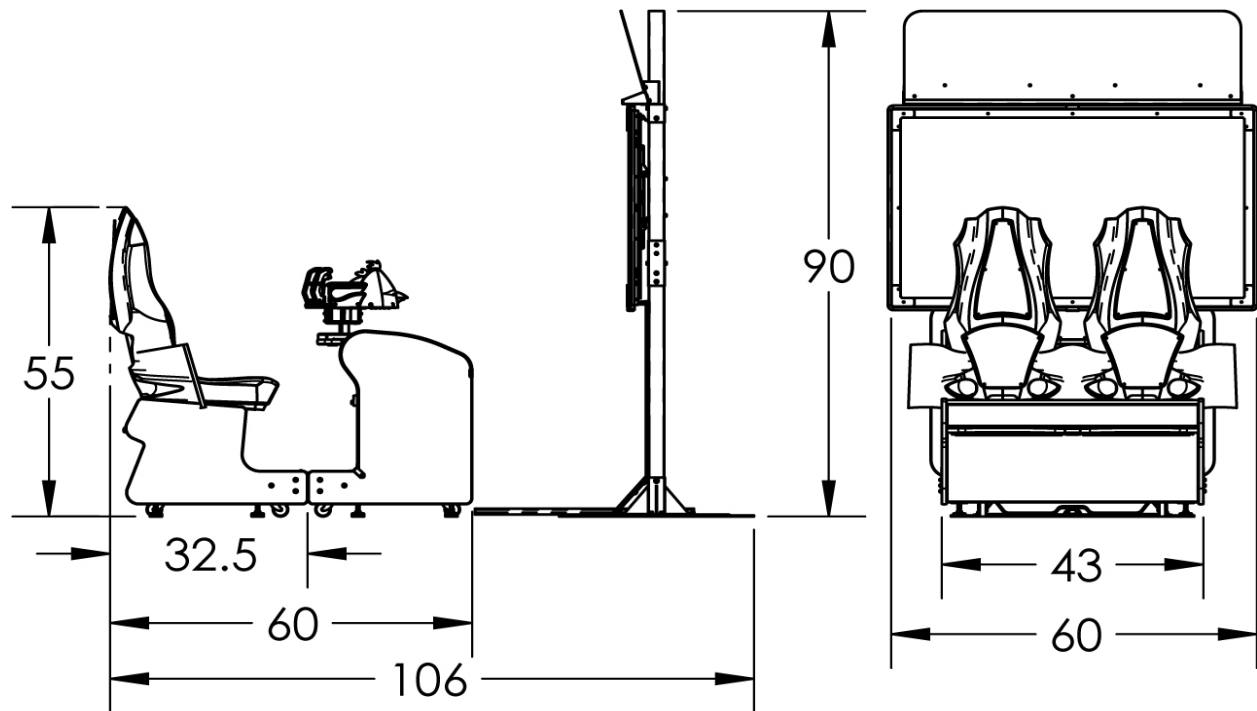
# Fuse Replacement Guide

NOTE:   FOR CONTINUED PROTECTION AGAINST FIRE AND ELECTRICAL DAMAGE,
USE ONLY SPECIFIED FUSE TYPE AND VALUE.

10 fuses (six 5A fast, four 2A slow):
Please see unit for specified fuse labeling.  Abbreviations:

| 5A 250V | 5A, 250VAC Fast Acting 3AG Fuse | Littlefuse 0312005.MXP (or equivalent) |
|---|---|---|
| 2A-SB 250V | 2A, 250VAC Slow Blow 3AG Fuse | Littlefuse 0313002.HXP (or equivalent) |

# Required Tools

The following tools are needed to complete cabinet assembly.  At least two people are recommended.

- (2) 6' ladders
- Drill or multi-bit screwdriver
- Socket set
- #2 Phillips bit
- T-27 Torx security bit

# Universal LCD Stand Setup

## 1. Assemble LCD Mounting Stand

1. Attach the horizontal bracket to the universal LCD stand's upper half using (4) ¼"-20 x 3" screws plus washers and nylon lock nuts.
   *The "correct" set of mounting holes depends on the monitor that's being mounted.*
   *Mount the horizontal bracket in the middle and make adjustments later.*
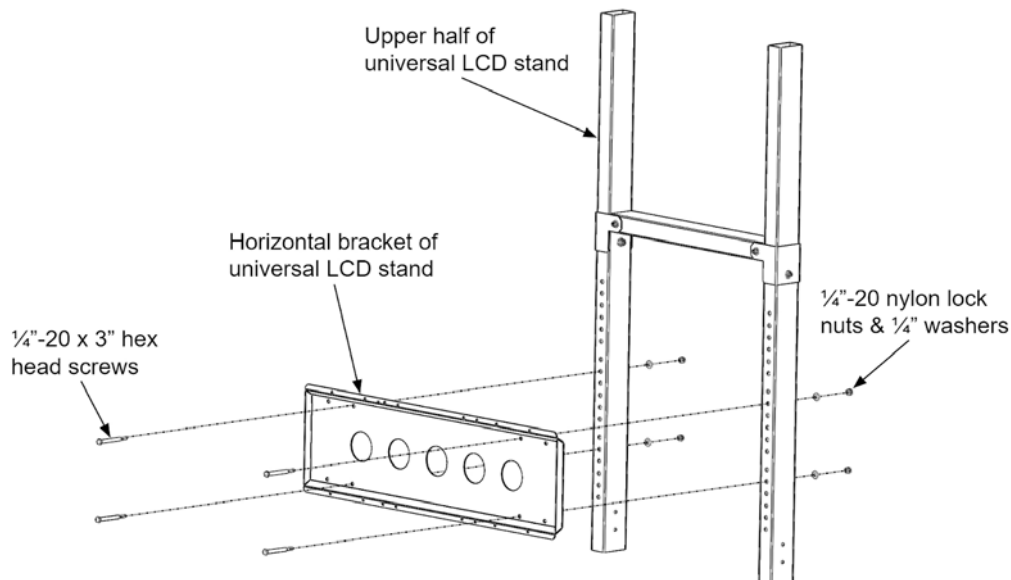


2. Move the lower half of the universal LCD stand to its final location.
   *The assembled stand is heavy and difficulty to move.*
3. Remove the (4) ¼"-20 x 2" screws plus washers and nylon lock nuts installed near the top of the lower half, and use this hardware to attach the upper and lower halves.
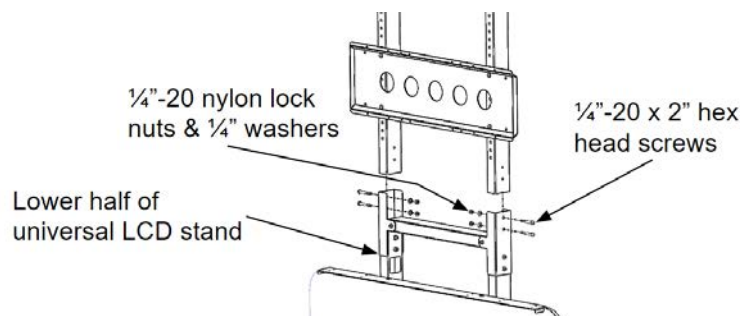
## 2. Attach Monitor to LCD Mounting Stand

1. Locate the (2) vertical brackets, monitor, and monitor mounting hardware.
2. Remove the securing clip on the back of each vertical bracket.
3. Attach vertical brackets to VESA mounts on back of monitor using appropriate screws and corresponding washers (M6 and M8 screws of various lengths are provided in a kit).
   *For now, use any set of holes/slots, and make adjustments later.*
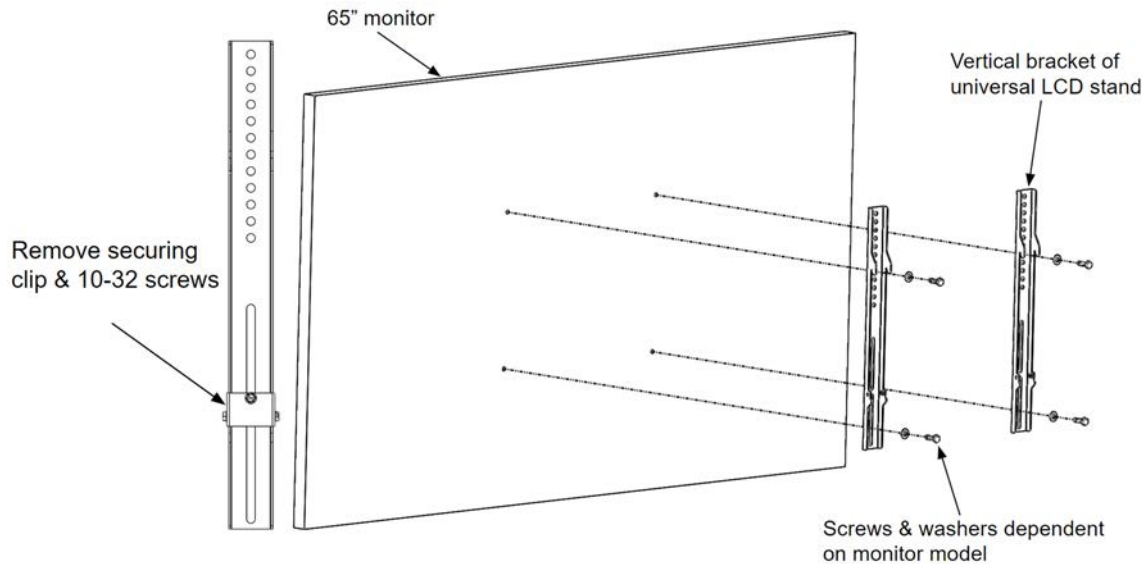


4. Have (2) people lift monitor assembly, and hook vertical brackets over top the horizontal bracket. Bottom of monitor should be no more than ¾" above the downlighting bracket. Remove the monitor and adjust horizontal/vertical brackets until correct.



Angry Birds Boom! Game Software copyright 2024 PlayMechanix™ Inc.   All rights reserved.
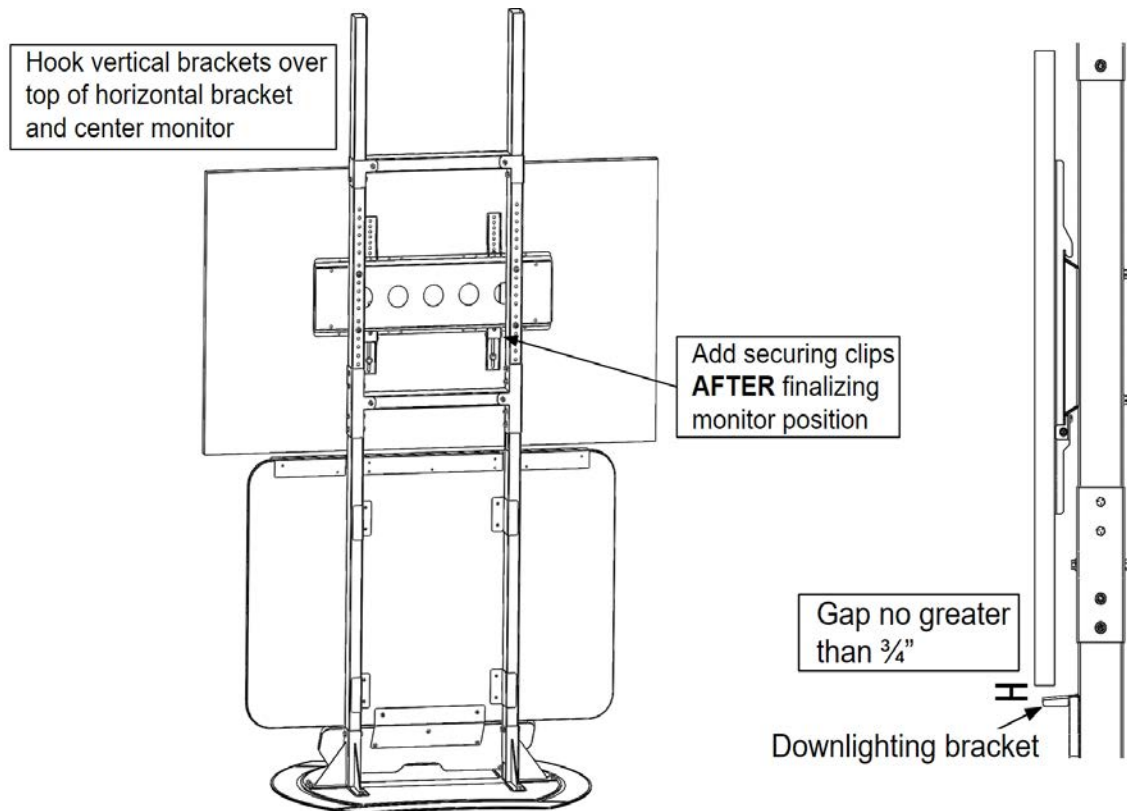
5. Plug the monitor power cord into the back of the monitor.
6. Center monitor and secure it using the securing clips and 10-32 screws.

## 3. Attach Monitor Protector Assembly to Monitor

1. Have (2) people lift the monitor protector assembly, and hook over top of the monitor.
2. Thread the monitor protector assembly straps between the stand and the monitor. Buckle the sides together, and tighten the straps to secure monitor protector assembly to monitor.
3. There are (2) 4-pin connectors (different genders) located near the top of the monitor protector assembly that power the encased LEDs. Connect them to the (2) 4-pin connectors that are a part of the harness that exits from a cutout in one of the lower tubes.



Thread straps between stand & monitor. Buckle together, then tighten

Encased LED connectors located near top of monitor protector assembly

Monitor protector assembly

From P2 encased LEDs

Connect

From harness in universal LCD stand

From P1 encased LEDs

Connect
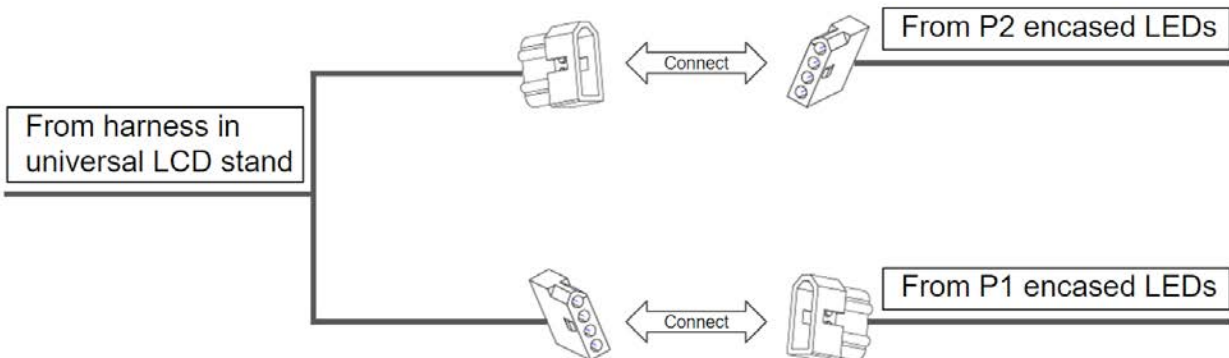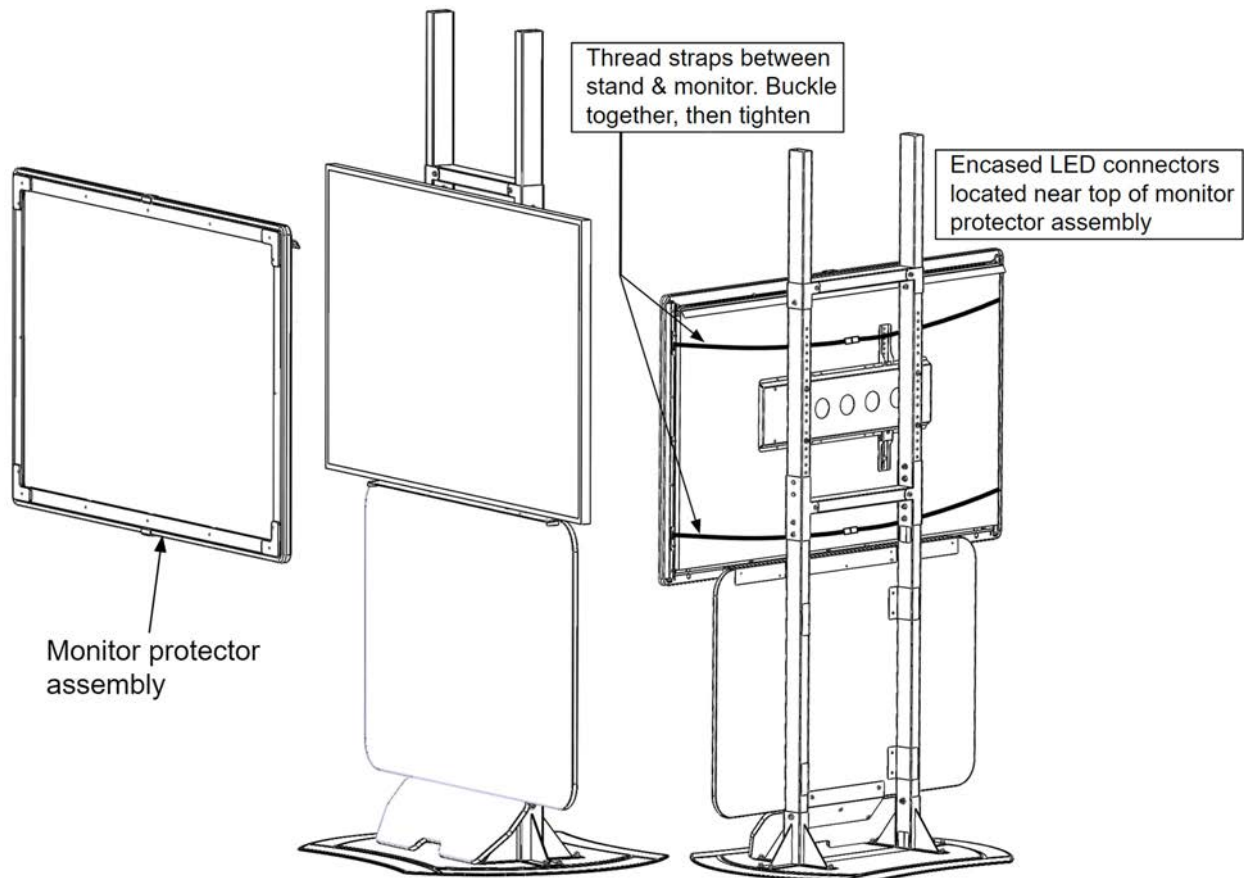
## 4. Attach Marquee Assembly to LCD Mounting Stand

