Service Manual

Innovative Concepts in Entertainment

10123 Main Street

Clarence, New York 14031

(716) 759-0360 8:30am to 6:00pm EST

WWW.ICEGAME.COM

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REV E - 10/31/2022

SAFETY AND WARNINGS BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION, OR DAMAGE TO THE ELECTRONICS.

NOTE: THIS GAME IS INTENDED FOR INDOOR USE ONLY.

DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY.

THIS GAME IS DESIGNED TO DISSIPATE STATIC ELECTRICITY THROUGH THE GROUNDING PLANE OF THE GAME. IF THE A.C. GROUND DOES NOT WORK, THE GAME COULD DISCHARGE STATIC ELECTRICITY THROUGH THE GAME CIRCUITRY, WHICH COULD CAUSE DAMAGE.

THE POWER SUPPLY IS NOT VOLTAGE ADJUSTABLE. TO OPERATE THE GAME AT VOLTAGES OTHER THAN THOSE IT WAS DESIGNED FOR. PLEASE CONTACT OUR SERVICE DEPARTMENT FOR VOLTAGE CONVERSION INFORMATION.

WARNING

DO NOT remove any of the components on the main board (e.g. compact flash and eproms) while the game is powered on. This may cause permanent damage to the parts and the main board. Removing any main board component part while powered on will void the warranty.

ALWAYS REMOVE POWER TO THE GAME, BEFORE ATTEMPTING ANY SERVICE,

UNLESS NEEDED FOR SPECIFIC TESTING. FAILURE TO OBSERVE THIS PRECAUTION

COULD RESULT IN SERIOUS INJURY TO YOURSELF OR OTHERS.

THIS GAME IS NOT SUITABLE FOR INSTALLATION IN AN AREA WHERE A WATER JET COULD BE USED.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

AC Power Information

The games main fuse is accessed through the back of the game at the power mod. Above the power cord is a small panel that contains the main fuse.

The value of the fuse for 120 volt users is 8 AMPS at 250Volt type slow blow.

HARDWARE LIST

E08639 HARNESS CLAMP

AA6630 1/4-20 x 4 black Allen

AA6369 - 1/4-20 X 3-1/2 BLACK

AA6299 - 8 X 2 drywall w/nibs black

AA6516: 1/4-20 X 3/4 DOWEL NUT silver

PC60636 1/4-20 X 3 (BLACK)

AA0655 - #8 X 3/4 Square pan head screw

AA6125 1/4-20 X 2-1/2 black

AA6584 1/4-20 X 2 (BLACK)

AA6177 - 8-32 x 1 pan head silver

AA6883 10 X 1-1/2 Silver TORX

AA6281 1/4-20 X 1-1/2 BLACK

PC60622 1/4-20 X 1 (BLACK)

AA6514 - 8 1/2 pan head silver

PC60614 1/4-20 Kept Nut

AA6004 - 8-32 X 1/2

AA6212 1/4 X 3/4 FLAT WASHER BLACK

AA6030 - #8 1-1/4 black drywall screw

AA6966 1/4-20 nylock black nut

AA6185 1/4 x .090 black washer

4

NON-HARDWARE ITEMS INCLUDED WITH PARTS PACK

DB3024 - balls X's 24 (4 boxes with 6 multicolored balls in each box) 18 balls installed in game, and 6 spare balls.

AA6105 Latch tool

GLASS CLEAN
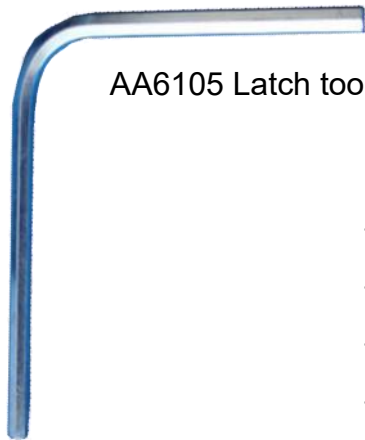
___#2 Phillips BIT (AA6173)

___T-20 TORX BIT (AA6811)

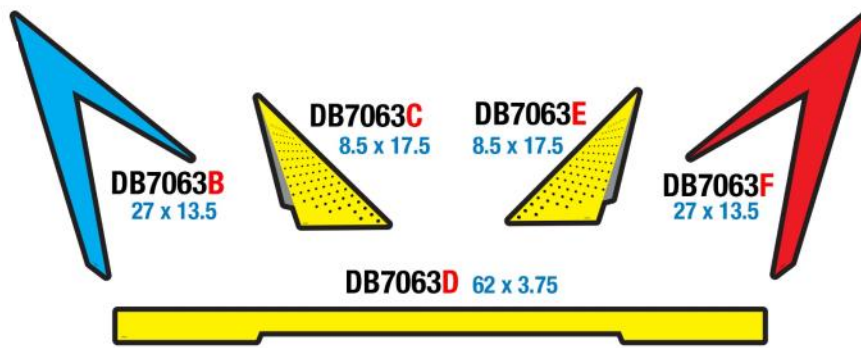___5/32" SECURTITY ALLEN BIT (AA6215)

___#2 SQ DRIVE BIT (PC60615A)

PC60601A
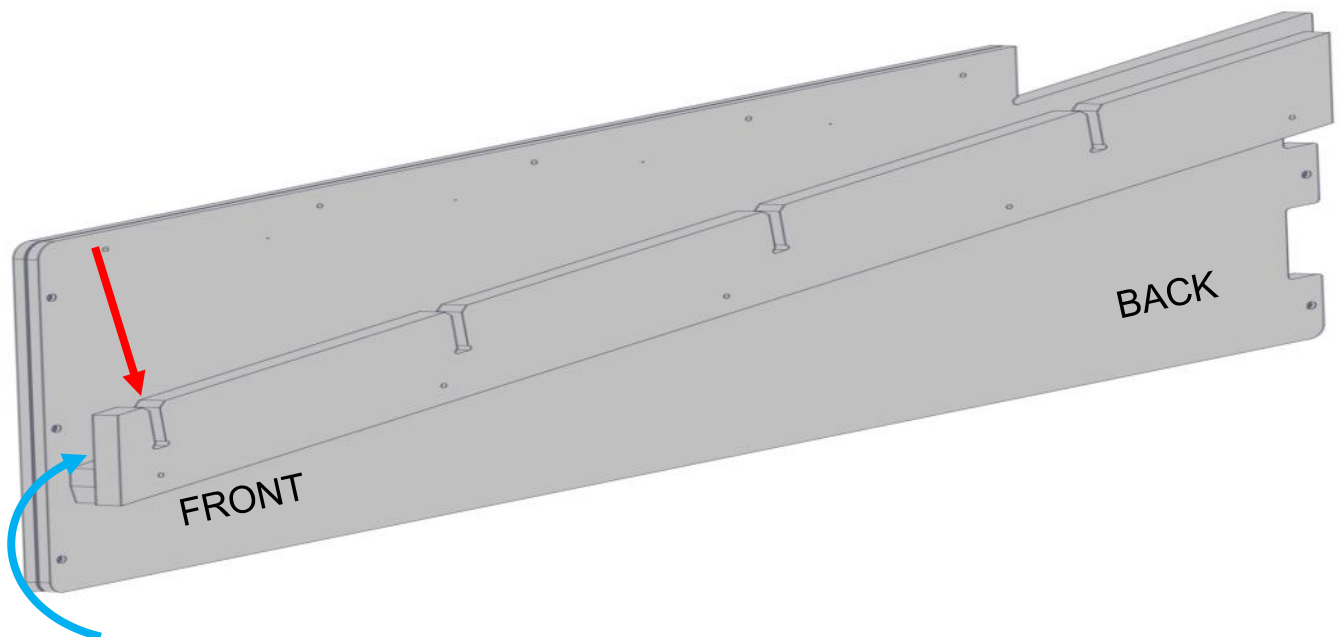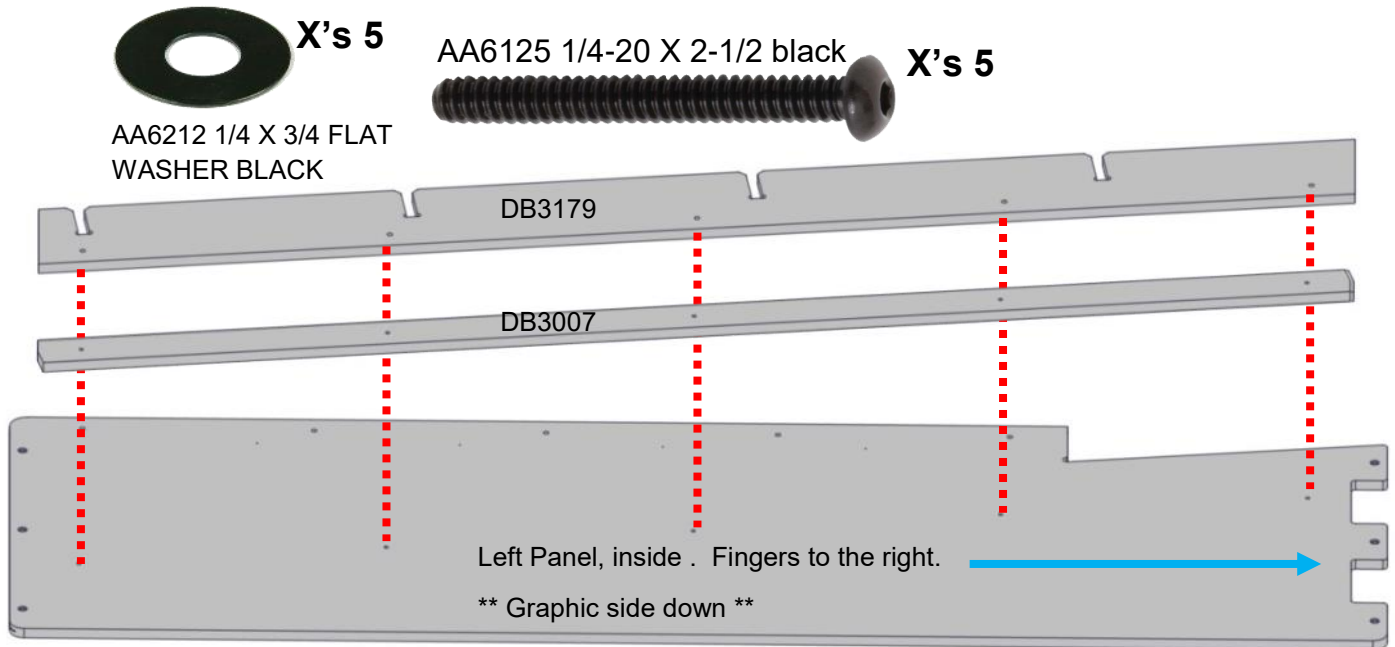5/32 Allen wrench

DB7063A-J
Note - There is no "i"

DB7063B
27 x 13.5

DB7063C
8.5 x 17.5

DB7063E
8.5 x 17.5

DB7063F
27 x 13.5

DB7063D 62 x 3.75

DB7063J
28 x 15.5

DODGEBALL
ULTIMATE ARENA

STEP 1:

Locate the left side panel, DB3007, and DB3179. Lay the left panel, *graphics side down* and fingers to the right. Place the DB3007 inside the left panel. Place the DB3179 on top of the DB3007 with the first slot closest to the left. Attach them to the left side panel using five AA6125 black Allen bolts and AA6212 black washers.

X's 5

AA6125 1/4-20 X 2-1/2 black   **X's 5**

AA6212 1/4 X 3/4 FLAT
WASHER BLACK

DB3179

DB3007

Left Panel, inside . Fingers to the right.

** Graphic side down **

BACK

FRONT

When assembled you should have a slot going all the way across (blue).

First slot must be at the front of the assembly (fingers are the back) (Red).
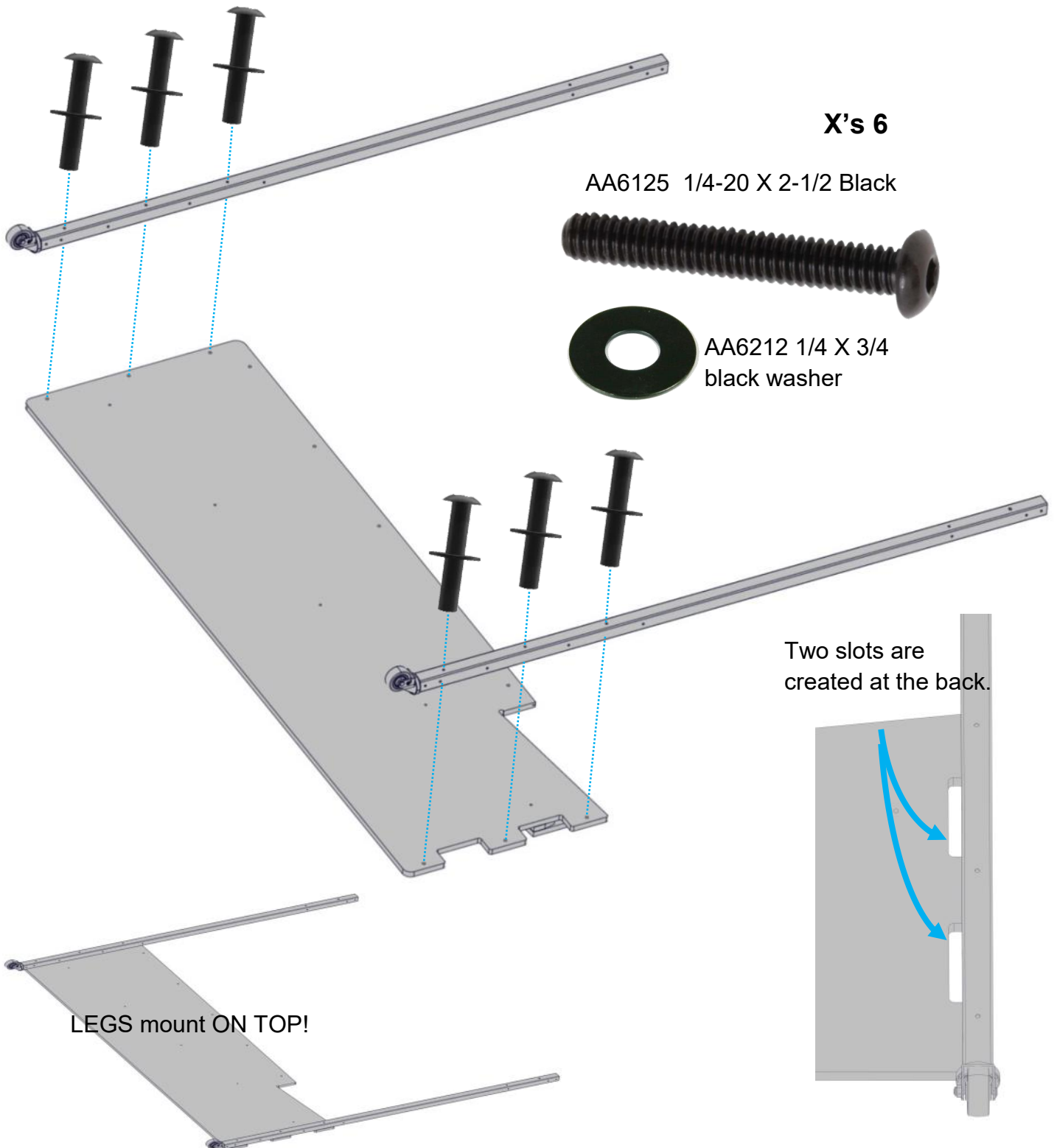
STEP 2:

Locate the right side panel, DB3007, and DB3179. Lay the right panel, *graphics side down* and fingers to the left. Place the DB3007 inside the right panel. Place the DB3179 on top of the DB3007 with the first slot closest to the right. Attach them to the right side panel using five AA6125 black Allen bolts and AA6212 black washers.

X's 5

AA6125 1/4-20 X 2-1/2 black   **X's 5**

AA6212 1/4 X 3/4 FLAT
WASHER BLACK

DB3179

DB3007

Right Panel, inside . Fingers to the right.

** Graphic side down **
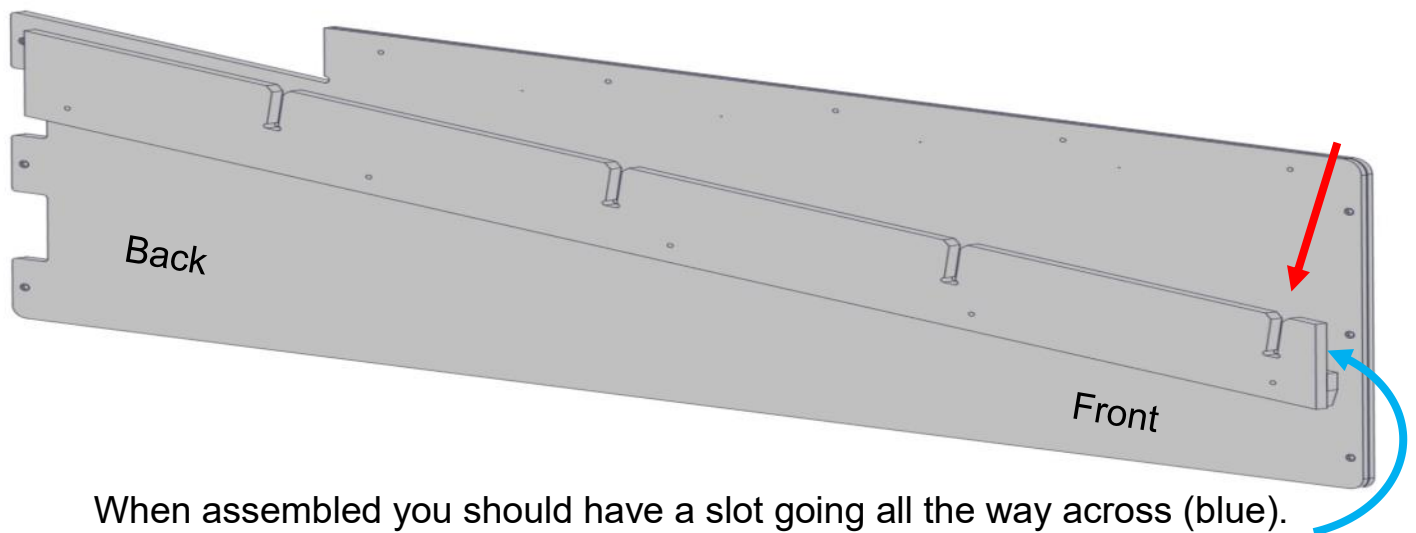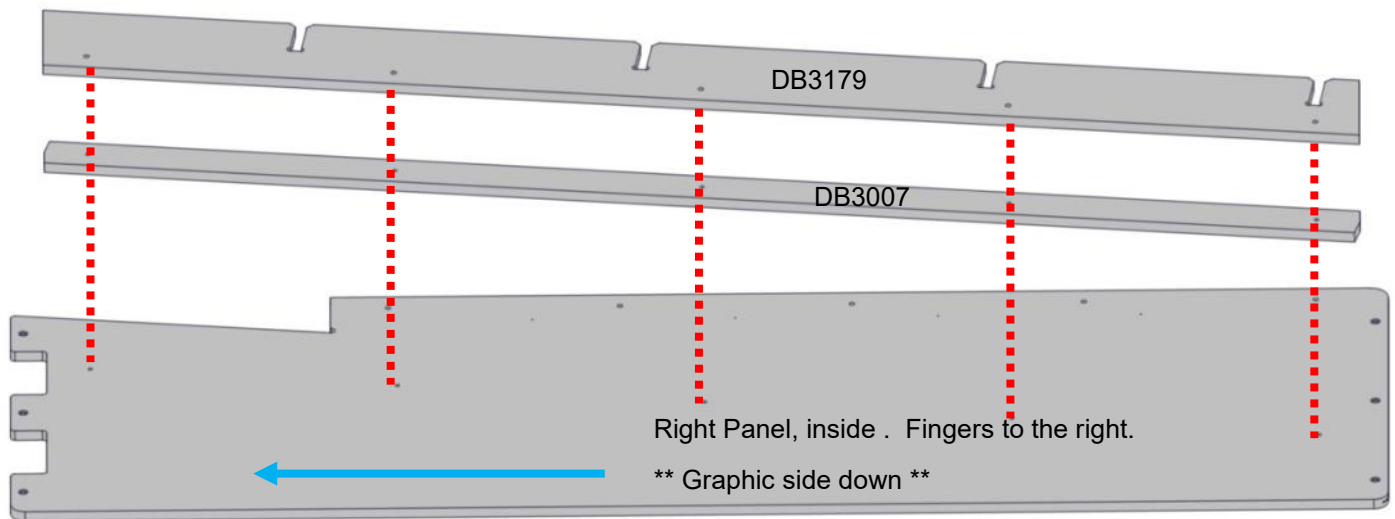
Back

Front

When assembled you should have a slot going all the way across (blue).

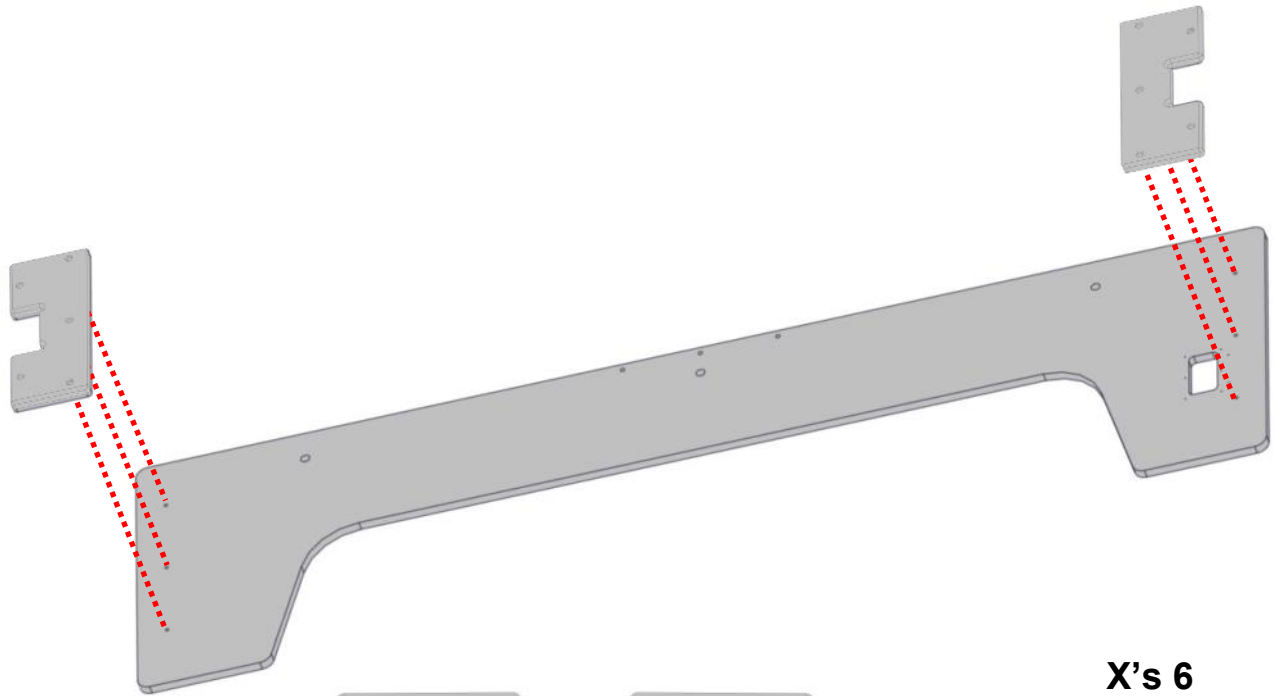First slot must be at the front of the assembly (fingers are the back) (Red).

