



Super Deluxe

Setup and Operation Service Manual

Revision Halo-1.2.2-8.30



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Halo: Fireteam Raven Game Software Copyright 2018 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 (ey@cryptsoft.com)

This product includes audio software developed by FMOD Studio. (<https://www.fmod.com/>)

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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

MULTIPLE POWER SUPPLY ENTRIES

Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

Attention: Avant d'accéder aux bornes, tous les circuits d'alimentation doivent être déconnectés.

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 access of liquid from spills and sprays from entering ventilation holes.

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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.

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. Your warranty, 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.



Product Specifications

Electrical Power

Unites States, International and Japan

MULTIPLE POWER SUPPLY ENTRIES

Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

Attention: Avant d'accéder aux bornes, tous les circuits d'alimentation doivent être déconnectés.

Rating per Power Entry

Operating AC Current: 10 Amps

Voltage: 115/230 ~ VAC 50/60Hz

Temperature

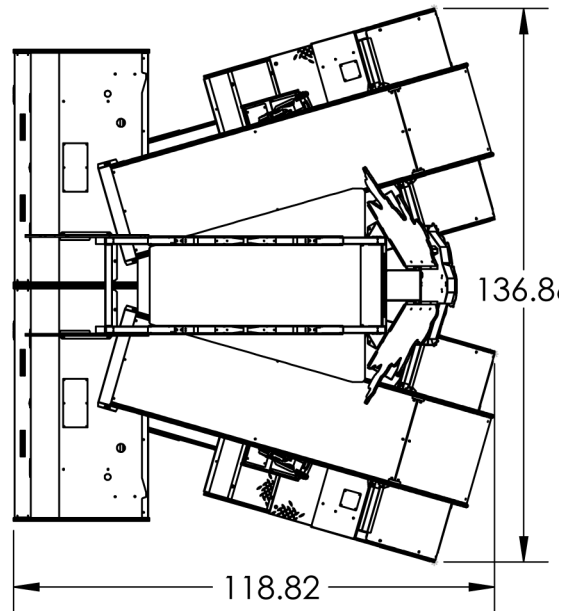
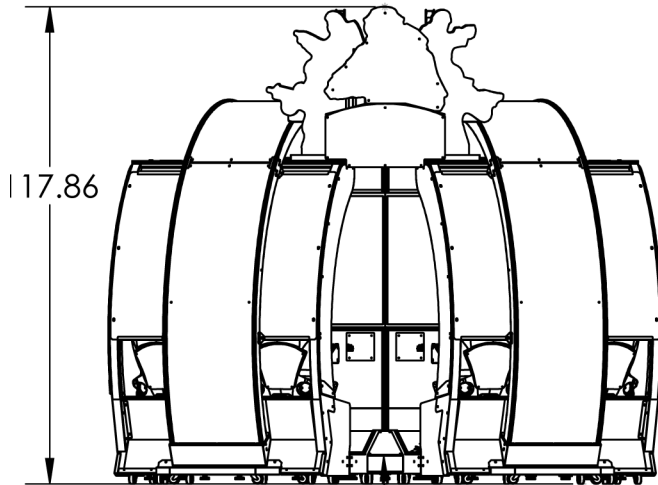
50° to 104° Fahrenheit (10° to 40° Celsius)

Humidity

Must not exceed 95% relative humidity

Cabinet Dimensions

Height	Width	Depth
117.86" (299.3644 cm)	136.86" (347.6244 cm)	118.82" (301.8028 cm)



Fuse Replacement Guide

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

Please see unit for specified fuse labeling. Abbreviations:

5A 250V	5A, 250VAC Fast Acting 3AG Fuse	Littlefuse 0312005.MXP (or equivalent)
5A-SB 250V	5A, 250 VAC Slow Blow 3AG Fuse	Littlefuse 0313005.HXP (or equivalent)
2A-SB 250V	2A, 250VAC Slow Blow 3AG Fuse	Littlefuse 0313002.HXP (or equivalent)

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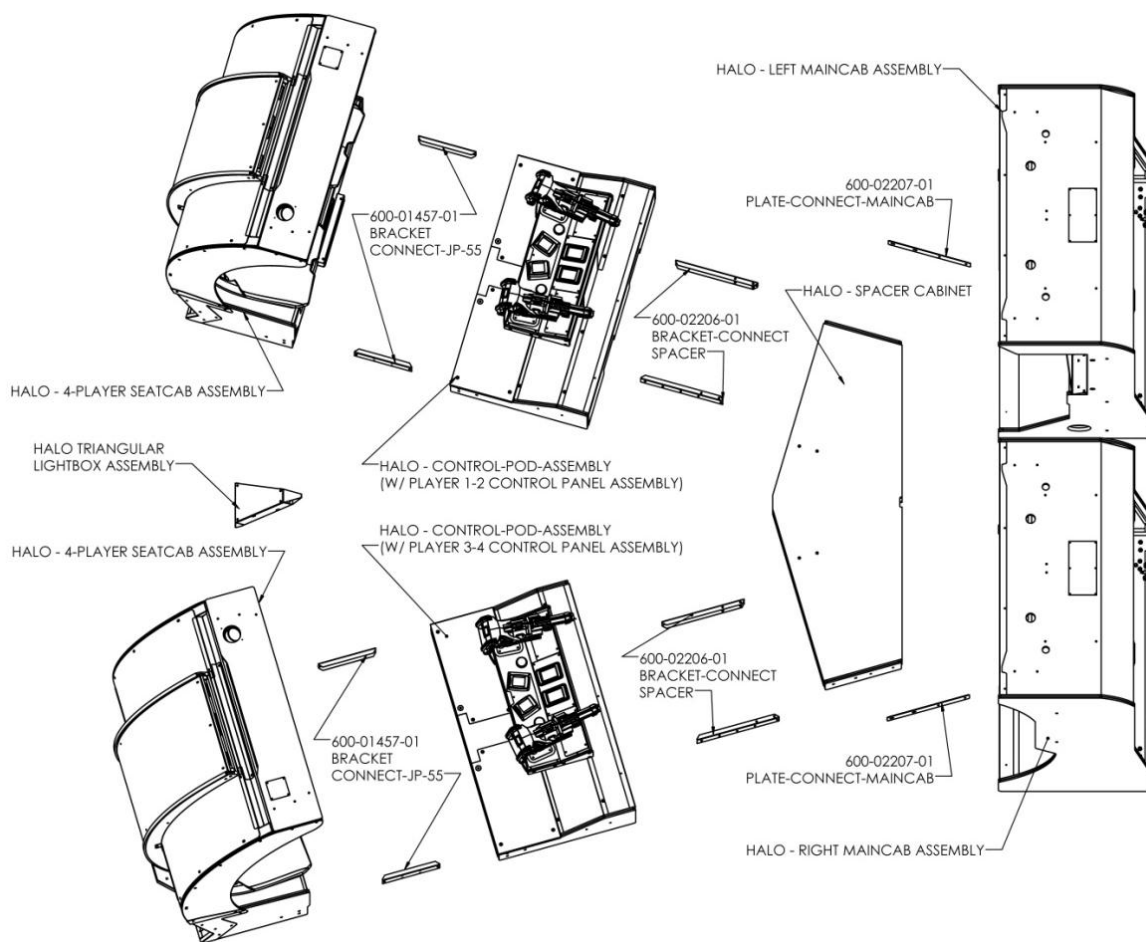
Setup

Tools required

- T- 27 Security bit and driver
- 7/16" socket wrench
- 7/16" hex nut driver
- 3/8" hex nut driver
- 1/4" driver
- #2 Phillips Screwdriver
- Two 6' ladders
- at least 3 additional people to assist in the assembly of the cabinet.

Orientation Guide

Please refer to this for correct part names and locations.





Unpack Carton

1. Unpack all cartons
 - the left and right main cabinet sections
 - the left and right control pods
 - the left and right seatcab sections
 - the floor spacer section
2. Packed inside the large rectangular carton, locate and open the small carton containing the cabinet connector brackets and fasteners.



3. Place the two main cabinet assemblies against each other.
Important: Ensure a flat and level surface on which to assemble the cabinet components.
The artwork should face the outsides of the cabinets.
4. Find the keys (taped to the main cabinet fronts) for the main cabinet rear doors
5. Unlock and remove all four rear doors.



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Assemble main (monitor) cabinet to floor spacer assembly

Parts required: two left and right connector black brackets, four #1/4-20 x 1.25" hex bolts, four #1/4-20 x 2" security screws, eleven 5/8" flash washers, four 1/4" lock washers, three #1/4-20 x 2.5" hex bolts, three 1/4" hex nuts

1. From the cabinet connector box, find the black cabinet connector brackets and all required fasteners
2. Position the floor spacer assembly, so that its flat end matches the main cabinet assembly.
IMPORTANT: Be sure to install the cabinet connector brackets correctly.

The holes in the bracket attach to the main cabinet. The slots attach to the floor spacer.

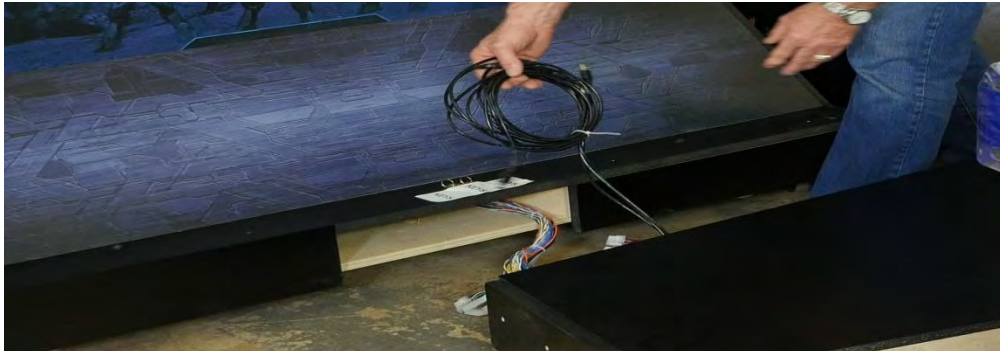


3. Insert two #1/4-20 x 1.25" hex bolts and two 5/8" washers into the holes in the bracket, then into left inside wall of the left inside wall of the left main cabinet front. Repeat this step for the right main cabinet. Snug but do not tighten all four hex bolts.
4. Locate the cables coming from the two main cabinet assemblies.
5. Carefully slide the cables out from the main cabinet and make the matching connections to the left and the right front of the floor spacer assembly.



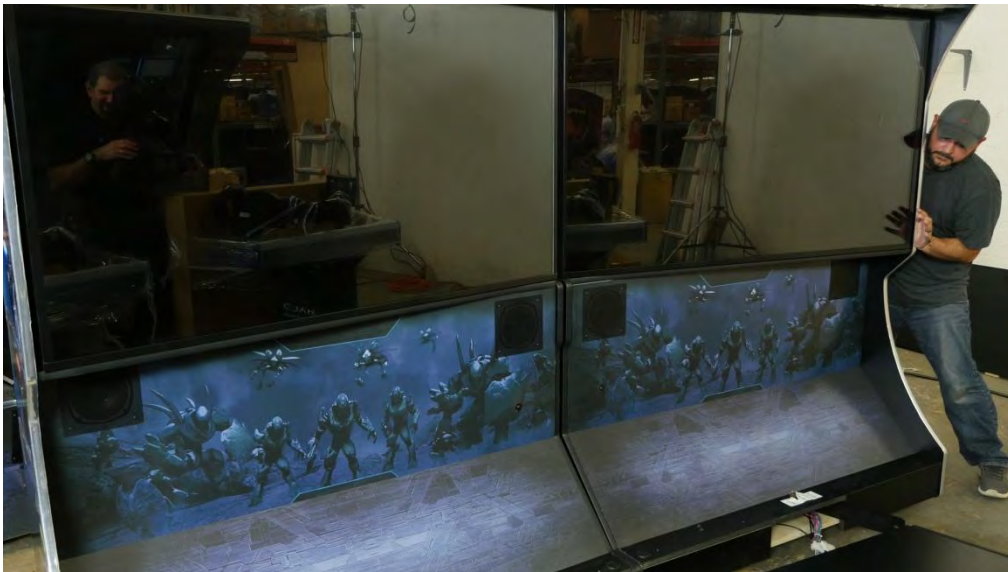


6. Locate the 6 USB cables (3 left and 3 right) in the floor spacer, and rout them to the back of the main cabinet assembly.



Important! If you intend to connect card readers to the game and will be using Ethernet cable (cat5), you will need to run the cables from the control pod through the floor spacer! Do not attempt after the cabinet is fully assembled!

7. Push the two main cabinet sections together.



8. Using two #1/4-20 x 2" black security screws, two 1/4" lock washers, and two 5/8" flat washers, insert the bolts through the holes in the black connector bracket and into the outside of the floor spacer base and secure it. Repeat this step on the opposite side of the floor spacer base.



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9. After the floor spacer has been attached to the main cabinet assemblies, the two main cabinet sections can be bolted together.
10. Locate three #1/4-20 x 2.5" hex bolts, three 1/4" hex nuts and six 5/8" flat washers.
11. Where the two main cabinet sections meet on the inside walls, locate the three pre-drilled holes and insert the bolts with washers through the holes.
The flat washers need to be on opposite ends of each bolt.
12. Add another washer on the opposite side of each bolt, add the nut and tighten.

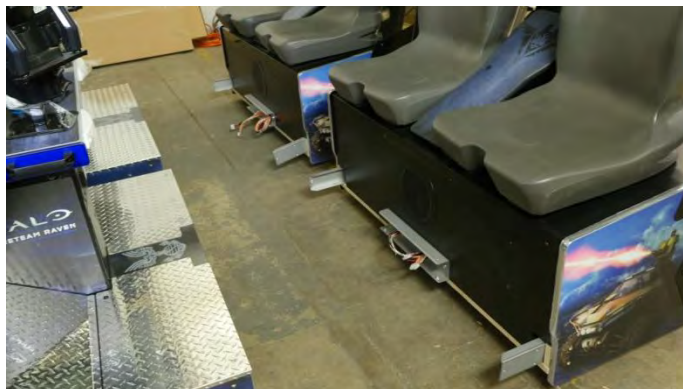
Attach Gun Pods to Seat Cabs

Parts required: 4 short silver/gray cabinet connector brackets, twelve 1/4-20 x 2" security bolts, fourteen 5/8" flat washers, fourteen 1/4" lock washers, two 1/4-20 x 1.5" security bolts

1. Remove the two cartons containing the master chief marquee assembly and accent art panels from both control pod units and set aside.
2. Move the left and right control pod assemblies to their respective positions in front of the main cabinet and floor spacer assembly.
3. Move the left and right seat cab cabinets so they are in line with the left and right control pod sections. **Note: There is a left and right control pod. The control pod with the blue and orange start buttons must be on the left side of the assembly facing the main cabinet. The control pod with the green and violet start buttons must be on the right side facing the main cabinet.**

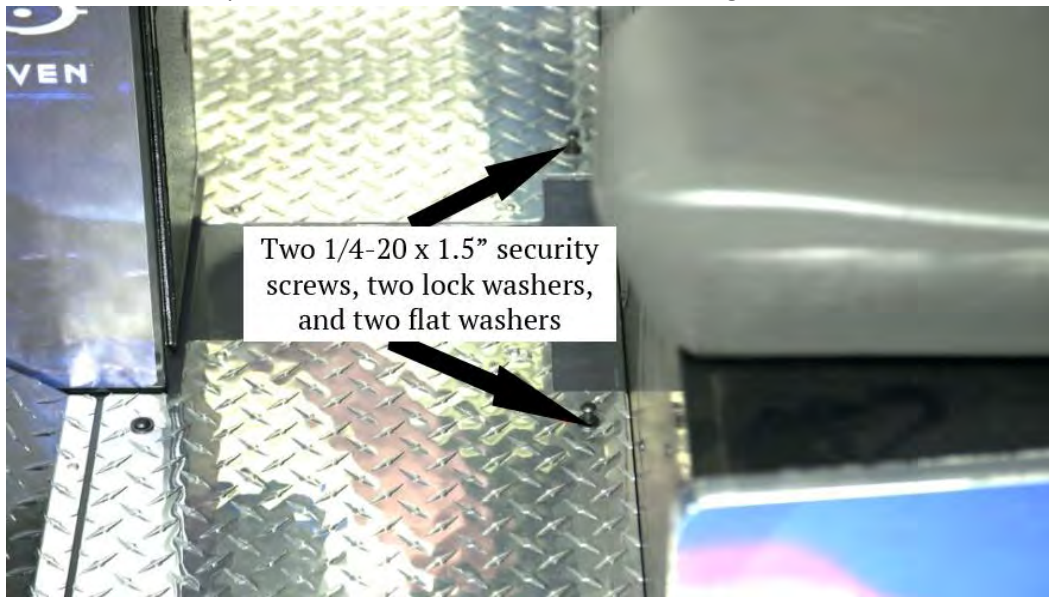


4. Locate the four shorter silver/gray colored cabinet connector brackets.
5. Place two connectors with the left seat cab assembly and two with the right.





6. Find three 1/4-20 x 2" black security bolts, three 1/4" lock washers and three 5/8" flat washers from the parts bag.
7. From the outside of the seat cab base, insert the bolts into the three holes, through the seat cab base, and secure to the connector bracket. *Do not tighten fully. You will want some movement, as you assemble the remainder of the cabinet.*
8. Repeat the step for the other connector brackets.
9. Pull the seat cab cables through the control pod base, so they are exposed on the opposite end of the control pod base. Be sure to rout this cable, so that it comes through on the center opening of each control pod base.
10. Using three of the 1/4-20 x 2" black security screws, three 1/4" lock washers, and three 5/8" flat washers from the parts box, insert the bolts and secure the seat cab to the control pod base.
11. Repeat for the other seat cab and control pod.
12. Using two 1/4-20 x 1.5" security bolts, two lock washers, and two 5/8" flat washers, secure the floor of the control pod to the floor bracket in the seatcab. Tighten all bolts at this time.



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Attach Seat cab and control pod to Floor Spacer

Parts Required: eight 1.5" hex bolts, eight 1/4" lock washers, twelve 1/4-20 x 2" black security screws, and twelve 5/8" black flat washers

1. Locate four of the long gray/silver brackets from the parts box.

2. Position two brackets in each control pod at the base of the cabinet.

3. Insert two 1/4-20 x 1.5" hex bolts and lock washers into the holes on the left and right inside walls of the control pod base opening. Snug but do not tighten the bolts.

4. Repeat for the other side.

5. Align both seat cab assemblies with control pods to the main cabinet with floor spacer.

6. Make all cable connections.

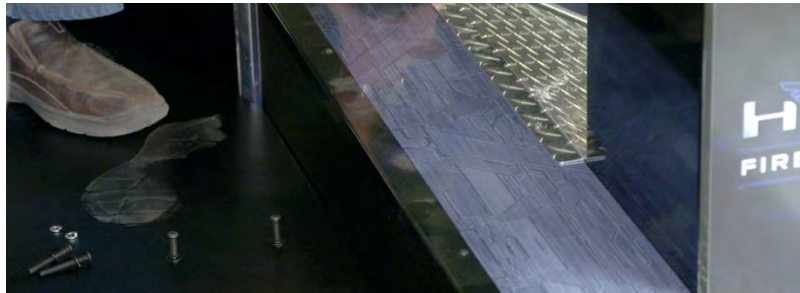
IMPORTANT: Each USB connection is labeled. Match all USB connections with the corresponding labels throughout the assembly process and do not mix them up.

7. Carefully and without pinching any cables, slide the seat cab assembly with control pod into the floor spacer.

IMPORTANT: Make sure not to pinch the orange cable coming from the main cabinet. This cable will be needed later for the floor marquee.

8. Using two 1/4-20 x 2" security bolts and two 5/8" flat washers, secure the top of the floor spacer to control pod connector bracket.

9. Repeat for the other seat cab assembly with control pod.





Attach Triangular Floor Marquee

Parts Required: four 1/4-20 x 1.5" plated hex bolts and four 5/8" plated flat washers

1. Remove the triangular marquee assembly from its box and find the required parts taped to the assembly. Remove the four screws attaching the art piece and remove the art.
2. Feed the cables coming from the floor spacer into the marquee and connect them.
3. Position the triangular floor marquee cornered between the two control pods.
4. Using four 1/4-20 x 1.5" hex bolts, secure the triangular marquee to the two control pods.



5. Replace the triangular marquee cover art and reinstall the four screws.



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Install Marquee Brackets and Logo Marquee

Parts Required: eight 1/4-20 x 2.5" security screws, ten 1/4-20 x 3/4" phillips screws, four 5/8" plated flat washers, four 5/8" black flat washers, and four 1/4-20 nuts.