1. On the marquee assembly, loosen (don't remove) the (4) inner ¼"-20 nylon lock nuts.
2. Using ladders, have (2) people lift the marquee assembly above the upper tubes.
   Guide the marquee assembly onto the upper tubes until it rests on the cross tube.
3. Secure the marquee assembly in place by tightening the (4) inner ¼"-20 nylon lock nuts.
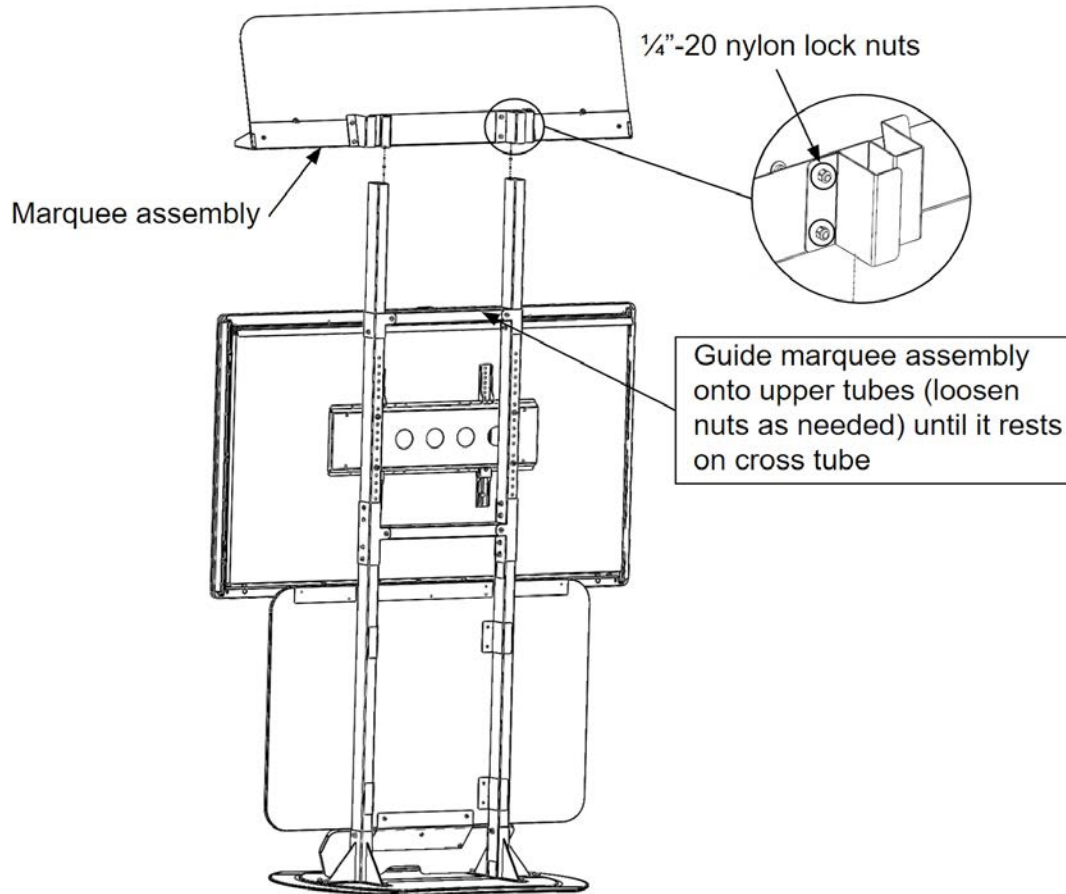


## 5. Attach Marquee Power Supply to LCD Mounting Stand

1. Attach marquee power supply to the top of the cross tube behind marquee assembly using the provided 3M dual lock adhesive.
2. Plug the power supply's 4-pin connector into the connector located on the bottom of the marquee assembly.
3. Plug provided line cord into the back of the power supply.
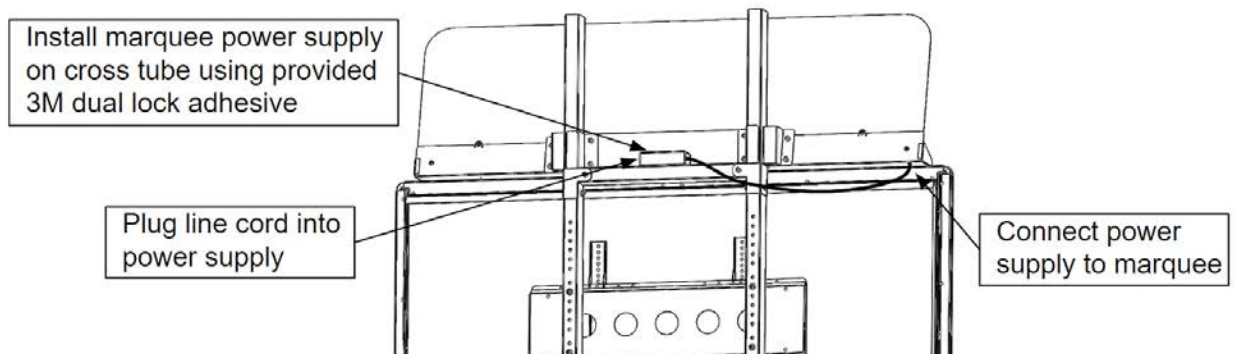
# Cabinet Setup

## 1. Setup Control Cabinet

1. Position control cabinet in front of universal LCD stand.

   *The recommended distance between back door and stand's wood panel is 17" to 29".*

2. Locate HDMI cable and cabinet connector harness (CR-77) inside the universal LCD stand base.

3. Run both through the opening in the stand's angled lower panel to the control cabinet.

4. Plug the 12-pin connector into the panel mounted connector on the back of the control cabinet.

5. Remove the back door.

6. Guide the HDMI cable through the hole in control cabinet bottom and plug into PC.

7. Plug the line cord into the AC plate on the back of the cabinet.

8. Secure HDMI cable, cabinet line cord, and cabinet connector harness within the cord cover.

9. Place the cord cover between the control cabinet and universal LCD stand, running any excess cable through the opening in the stand's angled lower panel.

   *Recommended: Secure cord cover to floor with tape.  Tape is not supplied due to variety of floor types (carpet, tile, wood, etc.); use a tape suitable for your particular floor.*

10. *Replace back door.*



Run HDMI cable, cabinet line cord, and cabinet connector harness (CR-77) through cord cover

Cord cover

Remove back door to access PC (guide HDMI cable through hole in cabinet floor)

Plug line cord into AC plate

Plug 12-pin connector into panel mount plate
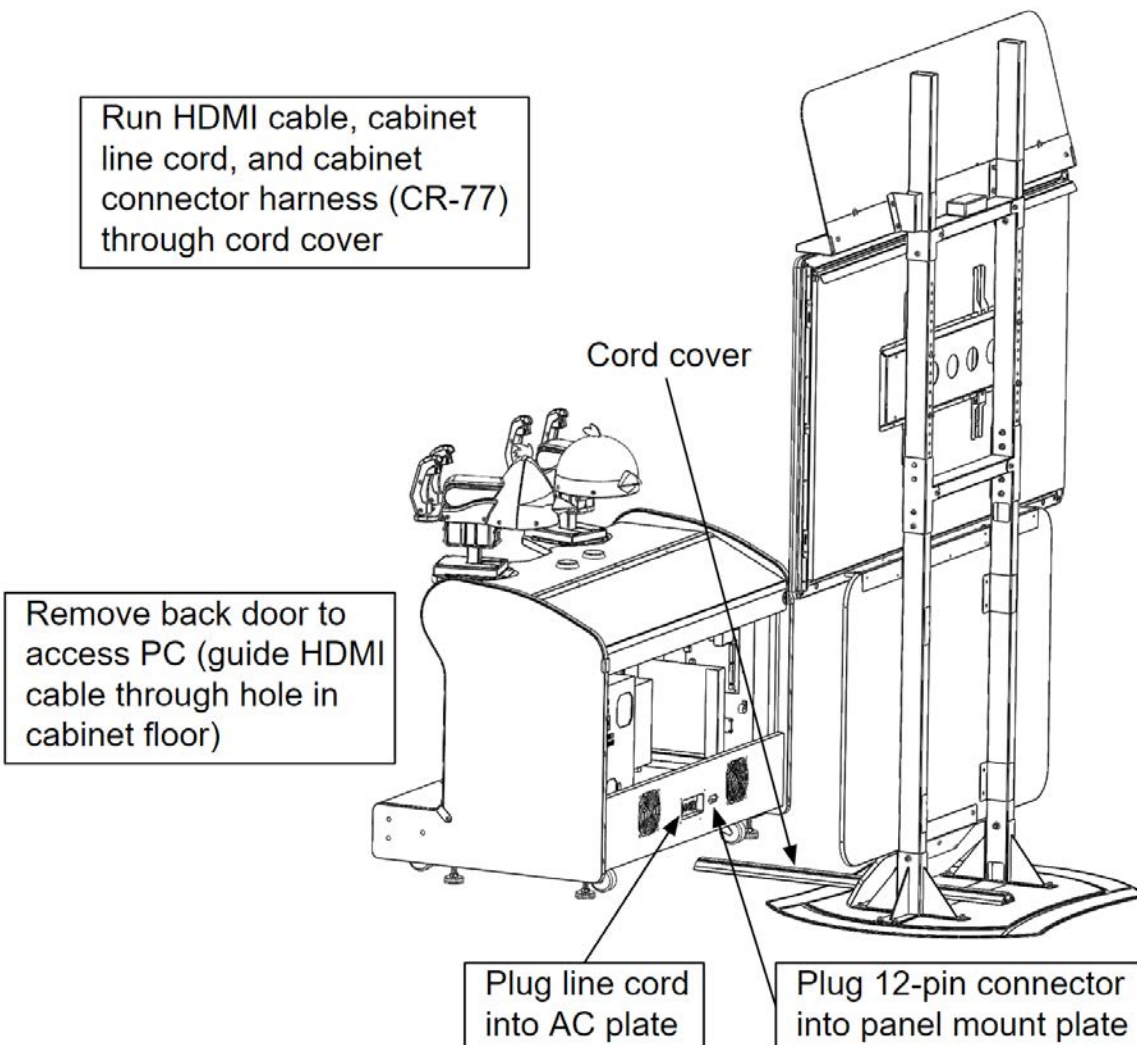
## 2. Attach Seat Cabinet to Control Cabinet

1. Secure (2) cabinet connector brackets to control cabinet using (6) ¼"-20 x 2" tamper-proof screws plus washers and lock washers.



¼"-20 x 2" tamperproof screws + washers & lock washers

Cabinet connector bracket
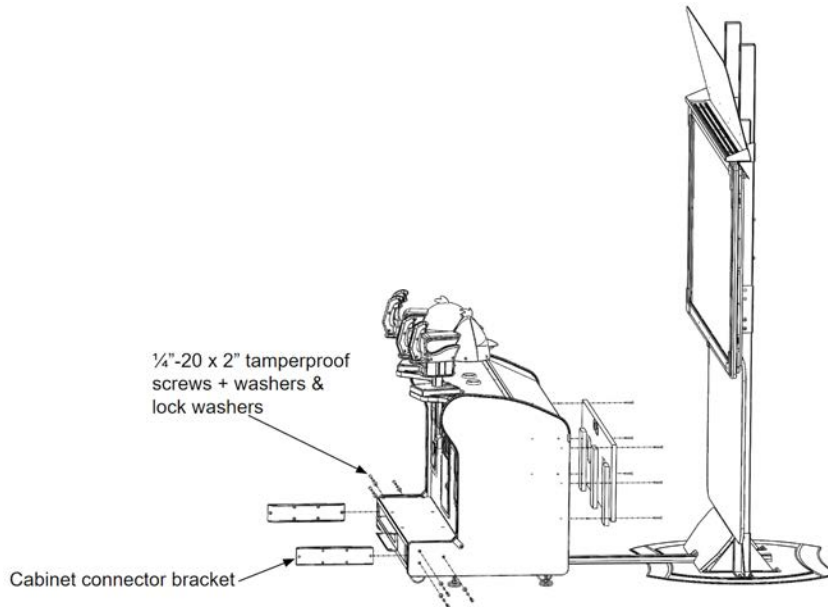
2. Place seat cabinet near control cabinet.
3. Connect the harnesses located in each cabinet.
4. Push seat cabinet into control cabinet making sure not to pinch any wires.
5. Secure seat cabinet to cabinet connector brackets using (6) ¼"-20 x 2" tamper-proof screws.
6. Secure seat cabinet to bracket mounted on the front of the control cabinet using (2) ¼"-20 x 1-½" tamper-proof screws plus washers and lock washers.  Screws go through slots in treadplate.



¼"-20 x 2" tamperproof screws + washers & lock washers

¼"-20 x 1-½" tamperproof screws + washers & lock washers

Connect cabinet harnesses
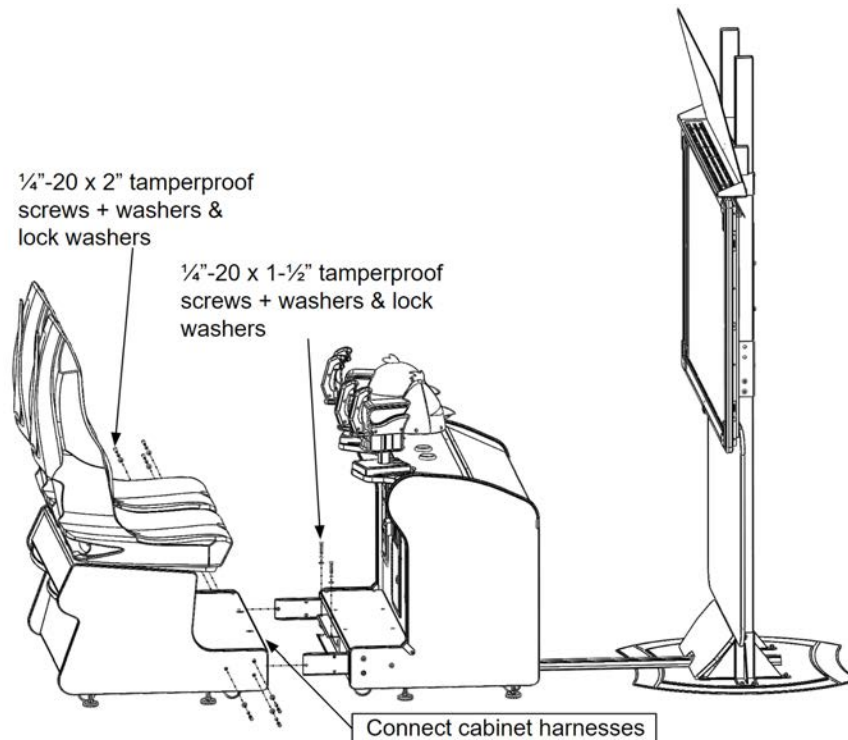
### 3. Verify Cabinet Functionality

1. Verify the voltage in the nearest AC outlet.
2. Verify the AC outlet ground connection is present and working.
3. Verify that the specified operating current will not overload the supply circuits.
4. Plug the cabinet line cord, marquee assembly power supply line cord, and monitor power cord into supplied power strip.
5. Plug power strip line cord into AC outlet.
6. Turn the main cabinet power switch to ON.
7. Verify that the cooling fans on the cabinet are working.

   *If not, turn off AC power and disconnect line cord. Contact Betson service*
8. Check that no component is excessively hot or emitting foul odors.

   *If so, turn off AC power and disconnect line cord. Contact Betson service.*
9. Once software loads, you will be asked to setup the cabinet software.

# Game Software Setup

## Initial Setup

When first turned on, follow the onscreen prompts to complete initial game setup.

## Verify Input and Output Functionality

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

# Card Reader Installation/Setup

UCL, or Universal Card Link, is a debit card standard established by the American Amusement Machine Association.  Visit https://coin-op.org/standardization/ for the latest UCL standard and manual information.

You can choose to use 1 or 2 card readers in the pricing adjustments section of the test menu.
It is recommended to use 2 card readers for best results.

There are (2) supplied UCL connections (located near the test bracket) with enough wire length to accommodate mounting card readers to the control panel or front panel.
If only (1) card reader will be used, use the P1 UCL connector.

The UCL connectors on this game use pins 1, 2, 6, 8, and 9.  The other pins are unused.
Each UCL connector can supply up to 1A at 12VDC.



| PIN # | SIGNAL NAME |
|-------|-------------|
| 1 | 12V |
| 2 | COIN |
| 3 | |
| 4 | |
| 5 | |
| 6 | TICKET NOTCH |
| 7 | |
| 8 | TICKET RUN |
| 9 | GND |
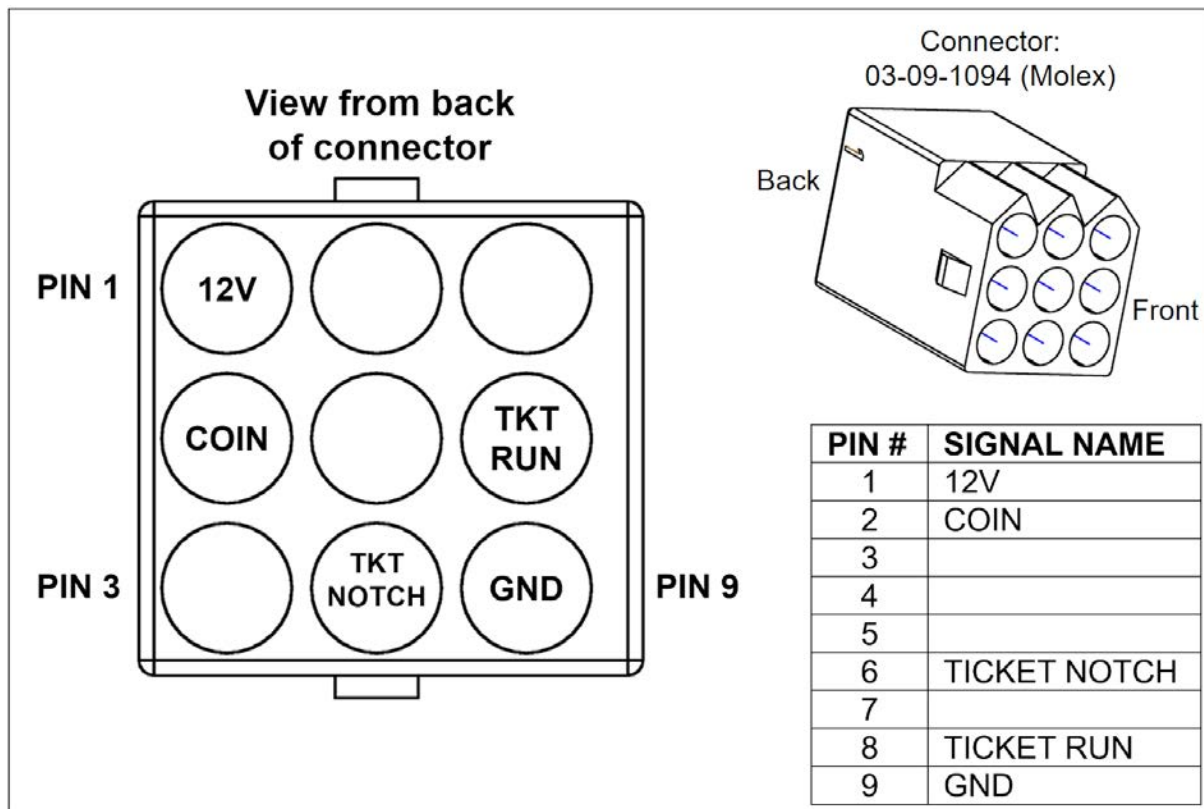
# PC Connection Guide

*Note – TV must be connected by an HDMI cable.  Do not use an HDMI adapter.

# 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
- A screen indicating Data Files Corrupted

### 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 main cabinet power switches.

**Flash Drive Restore**

1. Turn both cabinet AC power switches to OFF.
2. Connect USB flash drive to an open USB port found inside the coin door.
3. Turn both cabinet AC power switches to ON.
4. Initial software loading may take several minutes.   Check progress periodically.
   ***Do not interrupt power or reset the game during recovery.***
5. When software has finished loading, a message indicates that restore is complete.
6. Turn both cabinet power switches to OFF and disconnect USB flash drive.
7. After 30 seconds, turn both cabinet power switches to ON.
8. After game restarts, the game will proceed through the Setup wizard with factory defaults.