STEP 3:

Attach two legs to the left side panel, graphics facing up, using three AA6125 Allen bolts and three AA6212 black flat washers on each leg. The legs should be on top of the outside of the panel.

Graphics should be on facing at you. Db3179 & DB3007 should be facing ground.

X's 6

AA6125 1/4-20 X 2-1/2 Black

AA6212 1/4 X 3/4 black washer

LEGS mount ON TOP!

Two slots are created at the back.
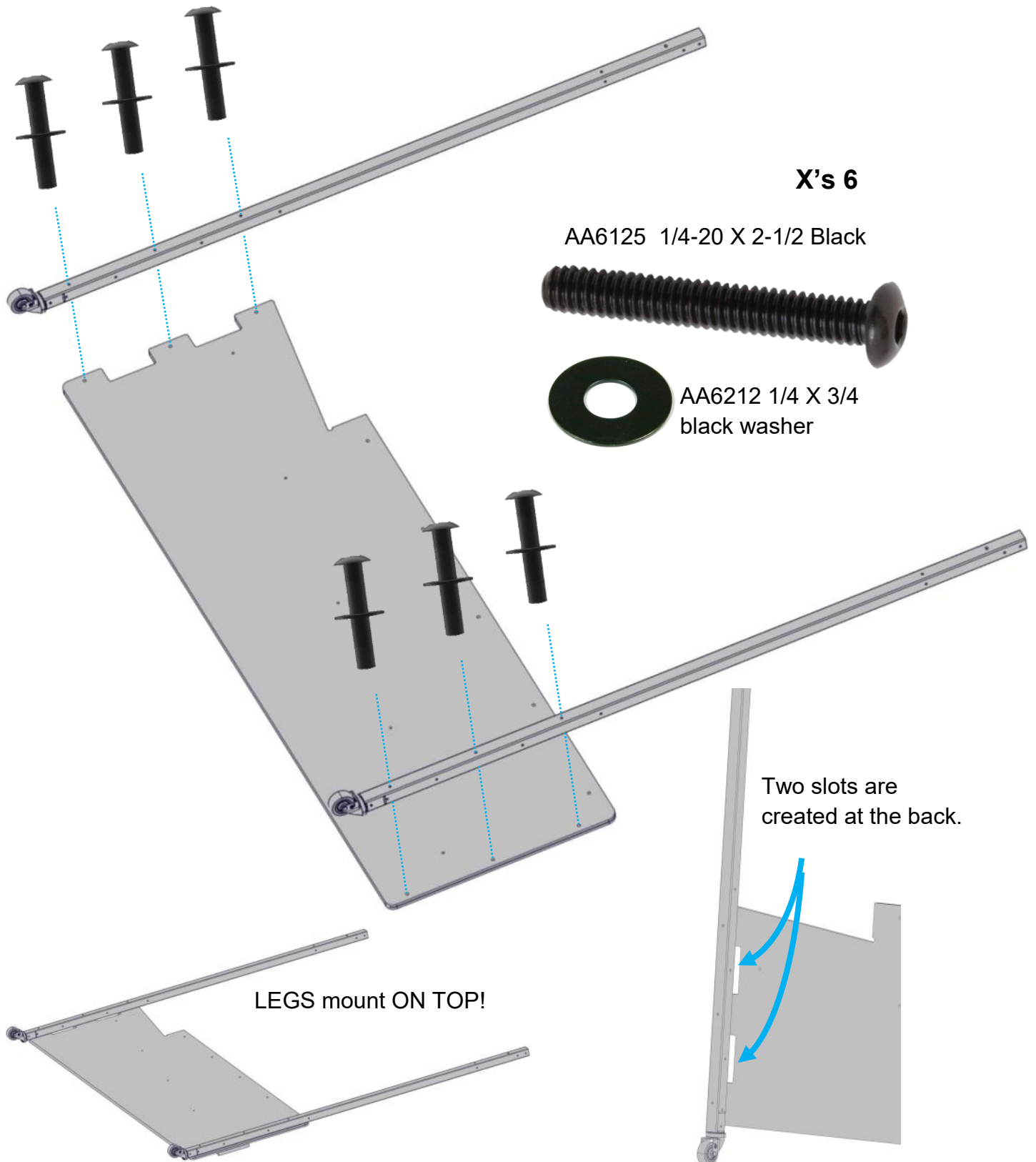
STEP 4:

Attach two legs to the right side panel, graphics facing up, using three AA6125 Allen bolts and three AA6212 black flat washers on each leg. The legs should be on top of the outside of the panel.

Graphics should be on facing at you. Db3179 & DB3007 should be facing ground.

X's 6

AA6125 1/4-20 X 2-1/2 Black

AA6212 1/4 X 3/4 black washer

Two slots are created at the back.

LEGS mount ON TOP!

STEP 5:

Attach two DB3075 brackets to each side of the back wall panel using three AA6584 black Allen bolts and AA6212 black washers. Brackets when installed should be on the inside of the panel. See mounted brackets and pay attention to the Square cut out on the right side.

X's 6

AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

DB3075   DB3075

Back panel assembled.
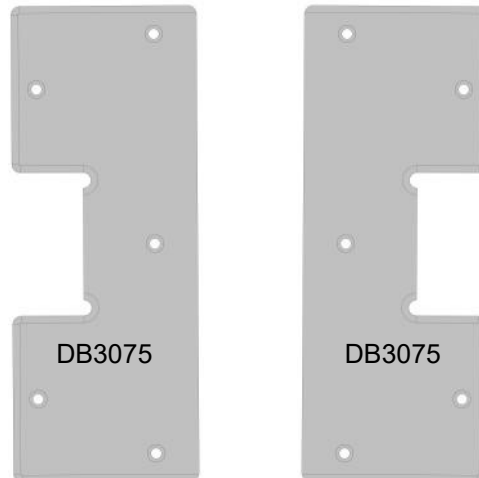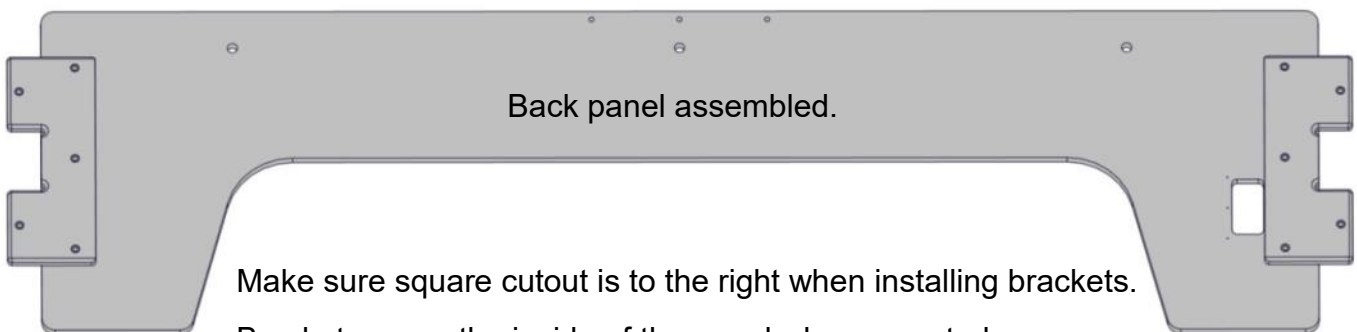
Make sure square cutout is to the right when installing brackets.

Brackets go on the inside of the panel when mounted.

STEP 6:

Slide the back wall assembly into the left wall back slots you created when you installed the back legs.
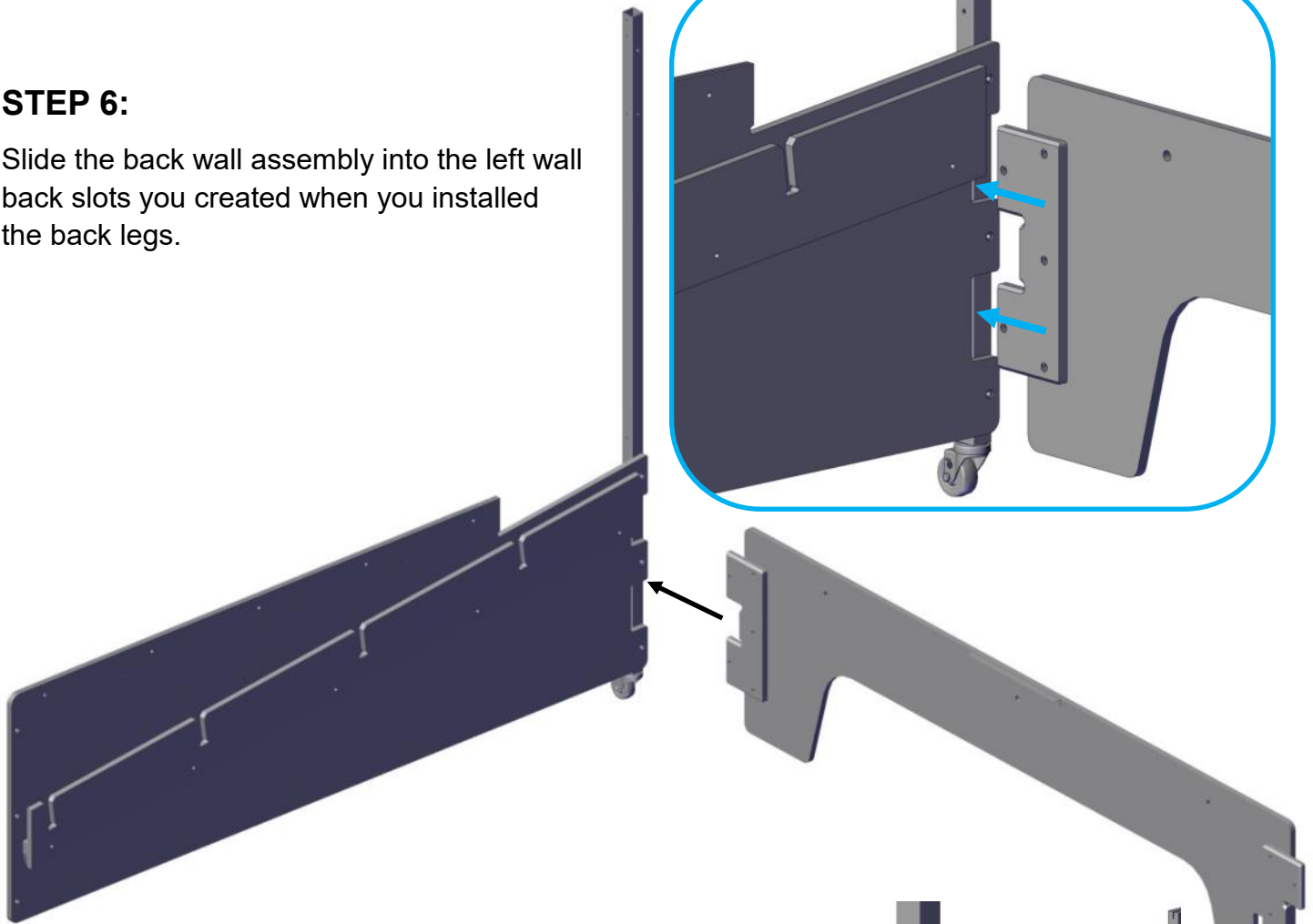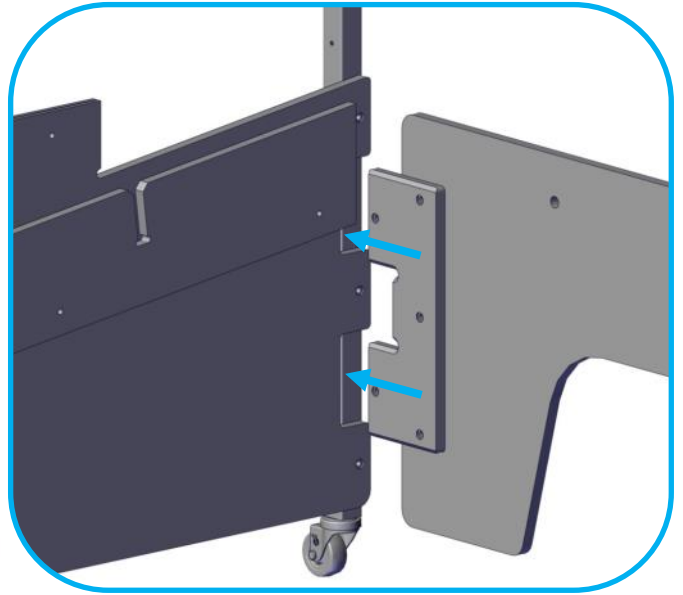
STEP 7:

Secure the back wall to the left side wall assembly using two AA6125 and two AA6212 black flat washers.

X's 2

AA6212 1/4 X 3/4 FLAT WASHER BLACK

AA6125 1/4-20 X 2-1/2 (BLACK)
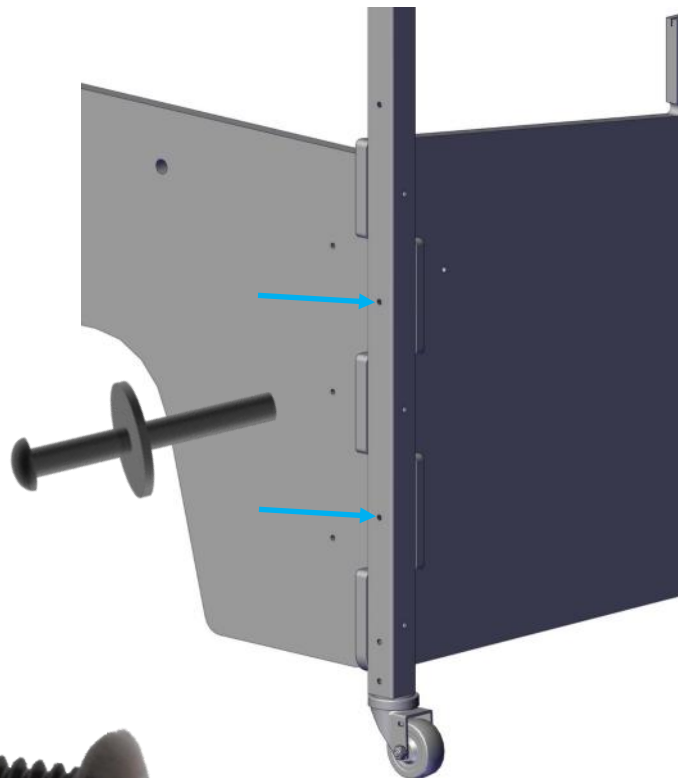
STEP 8:

Insert the other side of the back wall assembly into the right wall slots.
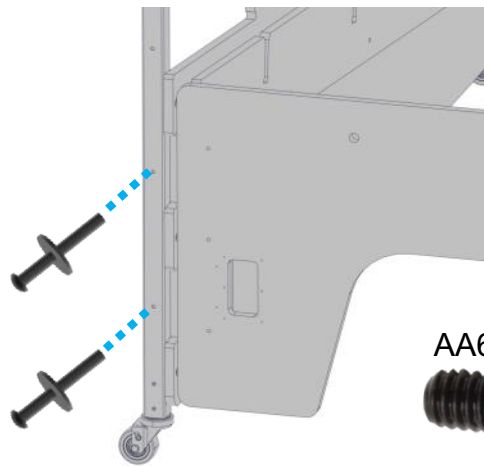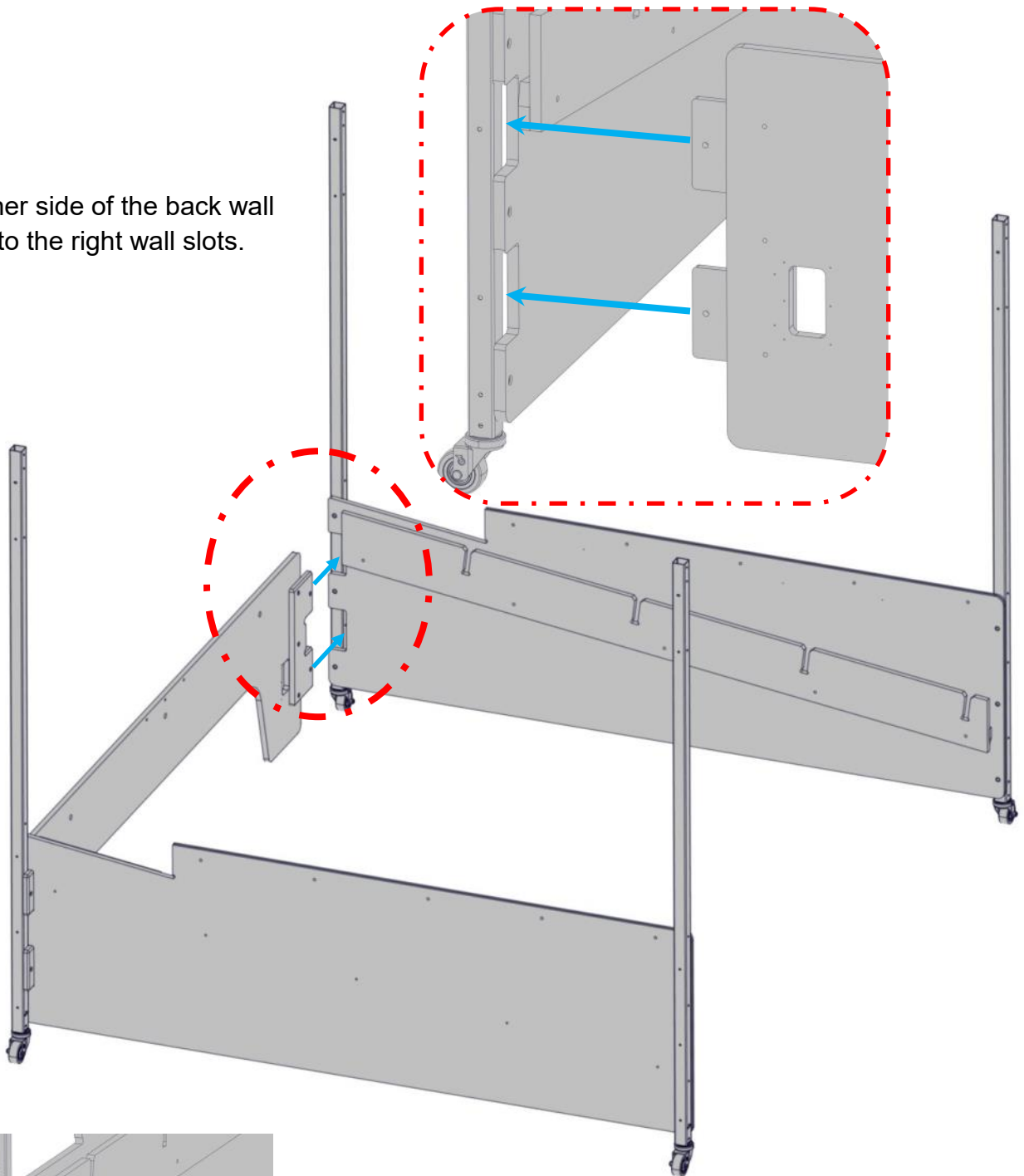
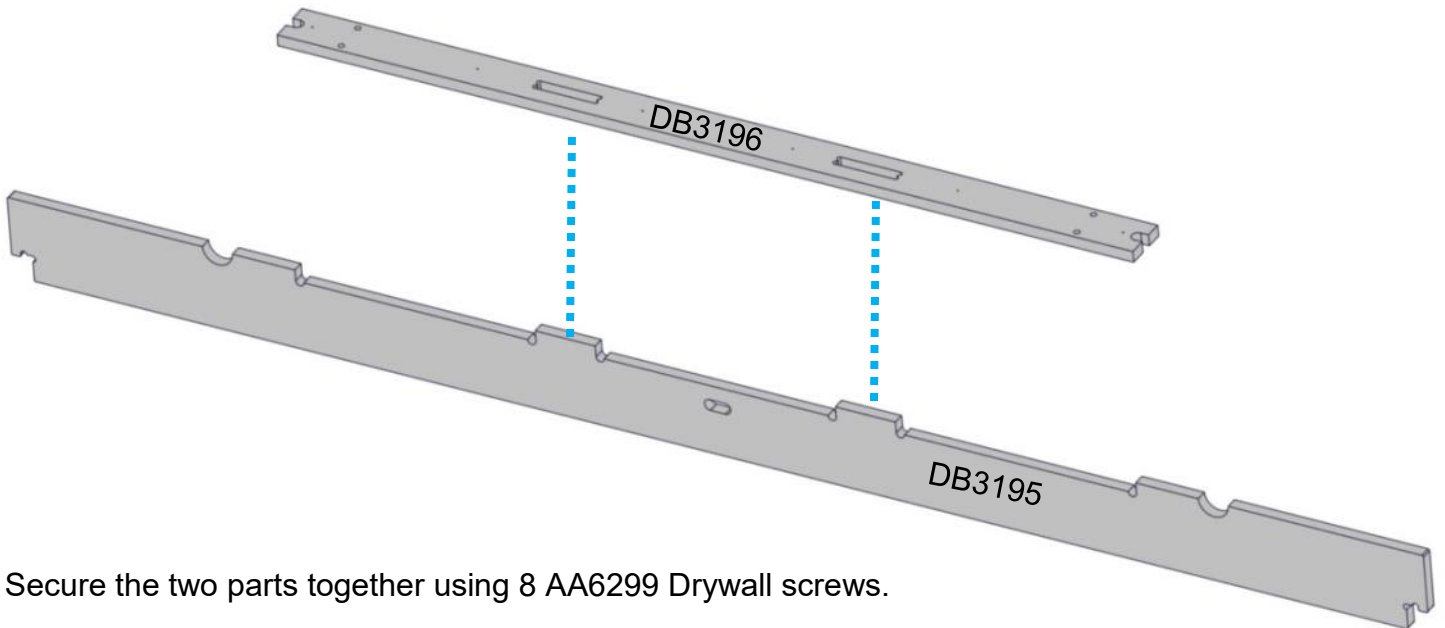Secure the back wall to the right wall assemblies using three AA6125 and three AA6212 black flat washers.