1. Locate and unpack the Master Chief / Halo Fireteam Raven Marquee assembly.
2. Using a 1/4" driver, loosen and remove the screws securing them to the pallet.



3. Remove the left and right Halo marquees from their cartons and find all mounting hardware.
4. Using six 1/4-20 x 3/4" Phillips head screws, attach the rear marquee mounting bracket to the top of the main cabinet assembly and tighten.



5. Using four 1/4-20 x 3/4" Phillips screws, attach the front marquee mounting bracket to the top of the seat cab assembly. Attach only the right side of the bracket and leave the left side loose for now.

Please note: Depending on leveling, the holes on the right side of the bracket may *not* align with the holes on the left side of the bracket. If this occurs, use the 2 sheet metal screws in the spare parts bag to secure the left side of the bracket after the assembly is complete.

6. With the help of an assistant, lift the marquee sections (left and right) to the top of the cabinet assembly. Feed the cables down through the hole in the front and rear marquee mounting brackets and set the marquee sections on the brackets. Repeat for the left side.

Please note: The right side Halo marquee has a cable connection at both ends. The Left Halo marquee has only one.



7. Locate four 1/4-20 x 2.5" security screws, eight 5/8" flat washers, and four 1/4-20 nuts.

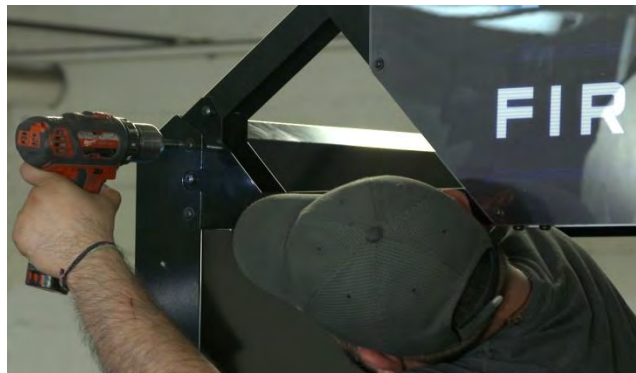
8. Fasten the Halo marquee to the right front marquee bracket. Align the mounting holes of the marquee with the mounting holes in the right marquee mounting bracket. From the outside of the bracket, insert a screw and washer, then add another washer and nut on the inside and tighten.



Repeat this for the left side.

9. Find four 1/4-20 x 2.5" security screws and four 5/8" flat washers and attach the Halo marquees to the rear mounting brackets. Hex nuts are not required for the rear mounting.

From the outside of the frame, align the marquee frame mounting holes with the mounting holes in the bracket and insert 2 screws and flat washers into the threaded holes and tighten. Repeat this for the opposite side. Tighten all fasteners.



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Assemble Master Chief / Halo Fireteam Raven Front Topper

Parts Required: nine 1/4-20 x 3/8" black Phillips screws

1. Locate and unpack the Master Chief /Halo Fire team Raven Marquee assembly.
2. Carefully lay the assembly face-down on a clean surface.
3. Using the nine 1/4-20 x 3/8" screws, attach the Master Chief lower support bracket and the upper hanger bracket to the back surface of the Master Chief/ Halo Fire team Raven Marquee.



Attach the Master Chief Marquee

Parts Required: two 1/4-20 x 1" hex bolts, two 1/2" sheet metal screws, two 1" fender washers, four 5/8" black flat washers

1. With the help of an assistant and using a ladder, raise the assembly to the front of the Cabinet.
2. Place the marquee over the mounting holes in the cabinet.
3. Attaching the upper hanger bracket to the monitor mounting bracket within the slot.
4. Align the bracket with the mounting holes. Use two 1/4-20 x 3/8" Phillips screws and two 5/8" flat washers and tighten.
5. Rout the power cable through the bracket and connect it.
6. Align the mounting holes on the bottom marquee bracket to the mounting holes in the top of the cabinet. Using two 1/4-20 x 1" hex bolts, fasten the marquee topper to the cabinet top.





Attach the Rings

Parts Required: eight 1.25"-20 2" security screws, 1/4-20 x 1/2" security screws, 1/4-20 x 1" plated hex bolts, twelve 5/8" black flat washers, four 5/8" plated flat washers

1. Locate and unpack the two ring cartons. Find mounting hardware attached to assembly.
2. Loosen the brackets at the end of the assemblies. There are four brackets.
3. With the help of an assistant and a 6' ladder, remove one of the Ring assemblies from the carton.
4. With two additional assistants, raise the assembly and rest it on the top of the left side of the cabinet assembly. Be sure the ring is facing the correct direction, according to the mating brackets on top of the cabinet.



5. Align the mounting holes on the front ring section with the mounting holes in the bracket(s) on top of the cabinet. Lift the rear portion of the ring and rout the cable into the hole in the top of the rear cabinet.
6. Insert two 1/4-20 x 2" security screws and two 5/8" flat washers into the sides of the ring assembly brackets located above the seat cab and tighten.



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7. Install two 1/2" security screws through the bracket ends facing downward and tighten.
8. Install two 1/4-20 x 1" plated hex bolts and two 5/8" plated flat washers through the rear bracket and into the top of the cabinet.
9. Repeat these steps for the right side ring.



Attach the Fireteam Raven Accent Art

Parts Required: six 1/4-20 x 3/4" black hex bolts

1. Locate and unpack the left and right foam core printed Fireteam Raven figures.
2. Using three 1/4-20 x 3/4" hex bolts, attach the right figures to the right-hand side of the front marquee mounting bracket. **The mounting holes in the parts will reveal the correct alignment.**
3. Using three 1/4 -20 x bolts, attach the left figures to the left-hand side of the rear mounting bracket.



Attach Rear Master Chief Accent Art

1. Locate and unpack the left and right Master Chief Accent art.
2. Using six 1/4-20 x 3/4" bolts, attach the right Master Chief Accent art to the right-hand side of the rear marquee mounting bracket.
3. Using three 1/4 -20 x bolts, attach the left Master Chief Accent art to the left-hand side of the rear marquee mounting bracket.





Route Marquee Power Cables

Run the power cables for the HALO marquee through the holes provided on the top of the main cabinet assemblies as shown.



Attach Ceiling Panel

Parts Required: four 1/4-20 x 3/8" security screws and four 5/8" black flat washers

1. Locate and unpack the ceiling panel. This is a corrugated plastic part that attaches to the inner sides of the ring and at the inside of the front marquee bracket.
2. There are two mounting bolts that attach the ceiling panel to the front of the cabinet assembly and two that attach to the rear.
3. With a ladder and an assistant, position the ceiling panel at its mounting points.
Be sure the bend is in the same direction as the tabs on the front mounting bracket.
4. Attach the front bracket of the ceiling to the front marquee bracket.
5. Align the ceiling panel bracket over the hole and install one 1/4-20 x 3/8" screw and flat washer.
6. Repeat for the opposite side of the ceiling panel.



7. Remove the previously installed 1/4-20x 1/2" screw and flat washer from the left ring bracket.
8. Align the ceiling panel tab over the hole and reinstall the 1/4-20 x 1/2" screw and flat washer.
9. Repeat on the opposite side of the ceiling panel.

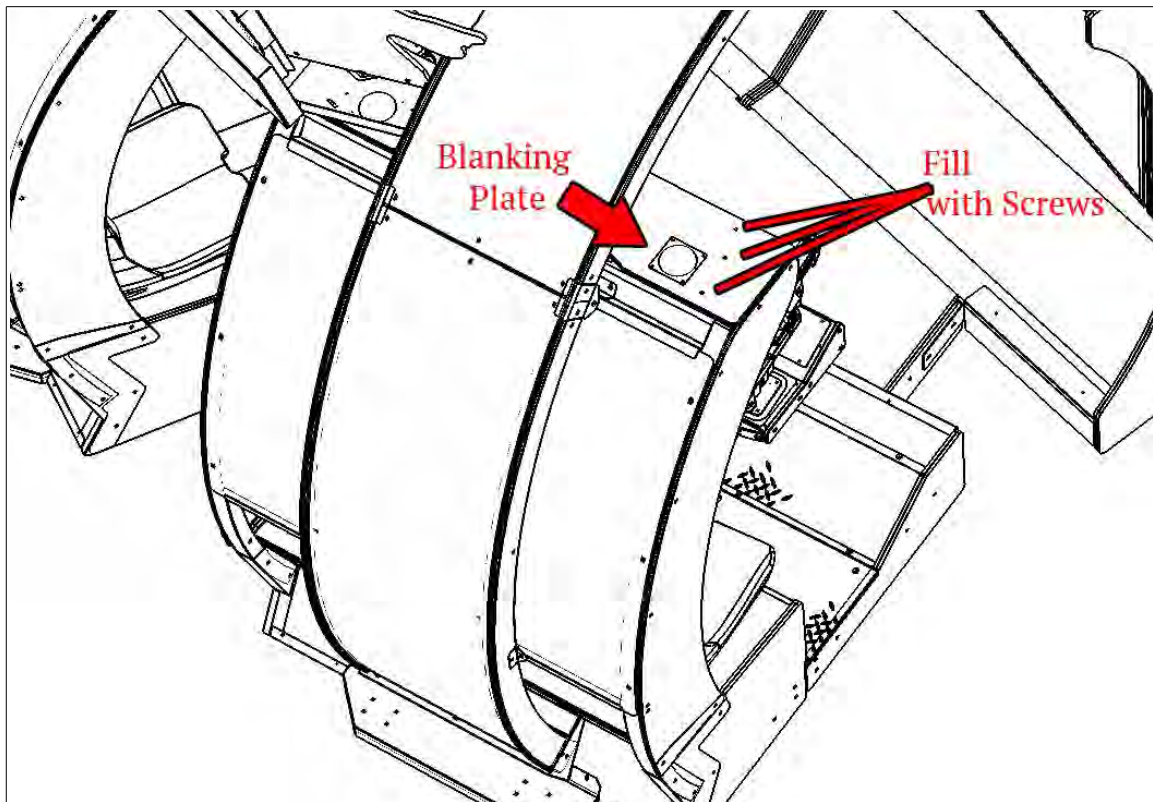


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Install Roof Blanking Plate

Parts Required: six 1/4-20 x 1" security screws, eight #8 x 0.5" security screws, six 5/8" flat washers

1. Locate the two blanking plates and associated hardware.
2. At the top of the rear main cabinet, install blanking plate using four 0.5" security screws.



3. Using three 5/8" flat washers and three 1/4-20 x 1" security screws, fill the empty holes.
4. Repeat for the other side of the cabinet.

Install Card Reader Blanking Plate (Optional)

1. If not using the card readers on your cabinet, locate the two card reader blanking plates.
2. Remove the five existing mounting screws from each card reader plate.
3. Remove and replace the existing card reader plates with the blanking versions.





Make Final Cable Connections

5. At the top section of the rear main cabinet, connect the left and right marquee power cables.
6. At the bottom left rear of the main cabinet, pass the following cables through the large hole in the main cabinet base. The left HDMI monitor cable, the PC audio cables, three USB cables, the USB from the I/O board and the speaker/sound cable.



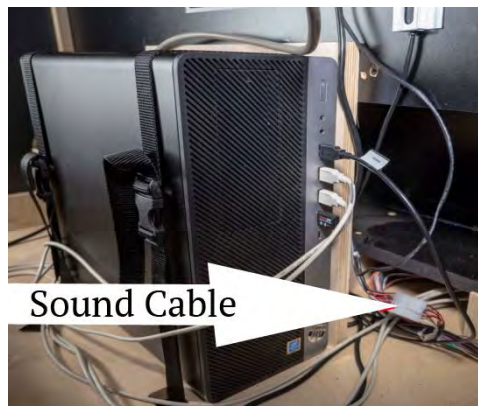
7. Connect the monitor power and PC power cables to the receptacles on the cabinet floor.



8. Connect the speaker terminals to the right speaker.



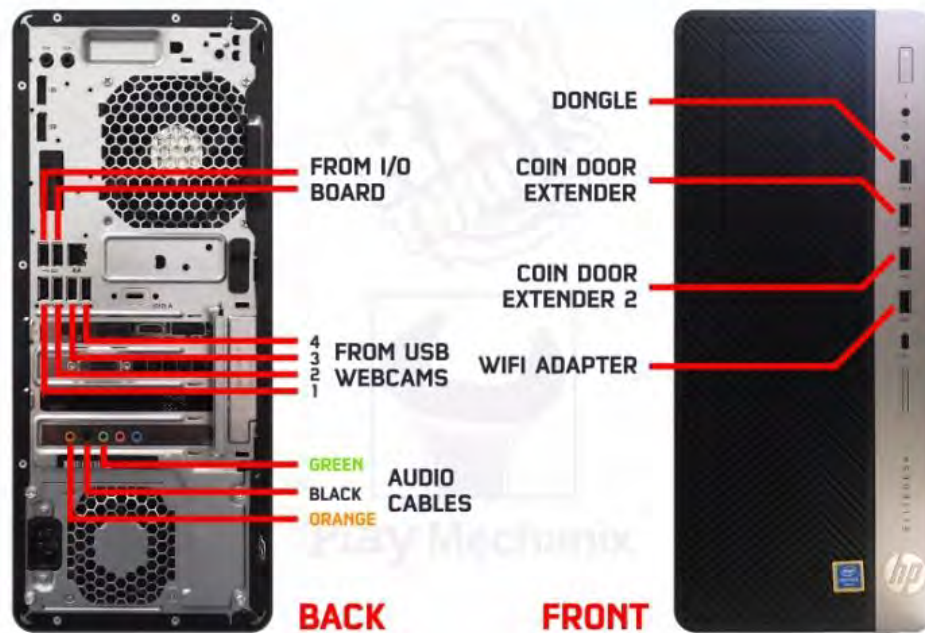
9. Connect the large speaker/sound interconnect cable to the mating connector on the cabinet floor.



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10. Connect the USB cables to the PC. All USB cables and audio cables are labeled. Be sure to follow the connection guide posted on the back wall of the main cabinet.

ATTENTION! ALL USB CONNECTIONS MUST BE AS SHOWN!



11. Connect the Orange, Green, and Black audio cables to the back of the PC.
12. Connect the two cabinet power cables to a 115V wall receptacle.

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 two line cords into AC outlets.
5. Turn the two main cabinet power switches to ON.
6. Verify that the cooling fans on the cabinet are working.
If not, turn off AC power and disconnect line cord. Contact Betson service
7. Check that no component is excessively hot or emitting foul odors.
If so, turn off AC power and disconnect line cord. Contact Betson service.
8. Once software loads, you will be asked to setup the cabinet software.



Game Software Setup

Initial Setup

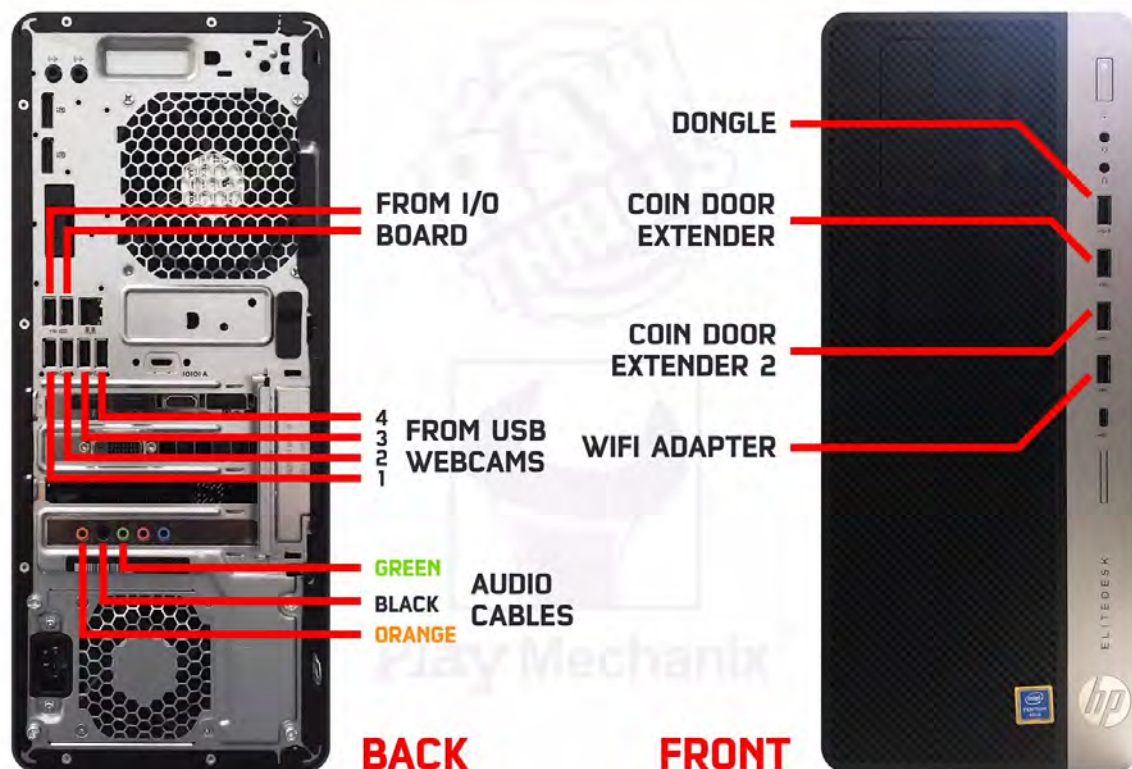
When first turned on, follow the onscreen prompts to complete initial game setup.

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.

PC USB Connection Guide

ATTENTION! ALL USB CONNECTIONS MUST BE AS SHOWN!



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Maintenance

Hard Drive Recovery

Symptoms requiring hard drive recovery include:

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



Regular Gun Maintenance Procedure

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

1. **Verify trigger 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 the triggers are functioning properly.
2. **Verify reload functionality**
Verify reload mechanisms are functional on all guns.
3. **Calibrate, calibrate, calibrate**
Return to the Main Menu screen and select Gun Calibration. Follow the instructions earlier in this manual or on screen to calibrate all guns.

Calibrate 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 devices 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 functionality.

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

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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.	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
	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 24.
Hard drive test reports "bad" or "missing" files.		
Game fails to finish loading.		
After resetting, game still reports an error.		
Game suggests inserting a boot DVD.		
Erratic game mode or attract mode.		
<p style="text-align: center;">WARNING! Data Files Corrupted. (Game Operation May Become Unstable.) Use "Test" Switch to Enter Test Mode and Run "File Test." Press Start To Continue.</p>		
Game resets	Bad file.	Run File Test. Restore hard drive.