# 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. |
| | Game power line circuit breaker tripped. | Check and reset game power line circuit breaker. |
| | No power to receptacle. | Test outlet and plug game into powered outlet. |
| | PC not turned on. | Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity. |
| | PC BIOS set incorrectly. | Set PC BIOS to boot on power. |
| *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 |
| No sound | Bad Connection | Check connection to speakers and amplifier board. |
| | Audio Cable Disconnected | Check audio cable and connection |
| Game does not load | Hard drive failure | Recover hard drive. See procedure on pg 15. |
| 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 |
|---|---|---|
| Coin meter does not click | 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 |
| *Dongle Not Present* | Dongle missing or disconnected | Find dongle usb connection and reseat in USB port |
| | Faulty USB port | Test dongle in another USB port |
| *Connect I/O Board* or *I/O Board Missing* | USB cable disconnected | Check USB connection from PC to I/O board |
| | Blown fuse | Check and replace fuse. |
| | No power to RIO2 board | Check for proper voltage (+12V) at RIO2 P1 connector |
| | Bad RIO2 Board | Replace RIO2 board with known functional board |

# Parts

## Angry Birds Boom! – Game Assembly
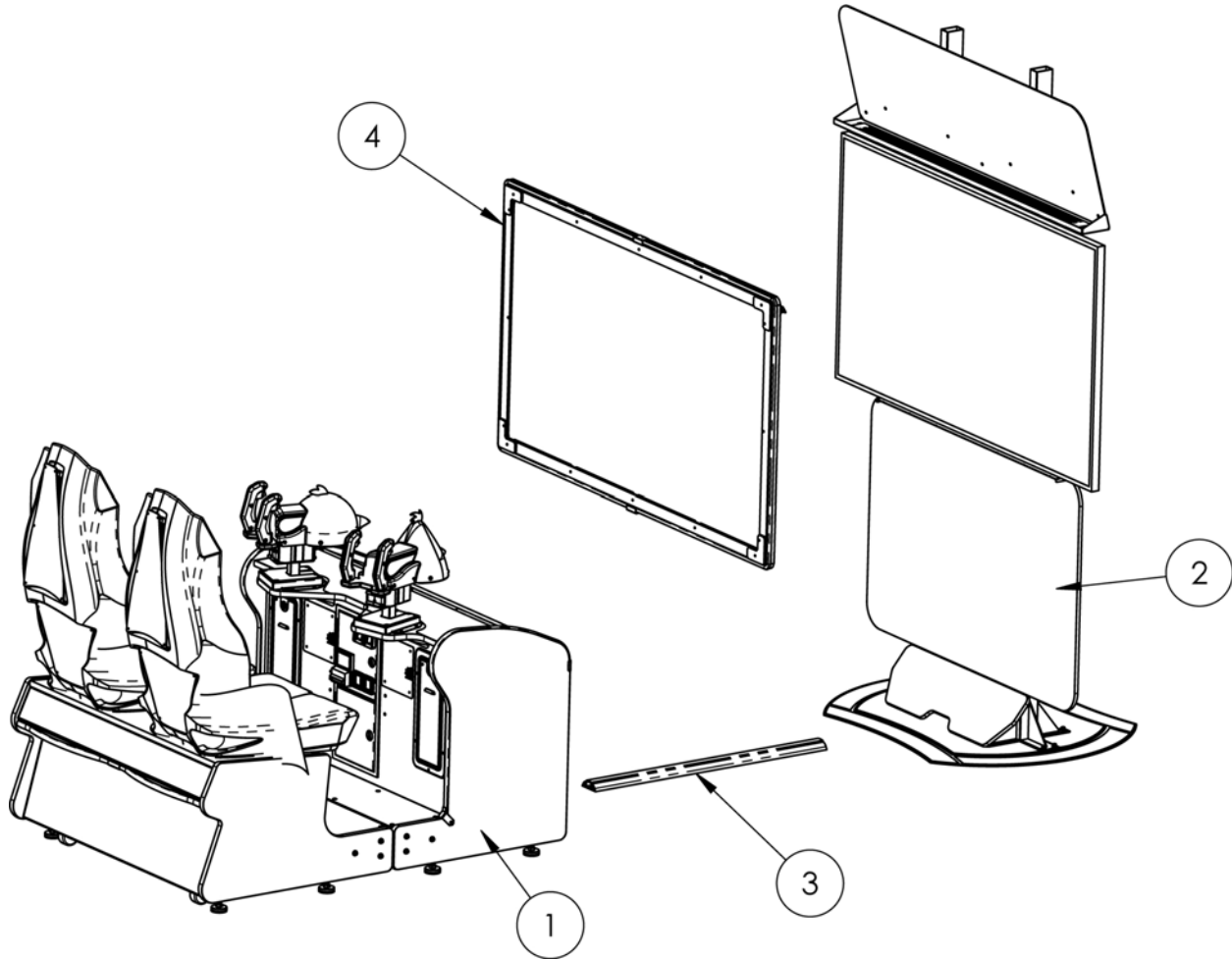


### Angry Birds Boom! – Game Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | Angry Birds Player Cabinet Assembly | Player Seat Cabinet Assembly | 1 |
| 2 | Angry Birds Monitor Stand Assembly | LCD Monitor Stand Assembly | 1 |
| 3 | Partec – 7-258 | Black Rubber Cord Cover 3' | 1 |
| 4 | Angry Birds Monitor Protector Assembly | Monitor Protector Assembly | 1 |

## Angry Birds Boom! – LCD Stand Assembly



STAND BASE DECALS:
- A - R90-13-99 - Front outer base plate decal
- B - R90-13-100 - Left outer base plate decal
- C - R90-13-96 - Rear outer base plate decal
- D - R90-13-101 - Right outer base plate decal
- E - R90-13-98 - Front inner base plate decal
- F - R90-13-97 - Rear inner base plate decal
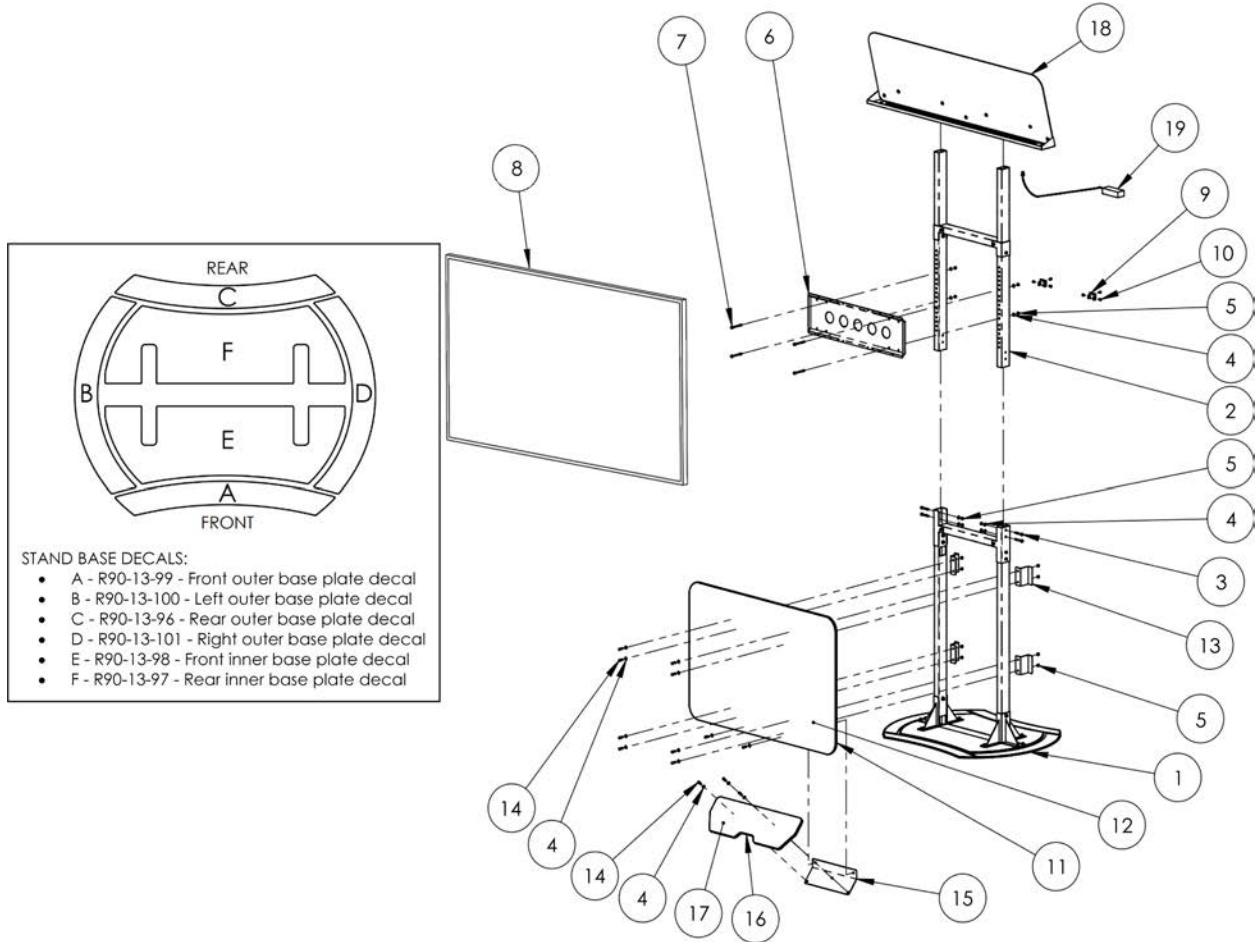
### Angry Birds Boom! – LCD Stand Assembly Part Numbers

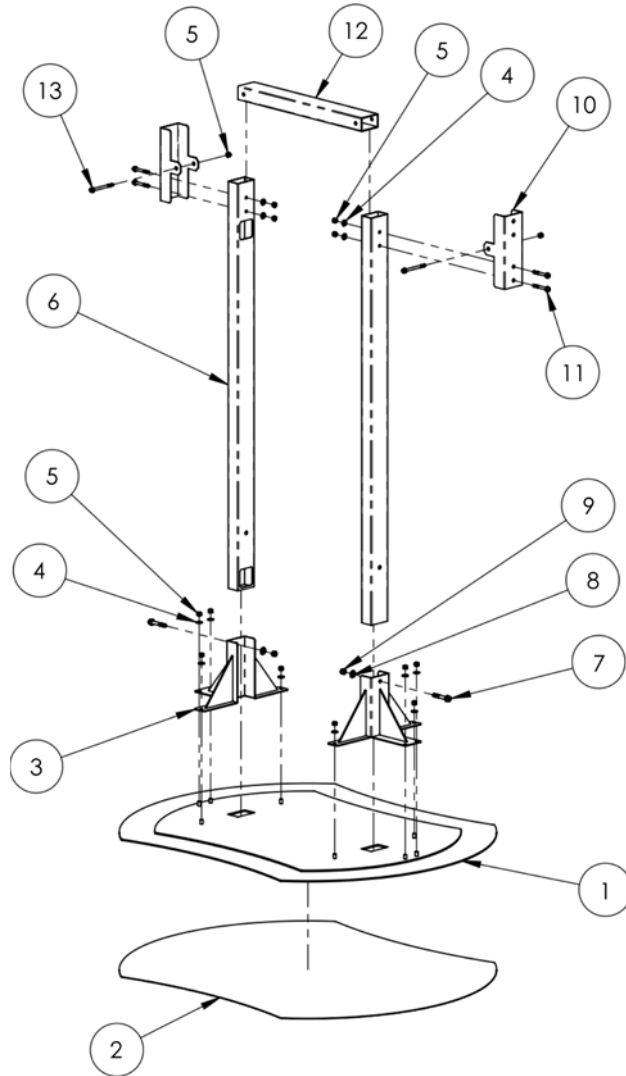| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | Lower_Half_Sub-Assy_of_Universal_LCD_Stand | Universal LCD Stand – Lower Half | 1 |
| 2 | Upper_Half_Sub-Assy_of_Universal_LCD_Stand | Universal LCD Stand – Upper Half | 1 |
| 3 | McMaster-Carr – 92316A550 | High Strength Grade 8 Steel Hex Head Screw, Flanged, ¼"-20 thread, 2" long | 4 |
| 4 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 21 |
| 5 | McMaster-Carr – 9133A150 | Low-Strength Steel Nylon-Insert Locknut, Black Ultra-Corrosion-Resistant Coated, ¼"-20 thread size | 16 |
| 6 | 600-00752-01 | Universal LCD Mount- Horizontal Bracket | 1 |
| 7 | McMaster-Carr – 92316A554 | High-Strength Grade 8 Steel Hex Head Screw, Flanged, ¼"-20 thread size, 3" long | 4 |
| 8 | AB Monitor & Mounting Hooks | 65" Monitor w/ Mounting Hook Brackets | 1 |
| 9 | 600-00760-01 | Universal LCD Mount – Securing Clip | 2 |
| 10 | McMaster-Carr – 90316A829 | Stainless Steel Flanged Hex Head Screws with Slotted drive, 10-32 thread size, ½" long | 6 |
| 11 | R90-23-38 | Lower Sign Panel | 1 |
| 12 | R90-13-64 | Lower Sign Decal | 1 |
| 13 | 600-02420-01 | Marquee Cinch Bracket | 4 |
| 14 | McMaster-Carr – 96075A223 | Tamper-Resistant Torx Screw, ¼"-20 thread, 1" long | 13 |
| 15 | 600-02431-01 | Lower Sign Bracket | 1 |
| 16 | R90-23-39 | Angled Lower Panel | 1 |
| 17 | R90-13-65 | Angled Lower Sign Decal | 1 |
| 18 | AB_Marquee_Assy | Marquee Assembly | 1 |
| 19 | Partec – CA-4177 | Marquee Power Supply & 8-582 Line Cord | 1 |

## Angry Birds Boom! – Universal LCD Stand – Lower Assembly



### Angry Birds Boom! – Universal LCD Stand – Lower Assembly Part Numbers

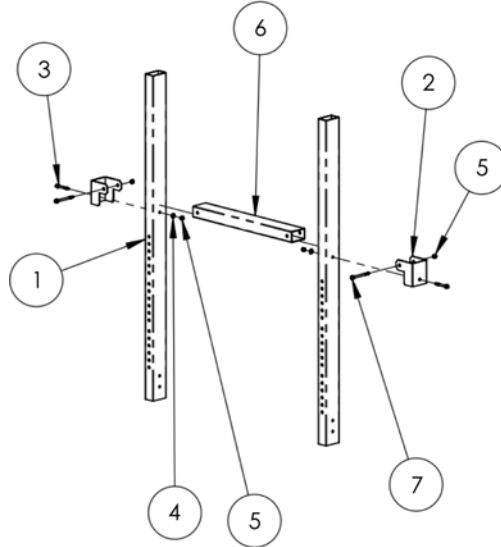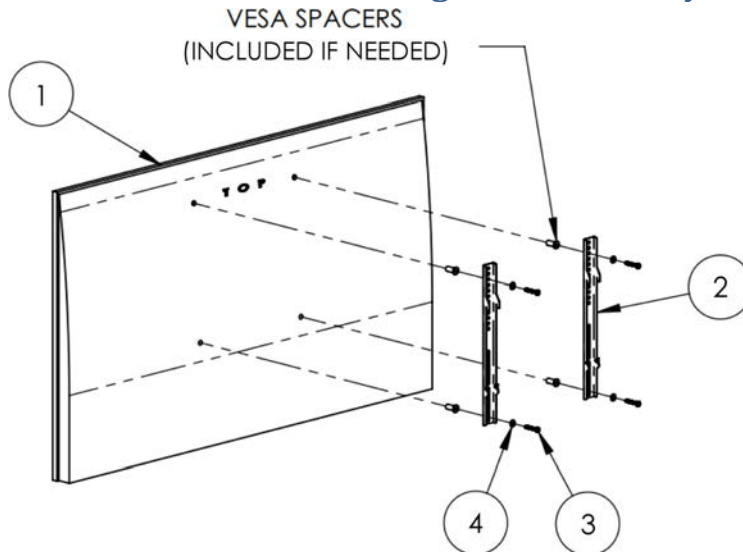| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 600-00990-01 | Stand Base | 1 |
| 2 | 600-00994-01 | Rubber Base Pad | 1 |
| 3 | 600-00989-01 | Welded Tube Support | 2 |
| 4 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 12 |
| 5 | McMaster-Carr – 9133A150 | Low-Strength Steel Nylon-Insert Locknut, Black Ultra-Corrosion-Resistant Coated, ¼"-20 thread size | 14 |
| 6 | 600-00987-01 | Lower Tube | 2 |
| 7 | McMaster-Carr – 92316A327 | High-Strength-Grade 8 Steel Hex Head Screw, Flanged, 5/16"-24 thread size, 2" long | 2 |
| 8 | McMaster-Carr – 92316A327 | Black-Oxide 18-8 Stainless Steel Washer for 5/16" screw size, 0.344" ID, 0.75" OD | 2 |
| 9 | McMaster-Carr – 96765A145 | 18-8 Stainless Steel Nylon-Insert Locknut, 5/16"-24 thread size | 2 |
| 10 | 600-00985-01 | Tube Joiner | 2 |
| 11 | McMaster-Carr – 92316A550 | High Strength Grade 8 Steel Hex Head Screw, Flanged, ¼"-20 thread, 2" long | 4 |
| 12 | 600-00991-01 | Cross Tube | 1 |
| 13 | McMaster-Carr – 92316A554 | High Strength Grade 8 Steel Hex Head Screw, ¼"-20 thread 3" long | 2 |

## Angry Birds Boom! – Universal LCD Stand – Upper Assembly



### Angry Birds Boom! – Universal LCD Stand – Upper Assembly Part Numbers

| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 600-00986-01 | Upper Tube | 2 |
| 2 | 600-00988-01 | Upper Bracket | 2 |
| 3 | McMaster-Carr – 92316A550 | High Strength Grade 8 Steel Hex Head Screw, Flanged, ¼"-20 thread, 2" long | 2 |
| 4 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 2 |
| 5 | McMaster-Carr – 9133A150 | Low-Strength Steel Nylon-Insert Locknut, Black Ultra-Corrosion-Resistant Coated, ¼"-20 thread size | 4 |
| 6 | 600-00991-01 | Cross Tube | 1 |
| 7 | McMaster-Carr – 92316A554 | High Strength Grade 8 Steel Hex Head Screw, ¼"-20 thread 3" long | 2 |

## Angry Birds Boom! – Monitor and Mounting Hook Assembly



### Angry Birds Boom! – Monitor and Mounting Hook Assembly Part Numbers

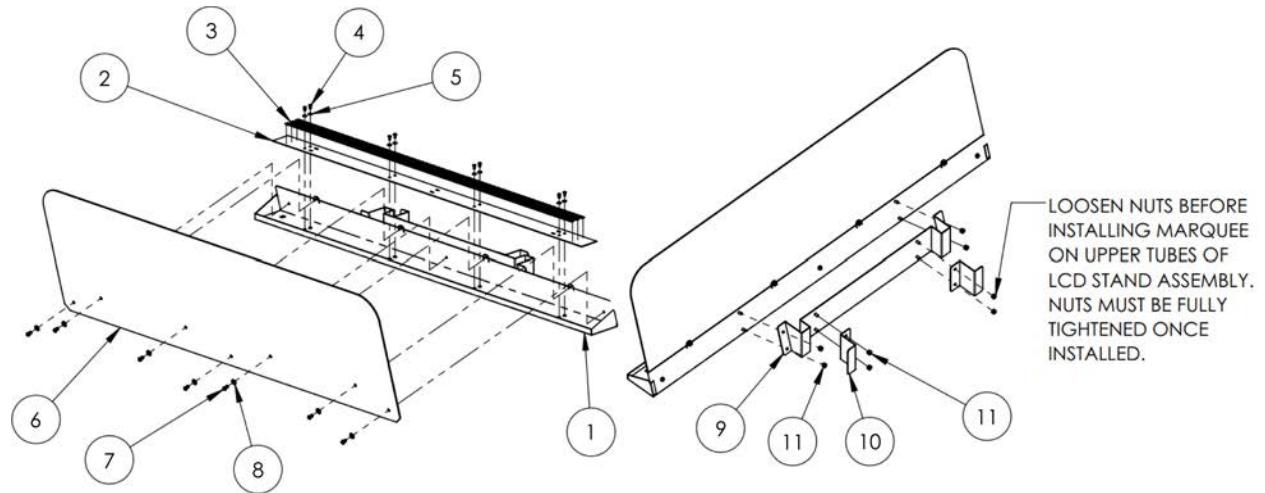| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 809-00016-01 | 65" Commercial Grade LED TV (exact model varies) | 1 |
| 2 | 600-00751-01 | Universal LCD Mount – Vertical Brackets | 2 |
| 3 | Depends on monitor model | Monitor mounting screws | 4 |
| 4 | Depends on monitor model | Monitor mounting screws | 4 |