X's 2

AA6125 1/4-20 X 2-1/2 (BLACK)

AA6212 1/4 X 3/4 black washer

STEP 9:

Insert a DB3196 into the center two tabs of the DB3195. The tabs go into the slots.

DB3196

DB3195

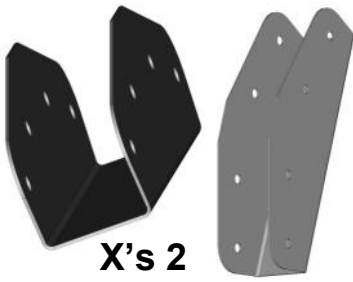Secure the two parts together using 8 AA6299 Drywall screws.

X's 8

AA6299 - 8 X 2 drywall
w/nibs black
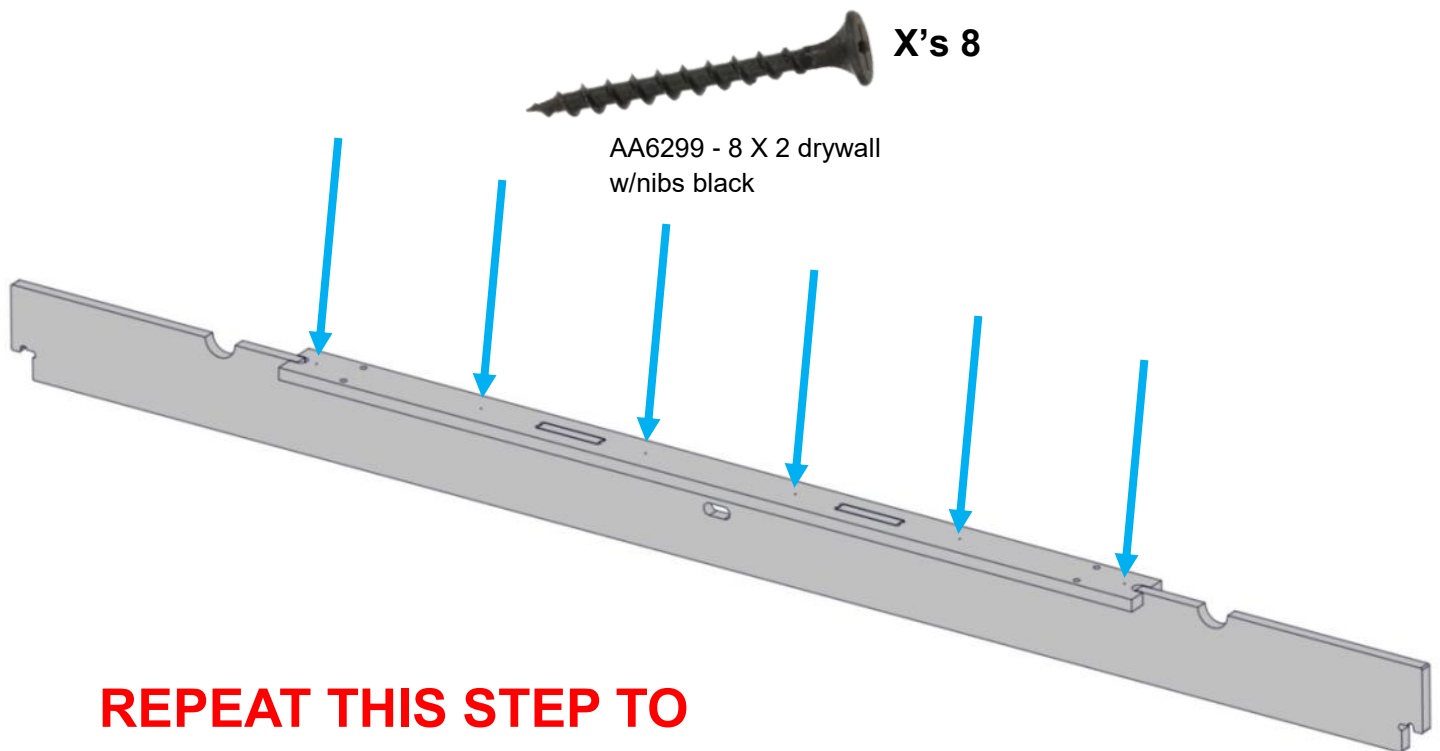
REPEAT THIS STEP TO
CREATE TWO SUPPORTS
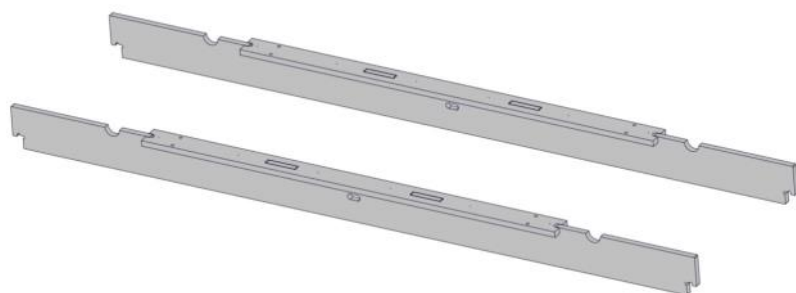
STEP 10:

Slide two stringers into the two inner channels shown. NO HARDWARE is used to secure them.
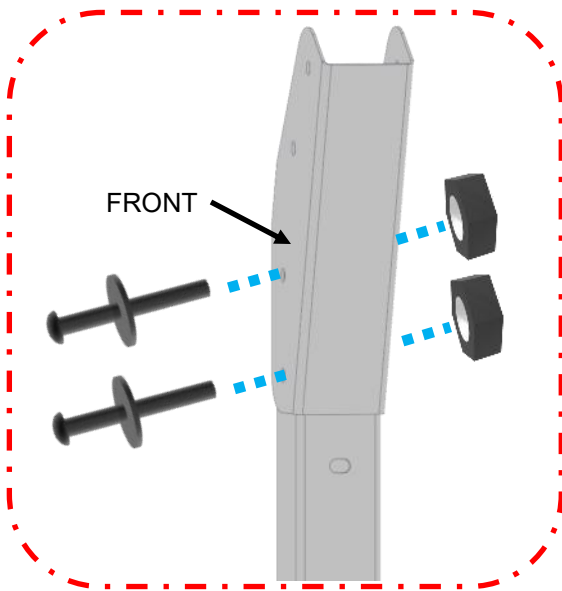
X's 4

AA6125 1/4-20 X 2-1/2 black Allen

AA6212 1/4 X 3/4 black washer

X's 2
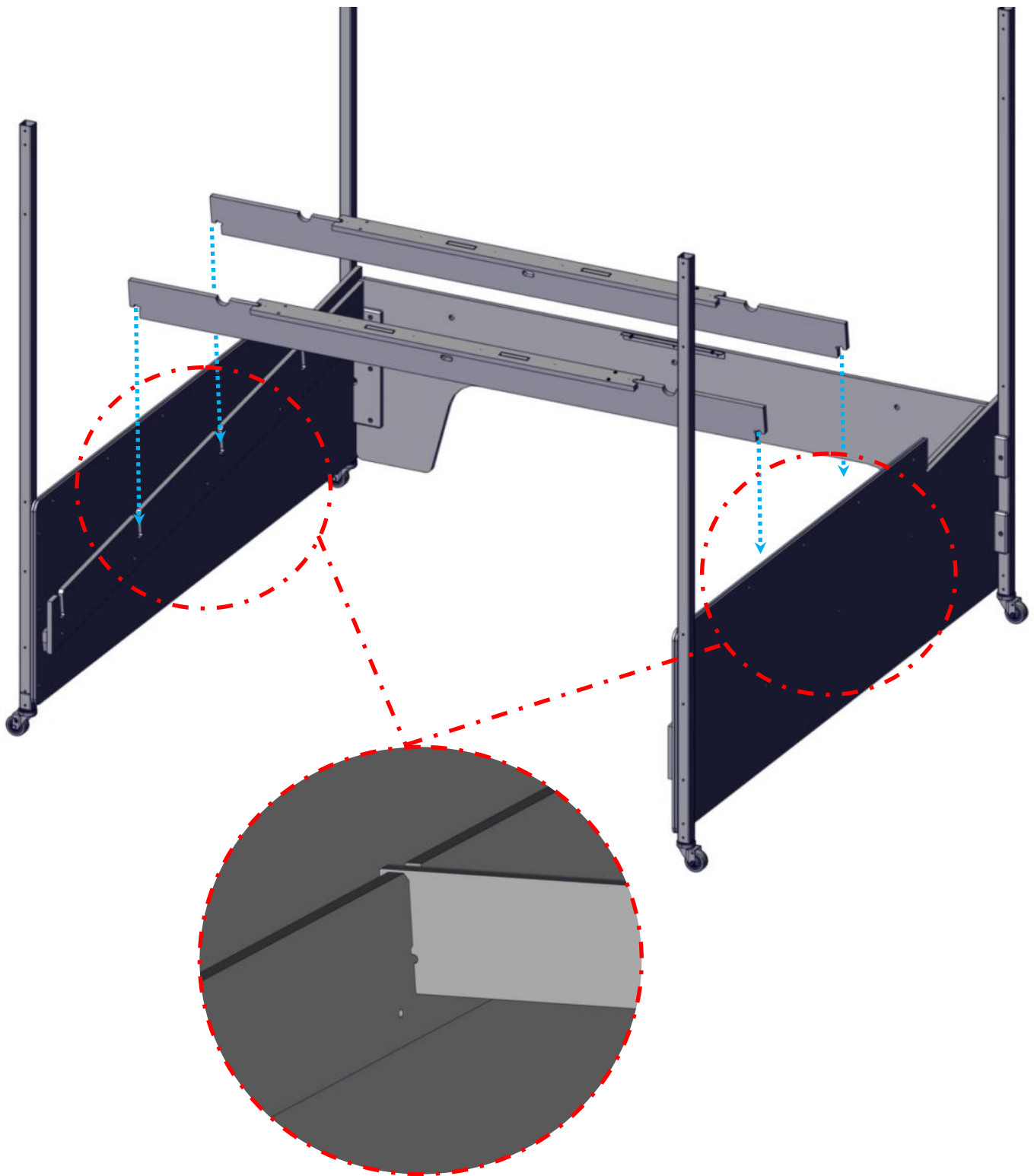
AA6966 1/4-20 black nylon nut.

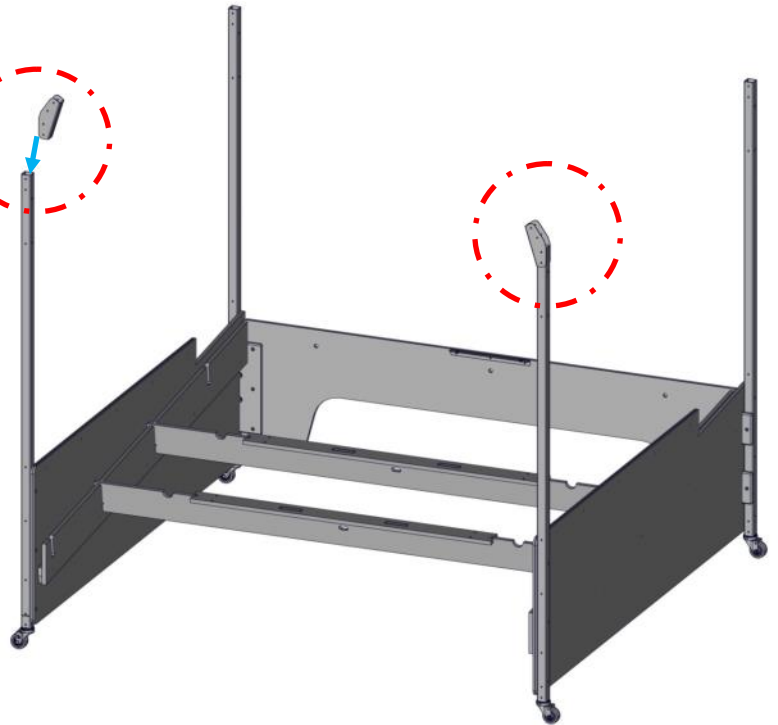DB1032 Upper Support Bracket

STEP 11:

Slide the upper DB1032 support brackets onto the front legs at both sides. Attach using two AA6125 Allen bolts and AA6212 washers from the front and secure them with AA6966 nylon nuts at the back.

KEEP HARDWARE LOOSE TO ALLOW EASIER ALIGNMENT OF HOLES.
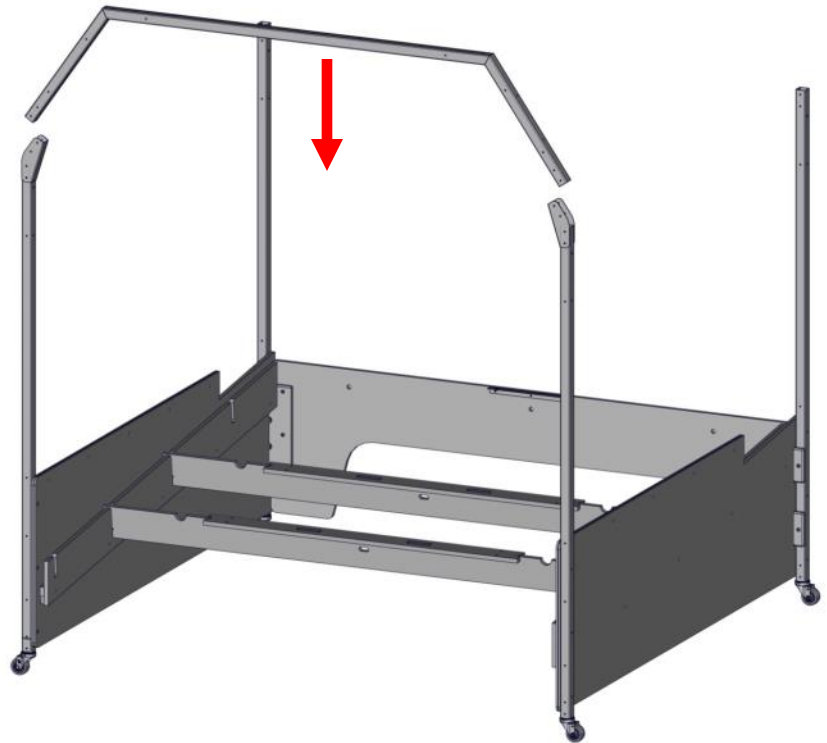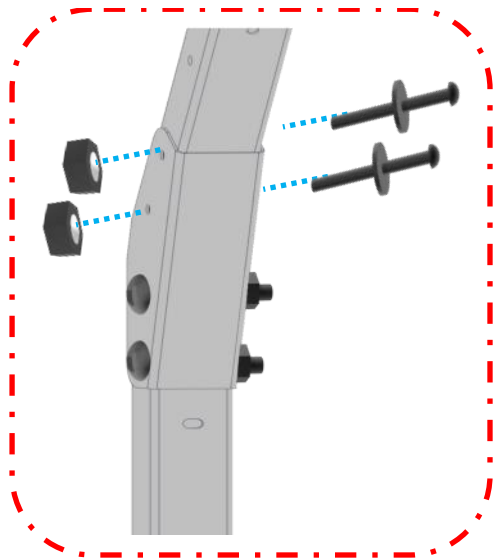

FRONT
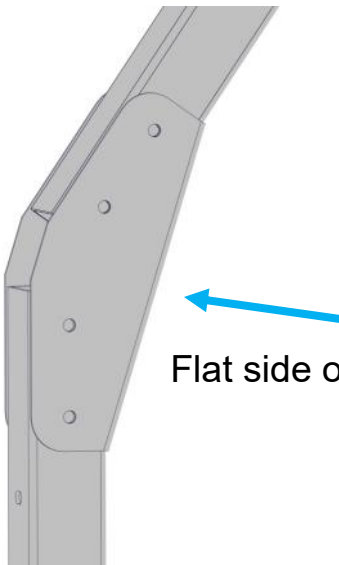
Flat side of bracket points to the inside of the cabinet! Triangle side out!

X's 4   AA6125 1/4-20 X 2-1/2 black Allen

AA6212 1/4 X 3/4
black washer

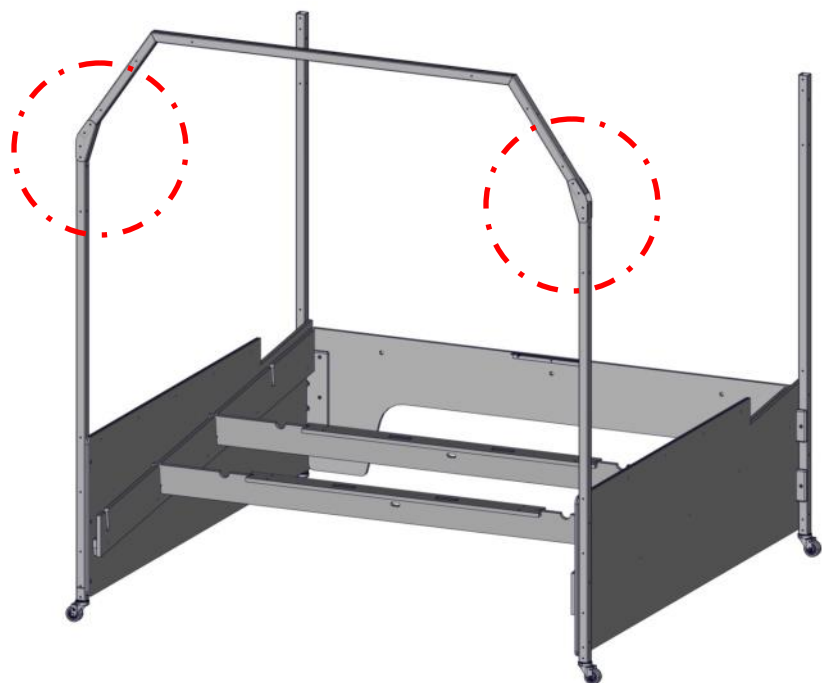AA6966 1/4-20
black nylon nut

STEP 12:

Slide the upper support onto the brackets at the front of the game.

Secure the support using two AA6125 Allen bolts and AA6212 washers from the backside and secure them with AA6966 nylon nuts at the front.

TIGHTEN ALL HARDWARE ONLY WHEN ALL BOLTS ARE INSTALLED!

STEP 13:

Slide the back floor assembly into the rear channels.
Align the tabs into the slots. WATCH YOUR FINGERS!
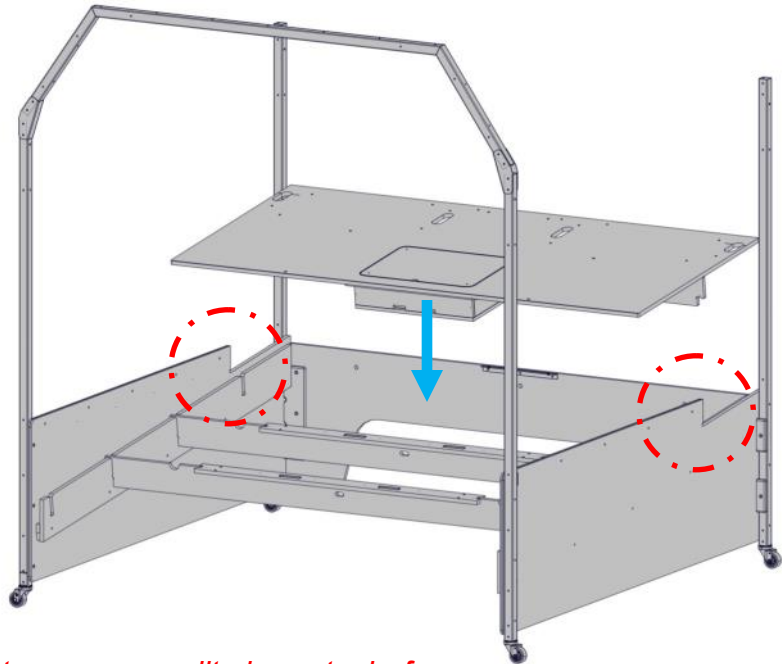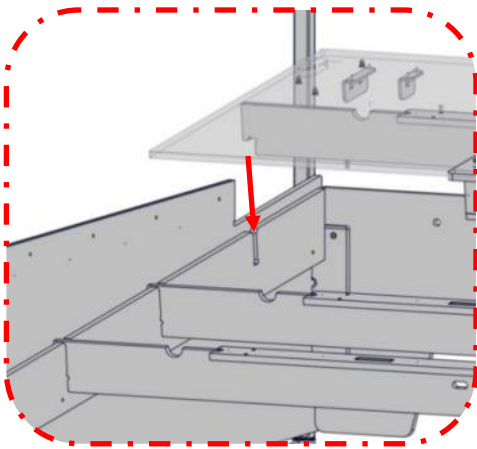
NOTE: Although all efforts we made to ensure quality in parts, before installing this panel, inspect the panel for damage to wiring or mounting holes not fully cleaned out.