Problem	Possible Cause	Solution
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

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Online Troubleshooting

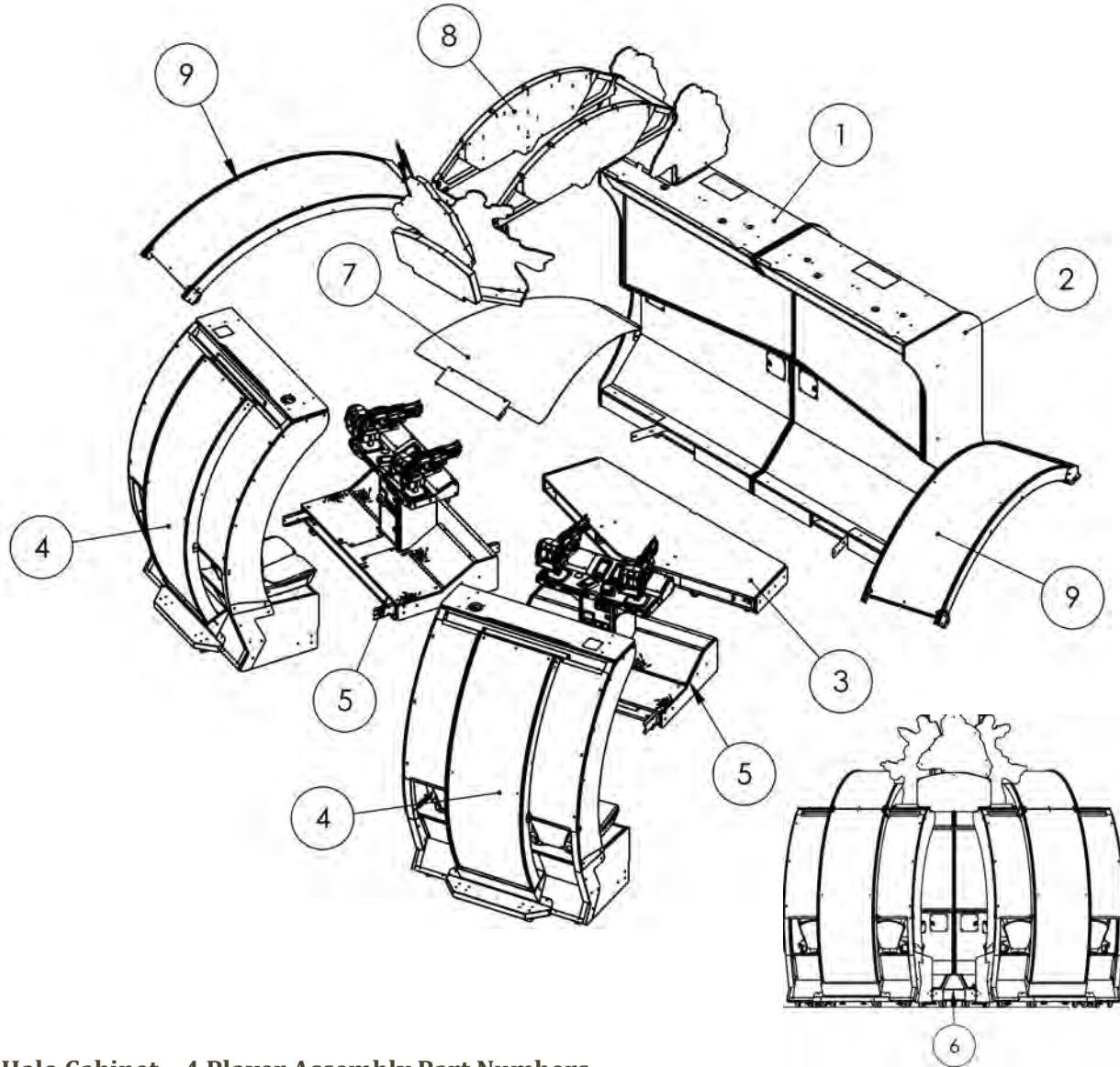
Problem	Possible Cause	Solution
Game cannot connect to CoinUp® server. No IP address appears under Test Connections menu	No broadband internet service	Contact a local ISP to setup either cable modem or DSL service.
	Wrong router configuration	Configure router for DHCP (Dynamic Host Configuration Protocol).
	Disconnected Ethernet cable	Check that Ethernet cables are tightly connected at both ends. An audible click confirms tightness. Reboot game. In Diagnostic mode, select Online, then Test Connection. Confirm that IP address appears. The phrase eth0 must follow IP address.
	Faulty Ethernet cable	Test cable by connecting it from another PC into router or wall jack. Replace cable if faulty.
	Faulty Ethernet wall jack.	Plug Ethernet cable into a different jack.
	Broadband service is down.	Contact ISP.
	Faulty router	Plug Ethernet cable into different jacks in router. Plug Ethernet cable directly into DSL or cable modem instead of router. Replace router if faulty.
	Faulty network card	Call CoinUp® service

Problem	Possible Cause	Solution
Game has IP address and screen says <i>Server Ping Success</i> but Test Connection screen reports Database Ping failure or File Server Ping failure.	Firewall is blocking communication with server.	Read firewall documentation. Ensure configuration allows ICMP Echo. If router has built-in firewall, check router configuration. Enable communication on ports 80, 443, 7786, and 7787.
	Database or File Server is down	Wait 30 minutes and revisit Test Connection screen. If still reporting failure, call CoinUp® service.



Parts

Halo Cabinet - 4 Player Assembly

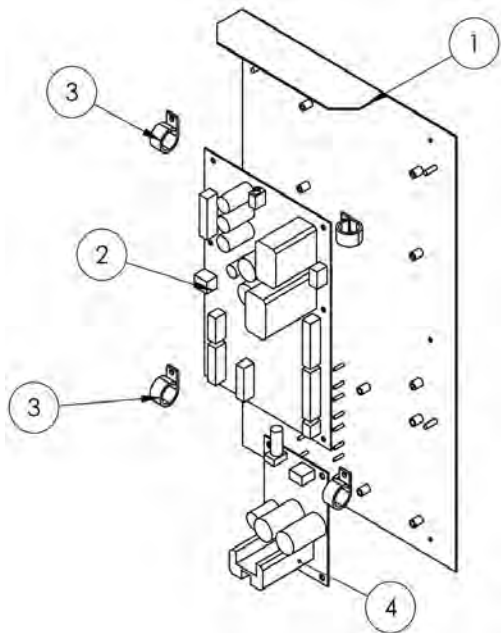


Halo Cabinet - 4 Player Assembly Part Numbers

Item	Part No.	Description	QTY
1	HALO-65-LEFT-MAINCAB-ASSY	Halo cabinet – left monitor assembly	1
2	HALO-65-RIGHT-MAINCAB-ASSY	Halo cabinet – right monitor assembly	1
3	HALO-65-SPACER-ASSY	Halo cabinet – spacer assembly	1
4	HALO-65-2PLAYER-SEATCAB-ASSY	Halo cabinet – seat assembly	2
5	HALO-PLAYER-CONTROL-POD-ASSY	Halo cabinet – player control pod assembly	2
6	HALO-TRIANGLE-LIGHTBOX-ASSY	Halo cabinet – lightbox assembly	1
7	HALO-CEILING-ASSY	Halo cabinet – ceiling assembly	1
8	HALO-TOPPER-&-LOGO-MARQUEE-ASSY	Halo cabinet – marquee assembly	1
9	HALO-RING-WOOD-FRAME-ASSY-2PART	Halo cabinet – ring assembly	2

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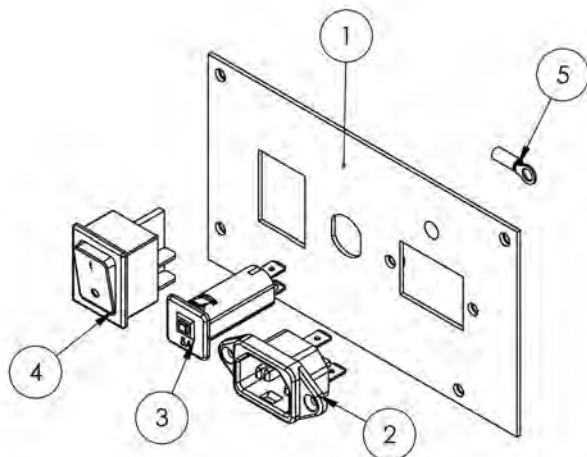
Rio Hardware Assembly



Rio Hardware Assembly Part Numbers

Item	Part No.	Description	QTY
1	RIO-HARDWARE-ASSY-HALO	Rio mounting plate	1
2	500-00199-05 verC	Rio2 board	1
3	Cable Clamp_750	Clamp 3/4" Screw mount	4
4	SUB-WOOFER-BOARD	Subwoofer pcb assembly	1

AC Power Plate Assembly

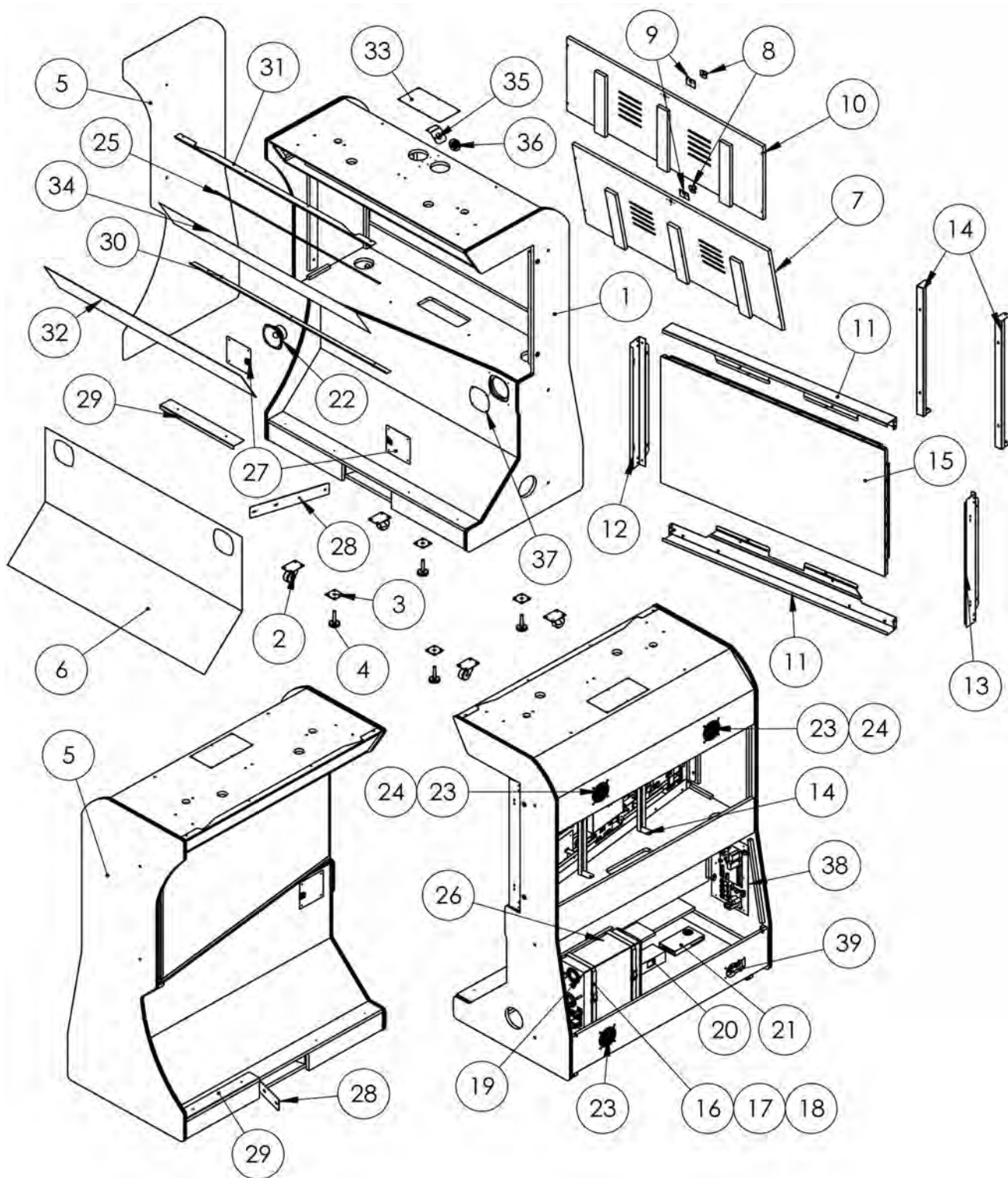


Rio Hardware Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-01681-01	Mounting Plate	1
2	Power Inlet Receptable	IEC Appliance Inlet 10A	1
3	T9-611-5A	5A-Circuit Breaker (Schurter #4404.0007)	1
4	1832-33-12	AC Switch 15AMP 125V	1
5	Ring and Spade Tongue Terminal	Ring and Space Tongue Terminal (#8 Screw)	1



Left Main Cab Assembly



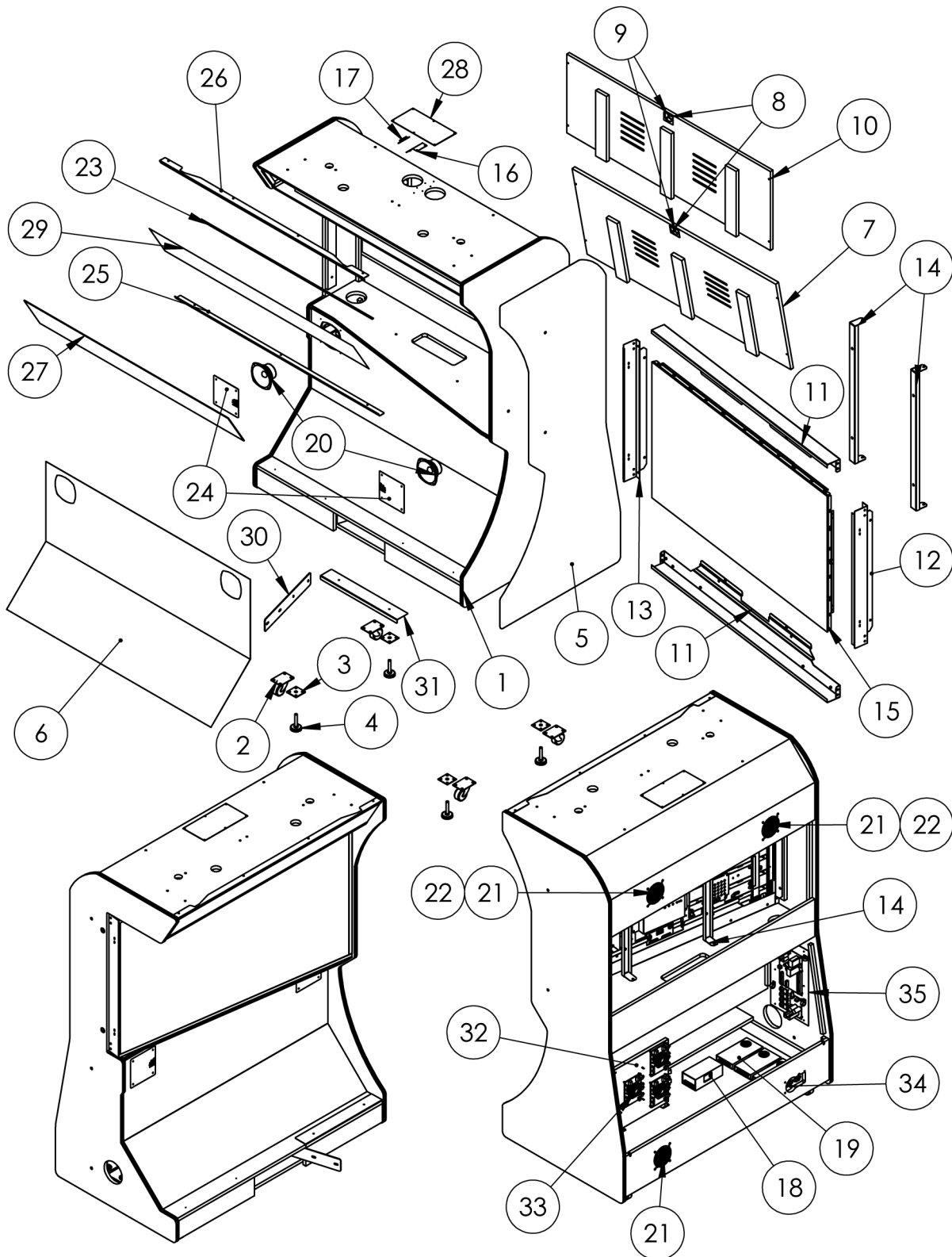
Super Deluxe Service Manual

Left Main Cab Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00821-01	ASSY-WOOD-LEFT-MAINCAB-HALO	1
2	Caster 2'5	2-1/2" Caster	4
3	Leg Leveler Plate	2.50 x 2.50 x 1/2-13 CTR – Leveler Plate	4
4	Leg Leveler 1_2 x 3 inch	1/2-13 x 4" Length	4
5	606-01431-01	Decal-left-maincab-side-project-ring	1
6	606-01433-01	Decal-maincab-left-below-lcd-project-ring	1
7	601-00823-01	Panel-lcd-door-project-ring	1
8	Lock 7/8" w/ 1.25 cam	Standard lock	2
9	Lock Retainer N202-130	Lock retainer N202-130	2
10	601-00824-01	Panel-rear-door-project-ring	1
11	600-02212-01	Bracket-base-65LCD	2
12	600-02213-01	Bracket-side-65LCD	2
13	600-02214-01	Bracket-inside-65LCD	2
14	600-02215-01	Bracket-support-65LCD	2
15	501205_KTS650AG101	Kortek-65LCD-Assy-501205_KTS650AG101_RAWT_R1.0	1
16	87425k76 (56 length)	Nylon Strip 0.075" Thick. 1" Width, black (56" length)	2
17	29705T86 (male)	Plastic buckle for webbing (male)	2
18	29705T86 (female)	Plastic buckle for webbing (female)	2
19	HP6005	HP 6005 PC ASSY	1
20	330-00003-01	600W-12V-POWER-SUPPLY-MEANWELL	1
21	330-00005-01	320W-24V-POWER-SUPPLY-MEANWELL	1
22	2-1-10-00-00-000	5.25 FULL RANGE SPEAKER	2
23	800-00001-00	120mm Wire Fan Guard	3
24	820-00001-00	FAN, 120VAC, 19/15W	2
25	120cm LED Strip (White)	120cm Flexible LED Strip (White)	1
26	600-00891-01	Securing Nylon Strap Plate	2
27	600-01464-01	JP-55-SPEAKER-GRILL	2
28	600-02207-01	PLATE-CONNECT-MAINCAB-PROJECT-RING	1
29	600-02209-01	TRIM-MAINCAB-BASE-PROJECT-RING	1
30	600-02210-01	RETAINER-MAINCAB-BASE-MARQUEE-PROJECT-RING	1
31	600-02211-01	RETAINER-MAINCAB-TOP-MARQUEE-PROJECT-RING	1
32	603-00905-01	PETG-MAINCAB-MARQUEE-PROJECT-RING	1
33	603-00925-01	PETG-PUCK-LIGHT-PROJECT-RING	1
34	606-01465-01	TRANSLITE-LEFT-MAINCAB-UPPER-HALO	1
35	600-00768-01	BRACKET-LIGHT-88HD	2
36	500-00205-01	White LED Superpuck PCB-36 LEDS	2
37	603-00933-01	COVER-BLANK-SPEAKER-PROJECT-RING	1
38	RIO-HARDWARE-ASSY-HALO	RIO-HARDWARE-ASSY-HALO	1
39	AC-POWER-PLATE-ASSY	AC-POWER-PLATE-ASSY	1