# Angry Birds Boom! – Monitor Protector Assembly
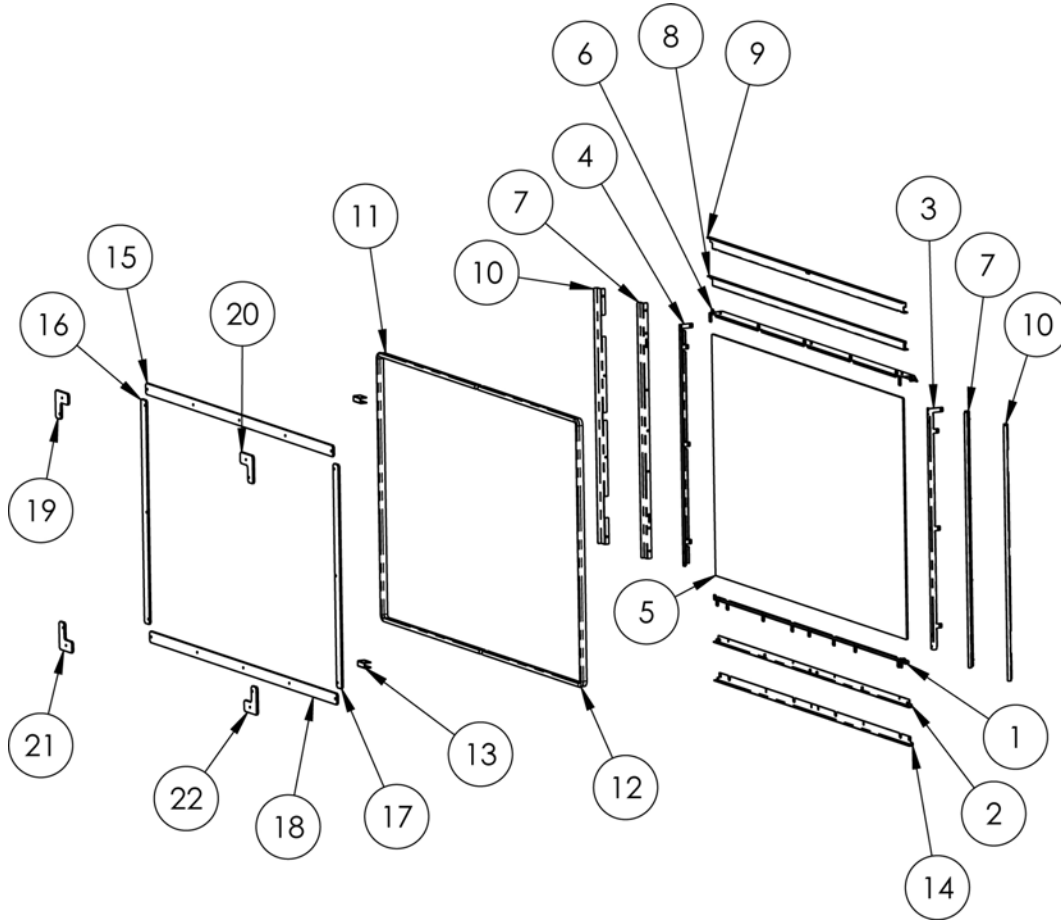


## Angry Birds Boom! – Monitor Protector Assembly Part Numbers

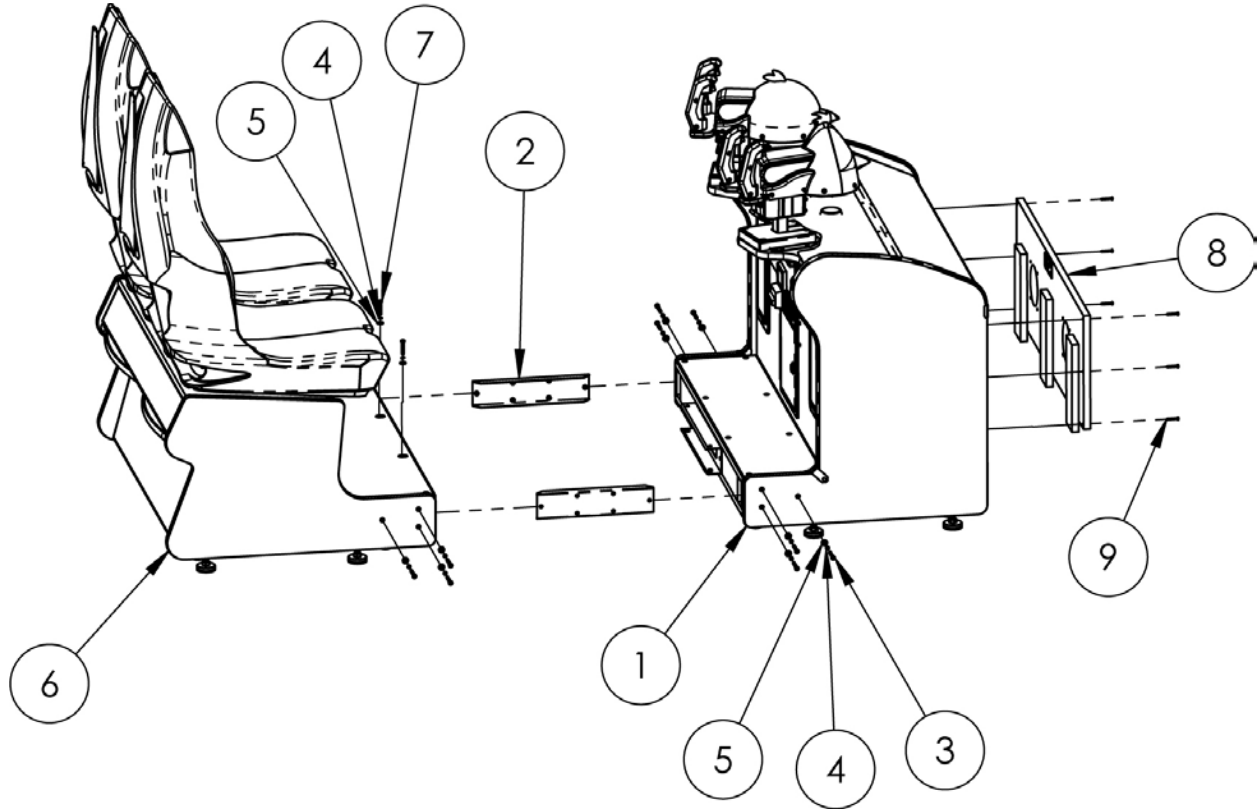| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | R1-1172 | Plexi holder bottom bracket | 1 |
| 2 | R1-1176 | Encased LED clamp bottom bracket | 1 |
| 3 | R1-1174 | Plexi holder side bracket | 1 |
| 4 | R1-1175 | Plexi holder side bracket, mirror | 1 |
| 5 | R4-1043 | Monitor Cover (65") | 1 |
| 6 | R1-1173 | Plexi holder top bracket | 1 |
| 7 | R1-1178 | Encased LED clamp bracket - side | 2 |
| 8 | R1-1177 | Encased LED clamp bracket - top | 1 |
| 9 | R1-1203 | Encased LED clamp bracket – long cap top | 1 |
| 10 | R1-1182 | Encased LED clamp bracket – short cap | 2 |
| 11 | CR-80 | Encased LEDs – player 1 | 1 |
| 12 | CR-81 | Encased LEDs – player 2 | 1 |
| 13 | R1-1204 | Encased LED – gap clip | 2 |
| 14 | R1-1181 | Encased LED clamp bracket – long cap bottom | 1 |
| 15 | R90-13-68 | Printed monitor bezel panel – upper base | 1 |
| 16 | R90-13-69 | Printed monitor bezel panel – left base | 1 |
| 17 | R90-13-70 | Printed monitor bezel panel – lower base | 1 |
| 18 | R90-13-71 | Printed monitor bezel panel – right base | 1 |
| 19 | R90-13-72 | Printed monitor bezel panel – upper left cap | 1 |
| 20 | R90-13-73 | Printed monitor bezel panel – upper right cap | 1 |
| 21 | R90-13-74 | Printed monitor bezel panel – lower left cap | 1 |
| 22 | R90-13-75 | Printed monitor bezel panel – lower right cap | 1 |

# Angry Birds Boom! – Marquee Assembly



LOOSEN NUTS BEFORE INSTALLING MARQUEE ON UPPER TUBES OF LCD STAND ASSEMBLY. NUTS MUST BE FULLY TIGHTENED ONCE INSTALLED.

## Angry Birds Boom! – Marquee Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 600-02426-01 | Main Marquee Bracket | 1 |
| 2 | 600-01735-01 | Marquee LED Sintra Panel | 1 |
| 3 | Partec – CA-4176 | Marquee LED Cable (500-00162-01: 3x 120cm) | 1 |
| 4 | McMaster-Carr – 91249A192 | Black-Oxide 18-8 Stainless Steel Pan Head Phillips Screws, 8-32 thread, 3/8" Long | 8 |
| 5 | McMaster-Carr – 97416A113 | Black-Oxide Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD | 8 |
| 6 | R90-13-76 | Printed Marquee Panel | 1 |
| 7 | McMaster-Carr – 96075A211 | Alloy Steel Tamper-Resistant Button Head Torx Screws, ¼"-20 Thread, ½" Long | 7 |
| 8 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 7 |
| 9 | 600-02419-01 | Marquee Mounting Bracket | 1 |
| 10 | 600-02420-01 | Marquee Cinch Bracket | 2 |
| 11 | McMaster-Carr – 91333A150 | Low-Strength Steel Nylon-Insert Locknut, Black Ultra-Corrosion-Resistant Coated, ¼"-20 thread size | 8 |

## Angry Birds Boom! – Player Cabinet Assembly



### Angry Birds Boom! – Player Cabinet Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | AB_Control_Assy | Control Cabinet Assembly | 1 |
| 2 | 600-01457-01 | Cabinet Connect Bracket | 2 |
| 3 | Partec – 31-TP250-03-004 | Alloy Steel Tamper-Resistant | 12 |
| 4 | McMaster-Carr – 93711A500 | Black-Oxide 18-8 Stainless Steel Split Lock Washer for ¼" Socket Head Screws, 0.26" ID, 0.363" OD | 14 |
| 5 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 14 |
| 6 | AB_Pedestal_Assy | Pedestal Cabinet Assembly | 1 |
| 7 | McMaster-Carr – 96075A231 | Alloy Steel Tamper-Resistant Button Head Torx Screws, ¼"-20 Thread, 1-1/2" Long | 2 |
| 8 | AB_Back_Door_Assy | Back Door Assembly | 1 |
| 9 | McMaster-Carr – 90190A201 | Phillips Rounded Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 1-1/4" Long | 6 |

## Angry Birds Boom! – Control Cabinet Assembly



NOT SHOWN:
- SELECT HARDWARE
- P1 & P2 MECH DECALS
  - PART NUMBERS ON NEXT PAGE
- CABINET DECALS
  - R90-13-58 - Main Cabinet Left Decal
  - R90-13-59 - Main Cabinet Right Decal
  - R90-13-66 - Rear Control Panel Decal
  - R90-13-67 - Control Panel Decal
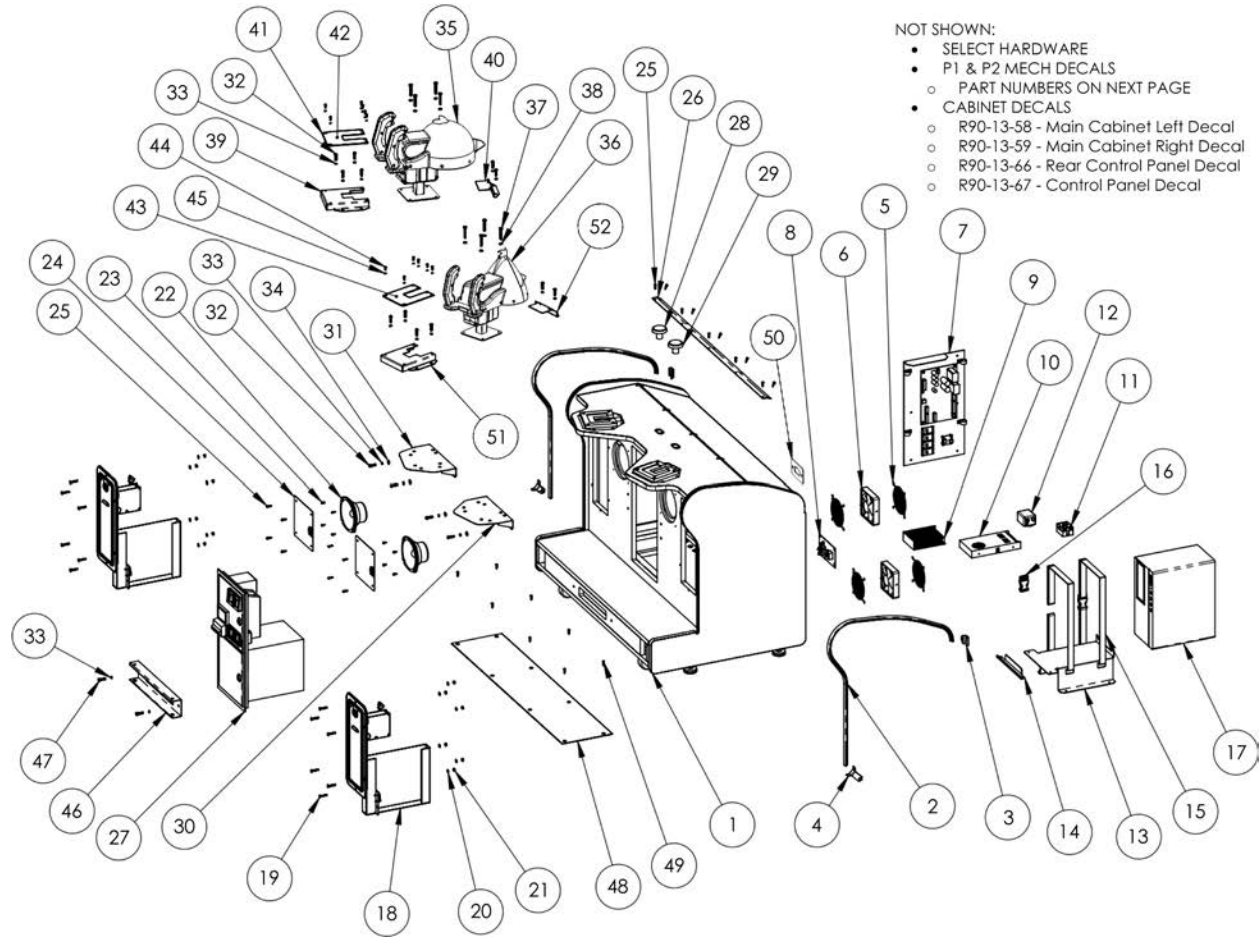
## Angry Birds Boom! – Control Cabinet Assembly Part Numbers

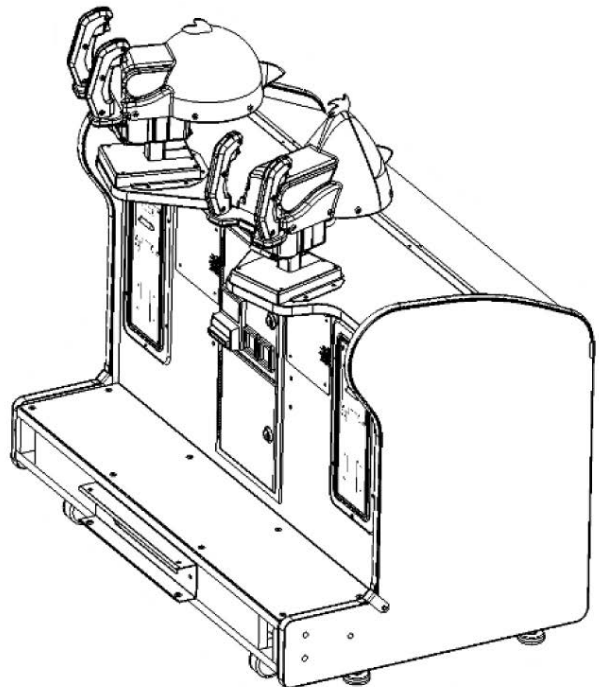| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | R90-13-76 | Main Cabinet | 1 |
| 2 | 603-00718-01 (47.5in) | LED T-Molding Extrusion – 47.5" (& CA-4231 – 500-00131-01: 1x 120cm) | 2 |
| 3 | 600-01938-01 | LED T-Molding Clip | 2 |
| 4 | 600-01939-01 | Flanged LED T-Molding Clip | 2 |
| 5 | 800-00001-00 | 120mm Wire Fan Guard | 4 |
| 6 | Partec – CA-3277 | Cooling Fan (standard size): 12VDC, 3W, 80CFM (820-00012-00) | 2 |
| 7 | AB_RIO_Assy | RIO Assembly w/ Mounting Plate | 1 |
| 8 | AC_Plate_Assy | AC Power Plate Sub-Assembly | 1 |
| 9 | 330-00002-01 | LRS-150F-24: 150W, 24V Low Leakage Power Supply | 1 |
| 10 | 500-00193-01 | RSP-320-12: 320W, 12V PFC Dual Voltage Power Supply | 1 |
| 11 | 800-00079-01 | Crouzet 84137910N 25A Solid State Relay | 1 |
| 12 | 442-00001-01 | Power Line Filter (Corcom 6MV1) | 1 |
| 13 | 600-02422-01 | PC Mounting Bracket | 1 |
| 14 | 600-02427-01 | PC Retaining Clip | 1 |
| 15 | McMaster-Carr – 8742K76 (56in) | Nylon Fabric Strip, Black, 1" Wide, .08" Thick, 56" Long | 2 |
| 16 | McMaster-Carr – 29705T86 | Plastic Buckle, Black, Squeeze-Release, NO-Sew for 1" Webbing | 2 |
| 17 | R90-AP-8 | Lenovo TC M70t (& 310-00005-01: GTX1650 Video Card) | 1 |
| 18 | 800-00043-01 | Single Ticket Dispenser Door Assembly | 2 |
| 19 | Partec – 31-CB010-03-002 | Black Oxide Steel Square-Neck Carriage Bolt, Low-Strength- 10-24 Thread Size, 1-1/4" Long | 12 |
| 20 | McMaster-Carr – 91090A103 | Zinc-Plated Steel Oversized Washer for Number 10 Screw Size, 0.203" ID, 0.5" OD | 12 |
| 21 | McMaster-Carr – 90675A011 | Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-24 Thread Size | 12 |
| 22 | 2-1-10-00-00-000 | 5.25" Speaker, 8 Ohm, Full Range | 2 |
| 23 | McMaster-Carr – 90935A194 | Phillips Rounded Head Screws for Sheet Metal, Black-Oxide Steel, Number 8 Size, ½" Long | 8 |
| 24 | 600-01464-01 | Speaker Grill | 2 |

| 25 | Partec – 31-TP008-03-003 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, Black Oxide Steel, Number 8 Size, ¾" Long | 18 |
|----|------|------|----|
| 26 | 600-01944-01 | Cabinet Seam Plate | 1 |
| 27 | Partec – AS-2565 | Mid-Width Coin Door (800-00005-01) Assembly w/ Test Switches and Ticket Meter | 1 |
| 28 | R90-AP-20 | Large Round Red IPB (.187 Gold MS, 6V White LED) | 1 |
| 29 | R90-AP-21 | Large Round Yellow IPB (.187 Gold MS, 6V White LED) | 1 |
| 30 | 600-01912-01 | Gun Gusset Bracket R | 1 |
| 31 | 600-01913-01 | Gun Gusset Bracket L | 1 |
| 32 | McMaster-Carr – 96075A223 | Alloy Steel Tamper-Resistant Button Head Torx Screws, ¼"-20 Thead, 1" Long | 16 |
| 33 | McMaster-Carr – 93711A500 | Black-Oxide 18-8 Stainless Steel Split Lock Washer for ¼" Socket Head Screws, 0.26" ID, 0.363" OD | 18 |
| 34 | McMaster-Carr – 97416A119 | Black-Oxide Steel SAE Washer for ¼" Screw Size, 0.281" ID, 0.625" OD | 4 |
| 35 | AB_Red_Assy | Angry Birds Red Mech | 1 |
| 36 | AB_Chuck_Assy | Angry Birds Chuck Mech | 1 |
| 37 | McMaster-Carr – 92865A548 | Medium-Strength Grade 5 Steel Hex Head Screw, Zinc-Plated, ¼"-20 Thread Size, 1-3/4" Long, Fully Threaded | 8 |
| 38 | McMaster-Carr – 91102A750 | Zinc-Plated Steel Split Lock Washer for ¼" Screw Size, 0.26" ID, 0.487" OD | 8 |
| 39 | 600-01936-01 | Mech Plate Rear – Red | 1 |
| 40 | 600-01937-01 | Mech Plate Front – Red | 1 |
| 41 | 600-01486-01 | Dash Gun Cover Plate | 2 |
| 42 | R90-13-79 | P1 Gun Plate Decal | 1 |
| 43 | R90-13-87 | P2 Gun Plate Decal | 1 |
| 44 | McMaster-Carr – 96075A139 | Alloy Steel Tamper-Resistant Button Head Torx Screws, 8-32 Thread, ½" Long | 12 |
| 45 | McMaster-Carr – 93711A300 | Black-Oxide 18-8 Stainless Steel Split Lock Washer for Number 8 Socket Head Screws, 0.174" ID, 0.267" OD | 12 |
| 46 | 600-01458-01 | Center Connect Bracket | 1 |
| 47 | McMaster-Carr – 92865A542 | Medium-Strength Grade 5 Steel hex Head Screw, Zinc-Plated, ¼"-20 thread size, 1" Long | 2 |
| 48 | 600-01992-01 | Main Cabinet Tread Plate | 1 |
| 49 | McMaster-Carr – 95638A197 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, 18-8 Stainless Steel, Number 8 Size, ¾" Long | 8 |
| 50 | R1-1180 | Panel Mount Bracket | 1 |
| 51 | 600-01936-02 | Mech Plate Rear – Yellow | 1 |
| 52 | 600-1937-02 | Mech Plate Front - Yellow | 2 |