STEP 14:

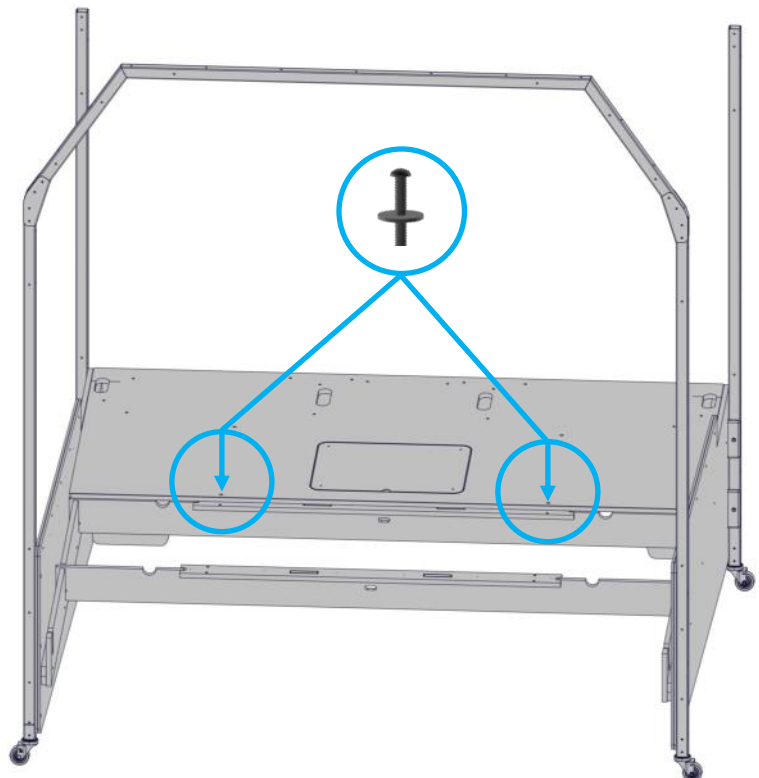Secure the back floor assembly using two AA6584 black Allen bolts and AA6212 black washers.

X's 2
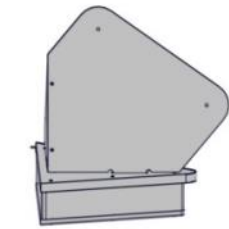
AA6584 1/4-20 X 2 black Allen

AA6212 1/4 X 3/4
black washer

STEP 15:

Locate the components shown below to assembly the ball gate assembly.

The two DB3186 ball deflectors are not installed at this time.
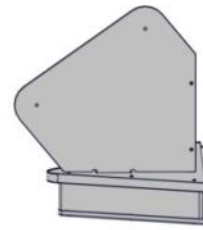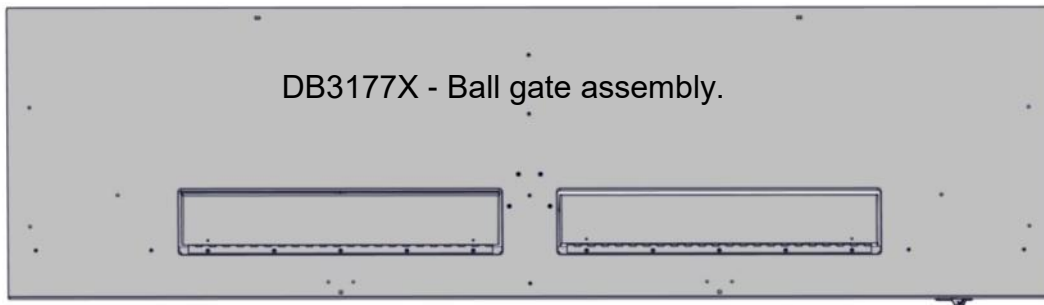

DB3083 - Left side ball defector

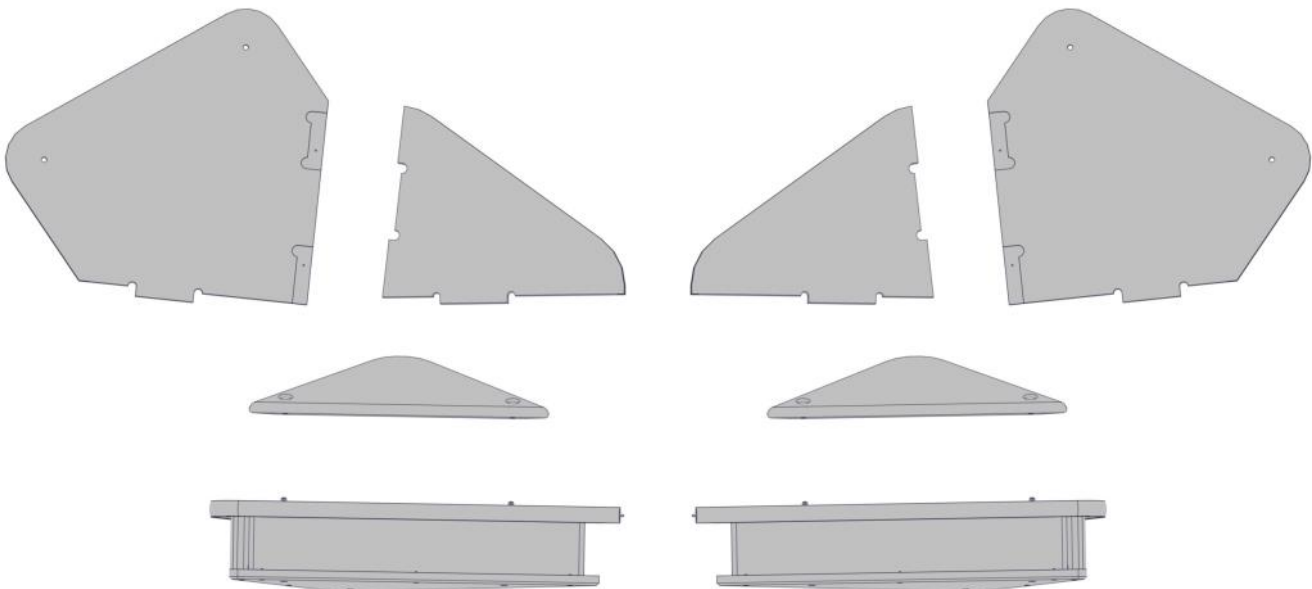DB3190X - Center mount

DB3190X - Center support for ball defector

DB3884X - Right side ball defector

DB3177X - Ball gate assembly.

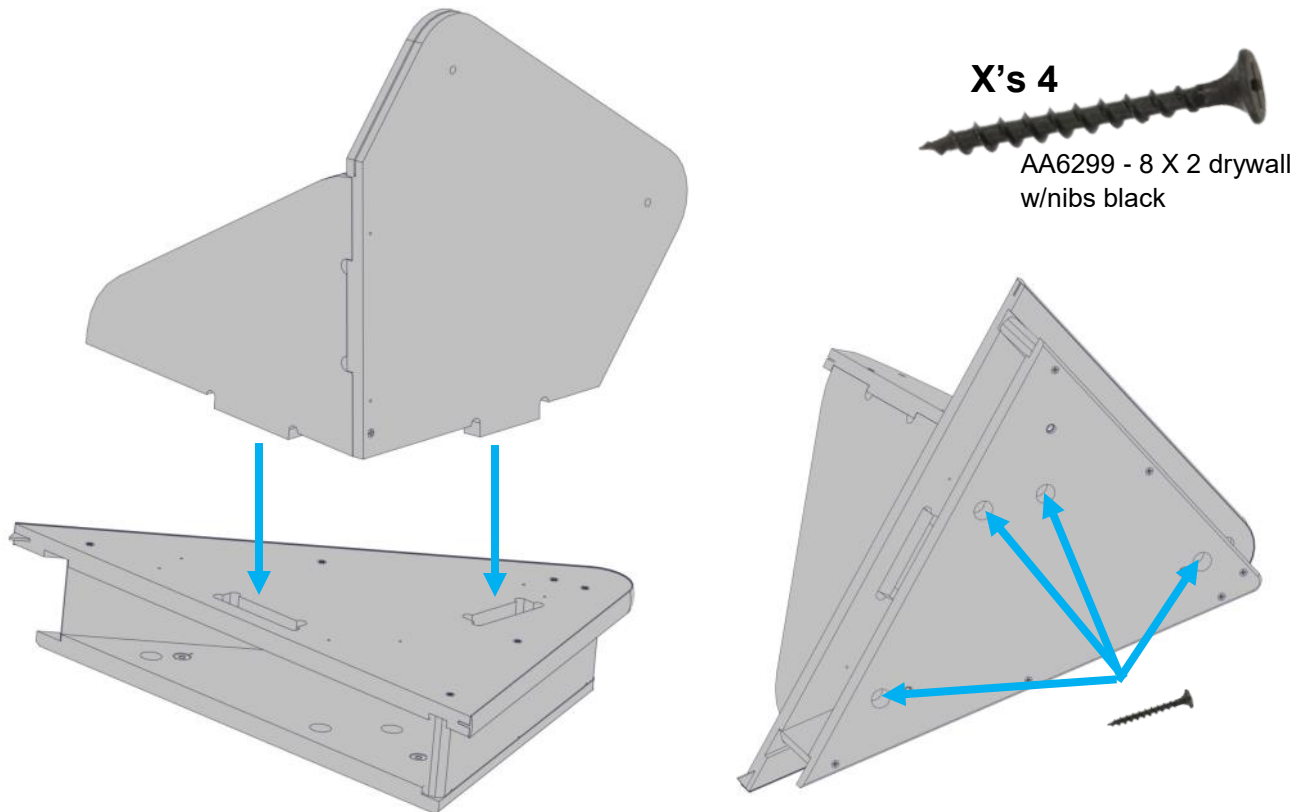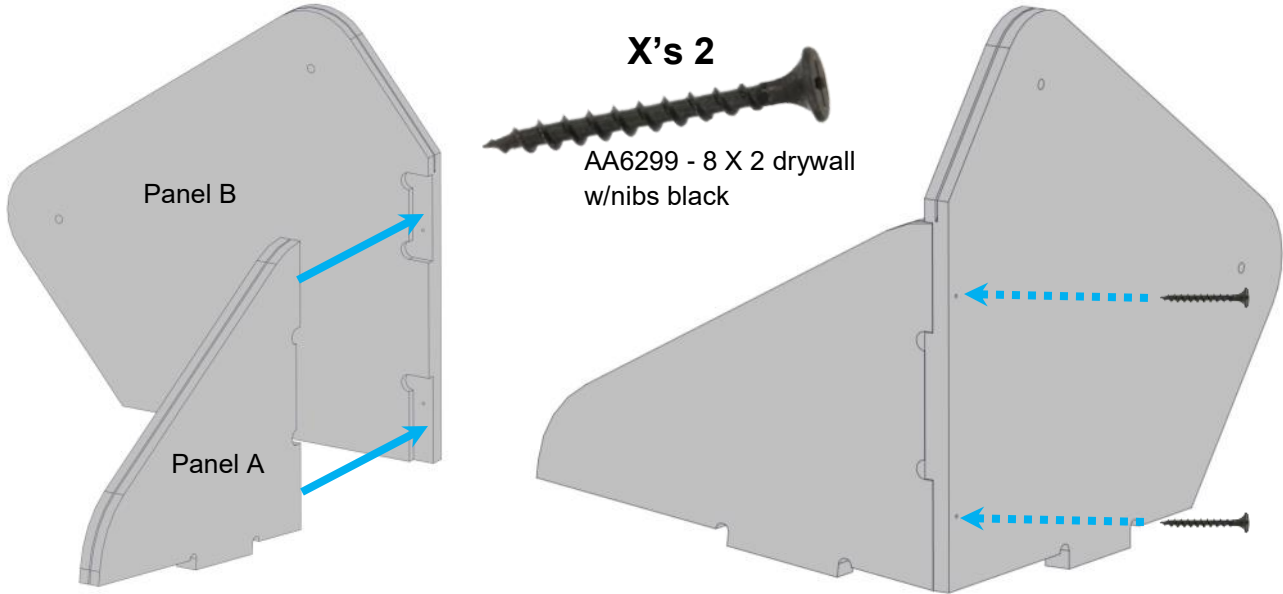## STEP 16: Assembly of DB3083X and DB3884X (TECH SHOP WORK!)

Locate the components shown below.

STEP 17:

Insert panel A's tabs into panel B's slots. They will form a 90 degree wall. Secure them together using two AA6299 Drywall screws. Be sure to drive the screw in straight and flush to the surface of the panel.

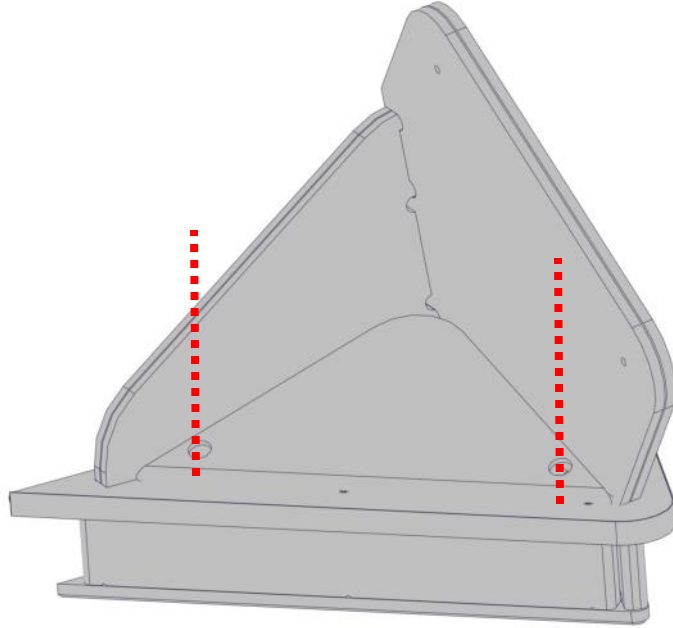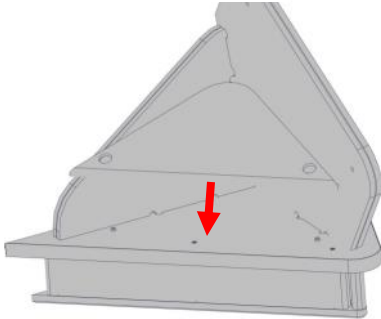Insert this into the base and secure using four AA6299 drywall screws.

X's 2

AA6299 - 8 X 2 drywall w/nibs black

Panel B

Panel A

X's 4

AA6299 - 8 X 2 drywall w/nibs black

STEP 18:

Place the ABS black deflector in the corner and attach using two AA0655 square bit screws.
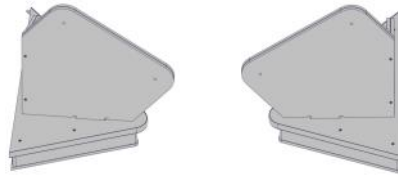
X's 2
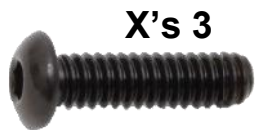
AA0655 - #8 X 3/4
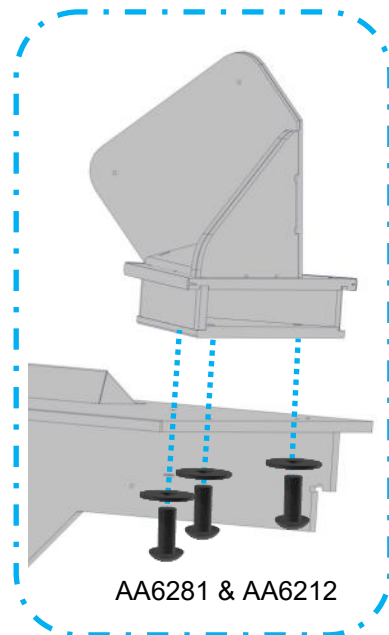Square pan head screw

Repeat steps 17 and 18 to make the other assembly.

STEP 19:

Secure both left and right ball deflectors to the ball gate assembly using three AA6281 black Allen bolts and AA6212 black washers on each deflector. Hardware comes from the bottom through the floor into the deflectors.
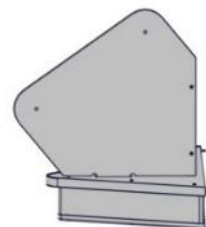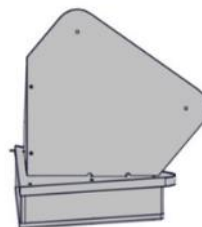
X's 3

AA6281 1/4-20 X 1-1/2 BLACK

AA6212 1/4 X 3/4 black washer
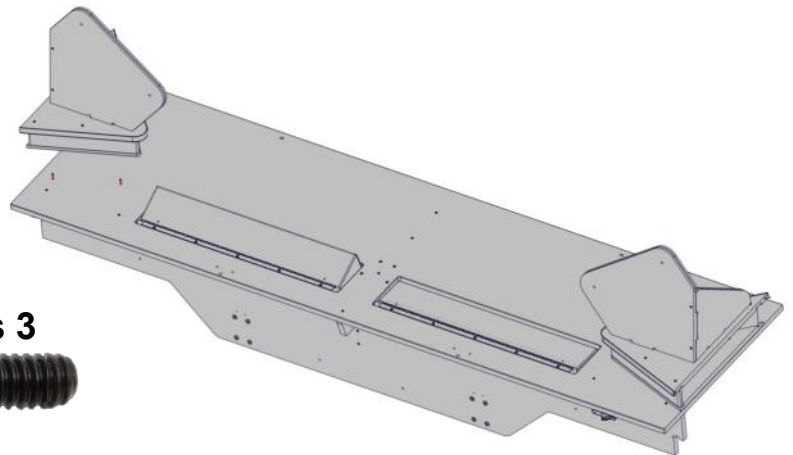
AA6281 & AA6212

STEP 20:

Secure the base panel to the center support with three AA6883 TORX screws. Then insert Dowel nuts into the holes, align the line horizontal, and secure with bolt AA6281 and AA6212 washer through the front panel.

FRONT PANEL

Center

BASE

X's 3

AA6281 1/4-20 X 1-1/2 BLACK

X's 3

AA6212 1/4 X 3/4 FLAT WASHER BLACK

X's 3

AA6516: 1/4-20 X 3/4 DOWEL NUT silver

X's 3
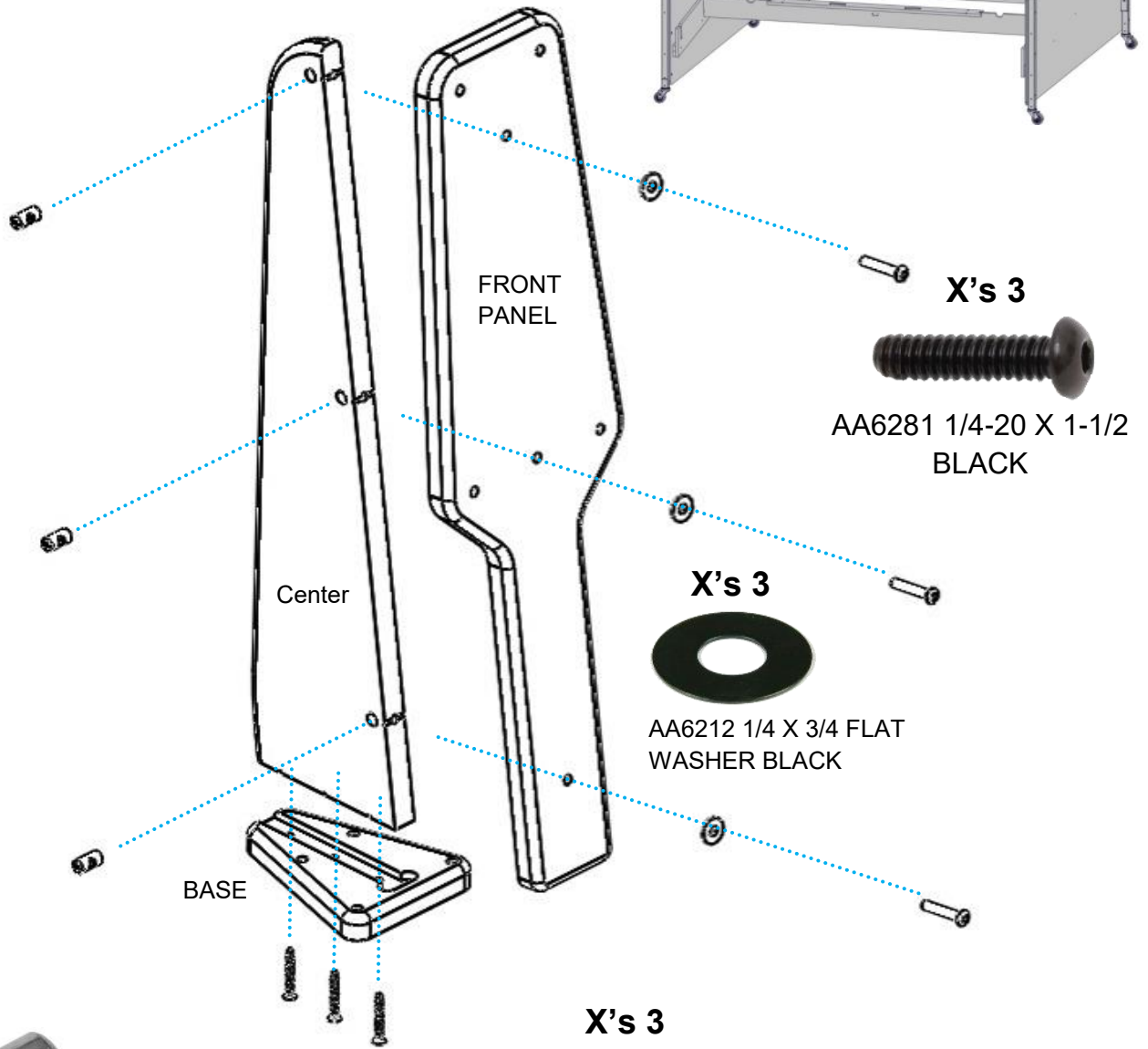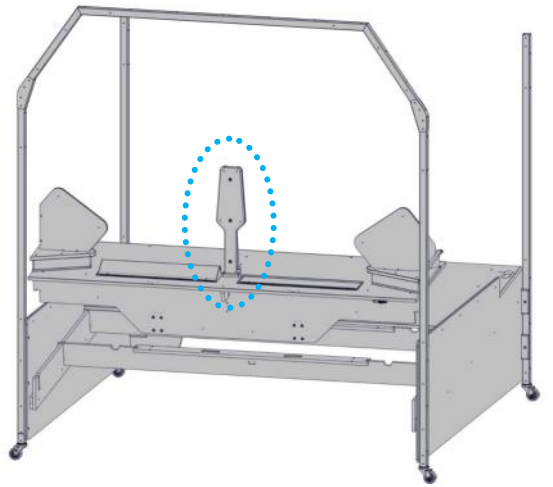
AA6883 10 X 1-1/2 Silver TORX

STEP 21:

Attach the center support with four AA6584 black Allen bolts and four AA6212 black washers from the top and at the back of the support.