Right Main Cab Assembly



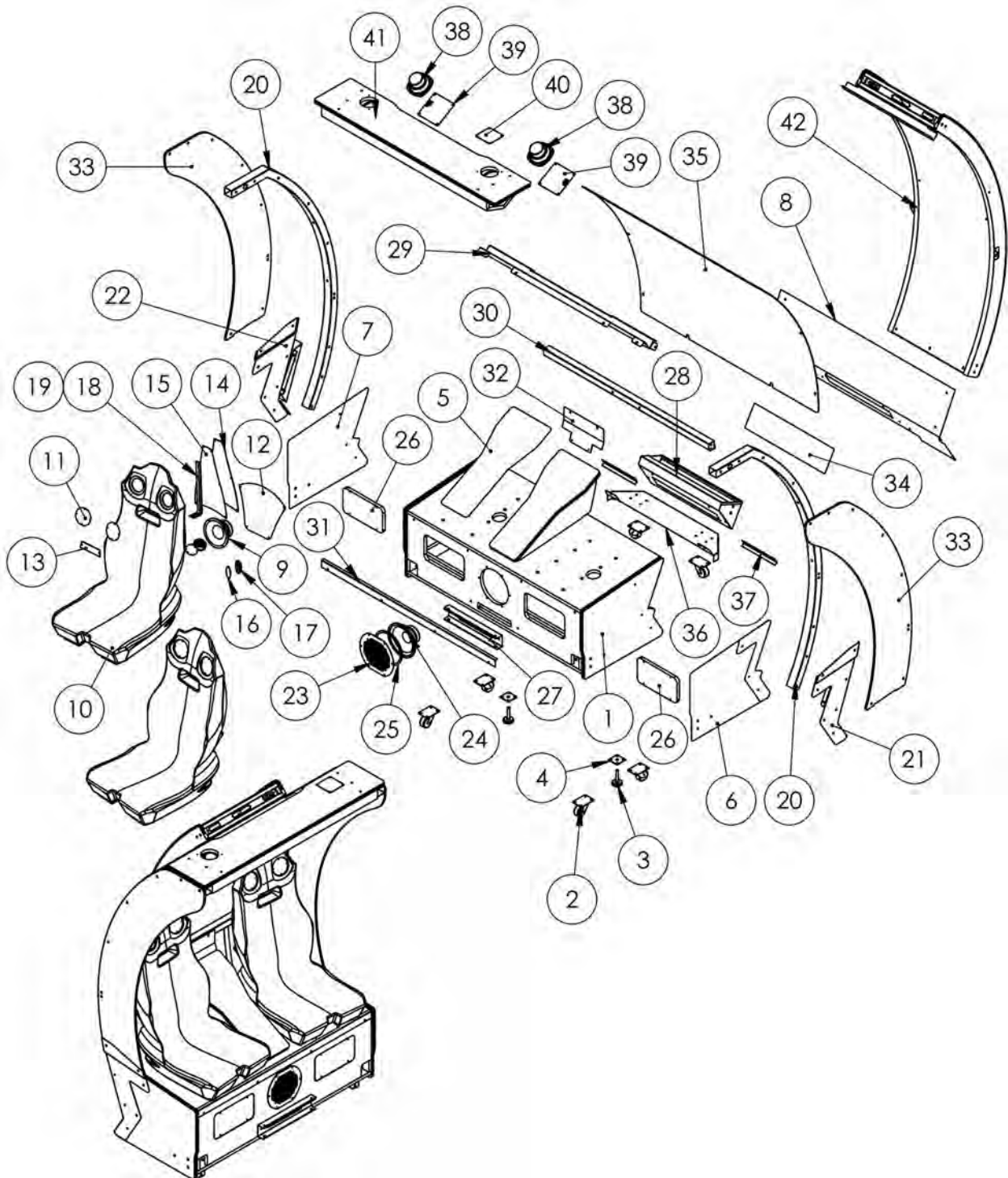
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Right Main Cab Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00822-01	ASSY-WOOD-RIGHT-MAINCAB-HALO	1
2	Caster 2'5	2-1/2" Caster	4
3	Leg leveler plate	2.50 x 2.50 x 1/2-13 CTR - Leveler Plate	4
4	Leg Leveler 1_2 x 3 inch	1/2-13 x 4" Length	4
5	606-01432-01	DECAL-RIGHT-MAINCAB-SIDE-PROJECT-RING	1
6	606-01434-01	DECAL-MAINCAB-RIGHT-BELOW-LCD-PROJECT-RING	1
7	601-00823-01	PANEL-LCD-DOOR-PROJECT-RING	1
8	Lock 7/8" w/ 1.25 Cam	Standard lock	2
9	LOCK RETAINER N202-130	LOCK RETAINER N202-130	2
10	601-00824-01	PANEL-REAR-DOOR-PROJECT-RING	1
11	600-02212-01	BRACKET-BASE-65LCD	2
12	600-02213-01	BRACKET-SIDE-65LCD	2
13	600-02214-01	BRACKET-INSIDE-65LCD	2
14	600-02215-01	BRACKET-SUPPORT-65LCD	2
15	501205_KT650AG101	KORTEC-65LCD-ASSY-501205_KTS650AG101_RAWT_R1.0	1
16	600-00768-01	BRACKET-LIGHT-BBHD	1
17	500-00205-01	White LED Superpuck PCB-36LEDS	1
18	330-00003-01	600W-12V-POWER-SUPPLY-MEANWELL	1
19	330-00005-01	320W-24V-POWER-SUPPLY-MEANWELL	3
20	2-1-10-00-00-000	5.25 FULL RANGE SPEAKER	2
21	800-00001-00	120mm Wire Fan Guard	3
22	820-00001-00	FAN, 120VAC, 19/15W	2
23	120cm LED Strip (White)	120cm Flexible LED Strip (White)	1
24	600-01464-01	JP-55-SPEAKER-GRILL	2
25	600-02210-01	RETAINER-MAINCAB-BASE-MARQUEE-PROJECT-RING	1
26	600-02211-01	RETAINER-MAINCAB-TOP-MARQUEE-PROJECT-RING	1
27	603-00905-01	PETG-MAINCAB-MARQUEE-PROJECT-RING	1
28	603-00925-01	PETG-PUCK-LIGHT-PROJECT-RING	1
29	606-01466-01	TRANSLITE-RIGHT-MAINCAB-UPPER-HALO	1
30	600-02207-01	PLATE-CONNECT-MAINCAB-PROJECT-RING	2
31	600-02209-01	TRIM-MAINCAB-BASE-PROJECT-RING	2
32	01-2721	PLATE, AUDIO AMP	1
33	380-00009-01	SURE-AMP-BOARD	3
34	AC-POWER-PLATE-ASSY	AC-POWER-PLATE-ASSY	1
35	RIO-HARDWARE-ASSY-HALO	RIO-HARDWARE-ASSY-HALO	1



Seat Cab Assembly



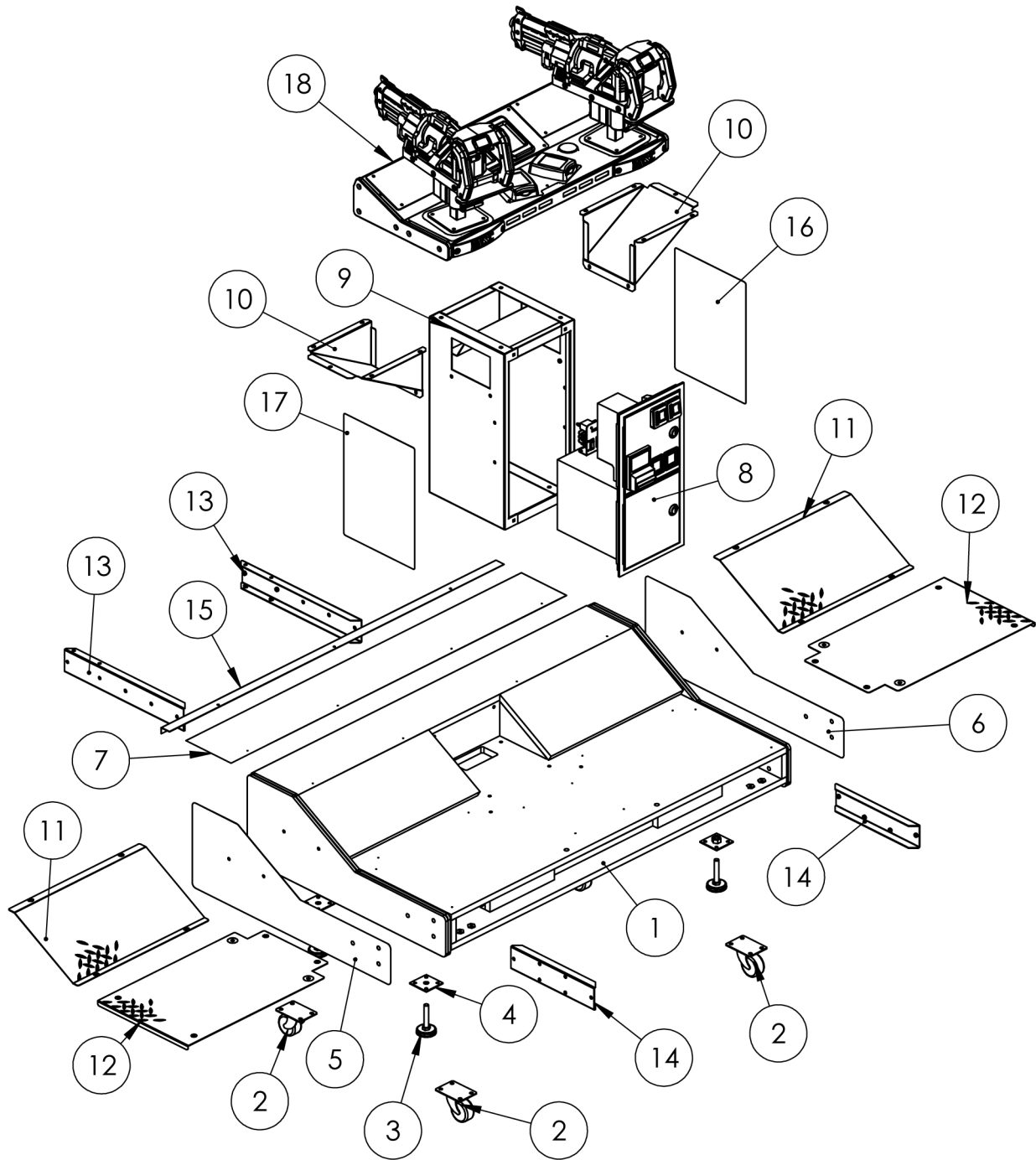
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Seat Cab Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00825-01	ASSY-SEAT-CABINET-HALO	1
2	Caster 2'5	2-1/2" CASTER	6
3	Leg Leveler 1_2x3 inch	1/2-13x4" Length	2
4	Leg leveler plate	2.50 x 2.50 x 1/2-13-CTR – LEVELER PLATE	2
5	606-01441-01	DECAL-STEATCAB-CENTER-PROJECT-RING	1
6	606-01442-01	DECAL-LEFT-SEATCAB-SIDE-PROJECT-RING	1
7	606-01443-01	DECAL-RIGHT-SEATCAB-SIDE-PROJECT-RING	1
8	606-01444-01	DECAL-SEATCAB-REAR-PROJECT-RING	1
9	2-2-11-00-00-000	SPEAKER WOOFER 6.5" 4 OHM	2
10	603-00523-01	PLASTIC-GRAY-ROTO-SEAT	2
11	600-00105-01	SEAT-HEADREST-SPEAKER-GRILL	4
12	600-00106-01	WOOFER-GRILL	2
13	600-00109-01	SEAT-BACK-PLATE-LOW	2
14	600-01840-01	Cruis'n Seatback Clear Overlay	2
15	606-01495-01	TRANSLITE-SEATBACK-PROJECT-RING	2
16	500-00084-01	BLUE-LED PUCK LIGHT-BLACK-PCB	4
17	603-00540-01-BLUE	LED Spotlight Lens – Red Tint	4
18	603-00762-00 (16in)	LED EXTRUSION 16INCH	2
19	500-00093-01 (35 CM)	LED STRIP – WHITE – 35CM	2
20	600-02180-01	CURVED-TUBE-PROJECT-RING	2
21	600-02181-01	BRACKET-LEFT-TUBE-PROJECT-RING	2
22	600-02182-01	BRACKET-RIGHT-TUBE-PROJECT-RING	2
23	600-01526-01	GRILL-WOOFER-JP-55	1
24	2-1-18-00-00-000	8" woofer, 4 Ohm, poly-mica cone	1
25	FOAM INSULATION	FOAM INSULATION	2
26	601-00826-01	DOOR-ACCESS-SEATCAB-PROJECT-RING	2
27	600-01458-01	JP-55-CTR-CONNECT-BRACKET	1
28	600-02184-01	BRACKET-RING-BASE-SEATCAB-PROJECT-RING	1
29	600-02192-01	RETAINER-SEATCAB-TOP-PETG-PROJECT-RING	1
30	600-02191-01	RETAINER-SEATCAB-LOWER-PETG-PROJECT-RING	1
31	600-0294-01	TRIM-SEAT-PANEL-PROJECT-RING	1
32	600-0295-01	BRACKET-CONSOLE-SEATCAB-PROJECT-RING	1
33	603-00898-01	ACRYLIC-SIDE-PANEL-PROJECT-RING	2
34	606-01450-01	DECAL-FLOOR-RING-BRACKET-HALO	1
35	606-01467-01	SCREENED-PETG-REAR-SEATCAB-PROJECT-RING	1
36	600-02269-01	COVER-CASTER-SEATCB-PROJECT-RING	1
37	600-02273-01	TRIM-CASTER-SIDE-PROJECT-RING	2
38	2-1-10-00-00-000	5.25 FULL RANGE SPEAKER	2
39	600-02196-01	GRILL-SPEAKER-PROJECT-RING	2
40	600-02264-01	COVER-SPEAKER-BOX-PROJECT-RING	2
41	601-00828-01	HALO-SPEAKER-BOX-ASSY	1
42	HALO-SEATCAB-RING-ASSY	HALO SEATCAB-RING-ASSY	1



Control Pod Assembly

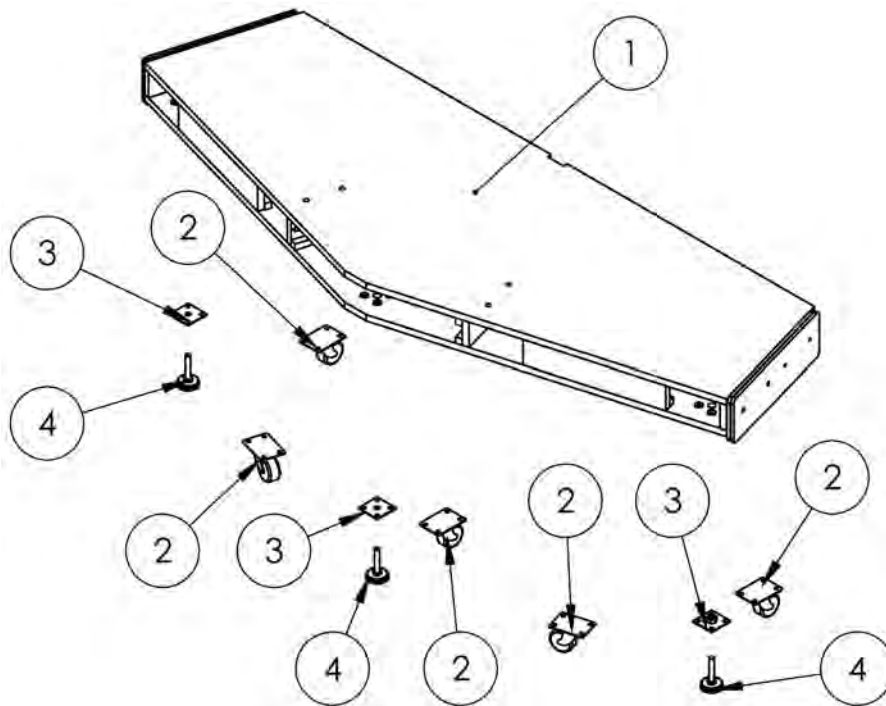


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Control Pod Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00827-01	ASSY-WOOD-CP-PLATFORM	1
2	Caster 2'5	2-1/2" CASTER	4
3	Leg Leveler	1/2-13x4" Length	4
4	Leg leveler plate	2.50 X 2.50 X 1/2-13 CTR – LEVELER PLATE	4
5	606-01439-01	DECAL-LEFT-CP-PLATFORM-SIDE-HALO	1
6	606-01440-01	DECAL-RIGHT-CP-PLATFORM-SIDE-DECAL-PROJECT-RING	1
7	606-01449-01	DECAL-FLOOR-TOP-PLATFORM-PROJECT-RING	1
8	800-00005-01	MID-WIDTH COINDOOR – BBHD	1
9	600-02199-01	VAULT-COINDOOR-PROJECT-RING	1
10	600-02200-01	GUSSET-CONTROL-PANEL-PROJECT-RING	2
11	600-02198-01	DIAMOND-PLATE-ANGLED-PROJECT-RING	2
12	600-02197-01	DIAMOND-PLATE-FLOOR-PROJECT-RING	2
13	600-02206-01	BRACKET-CONNECT-SPACER-PROJECT-RING	2
14	600-01457-01	JP-55-CONNECT-BRACKET	2
15	600-02193-01	TRIM-SEATCAB-BASE-PROJECT-RING	1
16	606-01506-01	DECAL-RIGHT-COIN-VAULT-PROJECT-RING	1
17	606-01455-01	DECAL-COIN-VAULT-COVER-PROJECT-RING	1
18	HALO-CONTROL-PANEL-ASSY	HALO-CONTROL-PANEL-ASSY	1

Floor Space Assembly

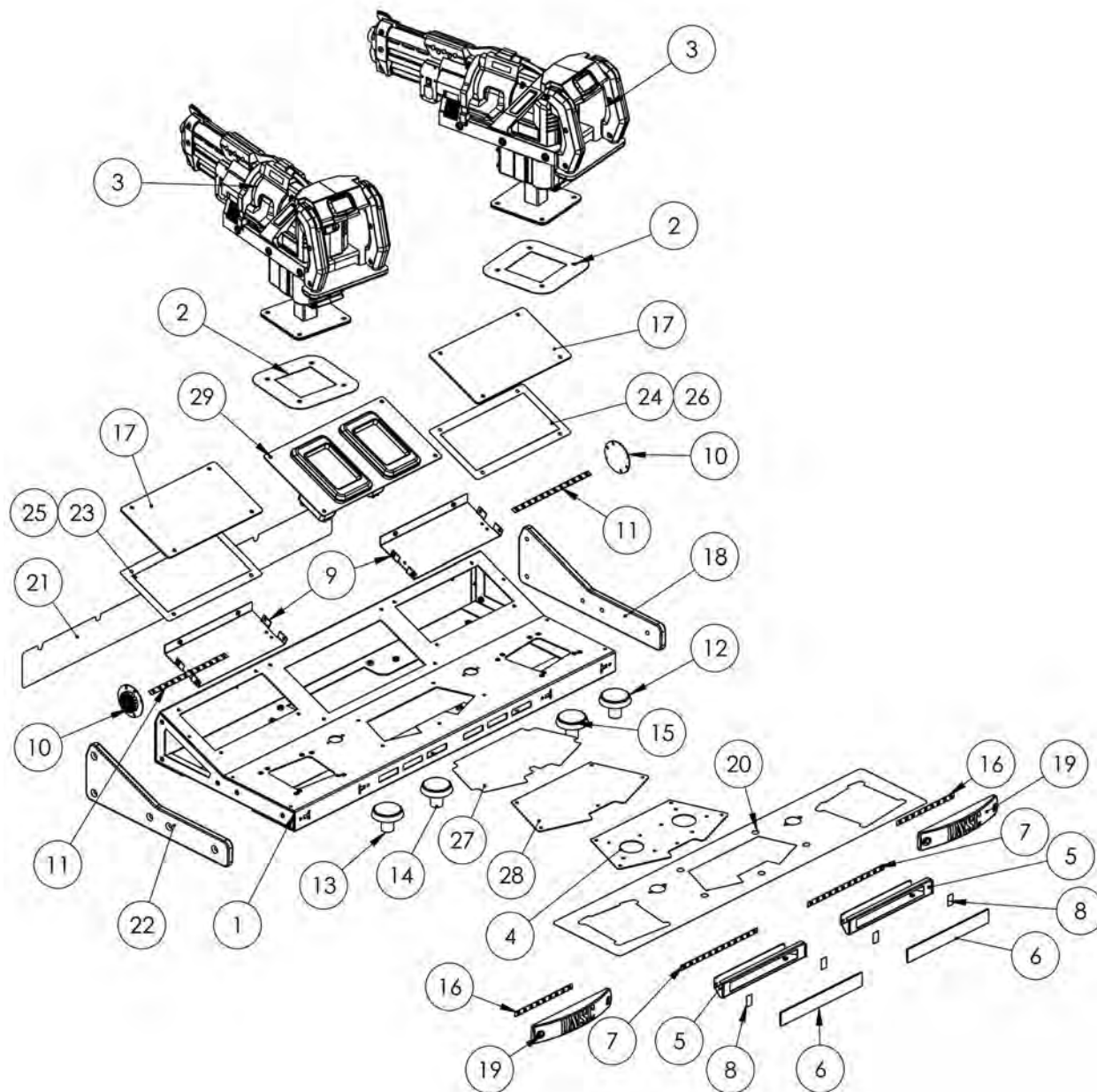


Floor Space Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00831-01	HALO-FLOOR-SPACER-ASSY	1
2	Caster 2'5	2-1/2" CASTER	5
3	Leg leveler plate	2.50 x 2.50 x 1/2-13 CTR- LEVELER PLATE	3
4	Leg leveler 1_2x3 inch	1/2-13x4" Length	3