Red Mech Decals:
- R90-13-194 - P1 Left Decal
- R90-13-195 - P1 Right Decal
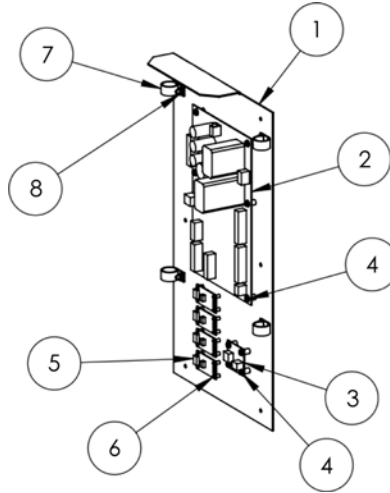- R90-13-80 - P1 Grip Plate Decal

Chuck Mech Decals:
- R90-13-196 - P2 Left Decal
- R90-13-197 - P2 Right Decal
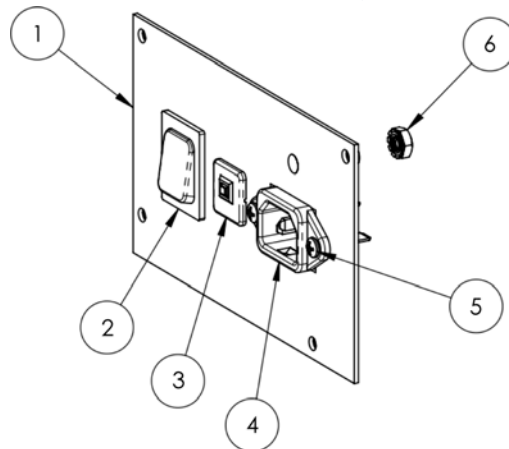- R90-13-88 - P2 Grip Plate Decal

## Angry Birds Boom! – RIO Assembly

### Angry Birds Boom! – RIO Assembly Part Numbers

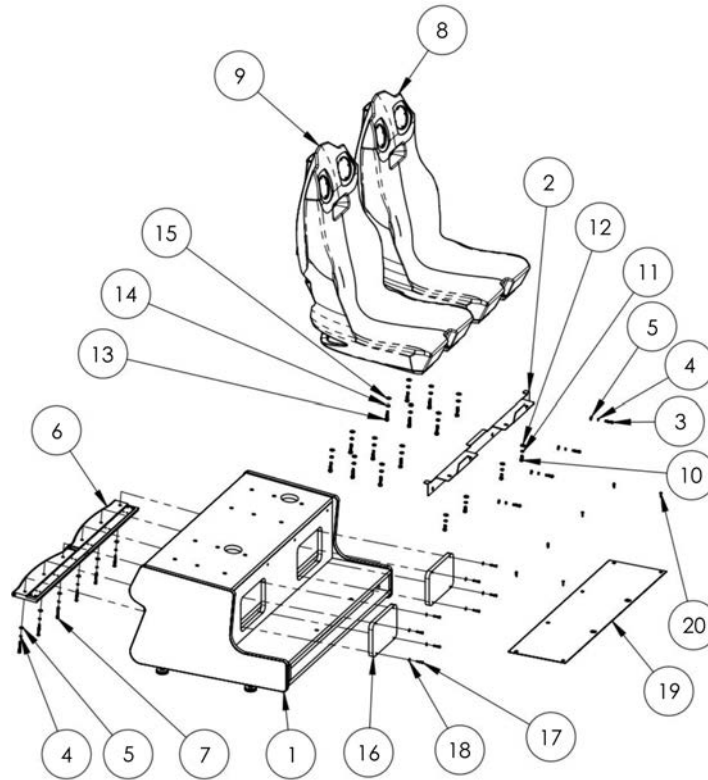| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 600-01914-01 | RIO Mounting Plate | 1 |
| 2 | 500-00040-02 | RIO PCB | 1 |
| 3 | 500-00194-01 | 5V, 5A Switching Regulator PCB (12V input) | 1 |
| 4 | McMaster-Carr – 91249A192 | Black-Oxide 18-8 Stainless Steel Pan Head Phillips Screws, 8-32 thread, 3/8" Long | 10 |
| 5 | 520-00024-01 | Aliens/Terminator Deluxe Gun Kickboard | 4 |
| 6 | McMaster-Carr – 90272A106 | Steel Pan Head Phillips Screws, 4-40 Thread, ¼" Long | 16 |
| 7 | AEH – 04-12-750 | Wire harness Clip (for ¾" Bundle Diameter) | 4 |
| 8 | McMaster-Carr – 90675A009 | Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 8-32 Thread Size, 11/32" Wide | 4 |

## Angry Birds Boom! – AC Power Plate Assembly

### Angry Birds Boom! – AC Power Plate Assembly Part Numbers

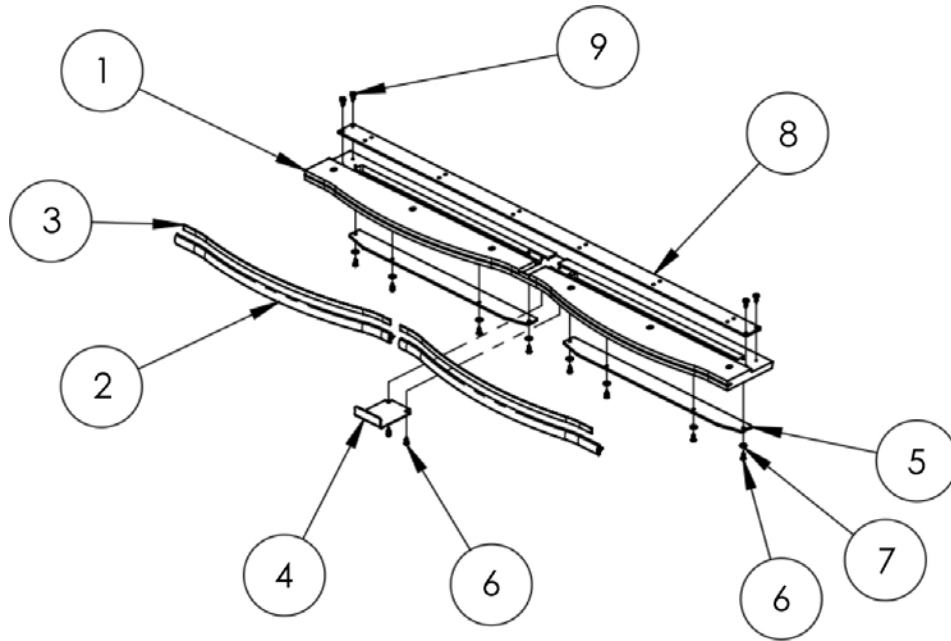| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 600-01681-01 | AC Electronics Plate | 1 |
| 2 | Marquardt – 1832.3312 | Rocket Switch (DPST): 250VAC, 16A | 1 |
| 3 | Schurter – T9-611P-6A | Thermal Circuit Breaker: 240VAC, 6A, Snap-in, Fuseholder, 1 Pole | 1 |
| 4 | Qualtek – 703W-00/08 | AC Receptacle: 250V, 15A | 1 |
| 5 | McMaster-Carr – 90272A146 | Steel Pan Head Phillips Screws, 6-32 Thread, 3/8" Long | 2 |
| 6 | McMaster-Carr – 90675A195 | Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-32 Thread Size | 1 |

## Angry Birds Boom! – Pedestal Cabinet Assembly



### Angry Birds Boom! –  Pedestal Cabinet Assembly Part Numbers

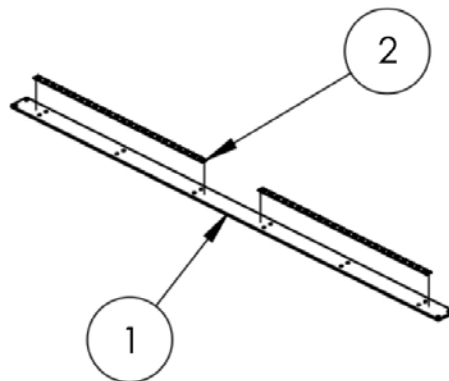| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | R90-23-37 | Seat Cabinet | 1 |
| 2 | 600-01915-01 | Seat Mount Bracket | 1 |
| 3 | Partec – 31-TP250-03-001 | Black Oxide Steel Tamper-Resistant Button Head Torx Screws, ¼"-20 Thread Size, 1-1/4" Long | 4 |
| 4 | McMaster-Carr – 93711A500 | Black-Oxide 18-8 Stainless Steel Split Lock Washer for ¼" Socket Head Screws, 0.26" ID, 0.363" OD | 10 |
| 5 | McMaster-Carr – 97416A119 | Steel SAE Washer for ¼" screw size, 0.281" ID, 0.625" OD | 10 |
| 6 | AB_Rear_Seat_LED_Cap_Assy | Rear Seat LED Cap Assembly | 1 |
| 7 | Partec – 31-TP250-03-004 | Alloy Steel Tamper-Resistant Button Head Torx Screws, ¼"-20 Thread, 2" Long | 6 |
| 8 | AB_Seat_Assy_P1 | Player 1 Seat Assembly (Red) | 1 |
| 9 | AB_Seat_Assy_P2 | Player 2 Seat Assembly (Yellow) | 1 |
| 10 | McMaster-Carr – 92965A581 | Black-Oxide Grade 5 Steel Hex Head Screws, Medium-Strength, 5/16"-18 thread size, ¾" Long | 4 |
| 11 | McMaster-Carr – 93711A600 | Black-Oxide 18-8 Stainless Steel Split Lock Washer for 5/16" Socket Head Screws, 0.322" ID, 0.457" OD | 4 |
| 12 | McMaster-Carr – 96754A145 | Black-Oxide 18-8 Stainless Steel Washer for 5/16" Screw Size, 0.344" ID, 0.75" OD | 4 |
| 13 | McMaster-Carr – 92865A587 | Medium-Strength Grade 5 Steel Hex Head Screw, Zinc-Plated, 5/16"-18 Thread Size, 1-1/2" Long, Fully Threaded | 12 |
| 14 | McMaster-Carr – 91102A755 | Zinc-Plated Steel Split Lock Washer for 5/16" Screw Size, 0.322" ID, 0.583" OD | 12 |
| 15 | McMaster-Carr – 92141A030 | 18-8 Stainless Steel Washer for 5/16" Screw Size, 0.344" ID, 0.75" OD | 12 |
| 16 | 601-00783-01 | Seat Access Panel | 2 |
| 17 | Partec – 31-TP008-03-002 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, Black Oxide Steel, Number 8 size, 1-1/4" Long | 8 |
| 18 | McMaster-Carr – 97416A113 | Black-Oxide Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD | 8 |
| 19 | 600-01993-01 | Seat Cabinet Tread Plate | 1 |
| 20 | McMaster-Carr – 95638A197 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, 18-8 Stainless Steel, Number 8 Size, ¾" Long | 6 |
| * | R90-13-60 | Seat Cabinet Decal – Upper Rear | 1 |
| * | R90-13-61 | Seat Cabinet Decal – Left | 1 |
| * | R90-13-62 | Seat Cabinet Decal – Right | 1 |
| * | R90-13-63 | Seat Cabinet Decal – Lower Rear | 1 |

*Not Shown

## Angry Birds Boom! – Rear Seat LED Cap Assembly



### Angry Birds Boom! – Rear Seat LED Cap Assembly Part Numbers

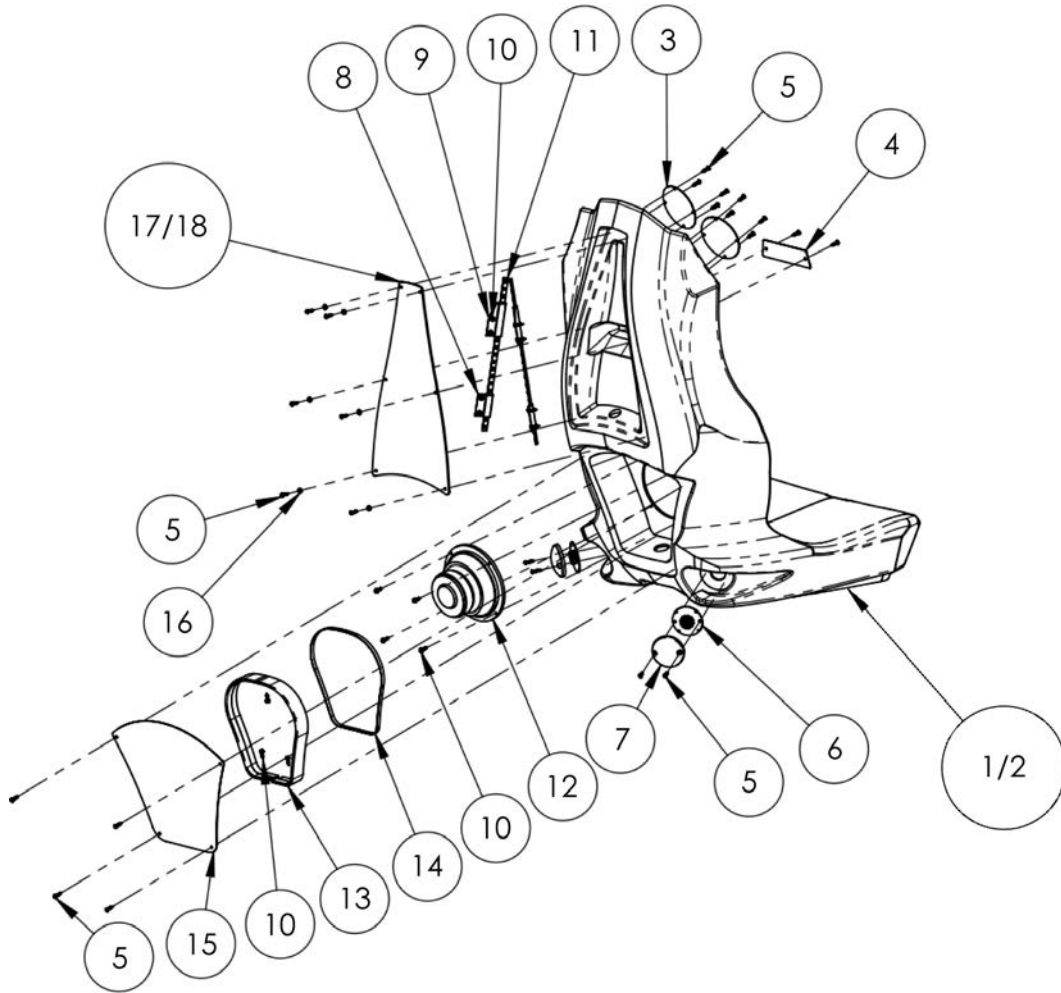| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 601-00782-01 | LED Cap Panel | 1 |
| 2 | 603-00718-01 (20.5in) | LED T-Molding Extrusion – 20.5" | 2 |
| 3 | Partec – CA-4514 | LED Cap T-Molding Cable (500-00131-01: 2x 50cm) | 1 |
| 4 | 600-01744-01 | LED Cap Bracket | 1 |
| 5 | 603-00805-01 | LED Cap Lens | 2 |
| 6 | Partec – 31-TP008-03-010 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, Black Oxide Steel, Number 8 Size, ½" Long | 10 |
| 7 | McMaster-Carr – 97416A113 | Black-Oxide Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD | 8 |
| 8 | AB_Rear_Seat_LED_Assy | Rear Seat LED Assembly | 1 |
| 9 | McMaster-Carr – 90054A194 | Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, ½" Long | 4 |

## Angry Birds Boom! – Rear Seat LED Assembly



### Angry Birds Boom! – Rear Seat LED Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 603-00806-01 | LED Cap Back | 1 |
| 2 | Partec – CA-4515 | LED Cap Down Lighting Cable (500-00162-01: 2x 40cm) | 1 |