AA6584 1/4-20 X 2 (BLACK)

X's 4

AA6212 1/4 X 3/4 FLAT WASHER BLACK
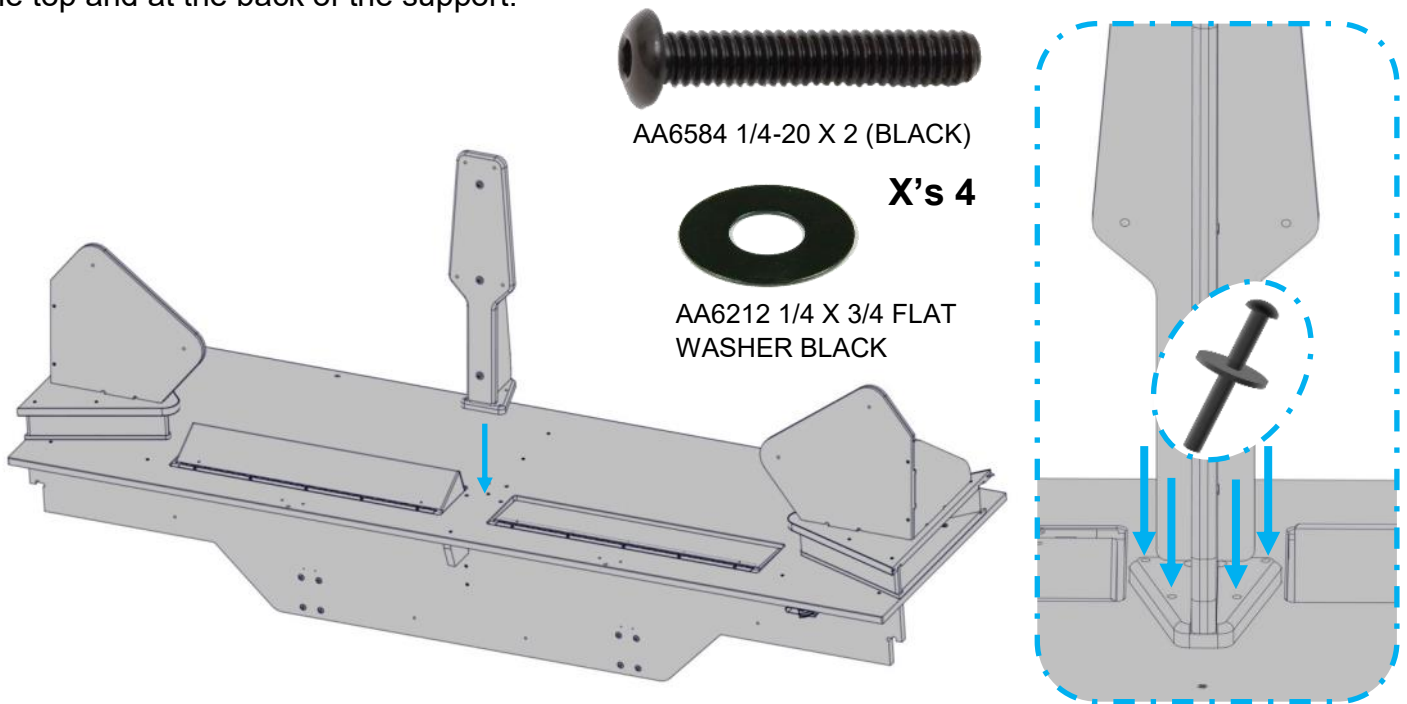
STEP 22:

Slide the ball gate assembly into the front slot of the base cabinet. Watch your fingers!

DO NOT SECURE AT THIS TIME.

NOTE: Although all efforts we made to ensure quality in parts, before installing this panel, inspect the panel for damage to wiring or mounting holes not fully cleaned out.

STEP 23:

Secure the middle floor assembly using four AA6584 black Allen bolts and AA6212 black washers.
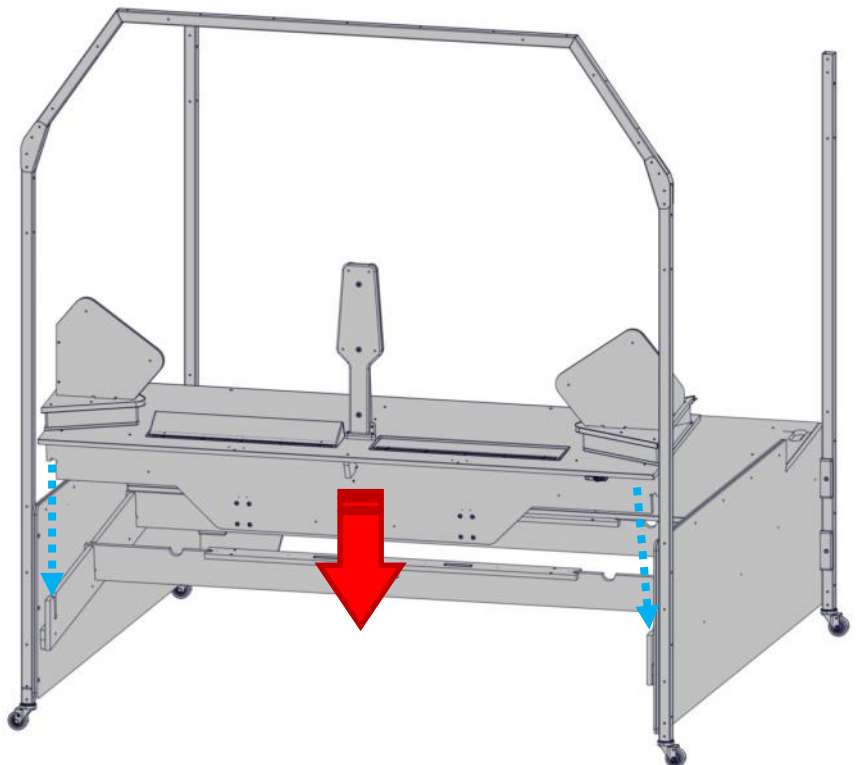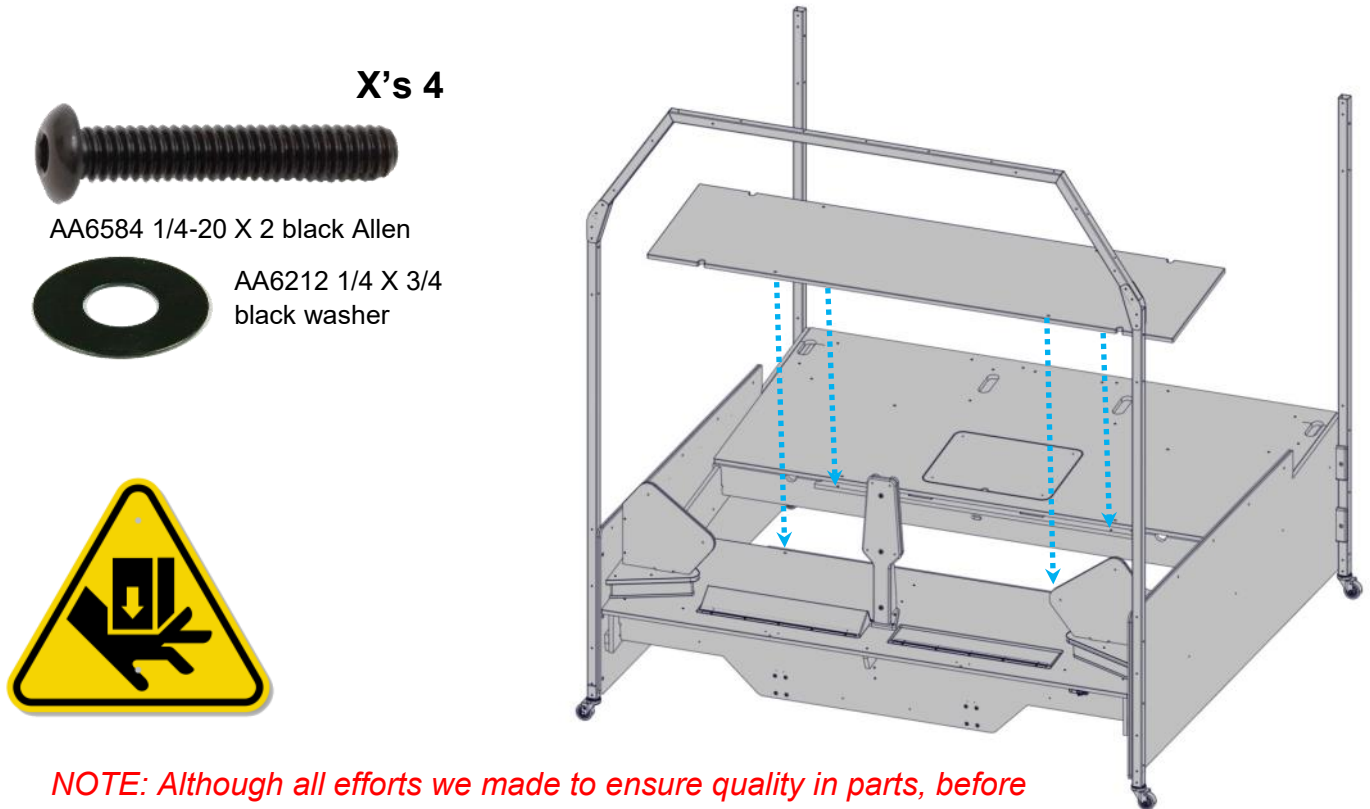
X's 4

AA6584 1/4-20 X 2 black Allen

AA6212 1/4 X 3/4 black washer

NOTE: Although all efforts we made to ensure quality in parts, before installing this panel, inspect the panel for damage to wiring or mounting holes not fully cleaned out.
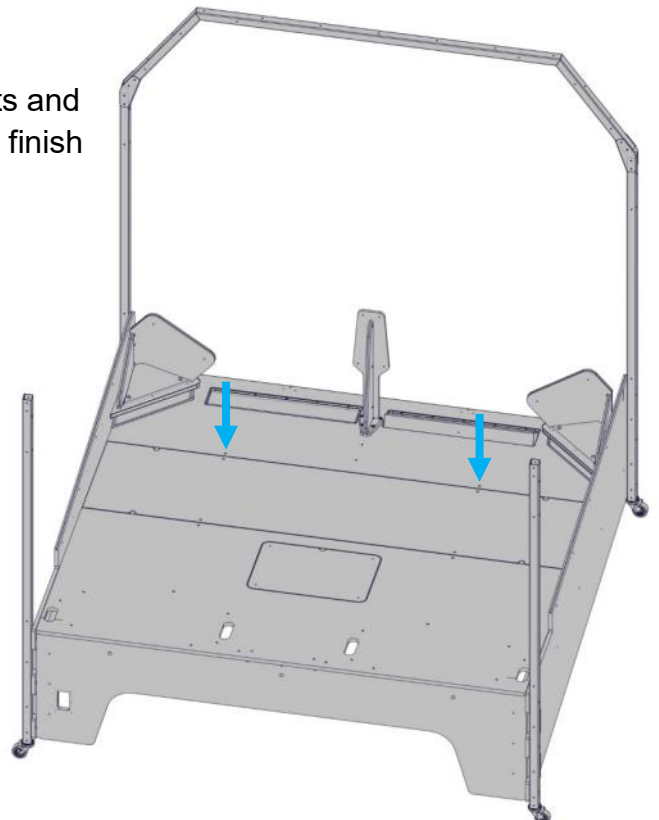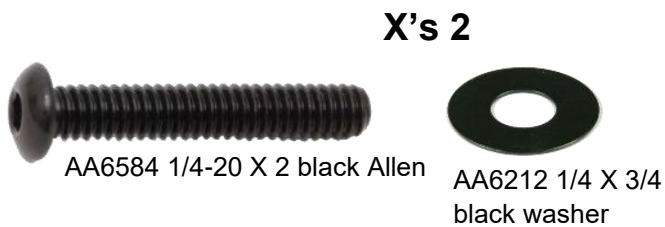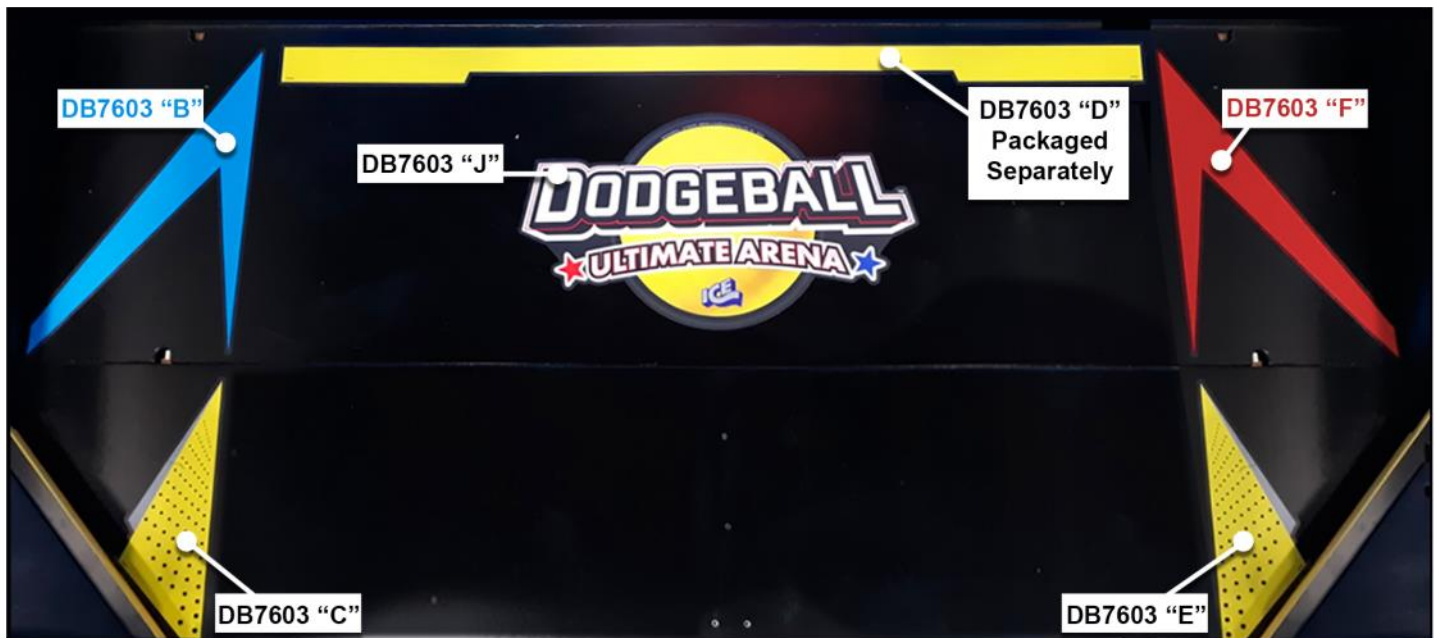
STEP 24:

Secure the ball gate with two AA6584 black Allen bolts and AA6212 black washers shown with arrows. (This is to finish securing from Step 18)

X's 2

AA6584 1/4-20 X 2 black Allen

AA6212 1/4 X 3/4 black washer

STEP 25:

If not installed, install decal graphics at front of game shown below.

STEP 26:

Lay the left and right Towers on their backs. At the bottom of the left tower should be one network cord and two DC connections (one small, one large). Carefully pull them out and ensure no damage has been done to the network cable. At the bottom of the right tower should be two network cords and two DC connections (one small, one large). Carefully pull them out and ensure no damage has been done to the network cables. It might be possible that the network cables can "catch" on internal wiring inside the towers. Wiggle the cable up, down, back and fourth until it is free.
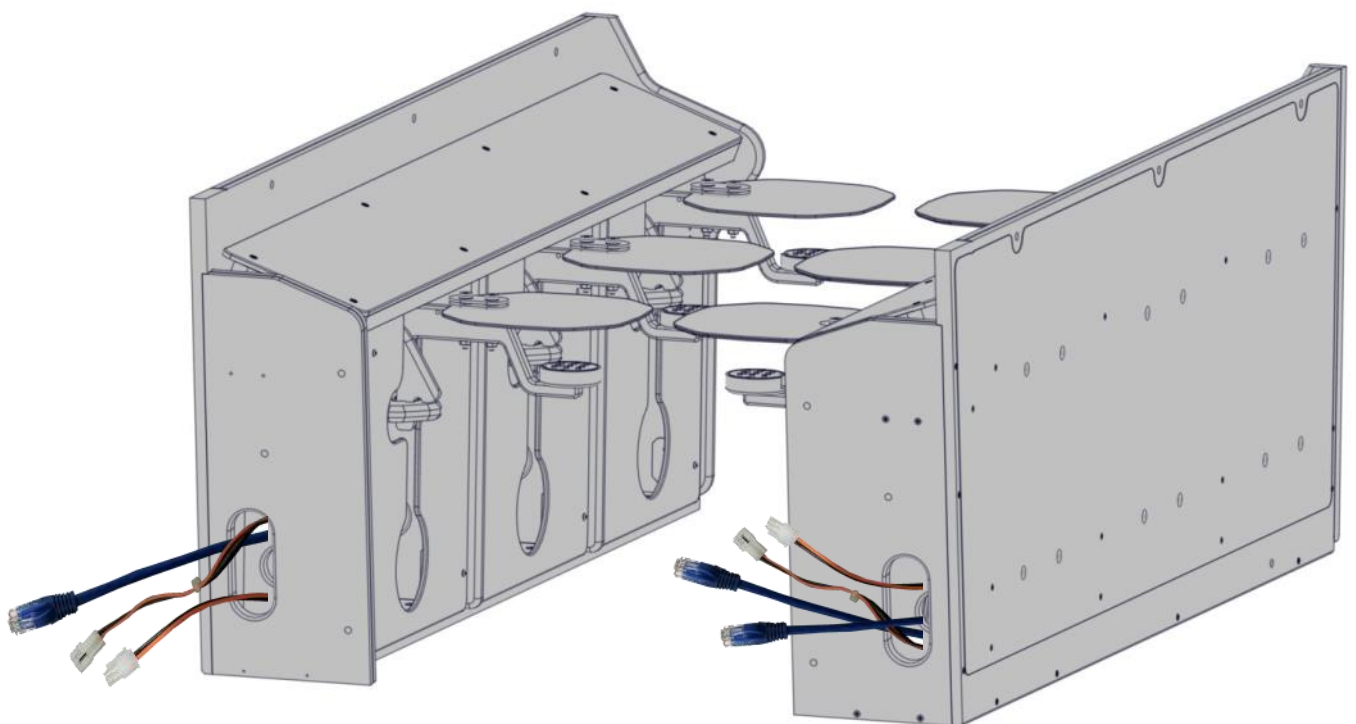
STEP 27:

Position DB3060AX target assembly to the left and DB3060BX target assembly to the right at the back of the cabinet. Align the hole at the bottom of the towers with the holes already at the back.

Secure using three AA6584 black Allen bolts and AA6212 black washers. **Use the Allen wrench to access the back bolt inside.**

AA6584 1/4-20 X 2 (BLACK)

X's 3
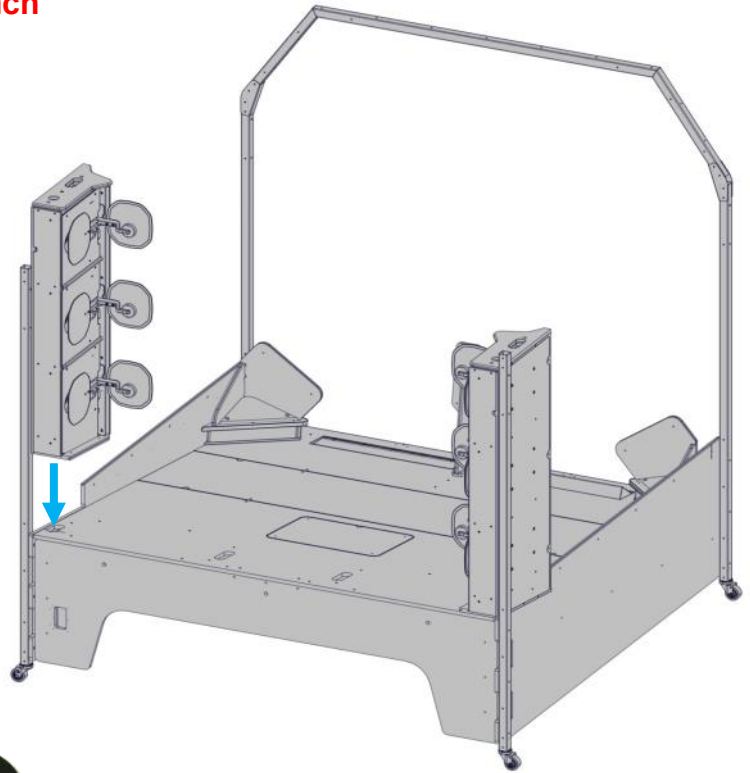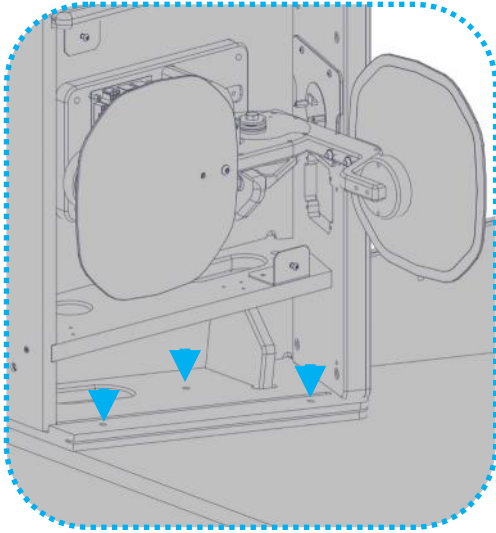
AA6212 1/4 X 3/4 FLAT WASHER BLACK

Push ethernet and power cables to the bottom of the game.

STEP 28:

Install the lower panel covers to both score towers using three AA6004 each.

USE A SCREW DRIVER or lower Torq setting.

These covers must remain removal for future service.