Control Panel Assembly



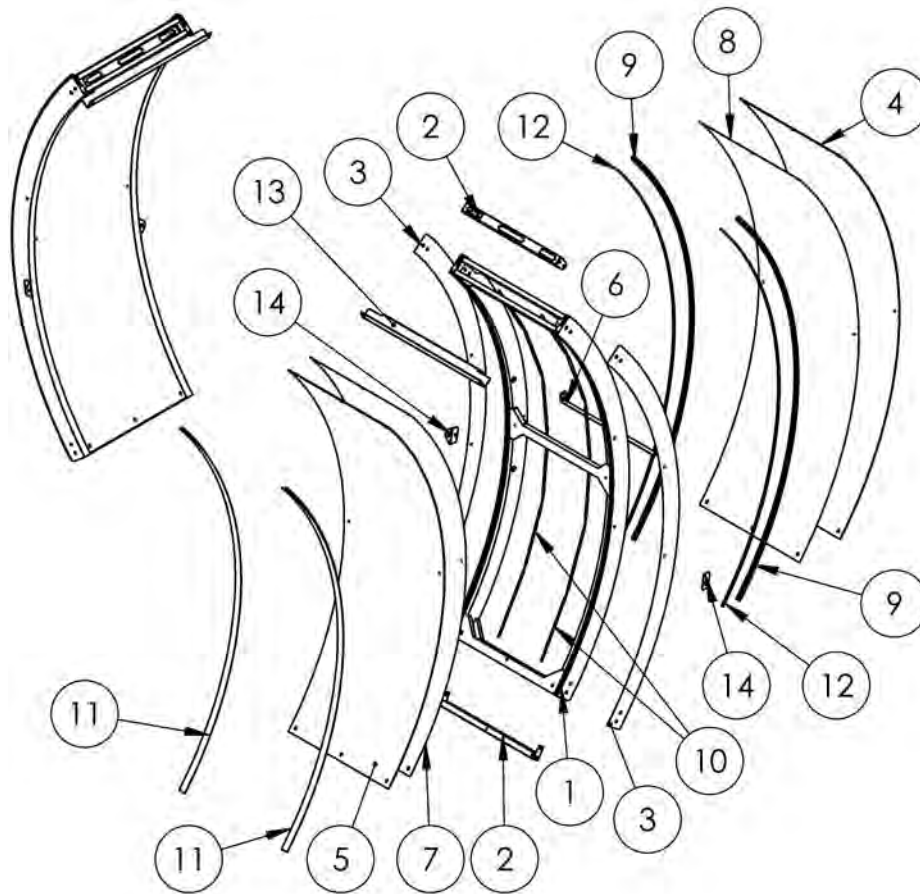
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Control Pannel Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02201-01	CONTROL-PANEL-PROJECT-RING	1
2	600-02205-01	PLATE-BEZEL-GUN-MOUNT-PROJECT-RING	4
3	820-00025-01	HALO-GUN-MCH-ASSY	4
4	600-02230-01	PLATE-CARD-READER-PROJECT-RING	1
5	600-02203-01	BRACKET-LED-FRONT-PROJECT-RING	2
6	603-00914-01	ACRYLIC-CP-FRONT-PROJECT-RING	2
7	20cm LED Strip (Blue)	20cm Flexible LED Strip (Blue)	2
8	DOUBLE STICK TAPE	DOUBLE STICK TAPE	2
9	600-02204-01	BRACKET-LED-SIDE-PROJECT-RING	2
10	500-00205-01	White LED Superpuck PCB-36LEDS	4
11	20CM LED STRIP	20cm Flexible LED Strip (WHITE)	2
12	702-00092-00	HALO-LARGE RND ORANGE PUSH BUTTON START	1
13	702-00093-00	HALO-LARGE RND BLUE PUSH BUTTON START	1
14	702-00094-00	HALO-LARGE RND GREEN PUSH BUTTON START	1
15	702-00095-00	HALO-LARGE RND PURPLE PUSH BUTTON START	1
16	15CM LED STRIP	15CM LED STRIP (RGB)	2
17	603-00902-01	PETG-CP-PROJECT-RING	2
18	603-00900-01	ACRYLIC-CP-RIGHT-PROJECT-RING	1
19	603-00896-01	COVER-MOLDED-PROJECT-RING	2
20	606-01452-01	DECAL-CP-PLAYER-1-2-PROJECT-RING	1
21	606-01454-01	DECAL-CP-REAR-PROJECT-RING	1
22	603-00899-01	ACRYLIC-CP-LEFT-PROJECT-RING	1
23	606-01460-01	TRANSLITE-PLAYER-1-PROJECT-RING	1
24	606-01461-01	TRANSLITE-PLAYER-2-PROJECT-RING	1
25	606-01462-01	TRANSLITE-PLAYER-3-PROJECT-RING	1
26	606-01463-01	TRANSLITE-PLAYER-4-PROJECT-RING	1
27	606-01535-01	DECAL-BLANK-CARD-READER-PLATE-PROJECT-RING	1
28	600-02286-01	PLATE-BLANK-CARD-READER-PROJECT-RING	1
29	SCANNER-MOUNT-ASSY	HALO-SCANNER-MOUNT-ASSY	1



Seat Cab Ring Assembly

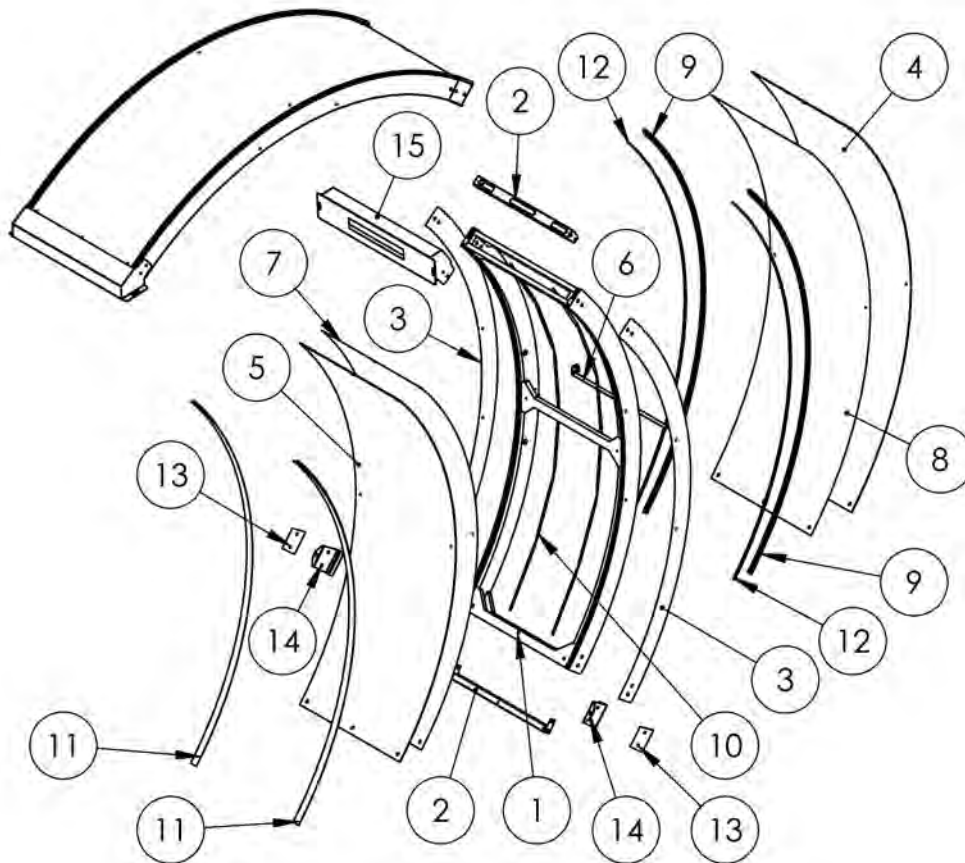


Seat Cab Ring Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00829-01	ASSY-WOOD-RING-HALO	1
2	600-02186-01	BRACKET-RING-INSIDE-PROJECT-RING	2
3	606-01445-01	DECAL-RING-SIDE-PROJECT-RING	2
4	603-00903-01	PETG-RING-OUTSIDE-PROJECT-RING	1
5	603-00904-01	PETG-RING-INSIDE-PROJECT-RING	1
6	600-02187-01	BRACKET-RING-CROSS-PROJECT-RING	1
7	606-01459-01	TRANSLITE-INSIDE-RING-PROJECT-RING	1
8	606-01458-01	TRANSLITE-OUTSIDE-RING-PROJECT-RING	1
9	HALO-LED-TMOLDING	APPROX 78.75" LG	2
10	150CM-WHITE-SEG-LED-STRIP	150CM-WHITE-SEGMENTED-LED-STRIP-HALO	2
11	HALO-OFFSET-T-MOLD-INSIDE	HALO-OFFSET-T-MOLD-INSIDE	2
12	200CM-TMOLD-RGB-LED-STRIP	200CM-TMOLD-RGB-LED-STRIP-HALO	2
13	600-02189-01	RETAINER-RING-TOP-PROJECT-RING	1
14	600-02190-01	CLIP-RING-SIDE-PROJECT-RING	2

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Overhead Ring Assembly

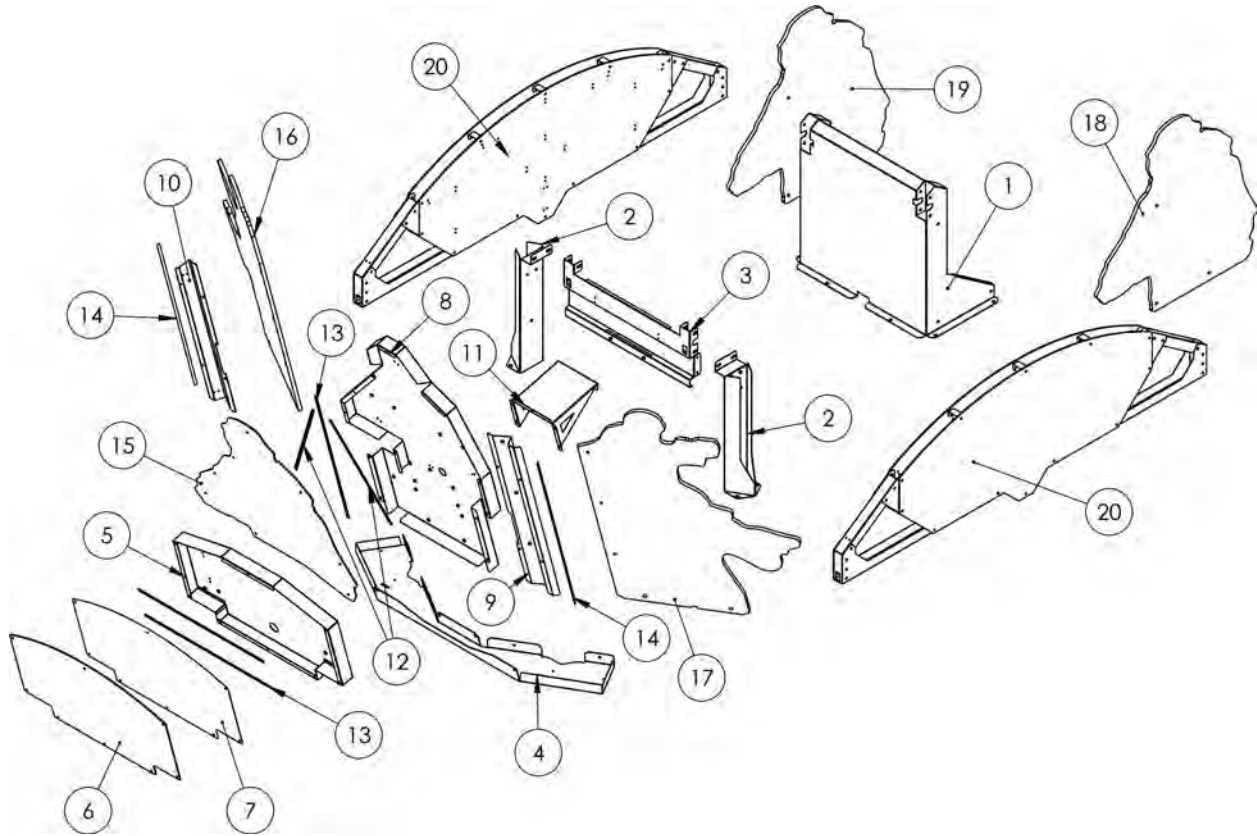


Overhead Ring Assembly Part Numbers

Item	Part No.	Description	QTY
1	601-00829-01	ASSY-WOOD-RING-HALO	1
2	600-02186-01	BRACKET-RING-INSIDE-PROJECT-RING	2
3	606-01445-01	DECAL-RING-SIDE-PROJECT-RING	2
4	603-00903-01	PETG-RING-OUTSIDE-PROJECT-RING	1
5	603-00904-01	PETG-RING-INSIDE-PROJECT-RING	1
6	600-02187-01	BRACKET-RING-CROSS-PROJECT-RING	1
7	606-01459-01	TRANSLITE-INSIDE-RING-PROJECT-RING	1
8	606-01458-01	TRANSLITE-OUTSIDE-RING-PROJECT-RING	1
9	HALO-LED-TMOLDING	APPROX 78.75"LG	2
10	150CM-WHITE-SEG-LED-STRIP	150CM-WHITE-SEGMENTED-LED-STRIP-HALO	2
11	HALO-OFFSET-T-MOLD-INSIDE	HALO-OFFSET-T-MOLD-INSIDE	2
12	200CM-TMOLD-RGB-LED-STRIP	200CM-TMOLD-RGB-LED-STRIP-HALO	2
13	606-01446-01	DECAL-RING-BRACKET-HALO	2
14	600-02188-01	BRACKET-RING-CONNECT-PROJECT-RING	2
15	600-02185-01	BRACKET-RING-TOP-MAINCAB-PROJECT-RING	1



Topper Assembly

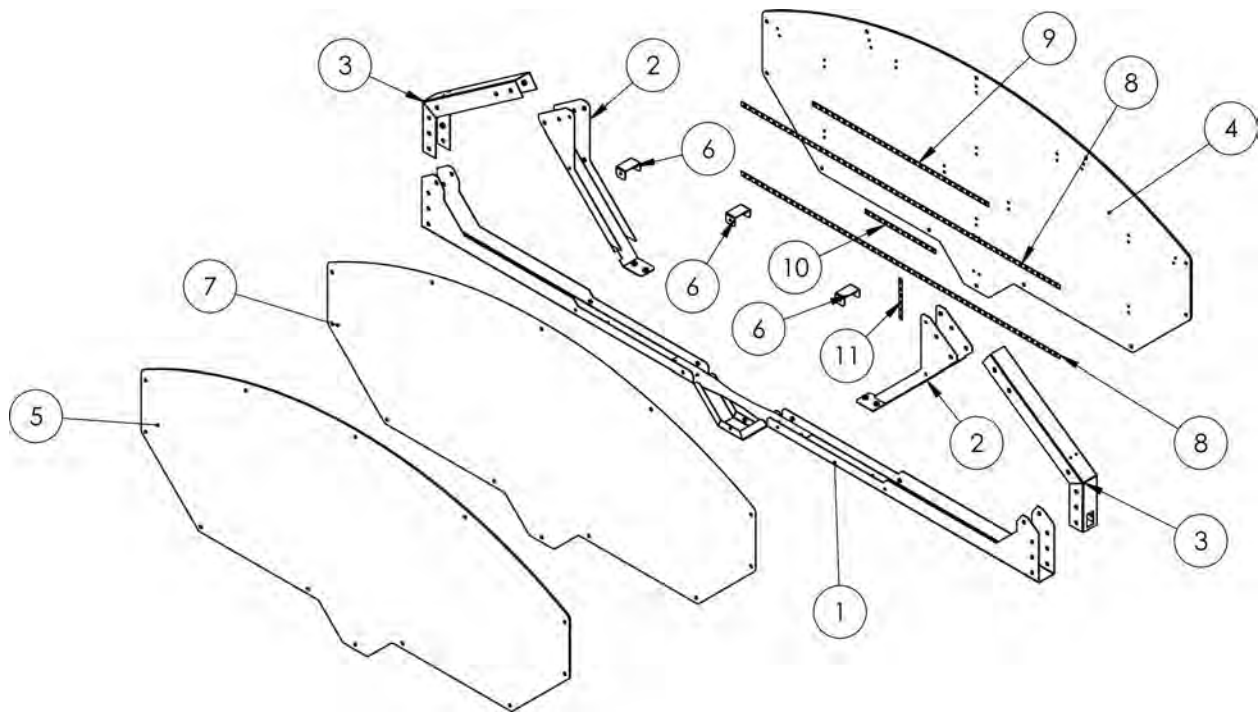


Topper Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02221-01	BOX-MARQUEE-SUPPORT-PROJECT-RING	1
2	600-02233-01	SUPPORT-BRIDGE-MARQUEE-PROJECT-RING	2
3	600-02234-01	BRACKET-BRIDGE-MARQUEE-PROJECT-RING	1
4	600-02225-01	BRACKET-SUPPORT-TOPPER-PROJECT-RING	1
5	600-02223-01	LIGHTBOX-TOPPER-PROJECT-RING	1
6	603-00901-01	PETG-TOPPER-LIGHTBOX-PROJECT-RING	1
7	606-01500-01	TRANSLITE-TOPPER-PROJECT-RING	1
8	600-02224-01	BACKPANEL-TOPPER-PROJECT-RING	1
9	600-02227-01	BRACKET-RIGHT-TOPPER-PROJECT-RING	1
10	600-02226-01	BRACKET-LEFT-TOPPER-PROJECT-RING	1
11	600-02232-01	BRACKET-MOUNT-TOPPER-PROJECT-RING	1
12	45CM LED STRIP	45CM LED STRIP (WHITE)	2
13	60CM-WHITE-LED-STRIP	60cm LED Strip (WHITE)	3
14	70CM LED STRIP	70cm LED Strip (WHITE)	2
15	606-01499-01	SCREENED-PETG-TOPPER-PROJECT-RING	1
16	606-01501-01	LEFT-SCREENED-PANEL-ULTRABOARD-PROJECT-RING	1
17	606-01502-01	RIGHT-SCREENED-PANEL-ULTRABOARD-PROJECT-RING	1
18	606-01505-01	SCREENED-MC-RIGHT-ULTRABOARD-PROJECT-RING	1
19	606-01504-01	SCREENED-MC-LEFT-ULTRABOARD-PROJECT-RING	1
20	HALO-LOGO-MARQUEE-ASSY	HALO-LOGO-MARQUEE-ASSY	

Super Deluxe Service Manual

Marquee Assembly

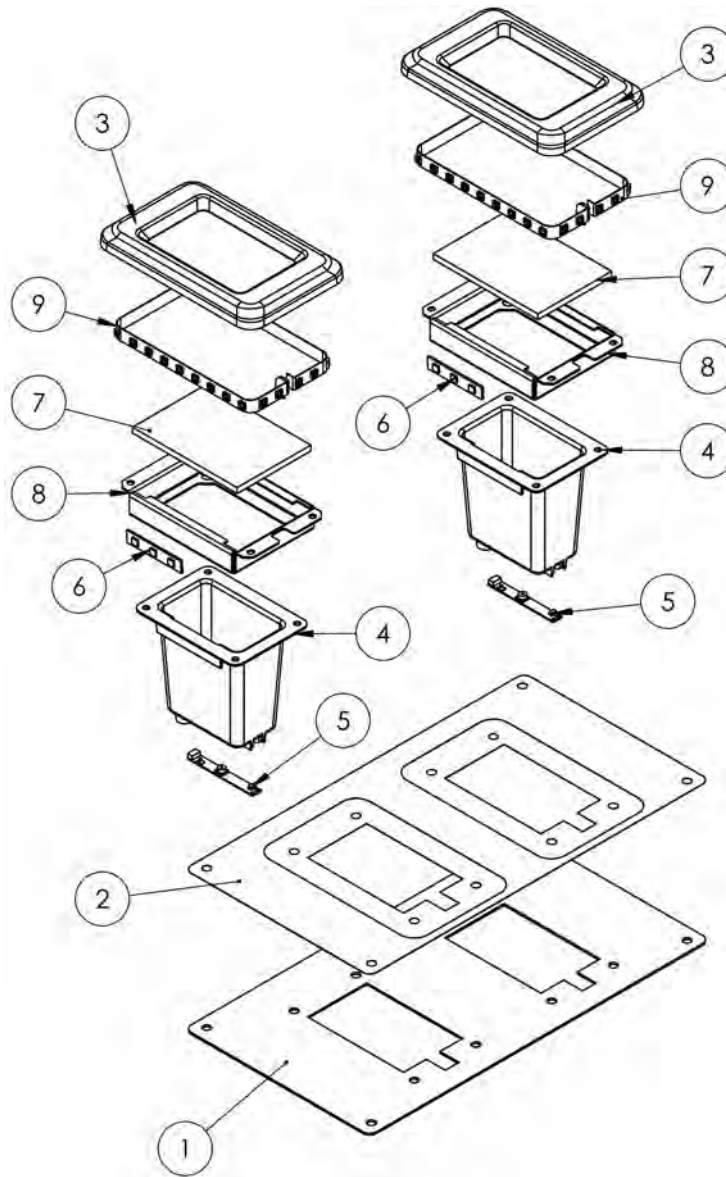


Marquee Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02217-01	BRACKET-BASE-LOGO-MARQUEE-PROJECT-RING	1
2	600-02218-01	BRACKET-SIDE-LOGO-MARQUEE-PROJECT-RING	2
3	600-02219-01	BRACKET-MOUNT-LOGO-MARQUEE-PROJECT-RING	2
4	603-00912-01	COROPLAST-LOGO-LIGHTBOX-PROJECT-RING	1
5	603-00907-01	PETG-LOGO-LIGHTBOX-PROJECT-RING	1
6	600-02220-01	CLIP-LOGO MARQUEE-PROJECT-RING	3
7	606-01456-01	TRANSLITE-LOGO-MARQUEE-PROJECT-RING	1
8	90cm LED Strip (White)	90cm LED Strip (White)	2
9	40CM LED STRIP (WHITE)	40CM LED STRIP (WHITE)	1
10	20CM LED STRIP (WHITE)	20cm Flexible LED Strip (red)	1
11	10cm LED Strip (White)	10cm Flexible LED Strip (White)	1