## Angry Birds Boom! – Seat Assembly



### Angry Birds Boom! – Seat Assembly Part Numbers

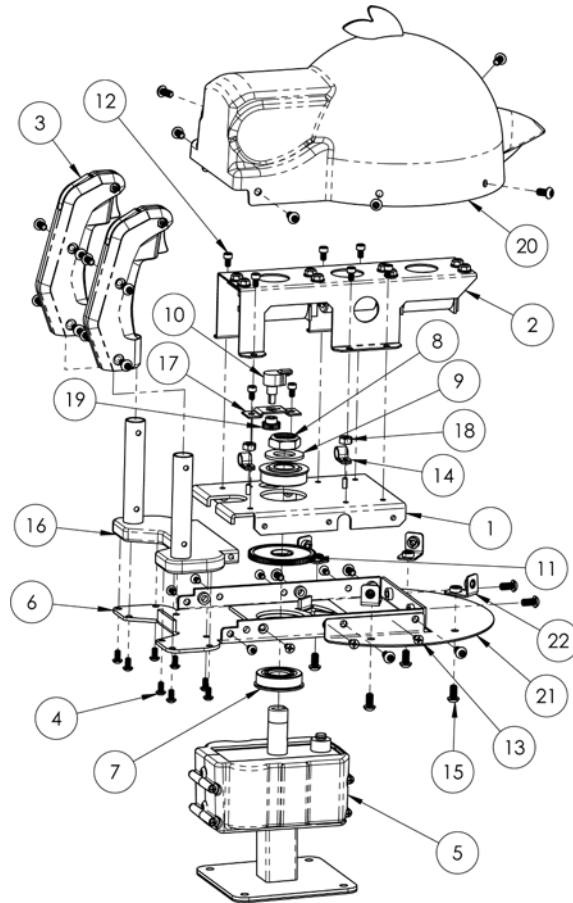| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 OR 2 | 603-00523-01 OR<br>603-01080-01-YEL | Red Plastic Seat OR<br>Yellow Plastic Seat | 1 |
| 3 | 600-00105-01 | Seat headrest Grill | 2 |
| 4 | 600-00620-01 | Middle Seat Plate | 1 |
| 5 | Partec – 31-TP008-03-003 | Tamper-Resistant Torx Rounded Head Screws for Sheet Metal, Black Oxide Steel, Number 8 Size, ¾" Long | 24 |
| 6 | 500-00065-01 | Red LED Puck Light w/ Black PCB | 2 |
| 7 | 603-00540-01 | LED Spotlight Lens – Red Tint | 2 |
| 8 | 603-00762-01 (2in) | LED Strip Holder Extrusion – 2" | 2 |
| 9 | 603-00762-01 (3in) | LED Strip Holder Extrusion – 3" | 1 |
| 10 | McMaster-Carr – 90054A196 | Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 5/8" Long | 15 |
| 11 | Partec- CA-4455 | Seatback LED Cable (500-00093-01: 2x 35cm) | 1 |
| 12 | 807-00003-00 | 6.5" Speaker, 4 Ohm | 1 |
| 13 | 603-00762-01 (28in) | LED Strip Holder Extrusion – 28" | 1 |
| 14 | Partec – CA-4510 | Seatback Woofer LED Cable (500-00219-01: 1x 70cm) | 1 |
| 15 | 600-00106-01 | Woofer Grill | 1 |
| 16 | McMaster-Carr – 90133A013 | Oil-Resistant Neoprene Rubber Sealing Washer for Number 10 Screw Size, 0.17" ID, 0.375" OD | 6 |
| 17 OR<br>18 | R90-13-77 OR<br>R90-13-78 | Seat Marquee PETG – Player 1 OR<br>Seat Marquee PETG – Player 2 | 1 |

## Angry Birds Boom! – Back Door Assembly
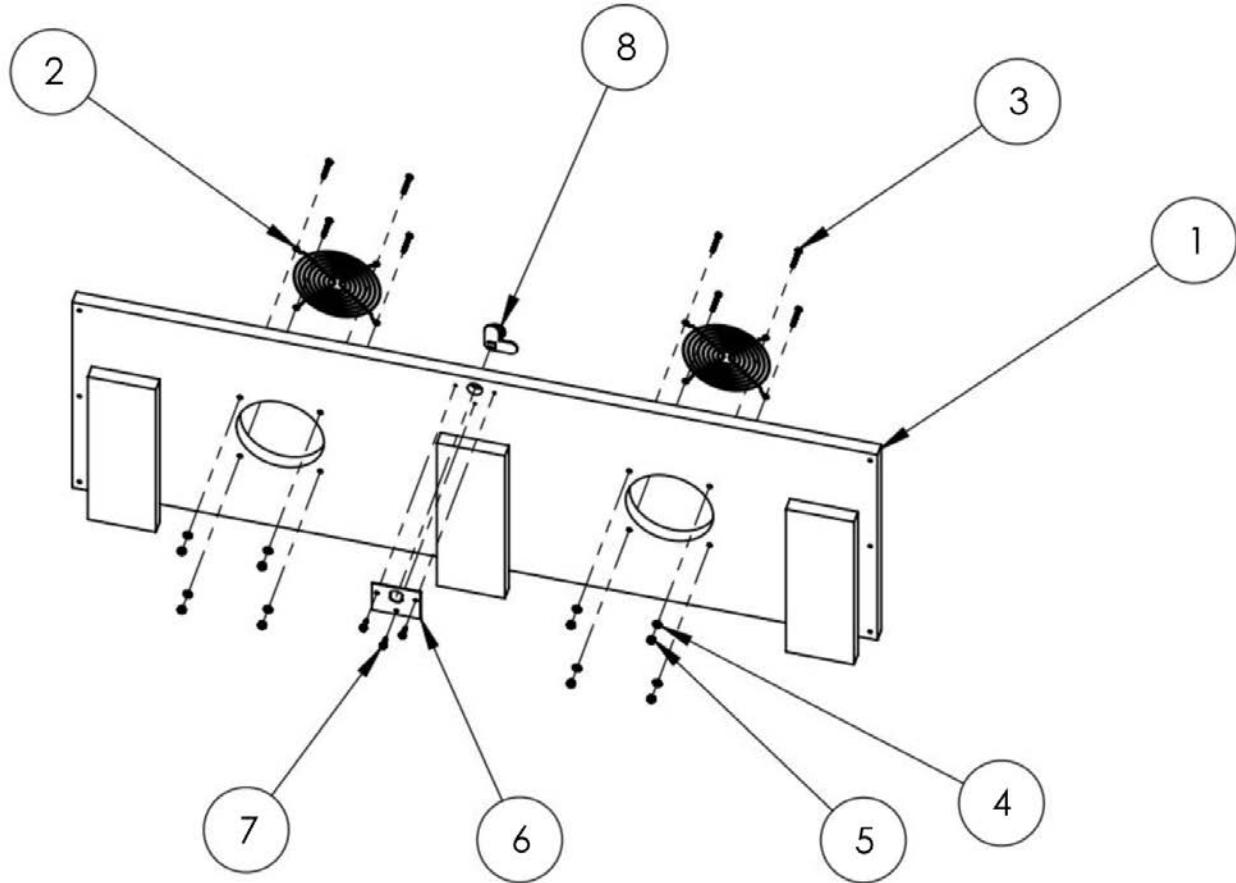


### Angry Birds Boom! –  Back Door Assembly Part Numbers

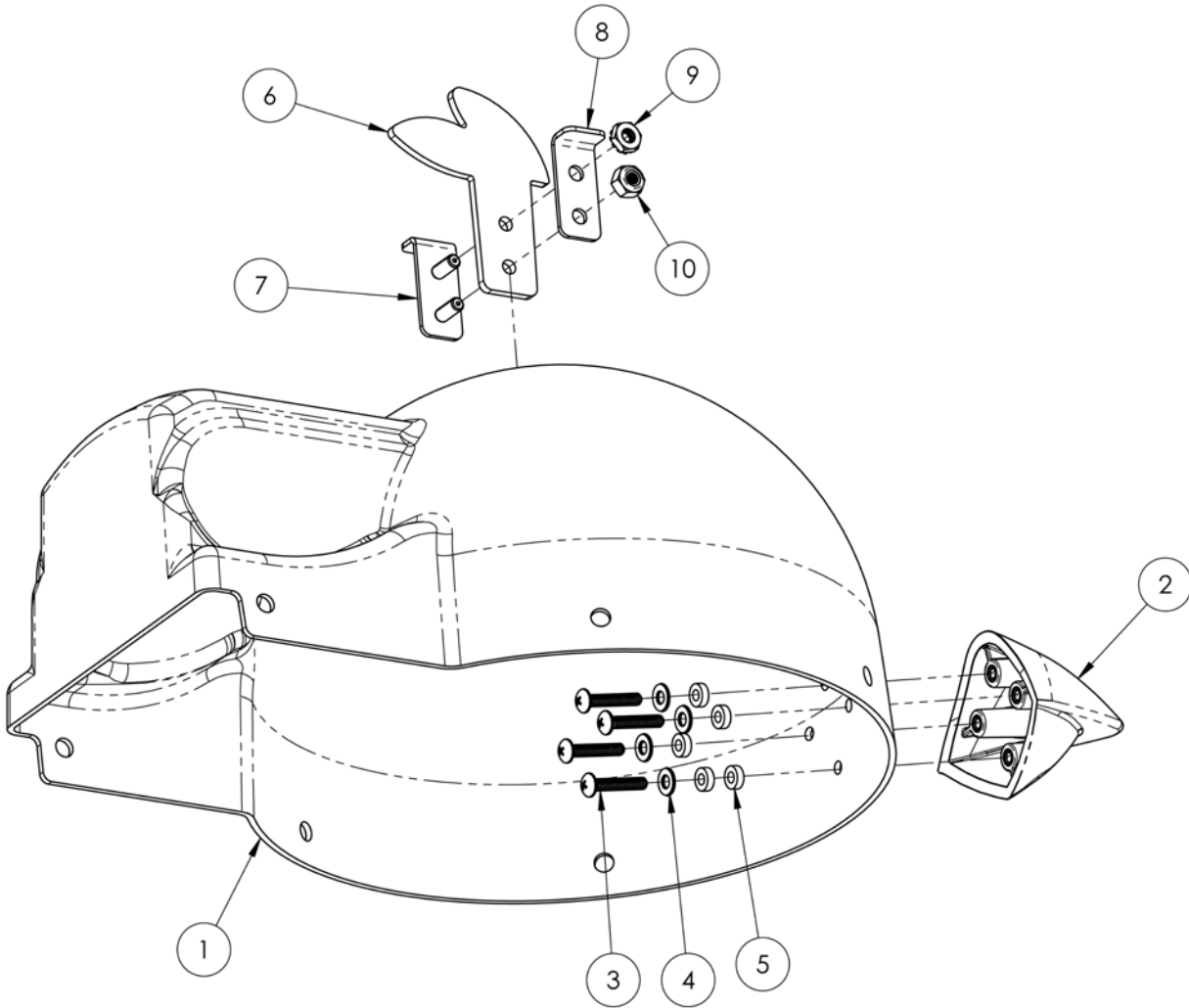| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 601-00780-01 | Back Door | 1 |
| 2 | 800-00001-00 | 120mm Wire Fan Guard | 2 |
| 3 | Partec – 31-MS008-01-009 | Zinc Plated Steel Pan Head Phillips Screw, 8-32 Thread, 1-1/8" Long | 8 |
| 4 | McMaster-Carr – 90126A512 | Zinc-Plated Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD | 8 |
| 5 | McMaster-Carr – 90631A009 | Low-Strength Steel Nylon-Insert Locknut, Zinc-plated, 8-32 Thread | 8 |
| 6 | 600-00043-01 | Lock Retainer Plate | 1 |
| 7 | McMaster-Carr – 90054A196 | Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 5/8" Long | 3 |
| 8 | 150-00001-00 | Standard Door Lock Assembly (for ¾" Panels) | 1 |

## Angry Birds Boom! – Red Top Assembly



### Angry Birds Boom! – Red Top Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 600-01422-01 | Pin Plate Bracket | 1 |
| 2 | Shaker_Assy | Shaker Assembly | 1 |
| 3 | Grip_Assy | Grip Assembly | 2 |
| 4 | McMaster-Carr – 96075A183 | Black-Oxide Alloy Steel Tamper-Resistant Button Head Torx Screw, 10-32 Thread Size, 3/8" Long | 10 |
| 5 | Lower_Mech_Assy | Lower Mech Assembly | 1 |
| 6 | 600-01423-01 | Cover Bracket | 1 |
| 7 | McMaster-Carr – 6384K369 | ¾" Flanged Bearing | 2 |
| 8 | McMaster-Carr – 91342A240 | ¾"-16 Locknut, Thin | 1 |
| 9 | McMaster-Carr – 90126A036 | Washer for ¾" Screw | 1 |
| 10 | 604-00064-01 | JackPot, 360° Potentiometer | 1 |
| 11 | 600-01420-01 | Large Gear | 1 |
| 12 | McMaster-Carr – 91251A338 | Black-Oxide Alloy Steel Socket Head Screw, 8-32 Thread Size, 5/16" Long | 8 |
| 13 | McMaster-Carr – 90273A827 | Flat Head Screw, 10-32 Thread Size, 3/8" Long 82° | 6 |
| 14 | Partec – 4-102 | ½" Cable Clamp | 2 |
| 15 | McMaster-Carr – 96075A211 | Black-Oxide Alloy Steel Tamper Resistant Button Head Torx Screw, ¼"-20 thread size, ½" Long | 24 |
| 16 | 600-01411-01 | Grip Plate Weldment | 1 |
| 17 | 600-01491-01 | Potentiometer Bracket | 1 |
| 18 | McMaster-Carr – 90675A009 | 8/32" Keps Nut | 2 |
| 19 | 600-01567-01 | Small Potentiometer Gear | 1 |
| 20 | Red_Cover_Assy | Red Cover Assembly | 1 |
| 21 | R1-1083 | Red underside bracket | 1 |
| 22 | R1-1085 | Red L bracket | 4 |

## Angry Birds Boom! – Red Cover Assembly



### Angry Birds Boom! –  Red Cover Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | R90-4-22 | Red Body | 1 |
| 2 | R90-4-24 | Red Beak | 1 |
| 3 | McMaster-Carr – 90272A198 | Steel Phillips Screw, 8-32 Thread Size, 7/8" Long | 4 |
| 4 | McMaster-Carr – 92141A009 | Washer for Number 8 Screw | 4 |
| 5 | McMaster-Carr – 99604A103 | Silicone Rubber Sealing Washer for Number 8 Screw | 5 |
| 6 | R90-7-3 | Red Hair | 1 |
| 7 | R1-1087 | Hair stopper bracket | 1 |
| 8 | R1-1202 | Hair stopper bracket, no studs | 1 |
| 9 | McMaster-Carr – 90675A195 | 10-32 Keps nut | 1 |
| 10 | McMaster-Carr – 90631A411 | 10-32 Locknut | 1 |

*Not shown: ¼" Thick x ½" Wide Closed Cell Foam Tape (MM-C – 3949N146)

## Angry Birds Boom! – Chuck Top Assembly



### Angry Birds Boom! –  Chuck Top Assembly Part Numbers

| Item | Part No. | Description | QTY |
|---|---|---|---|
| 1 | 600-01422-01 | Pin Plate Bracket | 1 |
| 2 | Shaker_Assy | Shaker Assembly | 1 |
| 3 | Grip_Assy | Grip Assembly | 2 |
| 4 | McMaster-Carr – 96075A183 | Black-Oxide Alloy Steel Tamper-Resistant Button Head Torx Screw, 10-32 Thread Size, 3/8" Long | 10 |
| 5 | Lower_Mech_Assy | Lower Mech Assembly | 1 |
| 6 | 600-01423-01 | Cover Bracket | 1 |
| 7 | McMaster-Carr – 6384K369 | ¾" Flanged Bearing | 2 |
| 8 | McMaster-Carr – 91342A240 | ¾"-16 Locknut, Thin | 1 |
| 9 | McMaster-Carr – 90126A036 | Washer for ¾" Screw | 1 |
| 10 | 604-00064-01 | JackPot, 360° Potentiometer | 1 |
| 11 | 600-01420-01 | Large Gear | 1 |
| 12 | McMaster-Carr – 91251A338 | Black-Oxide Alloy Steel Socket Head Screw, 8-32 Thread Size, 5/16" Long | 8 |
| 13 | McMaster-Carr – 90273A827 | Flat Head Screw, 10-32 Thread Size, 3/8" Long 82° | 6 |
| 14 | Partec – 4-102 | ½" Cable Clamp | 2 |
| 15 | McMaster-Carr – 96075A211 | Black-Oxide Alloy Steel Tamper Resistant Button Head Torx Screw, ¼"-20 thread size, ½" Long | 24 |
| 16 | 600-01411-01 | Grip Plate Weldment | 1 |
| 17 | 600-01491-01 | Potentiometer Bracket | 1 |
| 18 | McMaster-Carr – 90675A009 | 8/32" Keps Nut | 2 |
| 19 | 600-01567-01 | Small Potentiometer Gear | 1 |
| 20 | Chuck_Cover_Assy | Chuck Cover Assembly | 1 |
| 21 | R1-1084 | Chuck underside bracket | 1 |
| 22 | R1-1086 | Chuck L bracket | 4 |

## Angry Birds Boom! – Chuck Cover Assembly
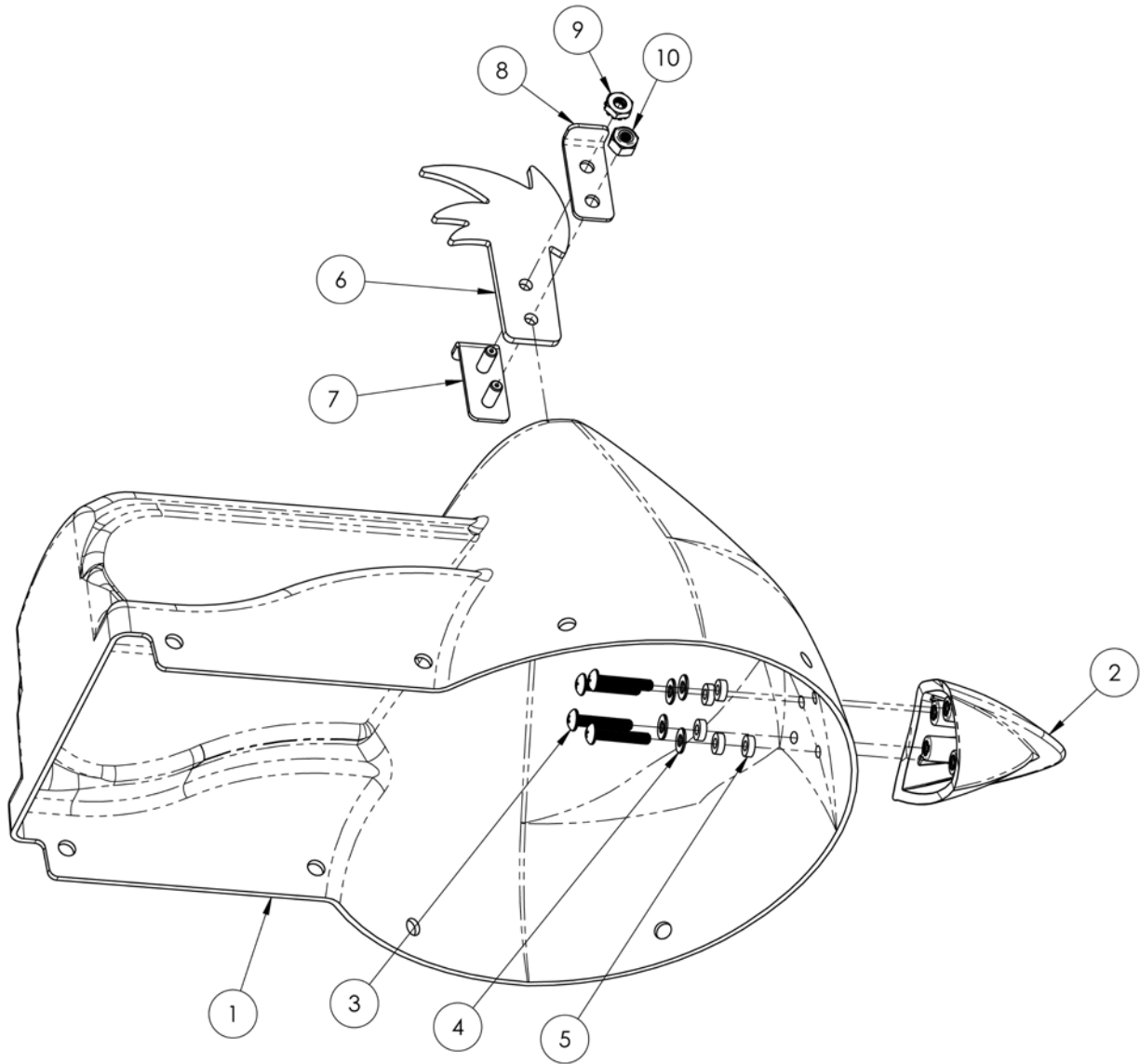


### Angry Birds Boom! – Chuck Cover Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | R90-4-23 | Chuck Body | 1 |
| 2 | R90-4-25 | Chuck Beak | 1 |
| 3 | McMaster-Carr – 90272A198 | Steel Phillips Screw, 8-32 Thread Size, 7/8" Long | 4 |
| 4 | McMaster-Carr – 92141A009 | Washer for Number 8 Screw | 4 |
| 5 | McMaster-Carr – 99604A103 | Silicone Rubber Sealing Washer for Number 8 Screw | 5 |
| 6 | R90-7-4 | Chuck Hair | 1 |
| 7 | R1-1087 | Hair stopper bracket | 1 |
| 8 | R1-1202 | Hair stopper bracket, no studs | 1 |
| 9 | McMaster-Carr – 90675A195 | 10-32 Keps nut | 1 |
| 10 | McMaster-Carr – 90631A411 | 10-32 Locknut | 1 |