AA6004 - 8-32 X 1/2

X's 3
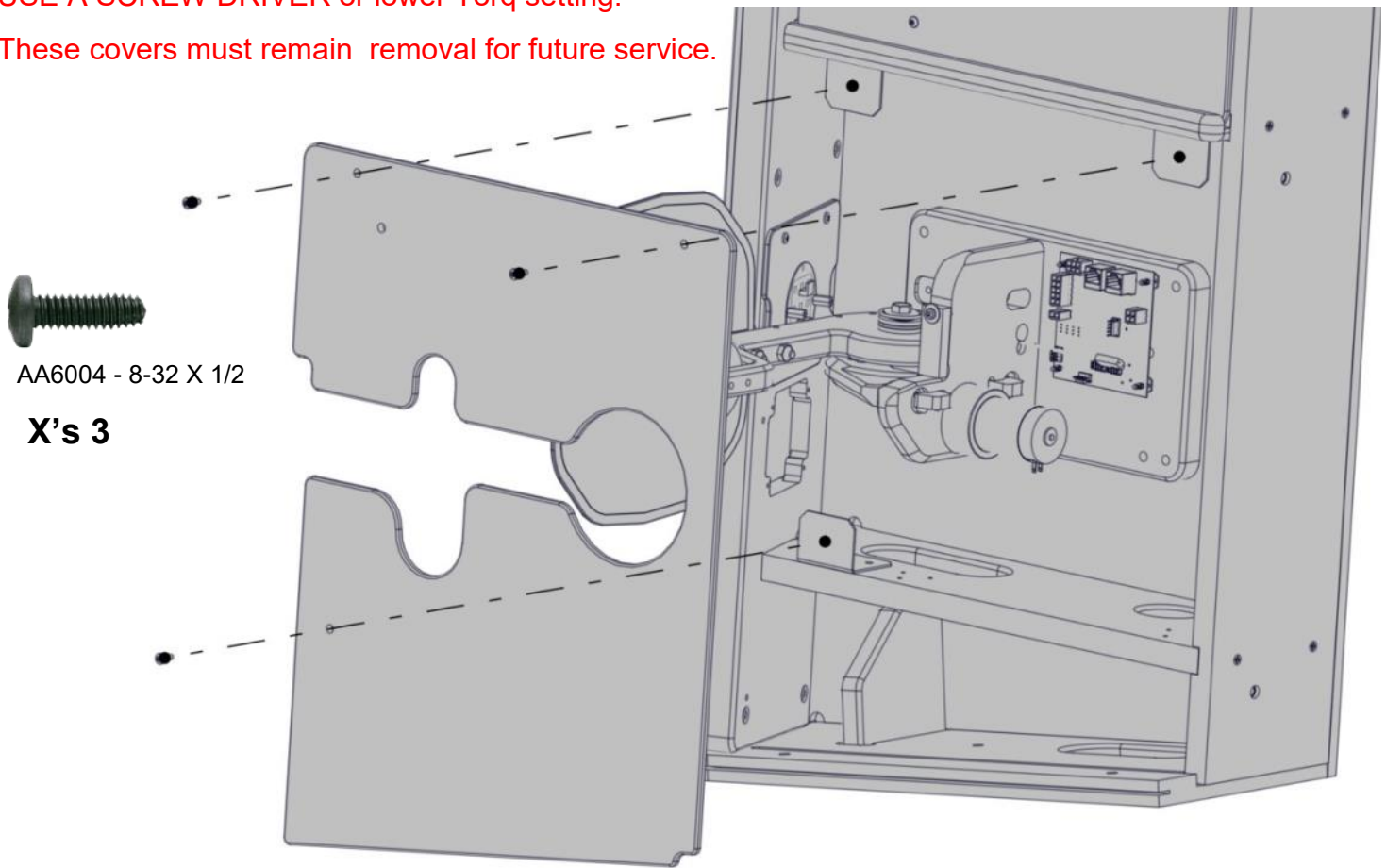
STEP 29:
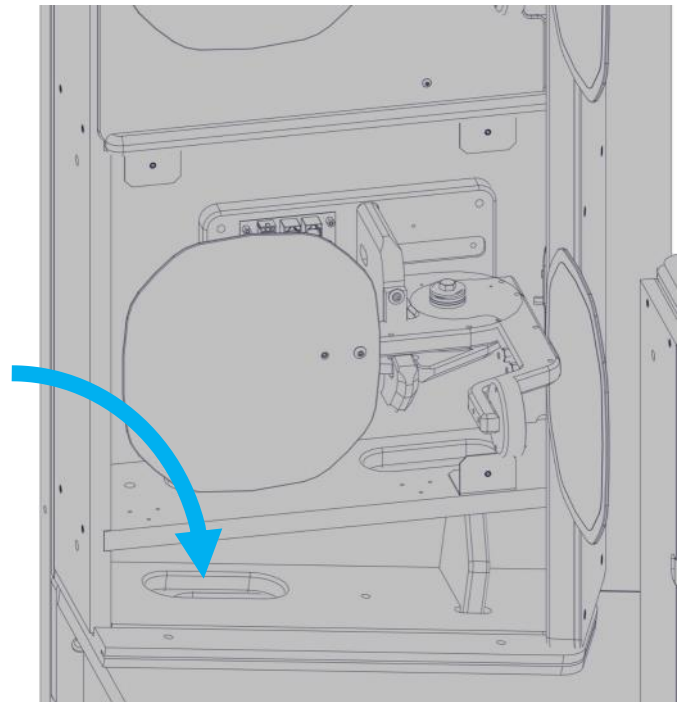
Lay the left and right middle Towers on their backs. Both towers should have one network cord and one DC connection (one large). Carefully pull them out and ensure no damage has been done to the network cables. It might be possible that the network cables can "catch" on internal wiring inside the towers. Wiggle the cable up, down, back and fourth until it is free.
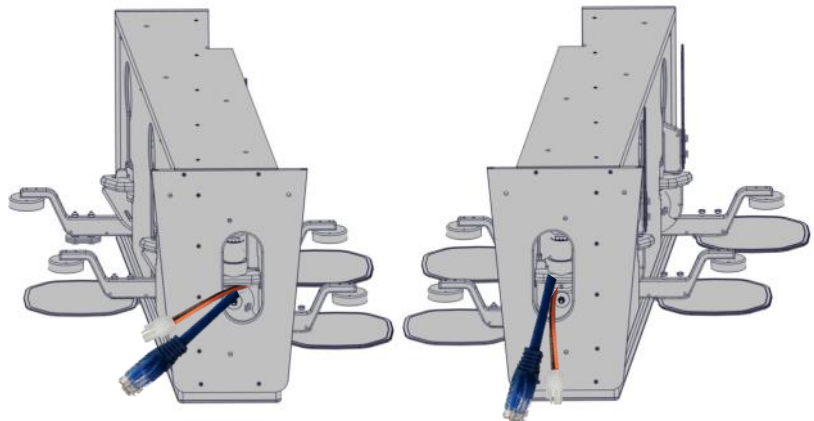
STEP 30:

Position DB3030AX target assembly to the left and DB3030BX target assembly to the right at the back of the cabinet. Align the hole at the bottom of the towers with the holes already at the back.

T-Molding goes to the bottom!
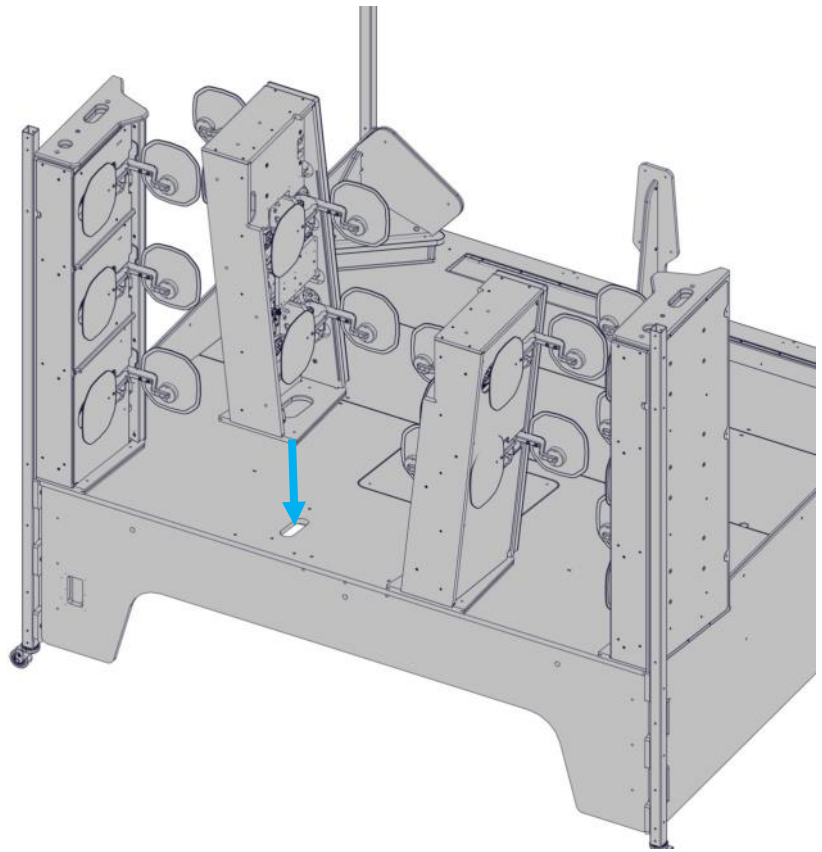
STEP 31:

Secure each tower using four AA6584 black Allen bolts and AA6212 black washers.

Do not install tower covers at this time.

X's 4

AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK
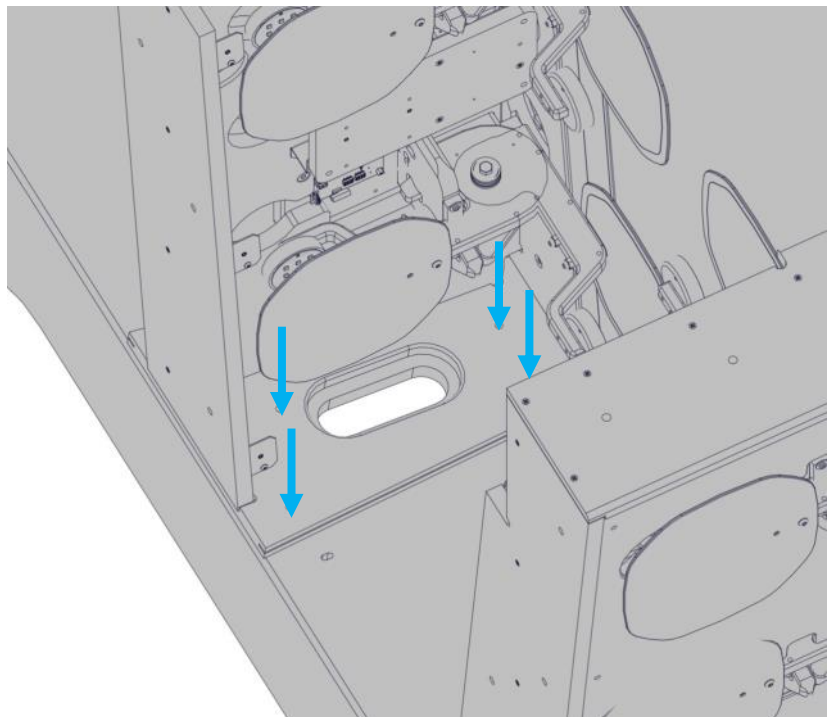
STEP 32:

THIS STEP REQUIRES HELPERS!   DO NOT ATTEMPT TO LIFT ALONE!

RECOMMEND THREE PEOPLE TO INSTALL THIS ASSEMBLY.

DO NOT ATTEMPT TO INSTALL FROM THE FRONT!

THIRD PERSON POSITION SHOULD BE AT THE FRONT, INSIDE THE CABINET TO MOUNT
HARDWARE AND STABILIZE CENTER TARGET/JUMBOTRON ASSEMBLY.

Lift the DB3116X Center target assembly up and onto the center two score towers.

There are slots the assembly fits into. The assembly will not evenly fit between the two towers
unless it is in aligned to the slots.

Notch at front at each side
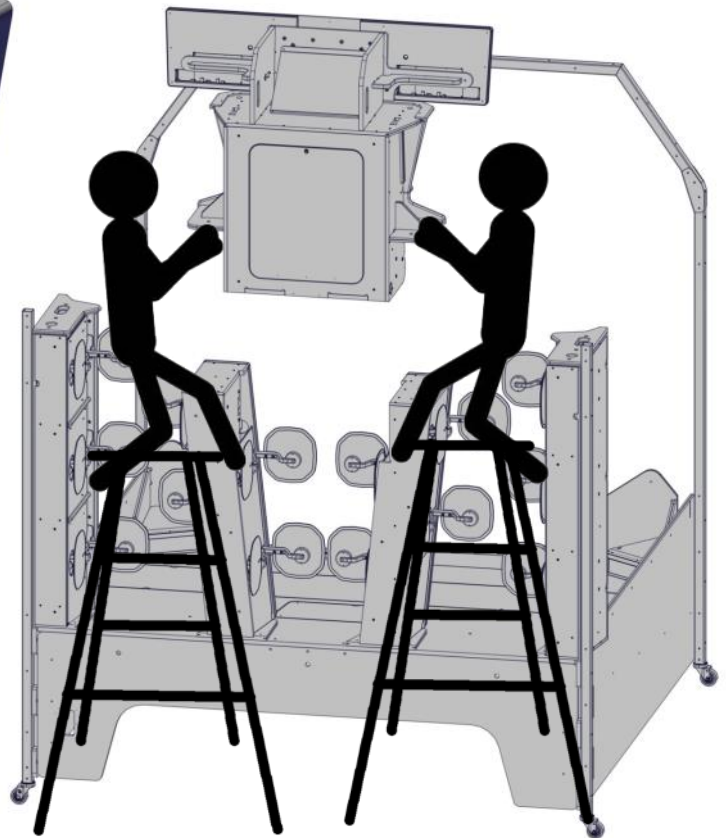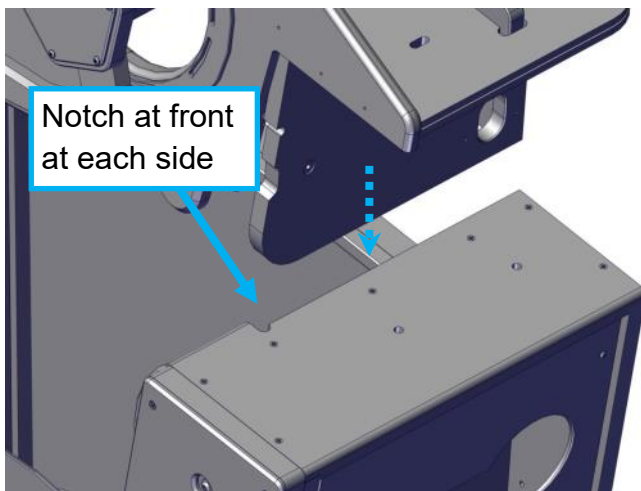
STEP 33:

Secure each tower using three AA6584 black Allen bolts and AA6212 black washers.
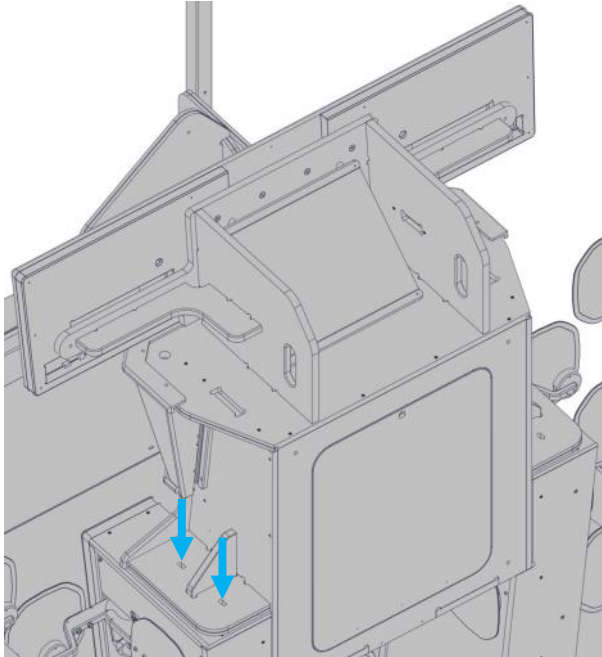
Use two AA6584 black Allen bolts and AA6212 black washers on each side of the center target assembly.

AA6584 1/4-20 X 2 (BLACK)

X's 3

AA6212 1/4 X 3/4 FLAT WASHER BLACK

STEP 34:

From the back of the game connect the power and coms harnesses.

Then connect one ethernet cable from each center score tower to the center score assembly.

NETWORK CABLES FROM SCORE TOWERS.

POWER AND COMS HARNESSES
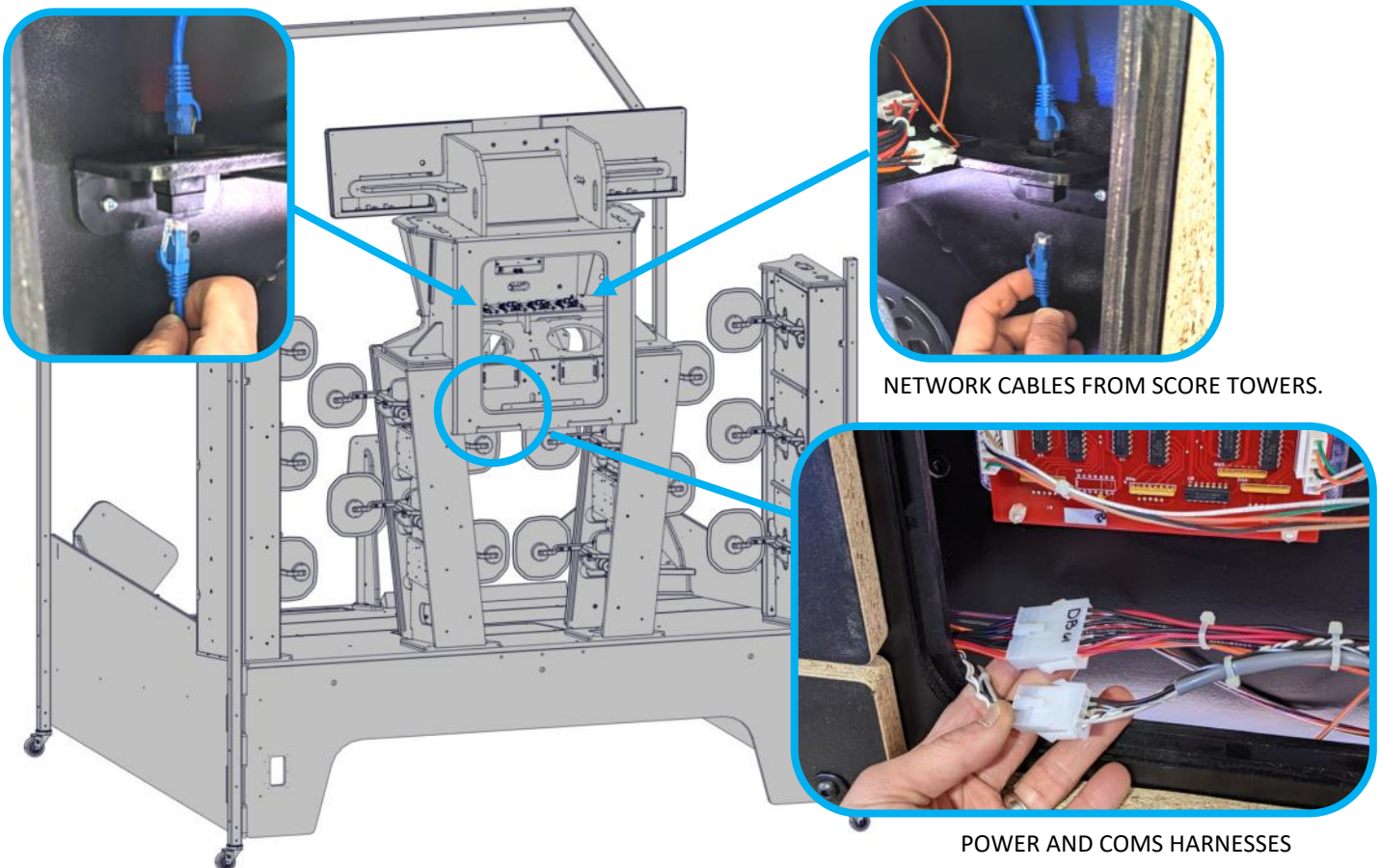
STEP 35:

On each tower and on both sides attach a DB3034 cover using three AA6004 black Allen bolts and AA6212 black washers.

AA6004 - 8-32 X 1/2
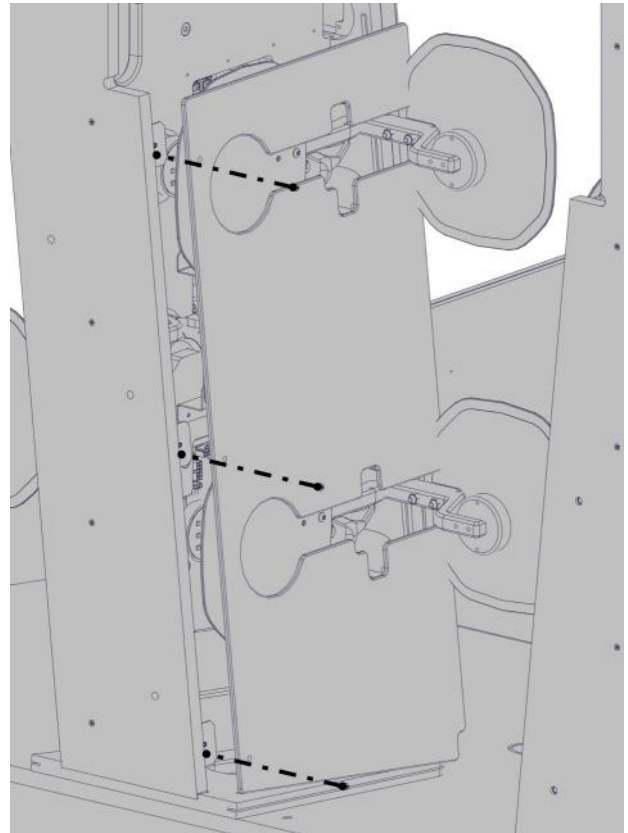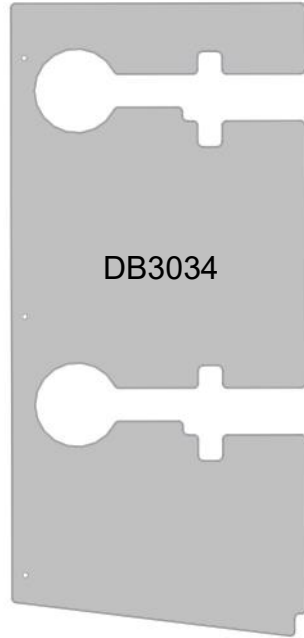
DB3034

STEP 36:

Attach on the inside for left and right sides a DB3038 using four AA6030 screw.