Phone Scanner Assembly

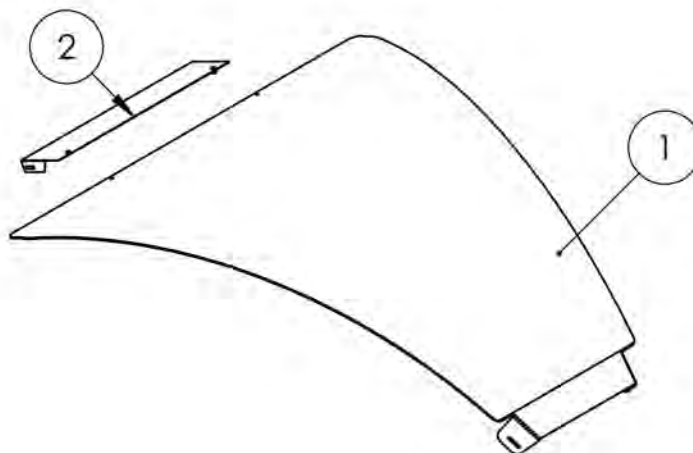


Phone Scanner Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02202-01	PLATE-SCANNER-PROJECT-RING	1
2	606-01503-01	DECAL-SCANNER-PLATE-PROJECT-RING	1
3	603-00897-01	Card Reader Bezel	2
4	603-00924-01	Camera Holder – IN BLACK	2
5	500-00213-01	Card Reader Webcam (10CM focus) – CM-020-10CM	2
6	500-00162-01 (5 CM)	White Flexible LED Tape, w/ FOAM	2
7	600-02236-01	GLASS-SHIELD-PHONE-SCANNER-BEZEL	2
8	600-02228-01	SPCAER-SCANNER-PROJECT-RING	2
9	40CM LED STRIP (RGB)	40CM-RBG-LED-STRIP-PHONE-SCANNER	2

Super Deluxe Service Manual

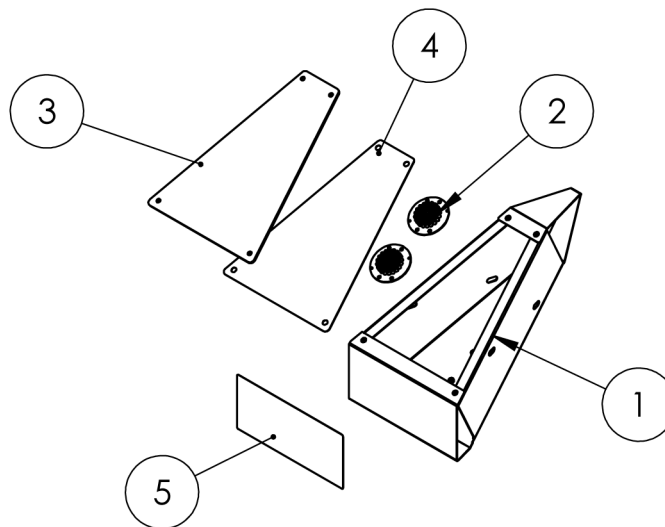
Ceiling Assembly



Ceiling Assembly Part Numbers

Item	Part No.	Description	QTY
1	603-00916-01	COROPLAST-CEILING-PROJECT-RING	1
2	600-02231-01	BRACKET-CEILING-PROJECT-RING	1

Triangular Light Box Assembly

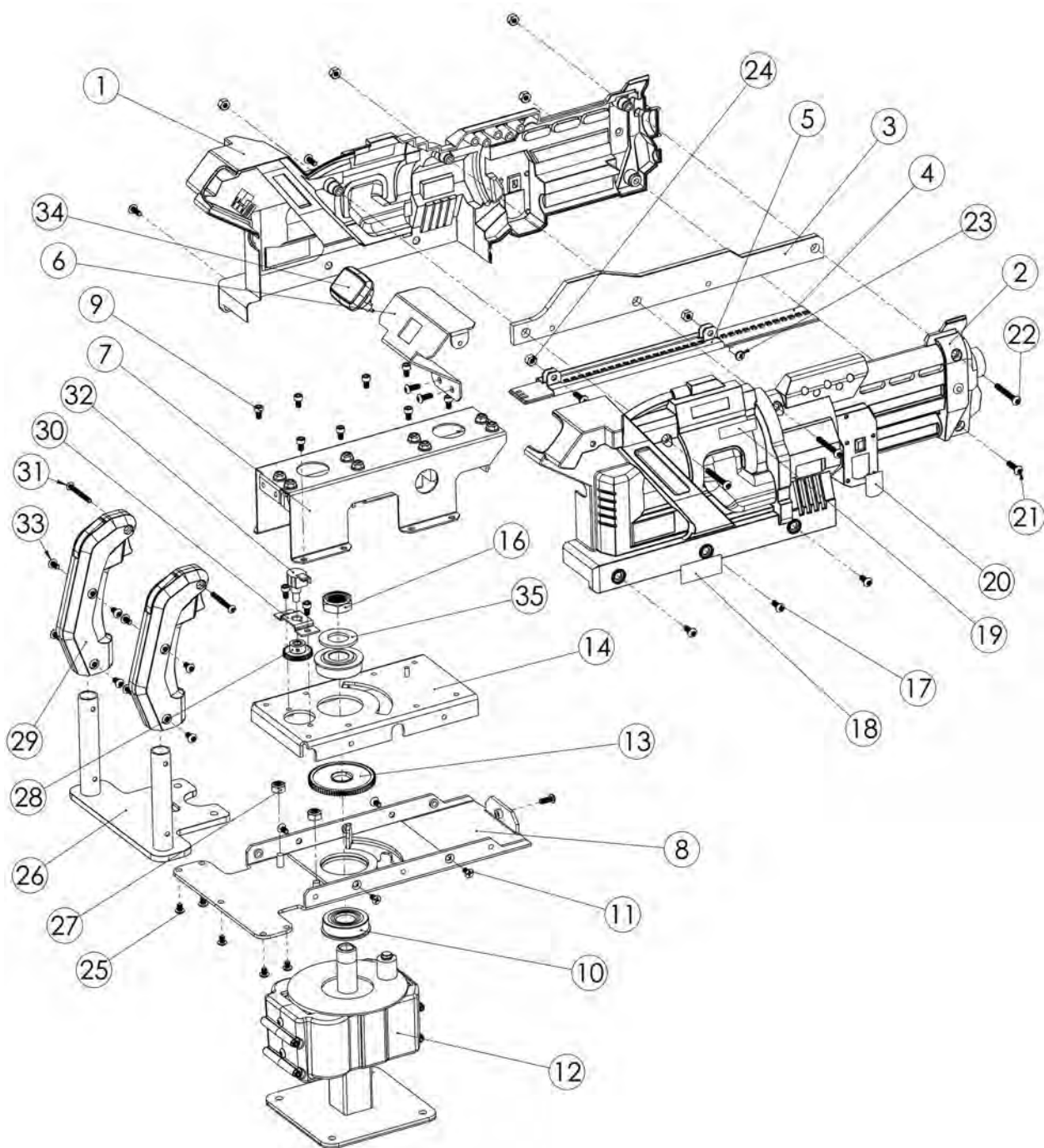


Triangular Light Box Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02216-01	LIGHTBOX-TRIANGULAR-PROJECT-RING	1
2	500-00205-01	White LED Superpuck PCB-36LEDS	2
3	603-00908-01	PETG-TRIANGULAR-LIGHTBOX-PROJECT-RING	1
4	606-01464-01	TRANLITE-CENTER-BASE-PROJECT-RING	1
5	606-01451-01	DECAL-CENTER-BASE-HALO	1



Halo Gun Main Assembly



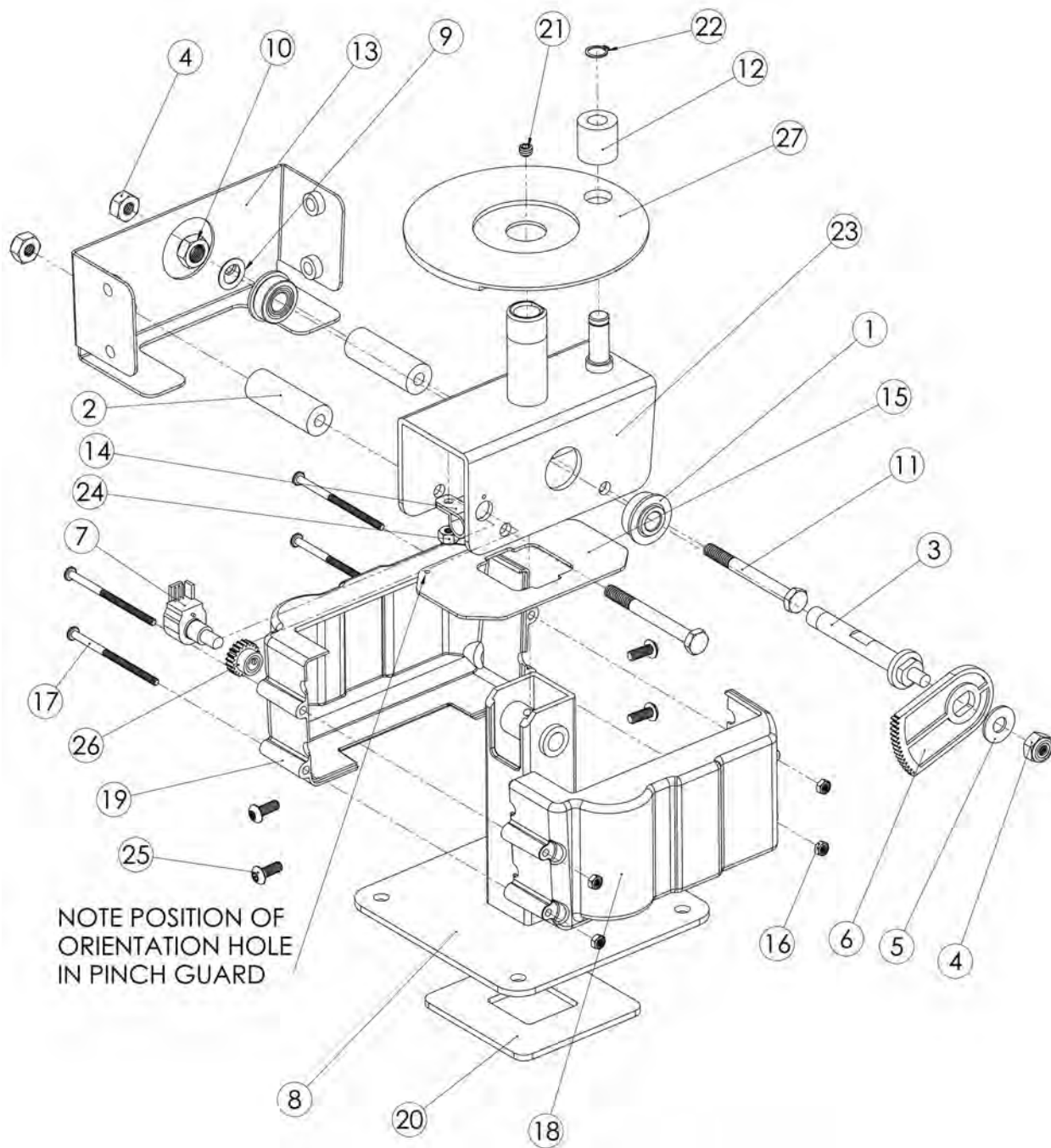
Super Deluxe Service Manual

Halo Gun Main Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02160-01	LEFT GUN SHELL	1
2	600-02161-01	RIGHT GUN SHELL	1
3	600-02162-01	GUN EDGE GLOW	1
4	500-00240-01	GUN PCB	1
5	600-02167-01	PCB MOUNTING BRACKET	1
6	600-02166-01	GRIP TOP BRACKET	1
7	SHAKER ASSEMBLY	SHAKER ASSEMBLY	1
8	600-02163-01	LOWER BASE BRACKET WELDMENT	1
9	MMC 91251A337	10-32 X 5/16" CAP SCREW	10
10	MMC 6384K369	3/4" FLANGED BEARING	2
11	MMC 90273A827	10-32 X 3/8" FLATHEAD SCREW	4
12	LOWER GUN ASSEMBLY	LOWER GUN ASSEMBLY	1
13	600-01420-01	LARGE GEAR	1
14	600-02164-01	UPPER BASE BRACKET	1
16	MMC 91342A240	3/4" LOCKNUT	1
17	MMC 91355A077	10-32 X 1/2" BLACK TP SCREW	9
18	606-01498-01	DECAL-LABEL	2
19	606-01496-01	DECAL-TOP	2
20	606-01497-01	DECAL-SIDE	2
21	MMC 96075A191	10-32 X 3/4" BLACK TP SCREW	1
22	MMC 96075A203	10-32 X 1.5" BLACK TP SCREW	3
23	MMC 90272A830	10-32 X 5/8" BLACK TP SCREW	2
24	MMC 90631A411	10-32 BLACK LOCKNUT	6
25	MMC 96075A182	10-32 X 1/4" BLACK TP SCREW	5
26	600-02171-01	GRIP MOUNT WELDMENT	1
27	MMC 90652A029	1/4-20 THIN LOCKNUT	2
28	600-02174-01	34 TOOTH SMALL GEAR	1
29	GRIP ASSEMBLY	GRIP ASSEMBLY	2
30	600-02172-01	POT BRACKET	1
31	MMC 96075A155	8-32 X 1.5" BLACK TP SCREW	2
32	HAPP 50-2670-01	POT - 5K	1
33	MMC 96075A183	10-32 X 3/8" TP BLACK SCREWS	8
34	702-00091-01	LIGHTED RECT. BUTTON	1
35	MMC 90126A036	3/4" WASHER	1



Lower Gun Assembly



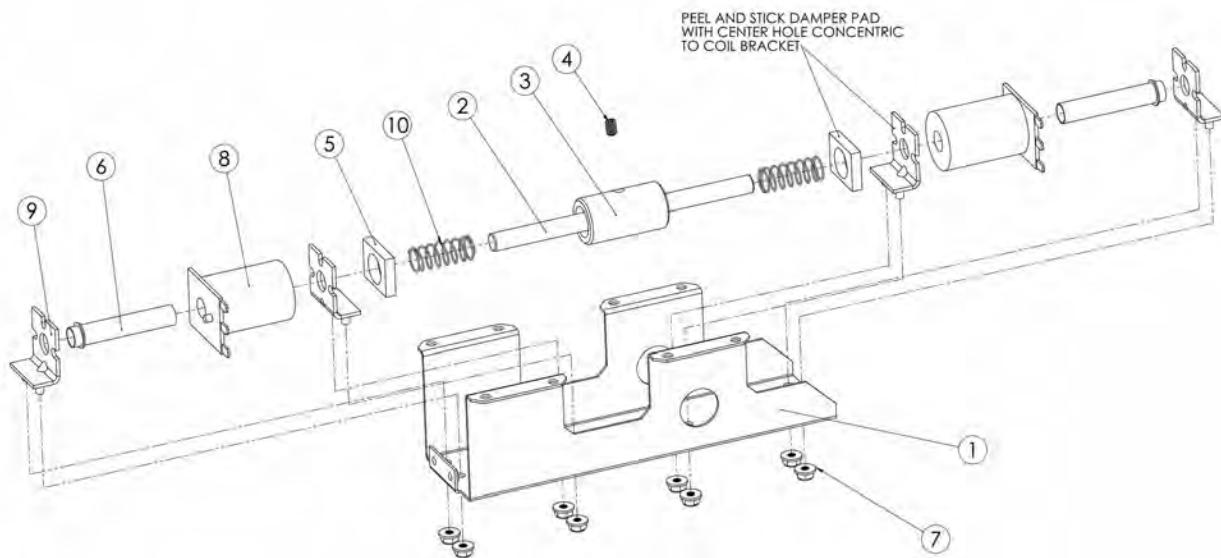
Super Deluxe Service Manual

Lower Gun Assembly Part Numbers

Item	Part No.	Description	QTY
1	MMC 6384k344	3/8" FLANGED BEARING	2
2	600-01418-01	TUBE STOP BUMPER – 5/8" OD	2
3	600-01424-01	SIDE PIN	1
4	MMC 90652A029	1/4-20 THIN LOCKNUT	3
5	MMC 90108A413	1/4-20 WASHER	1
6	HAPP 96-4907-00	SEGMENT GEAR	1
7	HAPP 50-2670-01	POT – 5K	1
8	600-01426-01	LOWER TUBE WELDMENT	1
9	MMC 95229A480	3/8" WASHER	1
10	MMC 90566A220	3/8" THIN LOCKNUT	1
11	MMC 91257A552	1/4-20 X 2 ½ HEX HEAD – GRADE 8	2
12	600-02173-01	SIDE STOP BUMPER – 3/4" OD	1
13	600-01496-01	LOWER MOUNTING BRACKET	1
14		CABLE CLAMP	1
15	600-01419-01	PINCH GUARD	1
16	999-00021-01	6-32 BLACK LOCKNUT	4
17	999-00017-01	6-32 X 2.4" BLACK PHILLIPS SCREW	4
18	600-01739-01	LOWER COVER – RIGHT	1
19	600-01738-01	LOWER COVER – LEFT	1
20	600-01577-01	GUN ISOLATOR	1
21	MMC 92313A532	1/4-20 X 3/16" SET SCREW	1
22	MMC 97633A170	RETAINER CLIP	1
23	600-02169-01	ROCKER BRACKET WELDMENT	1
24	MMC 90631A009	8-32 LOCKNUT	1
25	MMC 96075A211	1/4-20 X 1/2" BLACK TP SCREW	4
26	600-01567-01	SMALL POT GEAR	1
27	600-02170-01	ROTATIONAL PINCH GUARD	1



Shaker Assembly

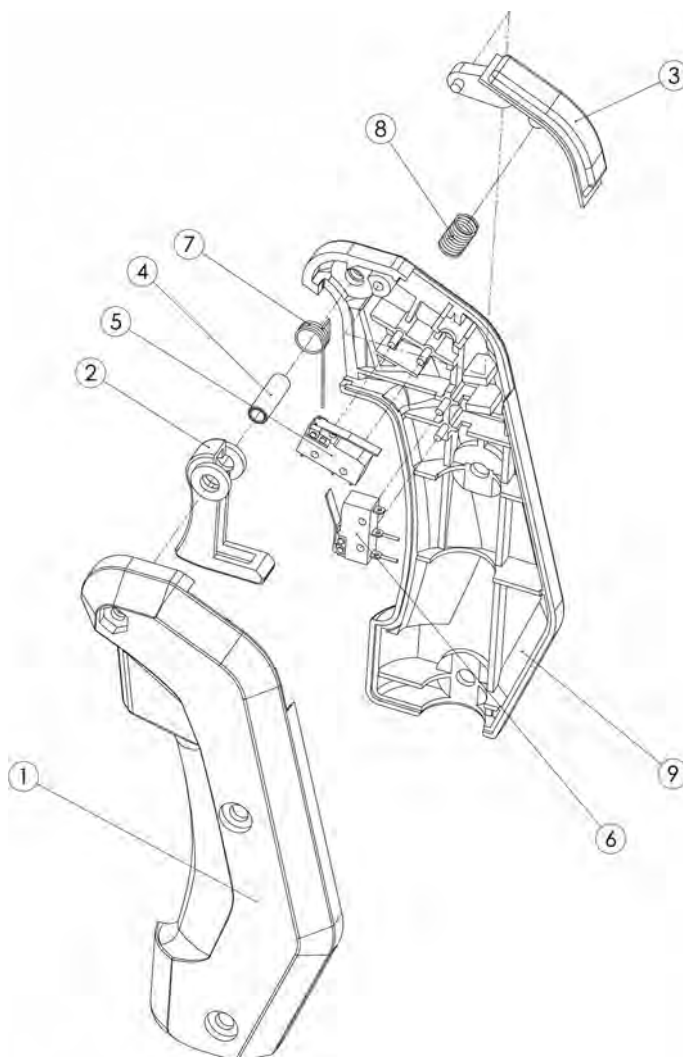


Shaker Assembly Part Numbers

Item	Part No.	Description	QTY
1	600-02165-01	COIL BRACKET	1
2	600-01413-01	COIL ROD	1
3	600-01414-01	COIL WEIGHT	1
4	MMC 91375A535	1/4-20 X 3/8" SET SCREW	1
5	680-00214-01	BLUE DAMPER PAD	2
6	HAPP #95-0637-00	COIL SLEEVE	2
7	MMC 93298A109	10-32 FLANGED LOCKNUT	8
8	HAPP FL11629	COIL	2
9	600-01576-01	COIL MOUNT BRACKET	4
10	608-00210-01	COIL SPRING	2