*Not shown: ¼" Thick x ½" Wide Closed Cell Foam Tape (MM-C – 3949N146)

## Angry Birds Boom! – Lower Mech Assembly



NOTE POSITION OF
ORIENTATION HOLE
IN PINCH GUARD
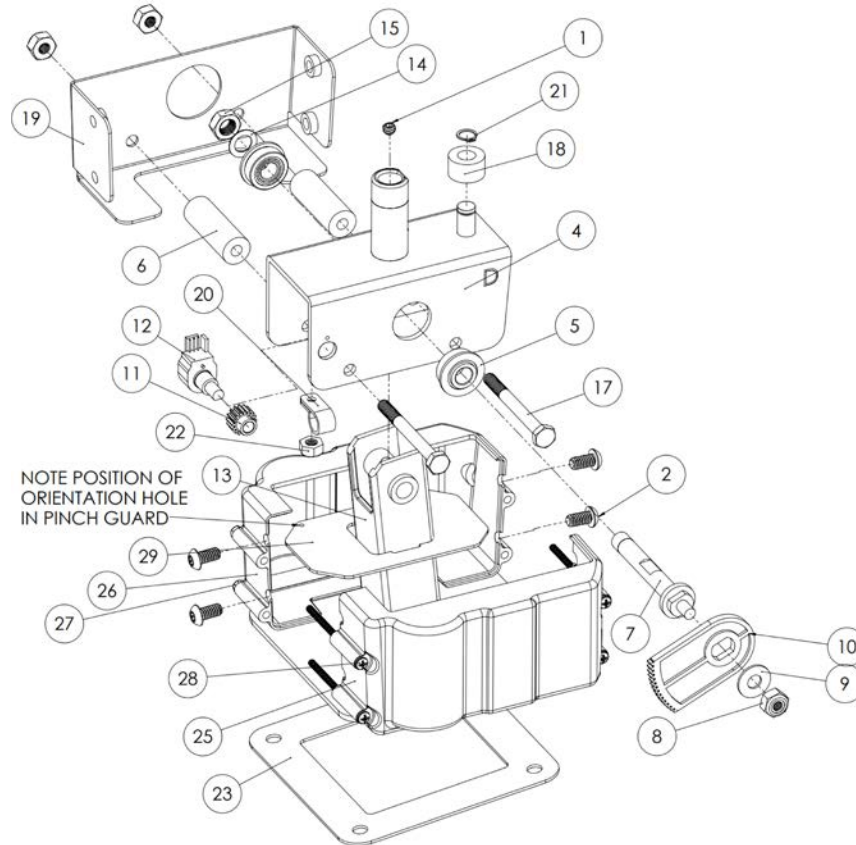
### Angry Birds Boom! – Lower Mech Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | McMaster-Carr – 92313A532 | 1/4-20 x 3/16" set screw | 1 |
| 2 | McMaster-Carr – 96075A211 | 1/4-20 x ½" black tamper-proof screw | 4 |
| 4 | 600-01425-01 | Rocker Bracket | 1 |
| 5 | McMaster-Carr – 6384K344 | 3/8" Flanged Bearing | 2 |
| 6 | 600-01418-01 | Tube Stop Bumper – 5/8" OD | 2 |
| 7 | 600-01424-01 | Side Pin | 1 |
| 8 | McMaster-Carr – 90652A029 | 1/4-20 Thin Locknut | 3 |
| 9 | McMaster-Carr – 90108A413 | 1/4-20 Washer | 1 |
| 10 | Happ – 96-4907-00 | Segment Gear | 1 |
| 11 | 600-01567-01 | Pot Gear | 1 |
| 12 | 604-00064-01 | Jackpot, 360° potentiometer | 1 |
| 13 | 600-01426-01 | Lower Tube Weldment | 1 |
| 14 | McMaster-Carr – 95229A480 | 3/8" Washer | 1 |
| 15 | McMaster-Carr – 90566A220 | 3/8" Thin Locknut | 1 |
| 17 | McMaster-Carr – 91257A552 | 1/4-20 x 2 ½ hex head – grade 8 | 2 |
| 18 | 600-01417-01 | Short Stop Bumper – ¾" OD | 1 |
| 19 | 600-01496-01 | Lower Vacform Mounting Bracket | 1 |
| 20 | | Cable Clamp | 1 |
| 21 | McMaster-Carr – 947633A170 | Retaining Clip | 1 |
| 22 | McMaster-Carr – 90675A009 | 8/32" Keps Nut | 1 |
| 23 | 600-01577-01 | Gun Isolator | 1 |
| 25 | 600-01739-01 | Bottom Cover - Right | 1 |
| 26 | 600-01738-01 | Bottom Cover - Left | 1 |
| 27 | 999-00021-01 | 6-32 Hex Locknut - Black | 4 |
| 28 | 999-00017-01 | 6-32 x 2.5" Phillips Head Screw - Black | 4 |
| 29 | 600-01419-01 | Pinch Cover | 1 |

# Angry Birds Boom! – Up and Down Pot Alignment

2) INSTALL SEGMENT GEAR AFTER POT IS ALIGNED FOR EASIER ACCESS TO GEAR SET SCREW. THE CENTER OF THE SEGMENT GEAR SHOULD POINT TO THE CENTER OF THE POT AS SHOWN.
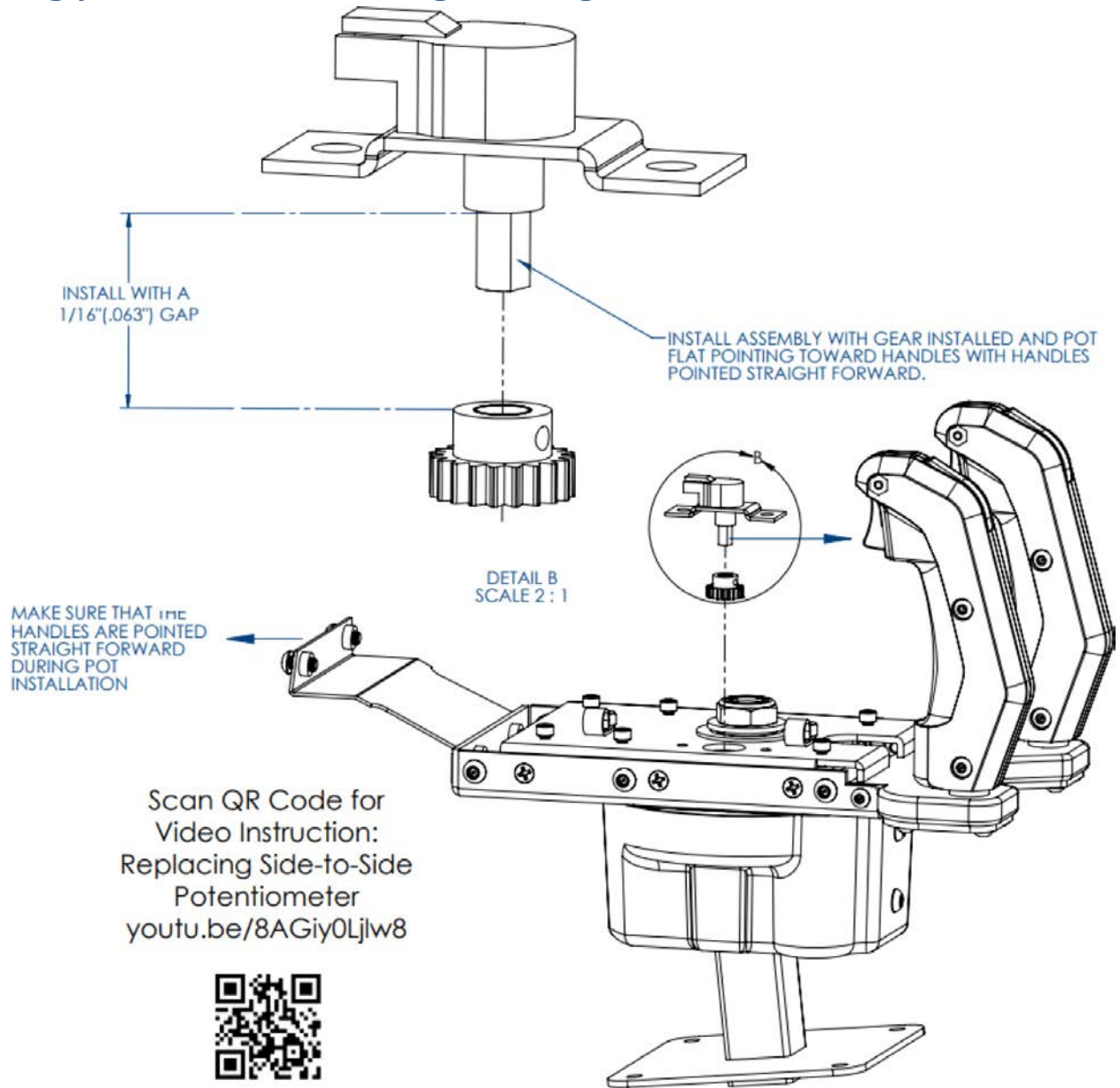
Scan QR Code for Video Instruction: Replacing Up/Down Potentiometer youtu.be/eO9afzAdQGw
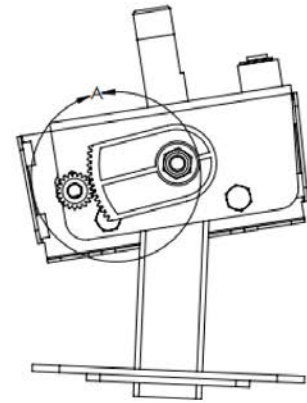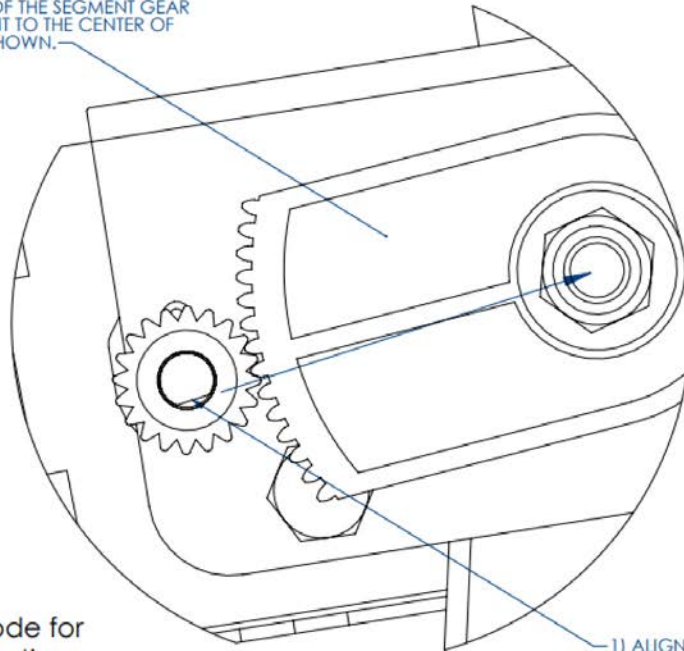
1) ALIGN FLAT ON POT DOWNWARD AND POINTING TOWARD CENTER OF SEGMENT GEAR

DETAIL A
SCALE 2 : 1

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## Angry Birds Boom! – Left to Right Pot Alignment



INSTALL WITH A
1/16"(.063") GAP

INSTALL ASSEMBLY WITH GEAR INSTALLED AND POT FLAT POINTING TOWARD HANDLES WITH HANDLES POINTED STRAIGHT FORWARD.

DETAIL B
SCALE 2 : 1

MAKE SURE THAT THE HANDLES ARE POINTED STRAIGHT FORWARD DURING POT INSTALLATION

Scan QR Code for Video Instruction:
Replacing Side-to-Side Potentiometer
youtu.be/8AGiy0Ljlw8

## Angry Birds Boom! – Shaker Assembly



PEEL AND STICK DAMPER PAD
WITH CENTER HOLE CONCENTRIC
TO COIL BRACKET
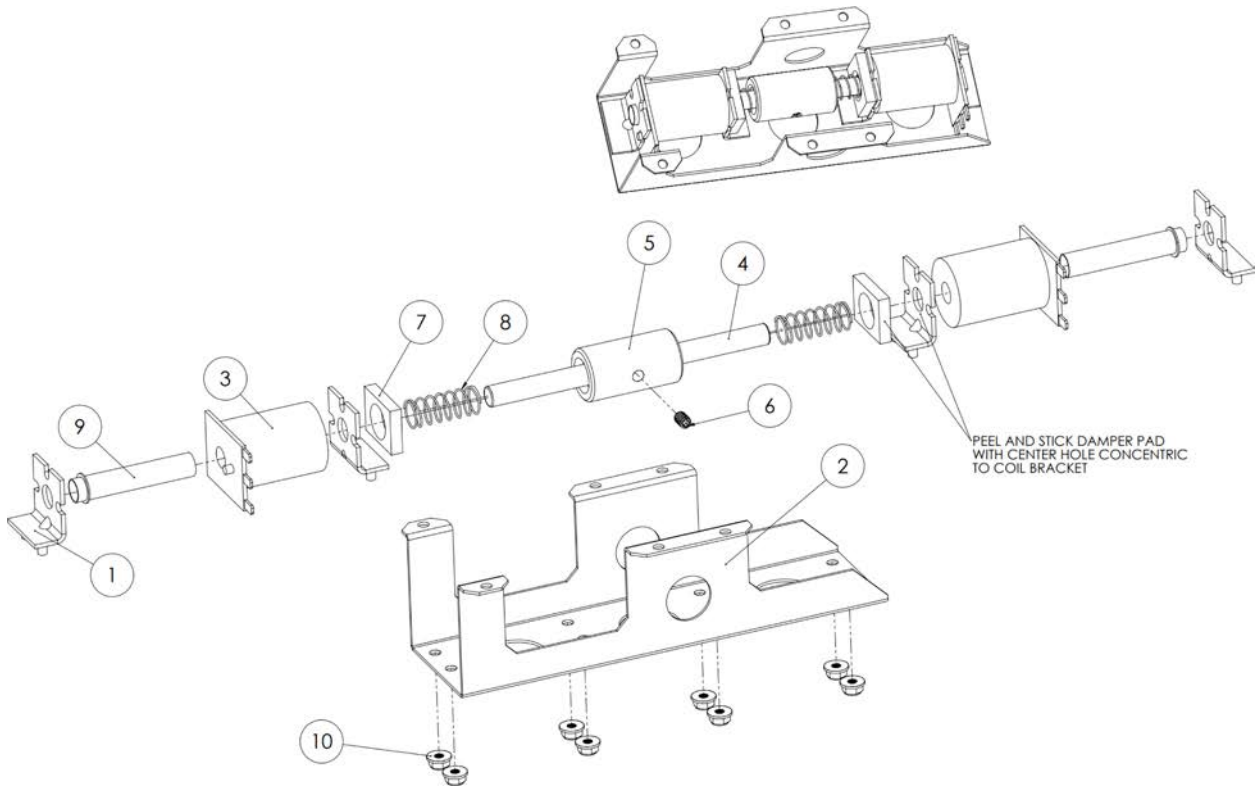
### Angry Birds Boom! – Shaker Assembly Part Numbers

| Item | Part No. | Description | QTY |
|------|----------|-------------|-----|
| 1 | 600-01576-01 | Coil Mount Bracket | 4 |
| 2 | 600-01412-01 | Coil Bracket | 1 |
| 3 | 608-00216-01 | Coil FL11629 | 2 |
| 4 | 600-01413-01 | Coil Rod | 1 |
| 5 | 600-01414-01 | Coil Weight | 1 |
| 6 | McMaster-Carr – 91375A535 | 1/4-20 x 3/8" Set Screw | 1 |
| 7 | 680-00214-01 | Blue Damper Pad | 2 |
| 8 | 608-00210-01 | Coil Spring | 2 |
| 9 | 608-00218-01 | Coil Sleeve | 2 |
| 10 | McMaster-Carr – 93298A109 | 10-32 Flanged Locknut | 8 |

# Angry Birds Boom! – Grip Assembly
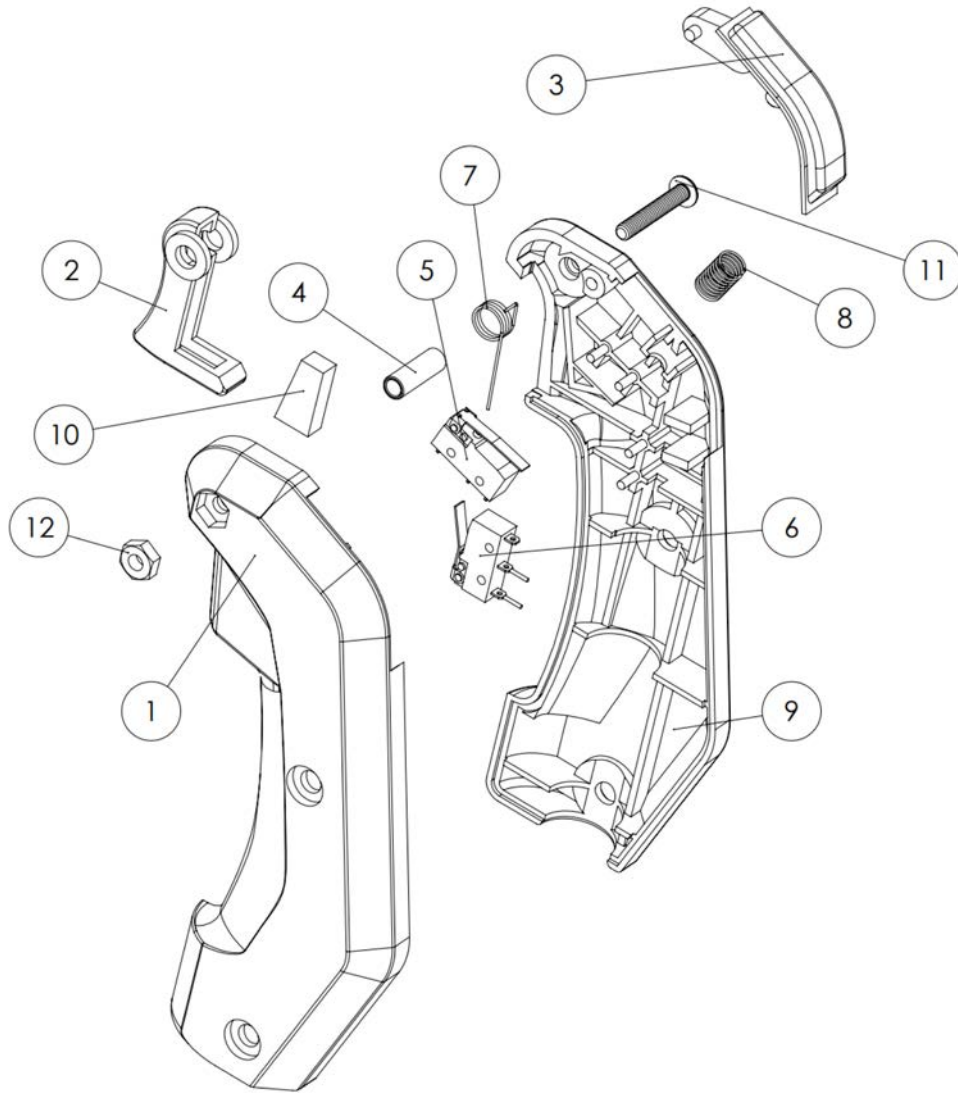


## Angry Birds Boom! – Grip Assembly Part Numbers

| Item | Part No. | Happ Number | Description | QTY |
|------|----------|-------------|-------------|-----|
| 1 | 608-00201-01 | 95-1294-00 | Grip – Left Half | 1 |
| 2 | 608-00204-01 | 95-1295-00 | Trigger – Red | 1 |
| 3 | 608-00203-01 | 95-1439-00 | Large Thumb Button | 1 |
| 4 | 608-00205-01 | 95-1315-00 | Shaft – Trigger | 1 |
| 5 | 608-00215-01 | 95-0259-ST | Switch Assy for Thumb Switch | 1 |
| 6 | 608-00220-01 | 95-0028-00 | Switch Assy for Trigger | 1 |
| 7 | 608-00206-01 | 95-1297-00 | Spring – Torsion | 1 |
| 8 | 608-00207-01 | 95-1298-00 | Spring – Compression | 1 |
| 9 | 608-00202-01 | 95-1293-00 | Grip – Right Half | 1 |
| 10 | 608-00218-01 | 96-0110-00 | Trigger Bumper | 1 |
| 11 | McMaster-Carr – 96075A147 | 43-0378-00 | Screw #8-32 x 1 Tamper-proof black | 1 |
| 12 | McMaster-Carr – 86537A140 | 43-1124-00 | Hex Nut #8-32 Black | 1 |