Screws go on the outside.

BOTH SIDES! ONLY ONE SIDE IS SHOWN.

AA6030 - #8 1-1/4
black drywall screw
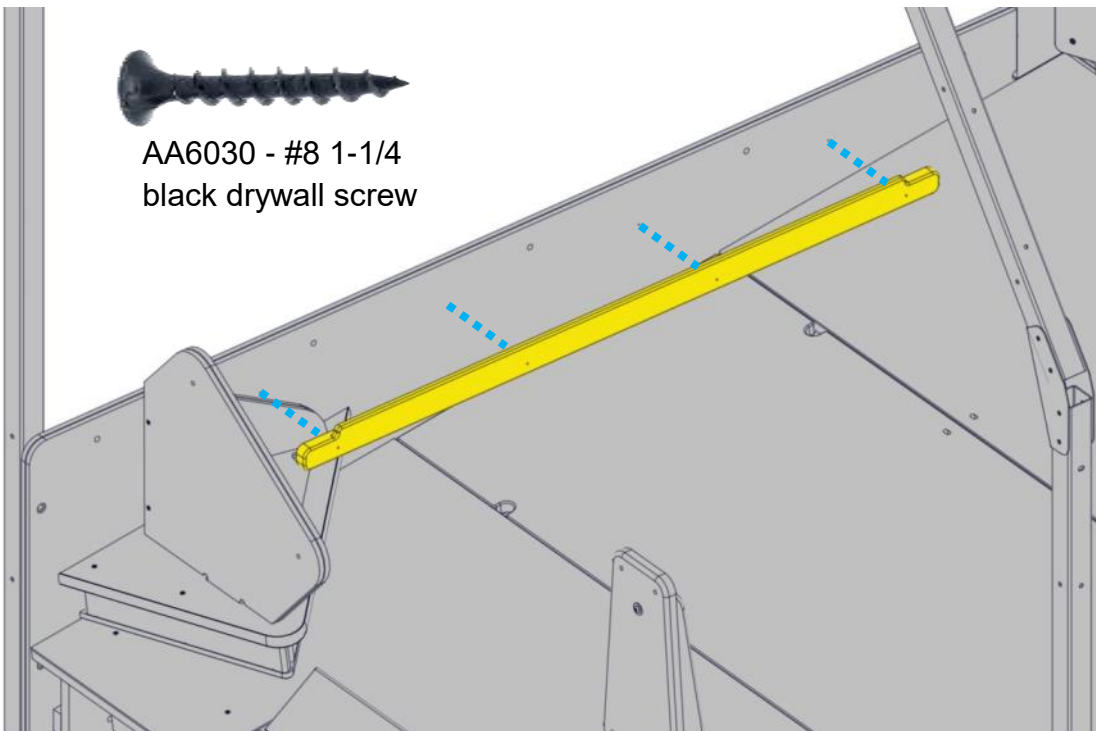
STEP 37:

Position the cage trim on top of both cages and attach them using four AA0655 square screws per cage. The notch side is the front. On some cages, a rubber hammer is needed to install the top panel.

AA0655 - #8 X 3/4
Square pan head screw

X's 4

LEFT

RIGHT
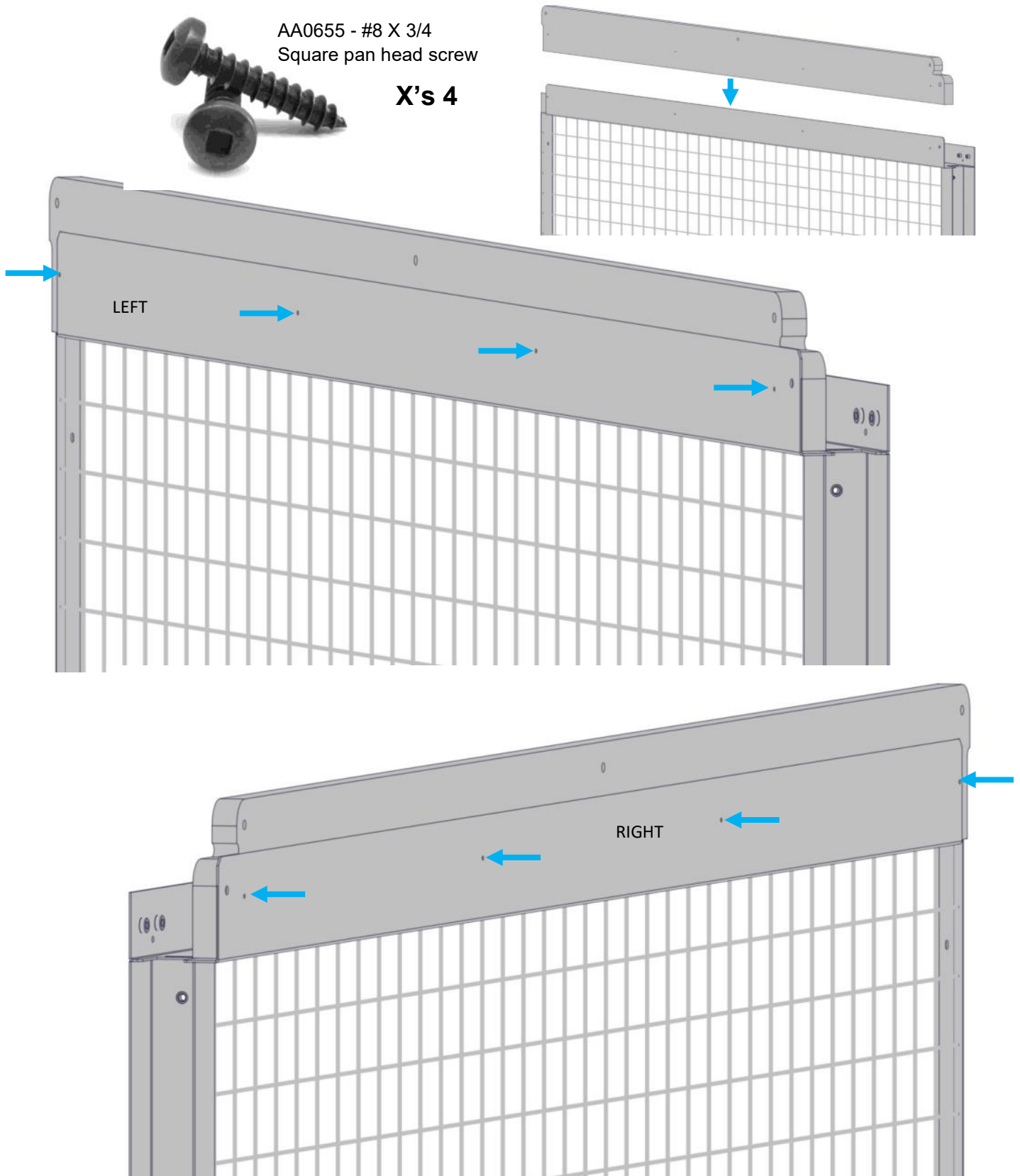
STEP 38:

Attach a DB3199 to each cage front using three PC60636 black Allen bolts and AA6212 black washers. The notch faces to the outside of the cage.

It is necessary to raise the cages off the ground to install.

X's 6

PC60636 1/4-20 X 3 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK
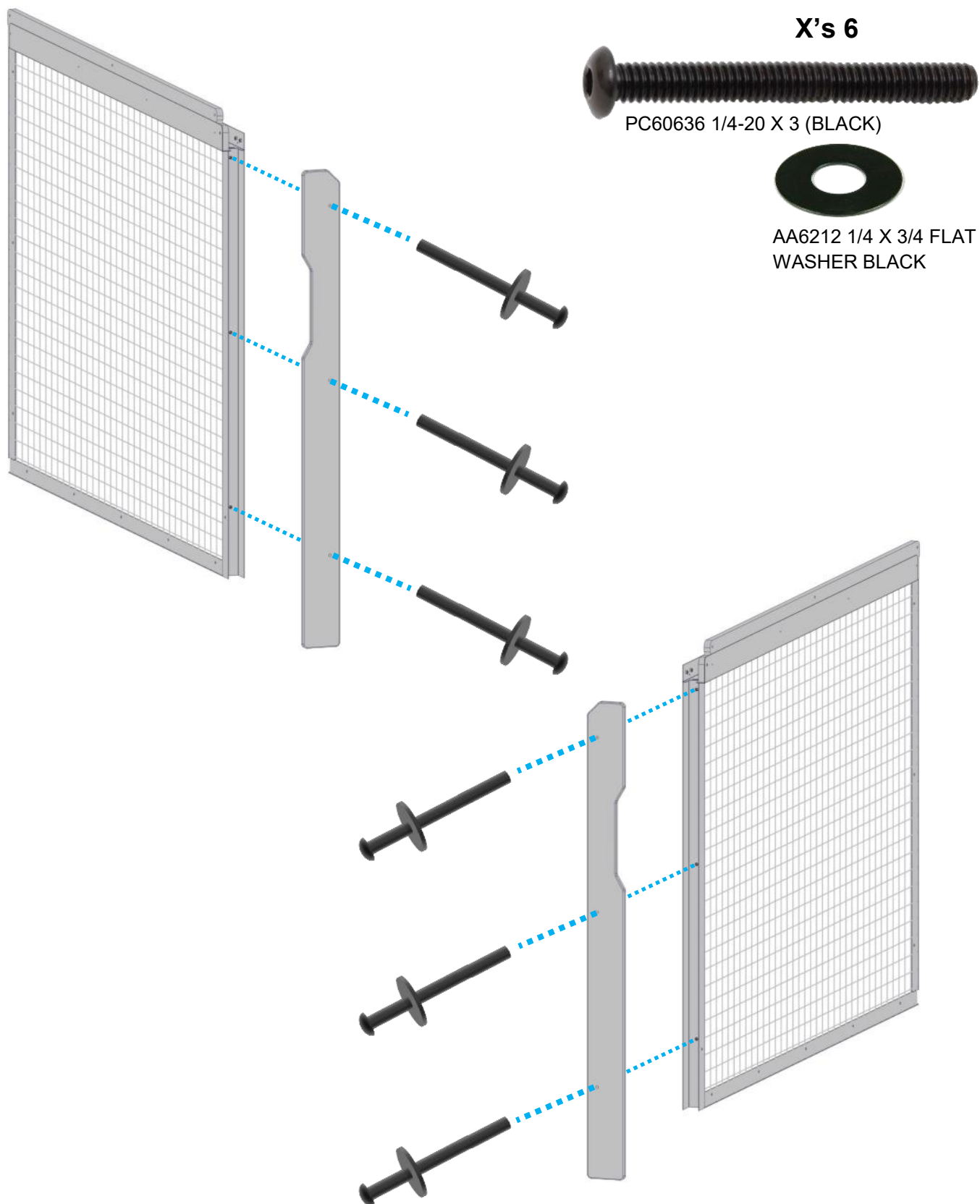
STEP 39:

Slide the left cage assemble on the inside trim you installed in step 26 and against the back tower.

Notch to the outside.
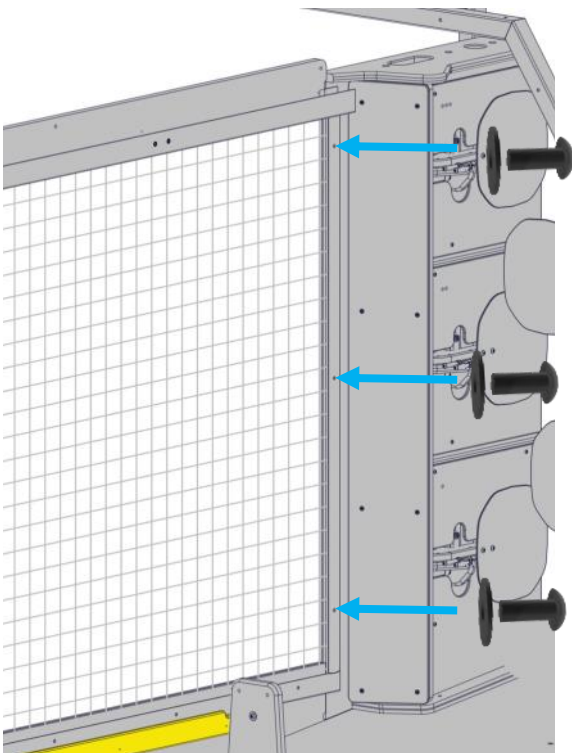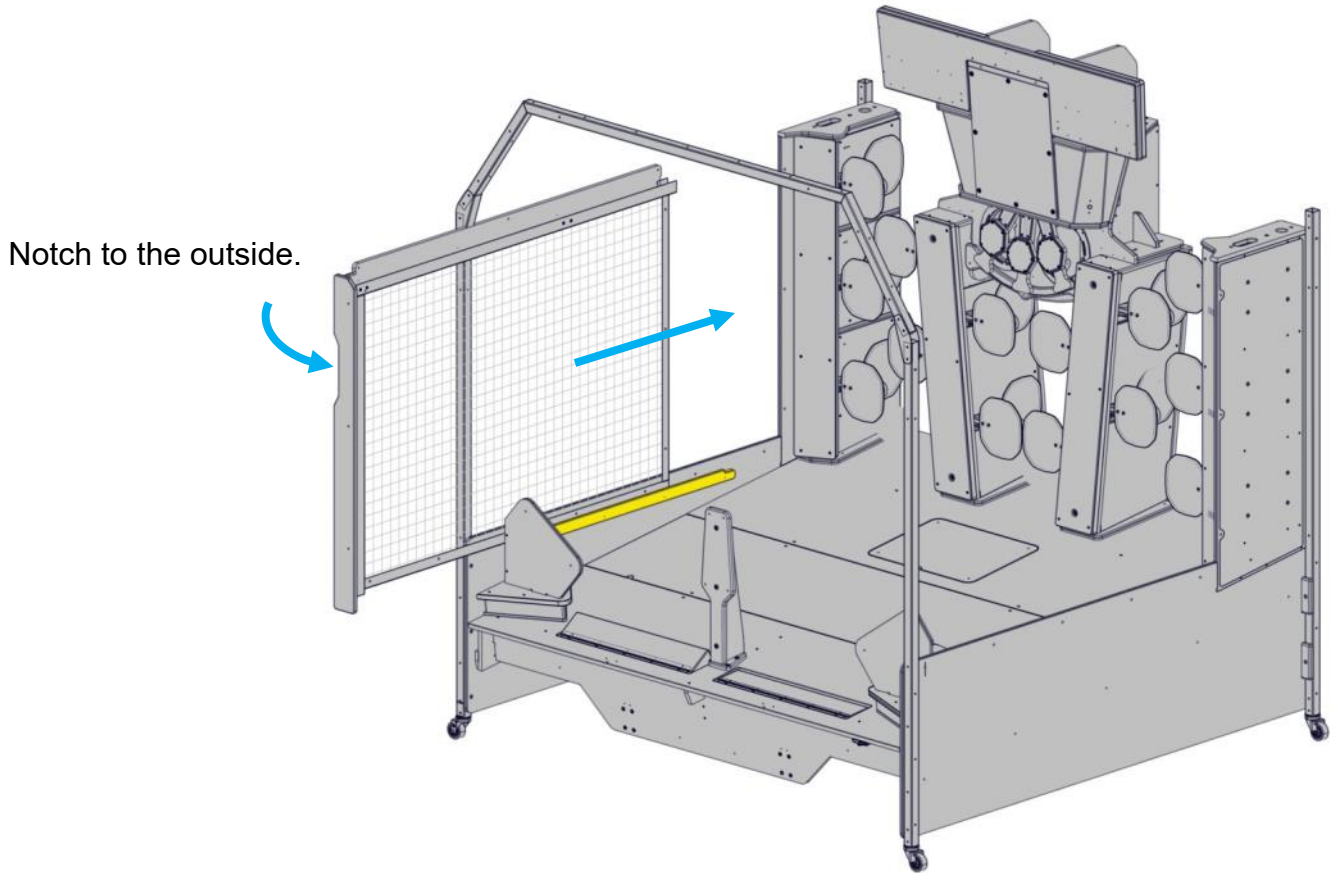
STEP 40: DO NOT TIGHTEN HARDWARE

Loosely secure the cage to the back tower using three PC60622 black Allen bolts and AA6212 black washers from the inside of the cabinet.

X's 3

PC60622 1/4-20 X 1 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

STEP 41: DO NOT TIGHTEN HARDWARE

Loosely secure the cage bottom to the cabinet using five PC60622 black Allen bolts and AA6212 black washers from the inside of the cabinet.

X's 5

PC60622 1/4-20 X 1 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK
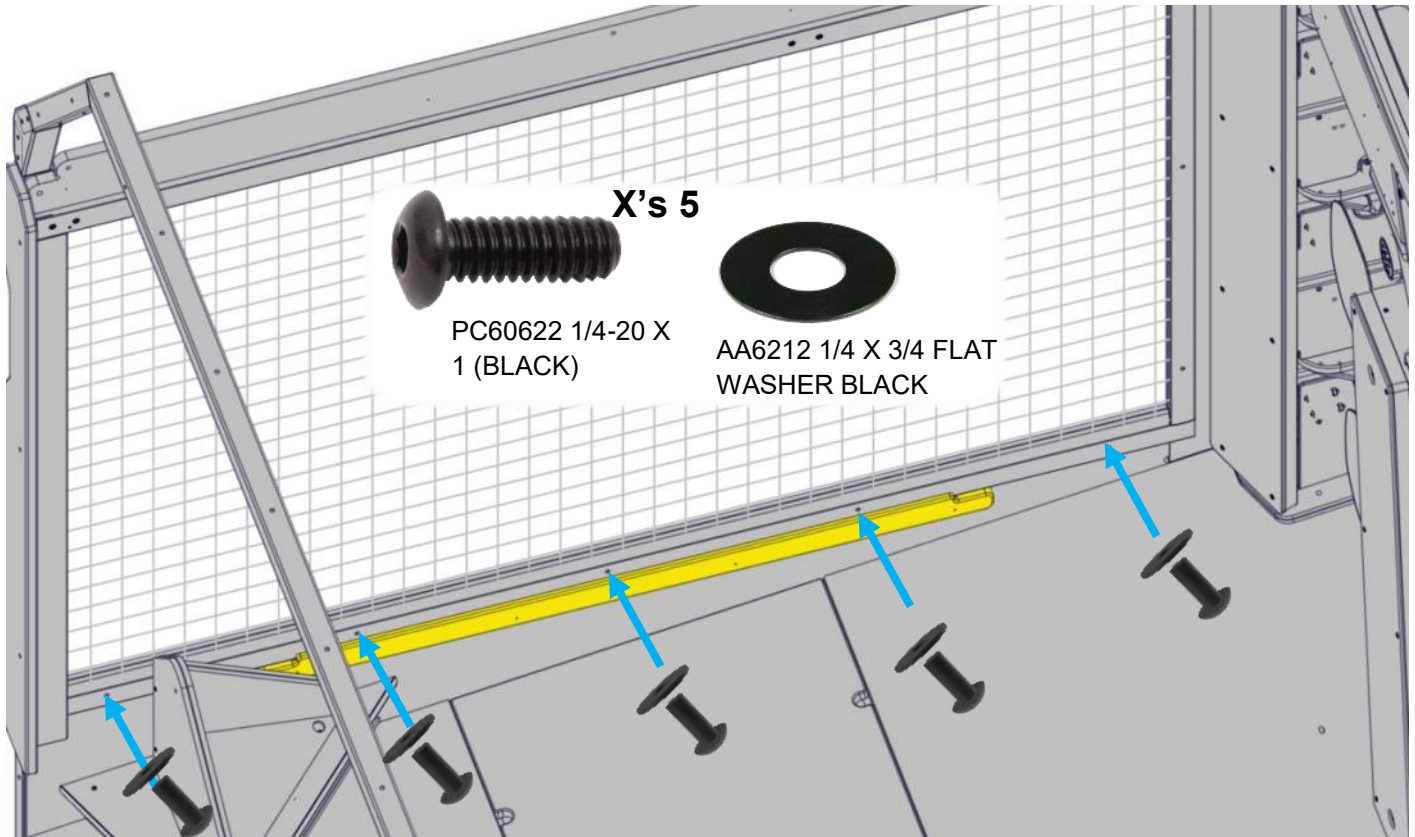
STEP 42:

Assembly the left cleat assembly by putting three AA6030 screws far enough into the yellow plastic so it protrudes slightly out the other side. Then line up the screw tips with the pilot holes in the black plastic (NOTE: Black plastic GROOVE SIDE UP as pictured. & Note: Yellow Plastic is universal and can be used on either LEFT or Right side panel.