Super Deluxe Service Manual

Grip Assembly

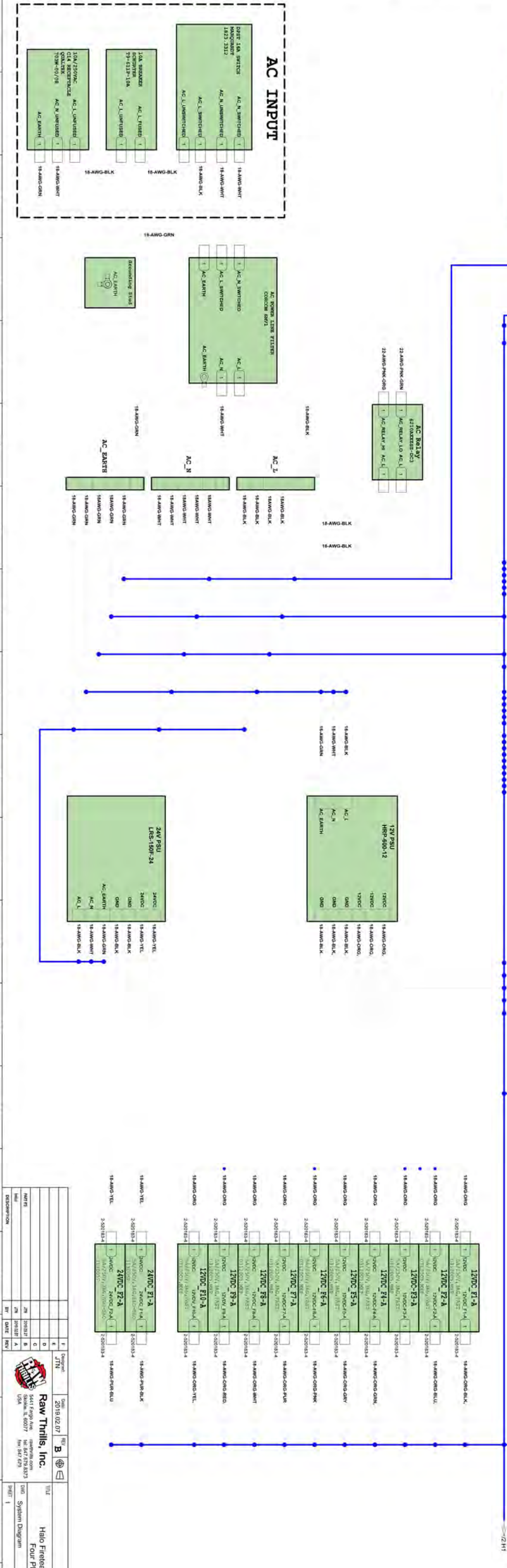
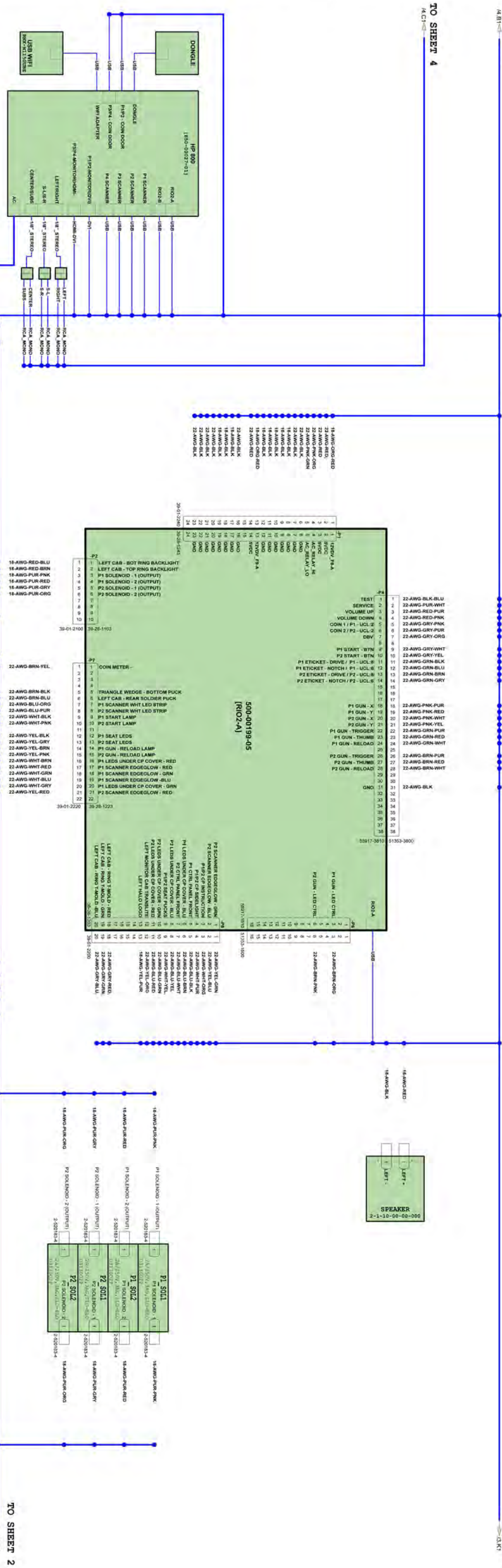


Grip Assembly Part Numbers

Item	Part No.	Happ No.	Description	QTY
1	608-00201-01	95-1294-00	GRIP-LEFT HALF	1
2	608-00204-01	95-1295-00	RED TRIGGER	1
3	608-00203-01	95-1439-00	LARGE TUMB 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 SHAFT TRIGGER	1
7	608-00206-01	95-1297-00	TORSION SPRING	1
8	608-00207-01	95-1298-00	COMPRESSION SPRING	1
9	608-00202-01	95-1293-00	GRIP-RIGHT HALF	1

System Diagrams

TO SHEET 4
TO SHEET 3



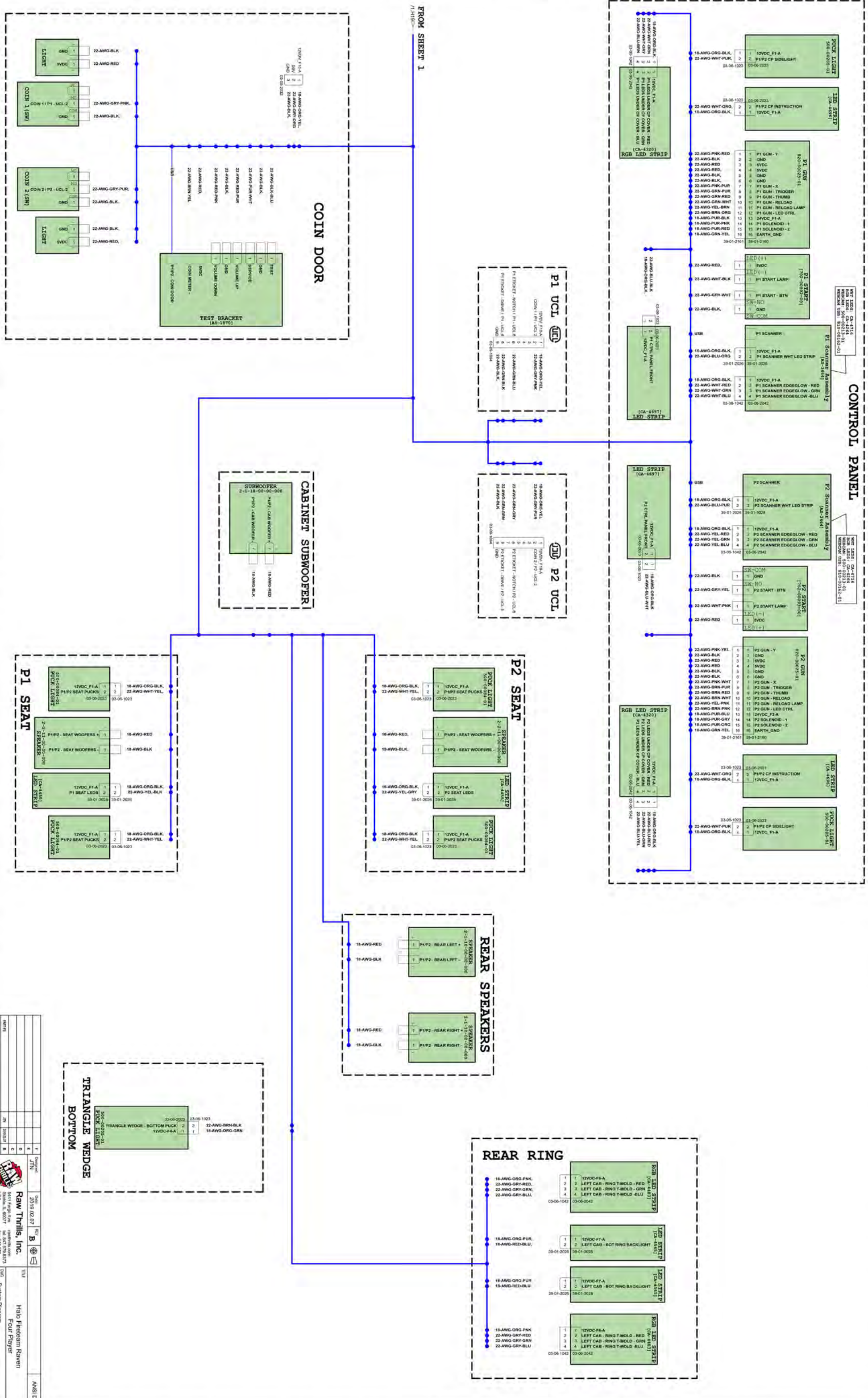
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NO.	DESCRIPTION	REV.	DATE	BY	CHKD.	APP.
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3	REVISED	3	11/11/09	SK	SK	SK
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5	REVISED	5	11/11/09	SK	SK	SK
6	REVISED	6	11/11/09	SK	SK	SK
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19	REVISED	19	11/11/09	SK	SK	SK
20	REVISED	20	11/11/09	SK	SK	SK

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www.rawthrills.com

Halo Fireteam Raven
Four Player
System Diagram

ANSI D

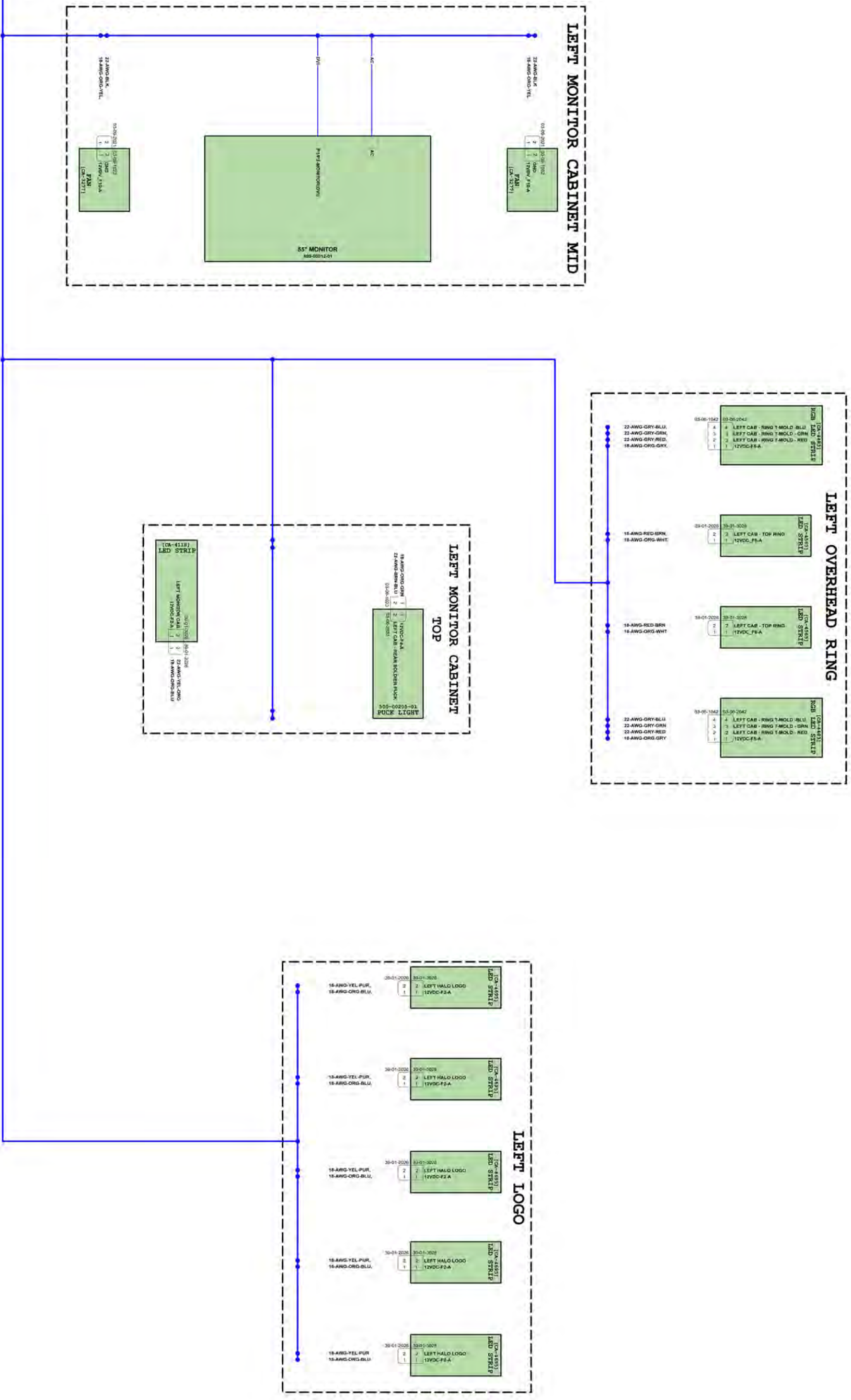


REV	DATE	BY	CHK	APP	DESCRIPTION
1	03-06-2023	JTN			Initial Release
2	03-06-2023	JTN			Initial Release
3	03-06-2023	JTN			Initial Release
4	03-06-2023	JTN			Initial Release
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6	03-06-2023	JTN			Initial Release
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14	03-06-2023	JTN			Initial Release
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16	03-06-2023	JTN			Initial Release
17	03-06-2023	JTN			Initial Release
18	03-06-2023	JTN			Initial Release
19	03-06-2023	JTN			Initial Release
20	03-06-2023	JTN			Initial Release

Raw Thrills, Inc.
 5411 Fargo Ave.
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 www.rawthrills.com

Halo Fireteam Raven
 Four Player
 System Diagram
 SHEET 2 OF 6





FROM SHEET 1
11 8191

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1		JTN			RAW THILLS, INC.
2		JTN			RAW THILLS, INC.
3		JTN			RAW THILLS, INC.
4		JTN			RAW THILLS, INC.
5		JTN			RAW THILLS, INC.

Raw Thrills, Inc.
 5441 Fargo Ave. | www.rawthrills.com
 Skokie, IL 60077 | 847.479.3377
 USA | 847.479.3377

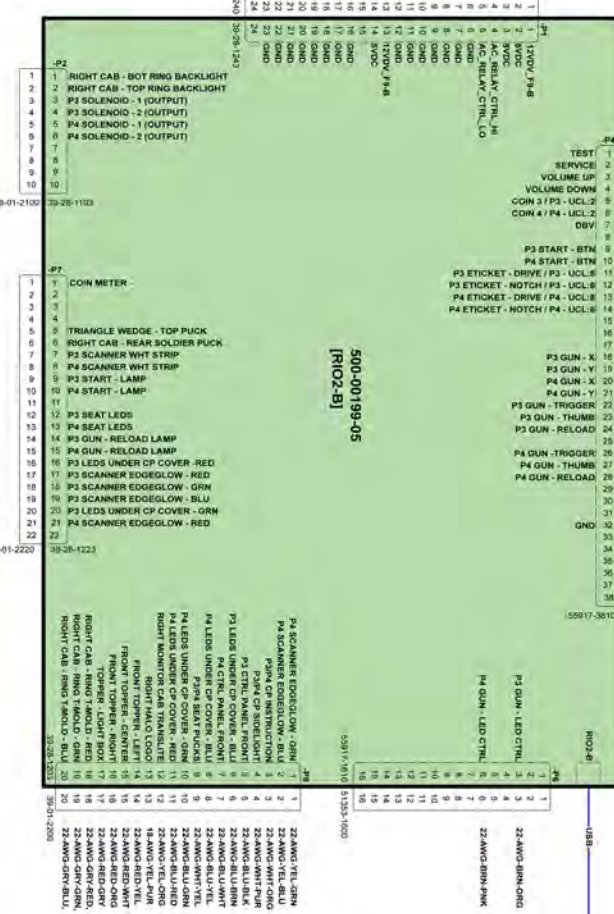
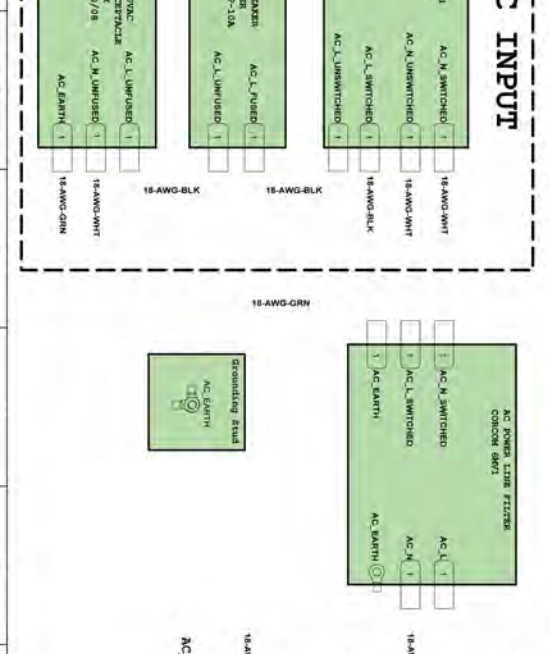
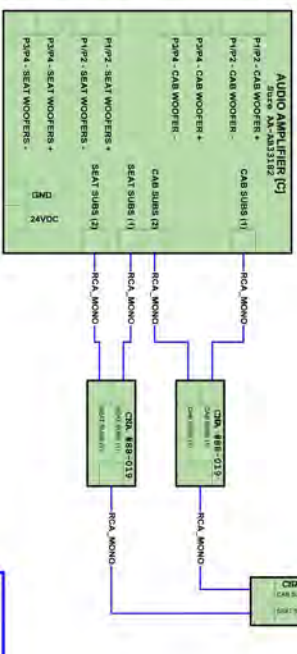
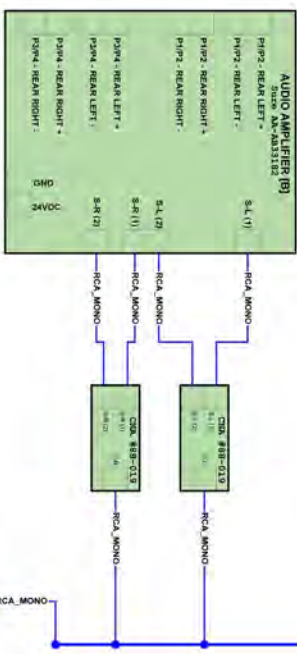
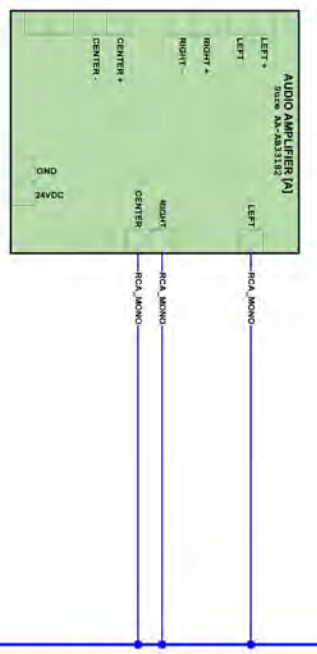
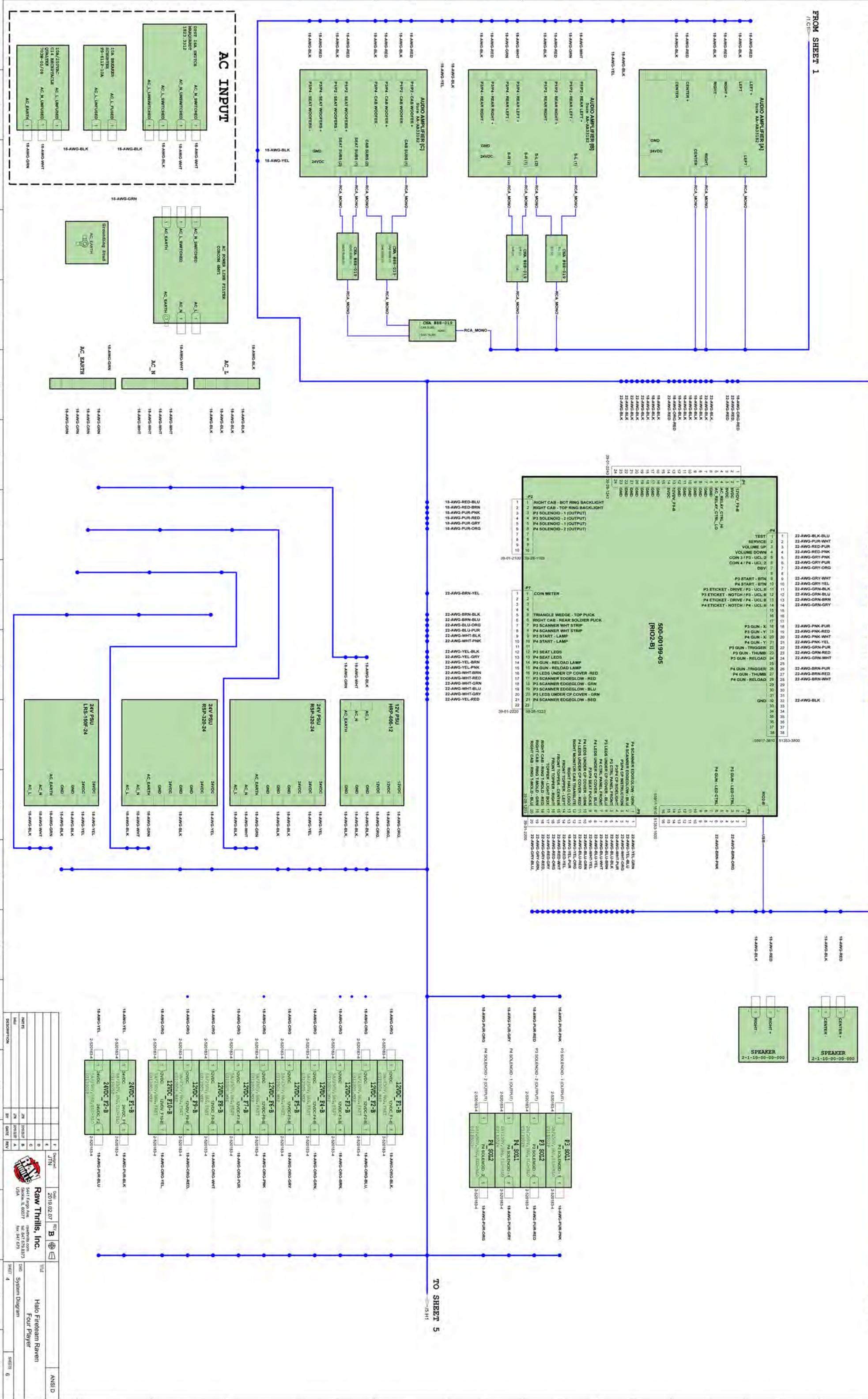
Halo Firestorm Raven
 Four Player
 System Diagram