# Contact Information

For an authorized distributor near you, visit Raw Thrills at http://www.rawthrills.com/sales-service
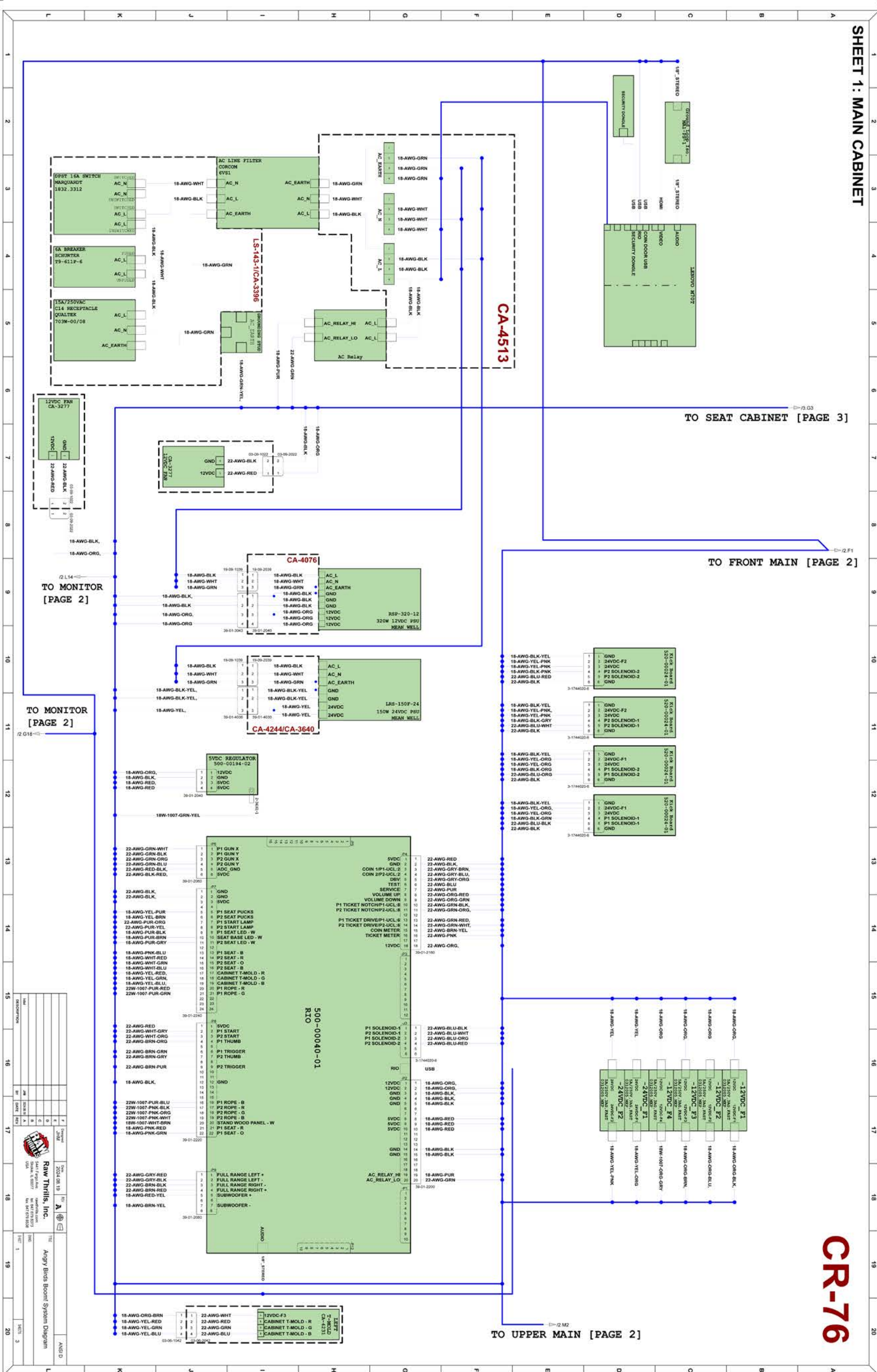
For service, contact your local distributor or your local Betson office for sales, technical information, warranty or repair. Betson can be reached at (800) 524-2343   Fax (201) 438-4837 www.betson.com

**Betson Enterprises Headquarters**
303 Paterson Plank Rd.
Carlstadt, NJ 07072
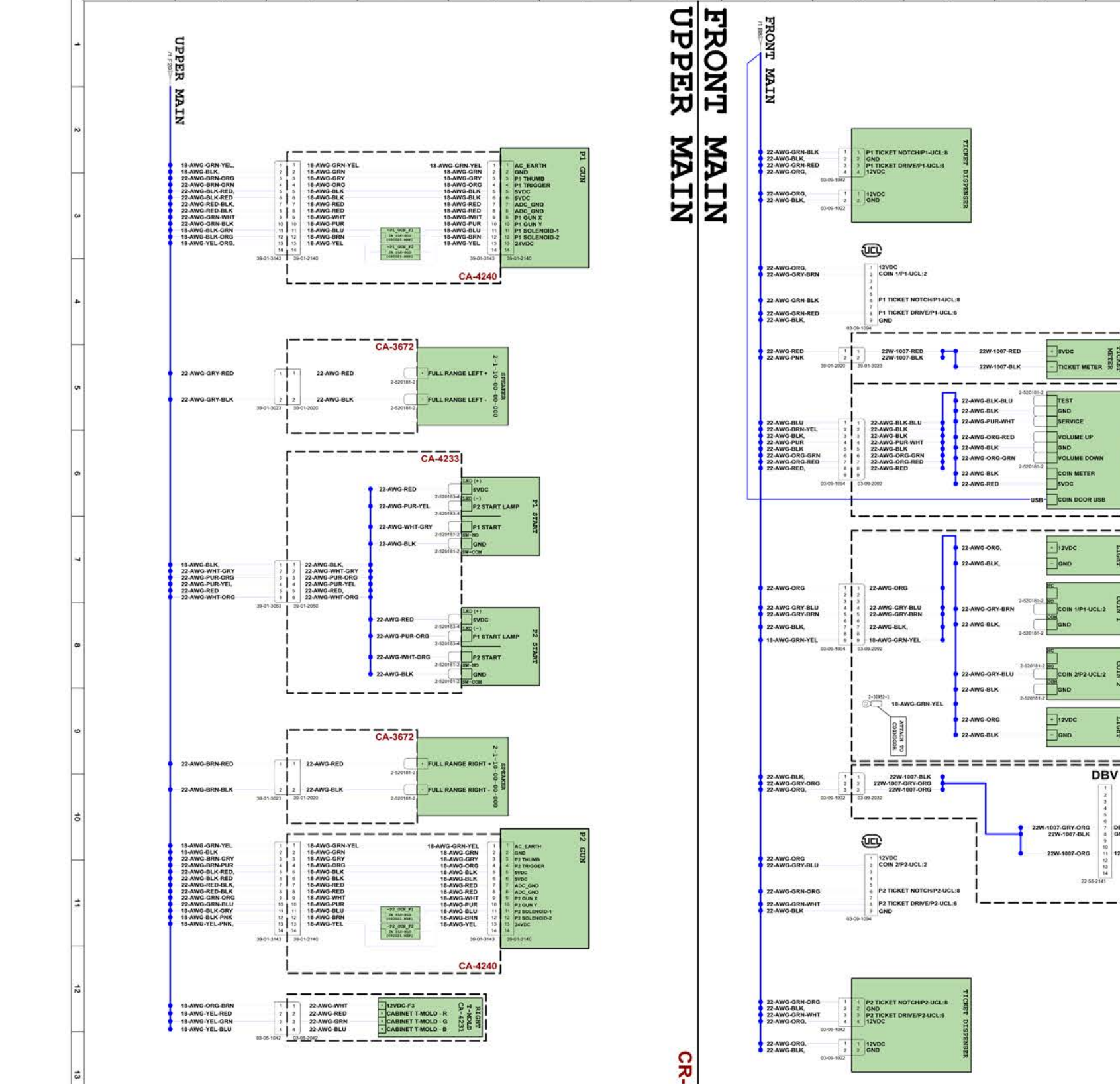(800) 524-2343  or  (201) 438-1300
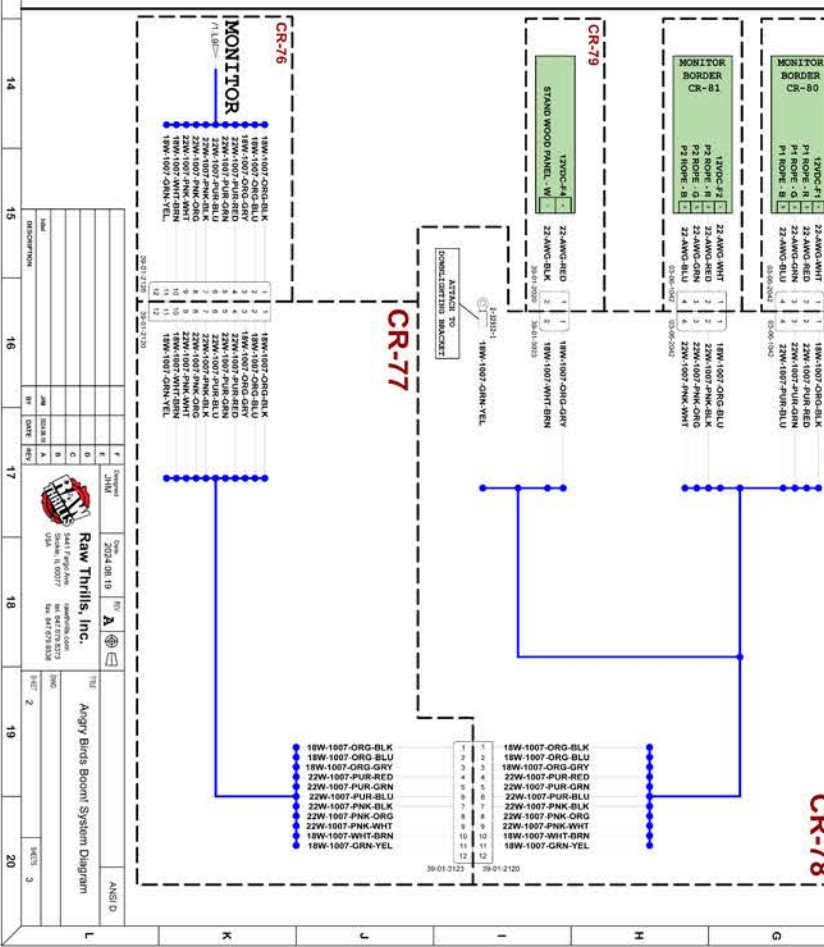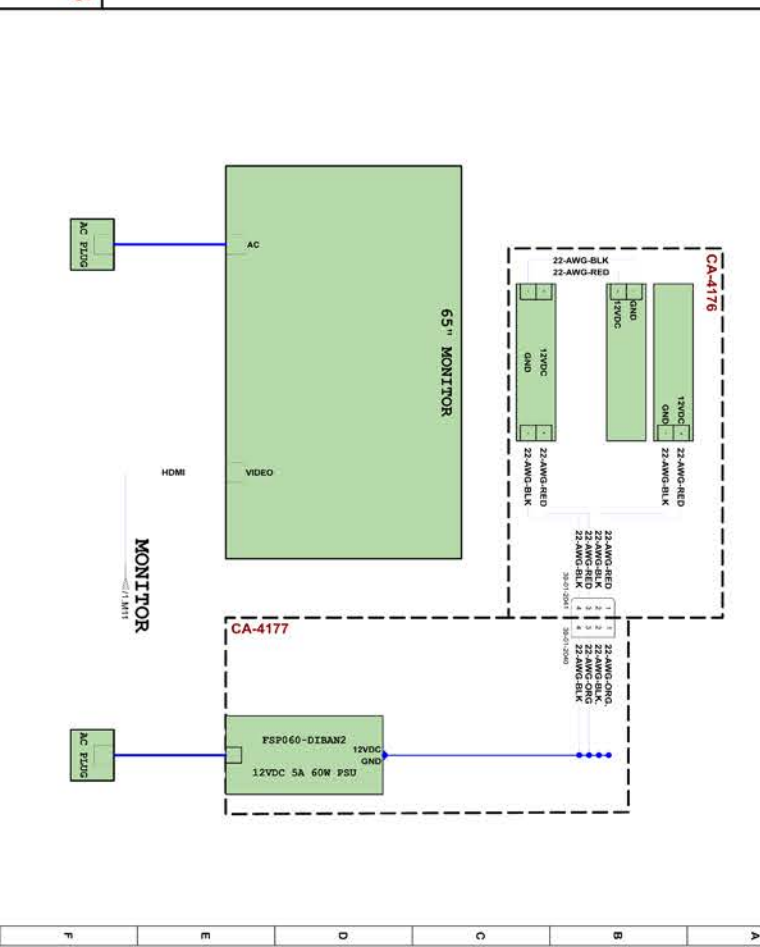fax (201) 438-4837

# System Diagrams

CR-76

TO SEAT CABINET [PAGE 3]

TO FRONT MAIN [PAGE 2]

TO MONITOR
[PAGE 2]

TO MONITOR
[PAGE 2]

TO UPPER MAIN [PAGE 2]

Angry Birds Boom! System Diagram

Raw Thrills, Inc.

**FRONT MAIN**
**UPPER MAIN**

**UPPER MAIN**

**FRONT MAIN**
**UPPER MAIN**

**MONITOR**

CA-4589

CR-76

CR-77

CR-78

P1 GUN — CA-4240

CA-3672 — SPEAKER FULL RANGE LEFT

CA-4233 — P1 START / P2 START

CA-3672 — SPEAKER FULL RANGE RIGHT

P2 GUN — CA-4240

TICKET DISPENSER

UCL

TICKET METER — CA-3646

TEST BRACKET — CA-3137

LIGHT / COIN 1 / COIN 2 / LIGHT — CA-3134

DBV — CA-3578

TICKET DISPENSER

MONITOR — CR-76

STAND WOOD PANEL — W — CR-79

MONITOR BORDER CR-81

MONITOR BORDER CR-80

65" MONITOR

CA-4176

CA-4177

FSP060-DIBAN2
12VDC 5A 60W PSU

AC PLUG

MONITOR

Raw Thrills, Inc.

Angry Birds Boom! System Diagram

Date 2024.06.19

Drawn by JNU

SHEET 3: SEAT CABINET

**810-00454-01**   **810-00313-01**

AS-3294

GUN COIL 1
- 18-AWG-YEL — 1 | 24VDC (+)
- 18-AWG-BLU — 2 | SOLENOID-1 (−)

GUN COIL 2
- 18-AWG-YEL — 1 | 24VDC (+)
- 18-AWG-BRN — 2 | SOLENOID-2 (−)

18-AWG-BLU — 1 | 1 — 18-AWG-BLU
18-AWG-BRN — 2 | 2 — 18-AWG-BRN
18-AWG-YEL — 3 | 3 — 18-AWG-YEL,
39-01-4036   39-01-4030

**810-00312-01**

TRIGGER 608-00220-01
- 22-AWG-GRN — 1 | GND | COM
- 22-AWG-PNK — 2 | TRIGGER | NO

THUMB 608-00215-01
- 22-AWG-GRN — 1 | GND | COM
- 22-AWG-GRY — 2 | THUMB | NO

22-AWG-PNK, — 1 | 1 — 22-AWG-PNK
22-AWG-GRY, — 2 | 2 — 22-AWG-GRY
22-AWG-GRN, — 3 | 3 — 22-AWG-GRN,
4 | 4
03-06-2042   03-06-1044

**810-00312-01**

TRIGGER 608-00220-01
- 22-AWG-GRN — 1 | GND | COM
- 22-AWG-PNK — 2 | TRIGGER | NO

THUMB 608-00215-01
- 22-AWG-GRN — 1 | GND | COM
- 22-AWG-GRY — 2 | THUMB | NO

22-AWG-PNK — 1 | 1 — 22-AWG-PNK
22-AWG-GRY — 2 | 2 — 22-AWG-GRY
22-AWG-GRN — 3 | 3 — 22-AWG-GRN,
4 | 4
03-06-2042   03-06-1044

**810-00455-01**

39-01-2140
1  18-AWG-GRN-YEL
2  22-AWG-GRN
3  22-AWG-GRY
4  22-AWG-PNK
5  22-AWG-BLK
6  22-AWG-BLK
7  22-AWG-RED
8  22-AWG-RED
9  22-AWG-WHT
10 22-AWG-PUR
11 18-AWG-BLU
12 18-AWG-BRN
13 18-AWG-YEL
14

**810-00457-01**

X POT 604-00064-01
- 22-AWG-BLK — 1 | 1 | GND
- 22-AWG-WHT — 2 | 2 | X-SIGNAL
- 22-AWG-RED — 3 | 3 | 5VDC
3-640440-3

**810-00456-01**

Y POT 604-00064-01
- 22-AWG-BLK — 1 | 1 | GND
- 22-AWG-PUR — 2 | 2 | Y-SIGNAL
- 22-AWG-RED — 3 | 3 | 5VDC
3-640440-3

**810-00311-01**

18-AWG-GRN-YEL
2-34148-1

---

Raw Thrills, Inc.
5441 Fargo Ave.
Skokie, IL 60077
USA
rawthrills.com
tel: 847.679.8373
fax: 847.679.8538

Designed: JHM
Date: 2024.09.13
REV: A

TITLE: Angry Birds Boom!
Red/Chuck mech internal harness

DWG  SHEET 1   SHEETS 1
ANSI A

| DESCRIPTION | BY | DATE | REV |
|---|---|---|---|
| Initial | JHM | 2024.09.13 | A |
| | | | B |
| | | | C |
| | | | D |
| | | | E |
| | | | F |