ANSI D

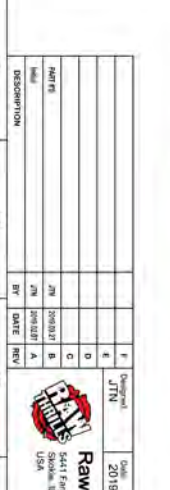
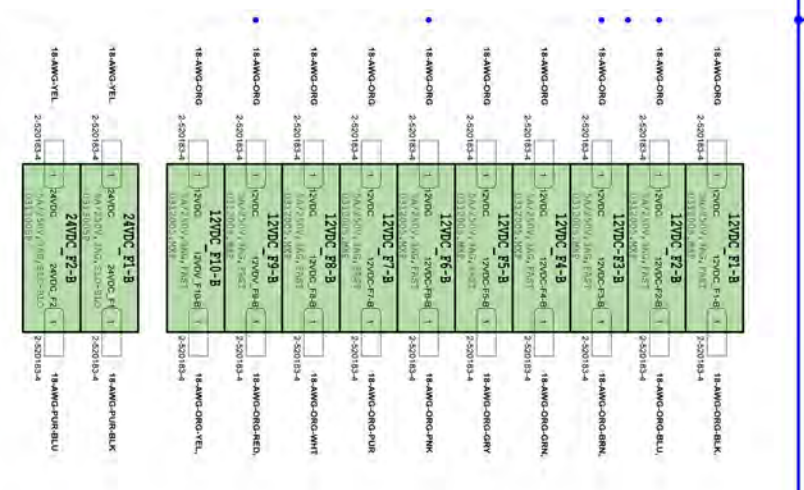
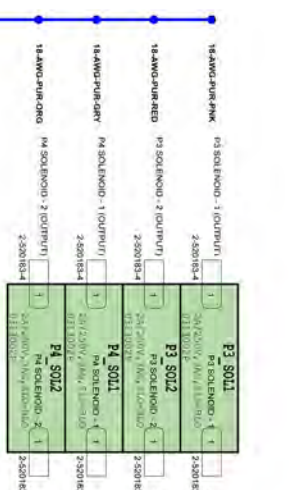
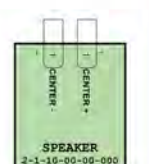
FROM SHEET 1
11 8191

FROM SHEET 1

1/C1C



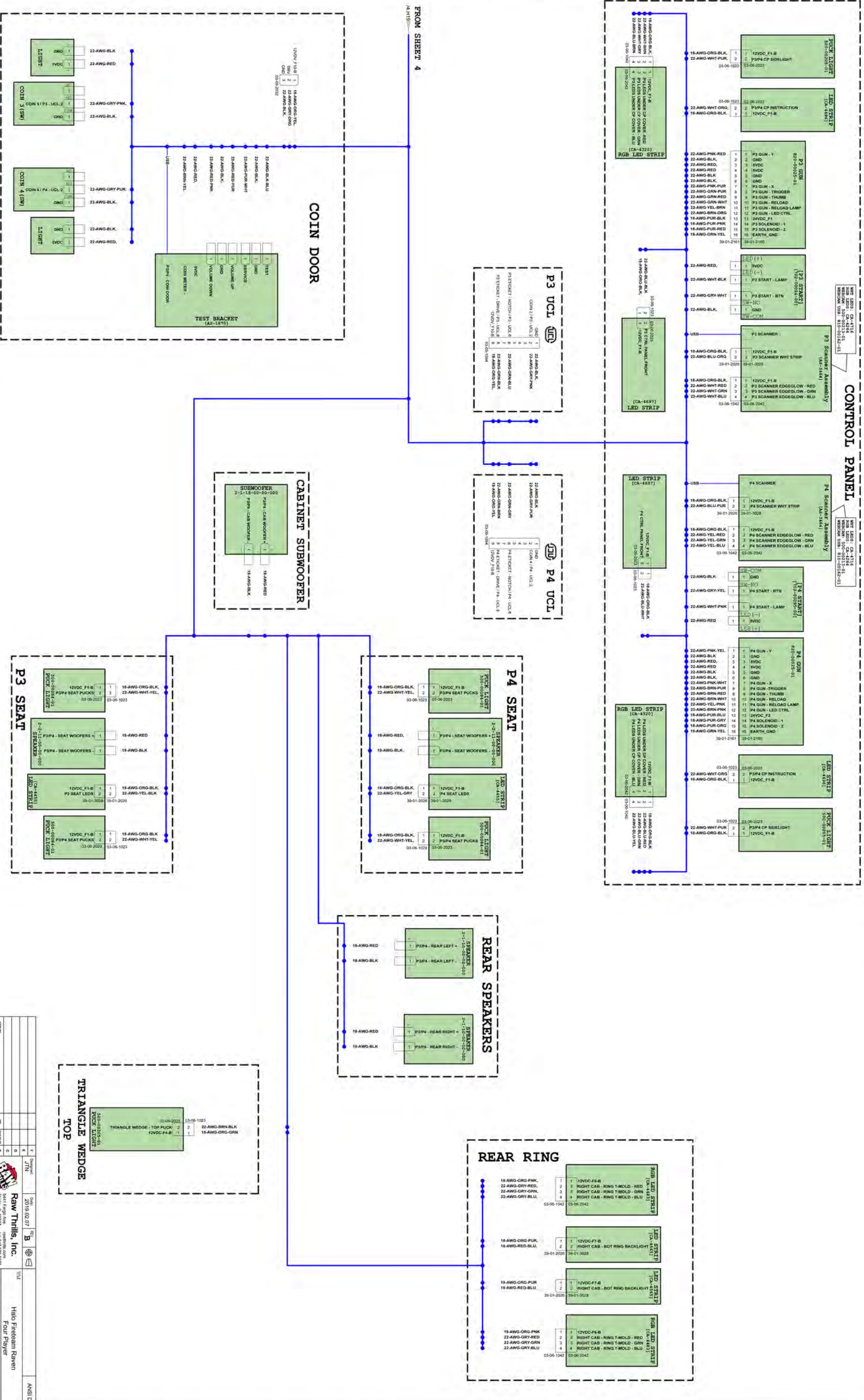
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- 22-AWG-PUR-WHT
- 22-AWG-RED-PUR
- 22-AWG-GRY-PNK
- 22-AWG-GRY-PUR
- 22-AWG-GRY-ORG
- 22-AWG-GRY-WHT
- 22-AWG-GRY-YEL
- 22-AWG-GRN-BLK
- 22-AWG-GRN-BLU
- 22-AWG-GRN-BRN
- 22-AWG-GRN-GRY
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- 22-AWG-BRN-WHT
- 22-AWG-BLK



REV	DATE	BY	CHK	DESCRIPTION
1	2019.02.07	JTN	B	
2				
3				
4				

Raw Thrills, Inc.
5411 Femp Ave.
Shoals, IL 62677
USA

Halo Fireteam Raven
Four Player
System Diagram



FROM SHEET 4
1/4 H191

CONTROL PANEL

WRT LEOS: CA-4114
WRT LEOS: CA-4244
WRT LEOS: CA-4344
WRT LEOS: CA-4444
WRT LEOS: CA-4544
WRT LEOS: CA-4644
WRT LEOS: CA-4744
WRT LEOS: CA-4844
WRT LEOS: CA-4944
WRT LEOS: CA-5044
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WRT LEOS: CA-9644
WRT LEOS: CA-9744
WRT LEOS: CA-9844
WRT LEOS: CA-9944
WRT LEOS: CA-10044

P3 SEAT

12VDC F1-B
P3P4 SEAT PUCKS
P3P4 SEAT WOOFERS
P3P4 SEAT WOOFERS
P3 SEAT LEDS
P3 SEAT LEDS
P3P4 SEAT PUCKS
P3P4 SEAT PUCKS
P3P4 SEAT PUCKS
P3P4 SEAT PUCKS

P4 SEAT

12VDC F1-B
P3P4 SEAT PUCKS
P3P4 SEAT WOOFERS
P3P4 SEAT WOOFERS
12VDC F1-B
P4 SEAT LEDS
12VDC F1-B
P3P4 SEAT PUCKS
12VDC F1-B
P3P4 SEAT PUCKS

REAR SPEAKERS

P3P4 - REAR LEFT
P3P4 - REAR LEFT
P3P4 - REAR RIGHT
P3P4 - REAR RIGHT

REAR RING

12VDC F1-B
RIGHT CAB - RING T-MOLD - RED
RIGHT CAB - RING T-MOLD - GRN
RIGHT CAB - RING T-MOLD - BLU
12VDC F1-B
RIGHT CAB - BOT RING BACKLIGHT
12VDC F1-B
RIGHT CAB - BOT RING BACKLIGHT
12VDC F1-B
RIGHT CAB - RING T-MOLD - RED
RIGHT CAB - RING T-MOLD - GRN
RIGHT CAB - RING T-MOLD - BLU

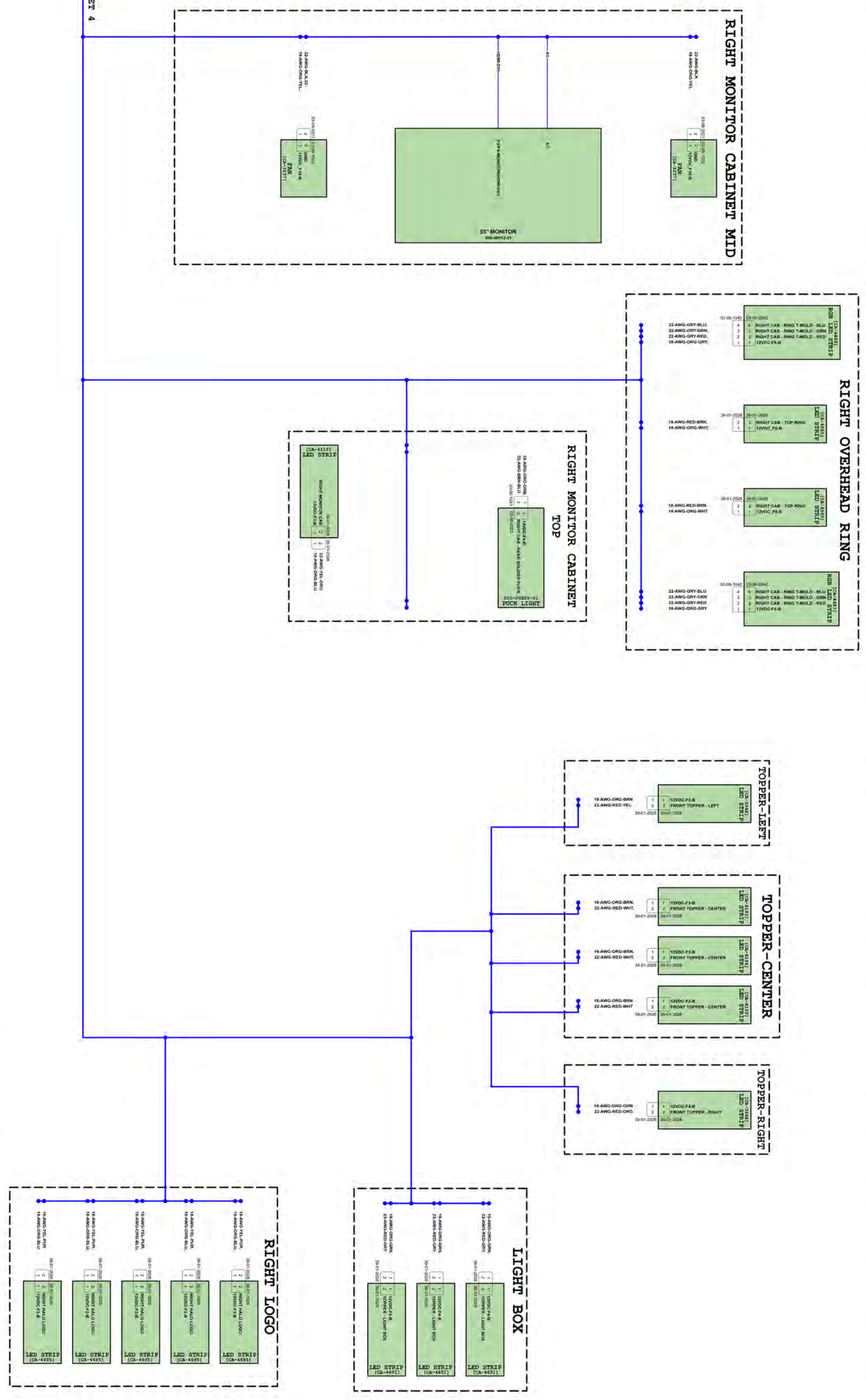
TRIANGLE WEDGE TOP

TRIANGLE WEDGE - TOP PUCK
12VDC F1-B

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1		JTN			Initial Release
2	2019.02.07	JTN			Revised for production

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Halo Fireteam Raven
 Four Player
 System Diagram
 SHEET 5 OF 6



FROM SHEET 4
A/B191

REVISION	BY	DATE	REV

Raw Thrills, Inc.
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 USA

Halo Fireteam Raven
 Four Player
 System Diagram
 SHEET 6

ANSID
 2019.02.07
 JTN

CA-4686

CA-4304

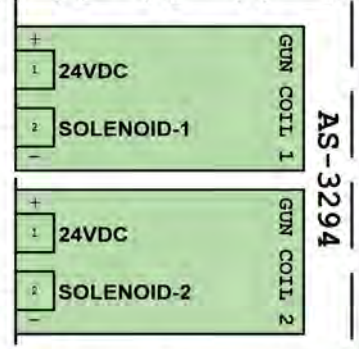
18-AWG-BLU
18-AWG-BRN
18-AWG-YEL

1	1
2	2
3	3

18-AWG-BLU
18-AWG-BRN
18-AWG-YEL

39-01-4032 39-01-4030

18-AWG-YEL
18-AWG-BLU
18-AWG-YEL
18-AWG-BRN



CA-4303

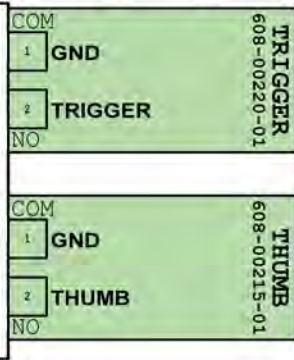
22-AWG-GRY
22-AWG-BLK-PNK
22-AWG-GRN

1	1
2	2
3	3
4	4

22-AWG-PNK
22-AWG-GRY
22-AWG-GRN

03-06-2042 03-06-1044

22-AWG-GRN
22-AWG-PNK
22-AWG-GRN
22-AWG-GRY



CA-4303

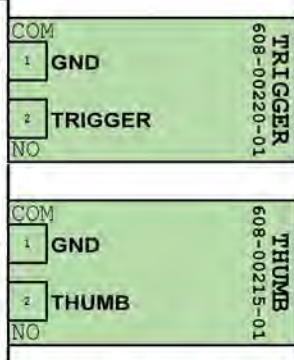
22-AWG-GRY
22-AWG-BLK-PNK
22-AWG-GRN

1	1
2	2
3	3
4	4

22-AWG-PNK
22-AWG-GRY
22-AWG-GRN

03-06-2042 03-06-1044

22-AWG-GRN
22-AWG-PNK
22-AWG-GRN
22-AWG-GRY



CA-4688

CA-4687

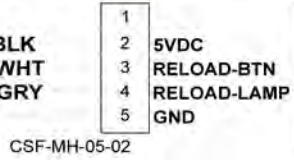
22-AWG-BLK
22-AWG-GRY-WHT
22-AWG-RED-BLK
22-AWG-WHT-GRY
22-AWG-ORG-WHT

1	1
2	2
3	3
4	4
5	5
6	6

22-AWG-BLK
22-AWG-GRY-WHT
22-AWG-RED-BLK
22-AWG-WHT-GRY
22-AWG-ORG-WHT

39-01-2061 39-01-2060

22-AWG-RED-BLK
22-AWG-ORG-WHT
22-AWG-WHT-GRY
22-AWG-BLK



22-AWG-RED-BLK
22-AWG-GRY-WHT
22-AWG-BLK



03-06-1032

CA-4898

22-AWG-RED
22-AWG-WHT
22-AWG-BLK

1	1
2	2
3	3

5VDC X-SIGNAL GND

3-640440-3

X POT [PART NO]

22-AWG-RED
22-AWG-PUR
22-AWG-BLK

1	1
2	2
3	3

5VDC Y-SIGNAL GND

3-640440-3

Y POT [PART NO]

- 1 22-AWG-PUR
 - 2 22-AWG-GRN,
 - 3 22-AWG-RED-BLK
 - 4 22-AWG-RED,
 - 5 22-AWG-BLK
 - 6 22-AWG-BLK,
 - 7 22-AWG-WHT
 - 8 22-AWG-GRY,
 - 9 22-AWG-BLK-PNK,
 - 10 22-AWG-ORG-WHT
 - 11 22-AWG-WHT-GRY
 - 12 22-AWG-GRY-WHT
 - 13 18-AWG-YEL
 - 14 18-AWG-BLU
 - 15 18-AWG-BRN
 - 16 18-AWG-GRN-YEL
- 39-01-2160

DESCRIPTION	INITIAL	BY	DATE	REV	F	E	D	C	B	A
	JTN	JTN	2019/04/03	A						

Designed: JTN
Date: 2019/04/03
REV A

Raw Thrills, Inc.
5441 Fargo Ave.
Skokie, IL 60077
USA
rawthrills.com
Tel: 847.679.8373
Fax: 847.679.

TITLE: HALO GUN: 820-0024-01
ANSI A

DWG SYSTEM DIAGRAM
SHEET 1
SHEETS 1

Super Deluxe Service Manual

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

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