X's 3

AA6030 - #8 1-1/4
black drywall screw

Part A

Part B
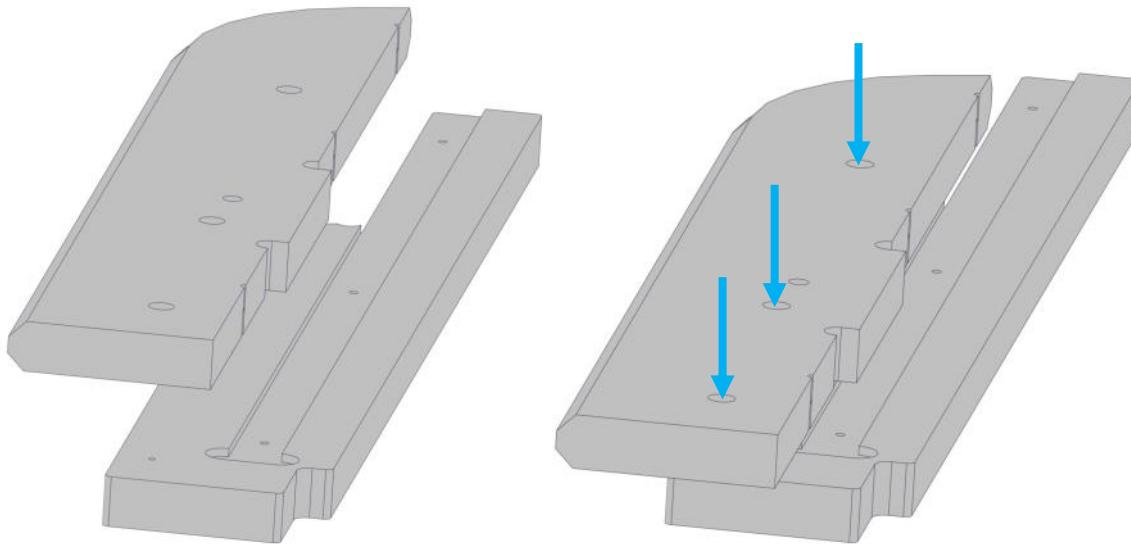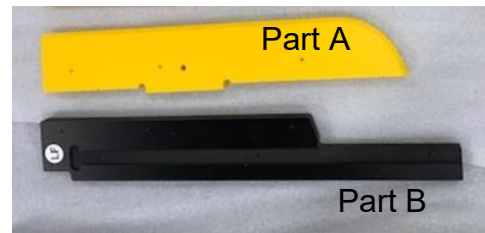
STEP 43:

Slide the cleat into the upper side support aligning the notch.
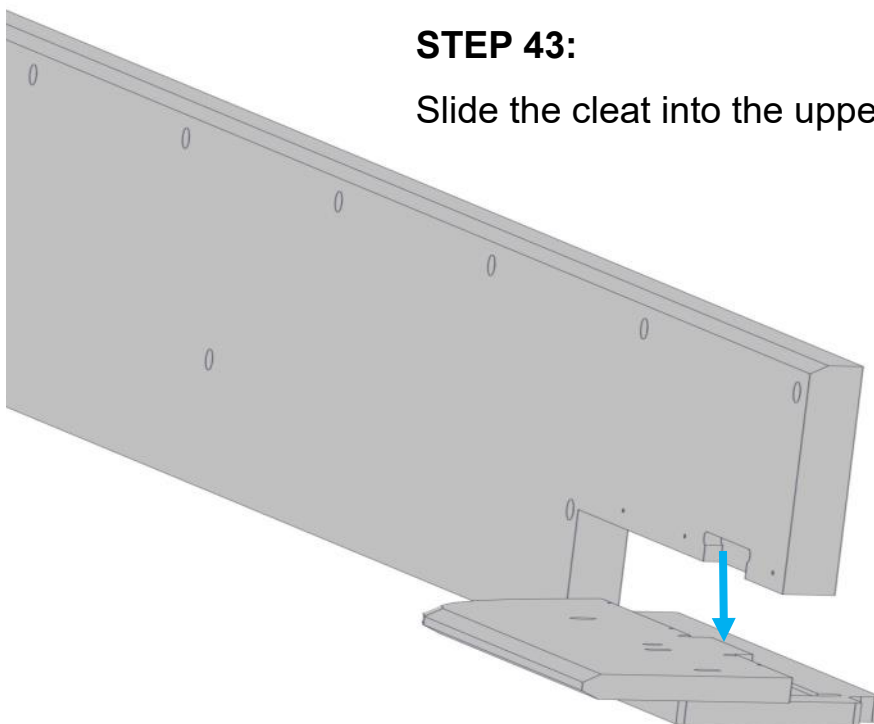
STEP 44:

Place the cleat onto the bottom edge of the LEFT side panel and secure with AA6922 three 2" WOOD SCREWS. **Note: The yellow plastic should be on the same side as the large flange of the silver insert. If it is not, then find the other panel.**

Large flange of Silver Insert

AA6299 2" SCREWS

X's 3

AA6299 - 8 X 2 drywall w/nibs black

STEP 45:

Flip over assembly and screw in AA6922 through the black plastic and into the yellow plastic.

AA6299 2" SCREWS

X's 3

AA6299 - 8 X 2 drywall w/nibs black
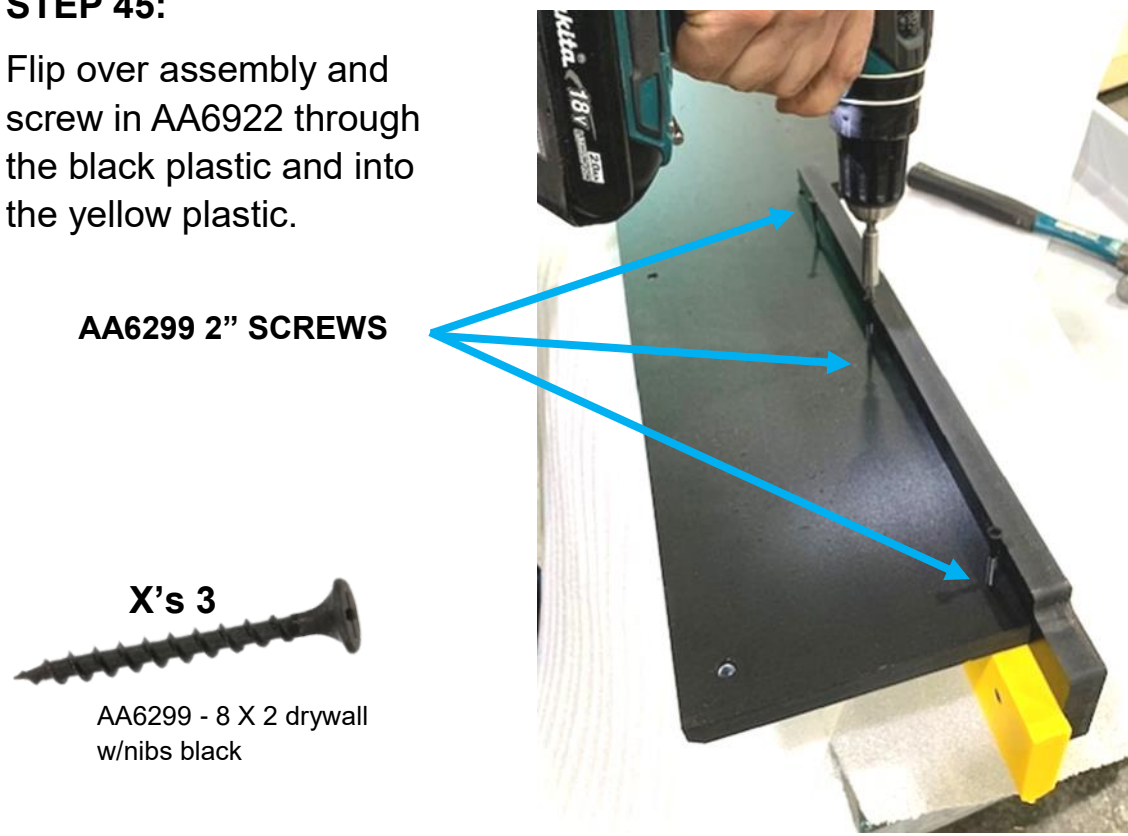
STEP 46:

Slide the top DB3158 side panel onto the left cage top, yellow to the inside.
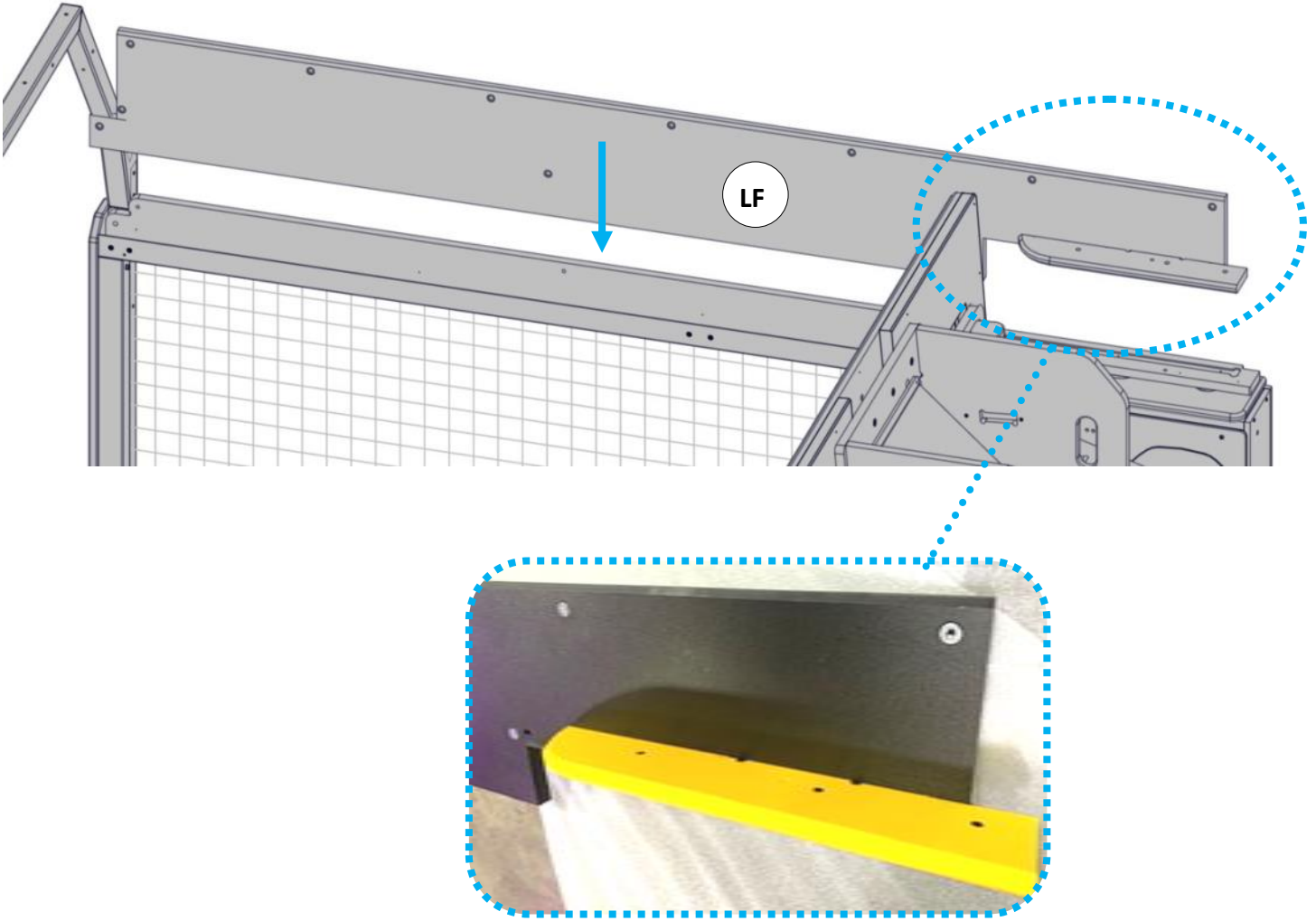
STEP 47:

Repeat steps 42 through 45 for the RIGHT side panel assembly.

DO NOT INSTALL RIGHT SIDE AT THIS TIME(NO CAGE HAS BEEN INSTALLED)

Note: Yellow Plastic is universal and can be used on either LEFT or RIGH side panel.

STEP 48:

Secure the cage to the front cabinet legs using one AA6369 Black Allen Bolt and AA6212 black washer.

OUTSIDE

X's 1

AA6369 - 1/4-20 X 3-1/2 BLACK

AA6212 1/4 X 3/4 FLAT WASHER BLACK
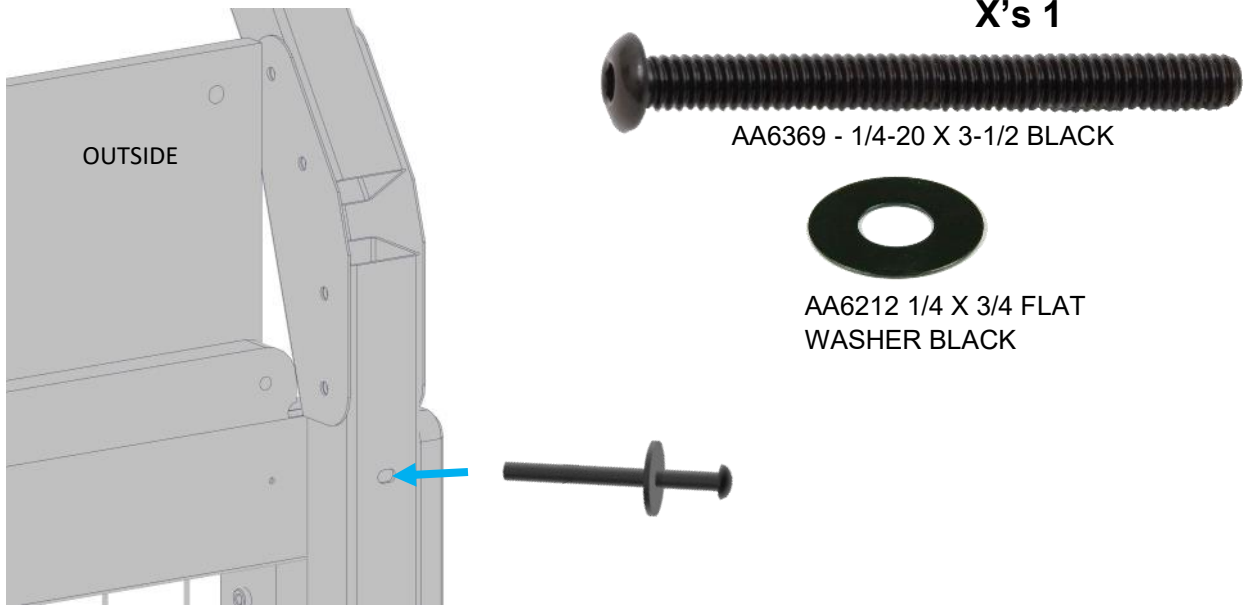
STEP 49:DO NOT TIGHTEN HARDWARE

Secure the cage to the DB3158 using three AA6281 Black Allen Bolts and AA6212 black washers.

X's 3

AA6281 1/4-20 X 1-1/2 black Allen

AA6212 1/4 X 3/4 FLAT WASHER BLACK
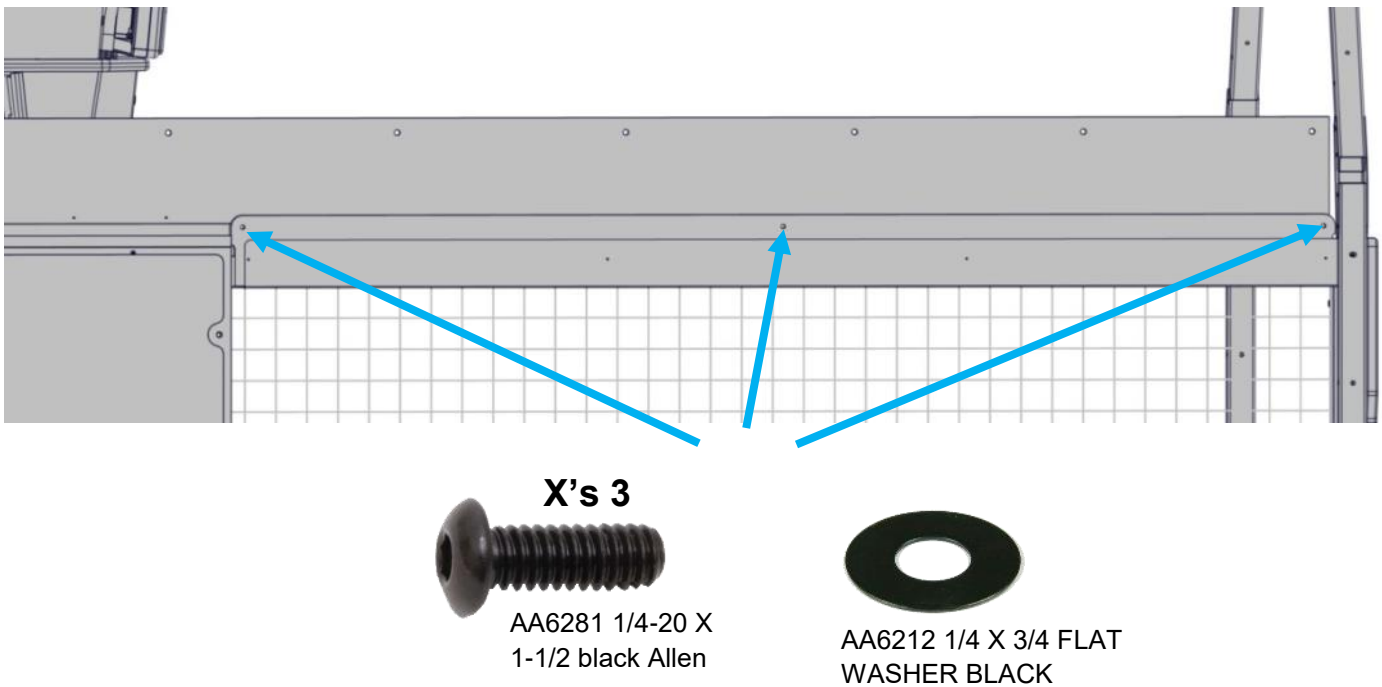
STEP 50:

Secure the cage assembly to the back tower with one AA6125 black bolt and AA6212 black washer.

AA6125 1/4-20 X 2-1/2 black Allen

X's 1

AA6212 1/4 X 3/4 FLAT
WASHER BLACK

STEP 51:

Slide the right cage assemble on the inside trim you installed in step 26 and against the back tower.
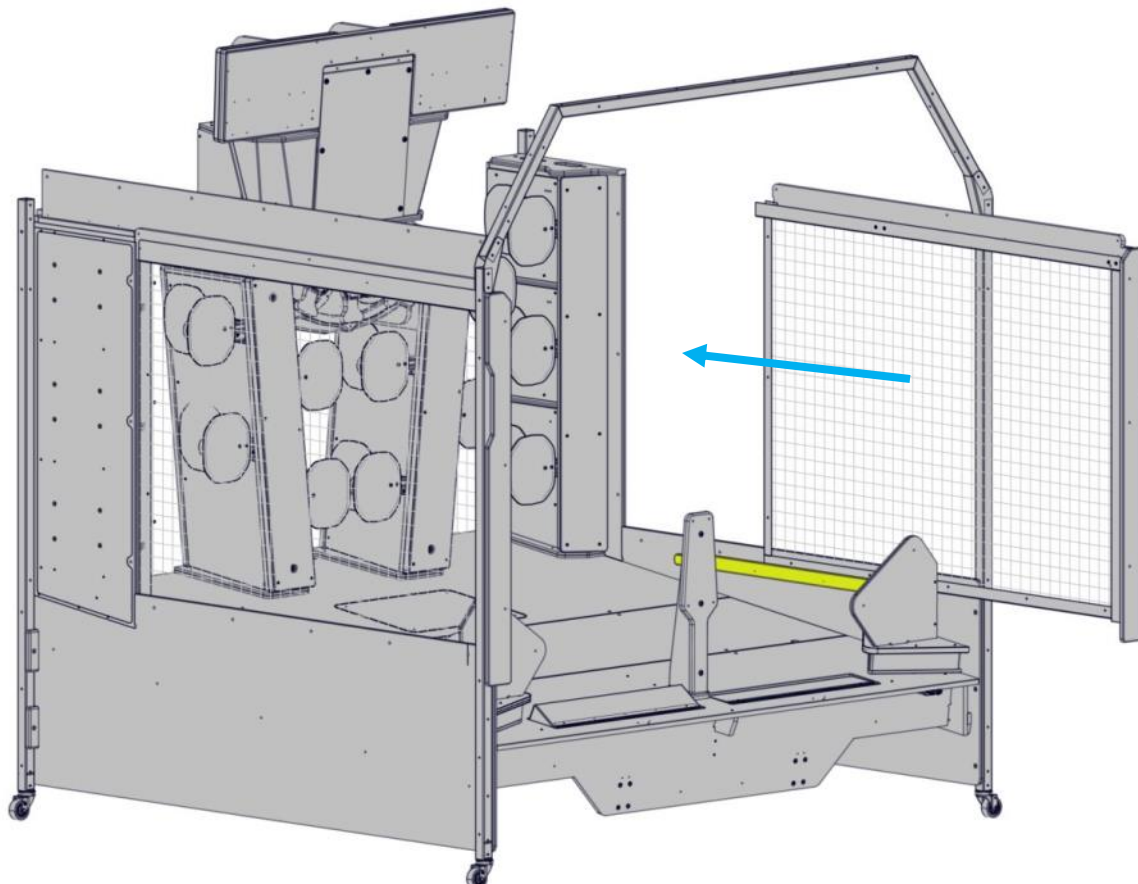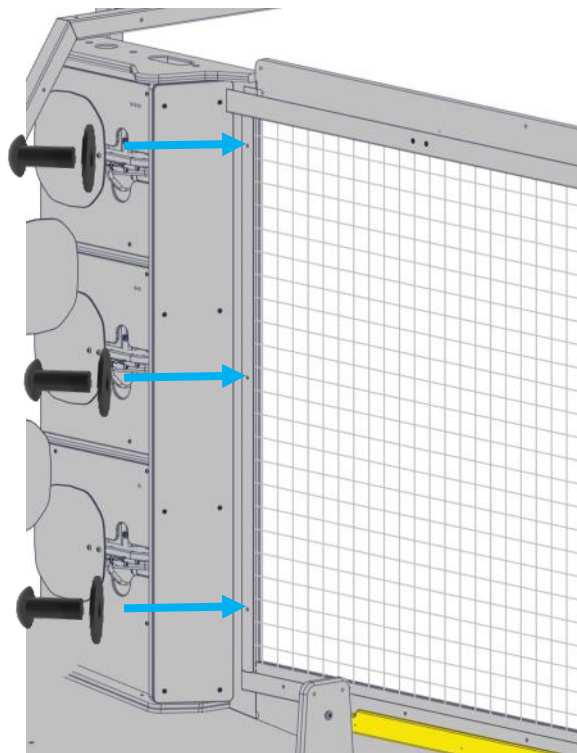
STEP 52: DO NOT TIGHTEN HARDWARE

Secure the cage to the back tower using three PC60622 black Allen bolts and AA6212 black washers from the inside of the cabinet.

X's 3

PC60622 1/4-20 X 1 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

STEP 53: DO NOT TIGHTEN HARDWARE

Secure the cage bottom to the cabinet using five PC60622 black Allen bolts and AA6212 black washers from the inside of the cabinet.

X's 5
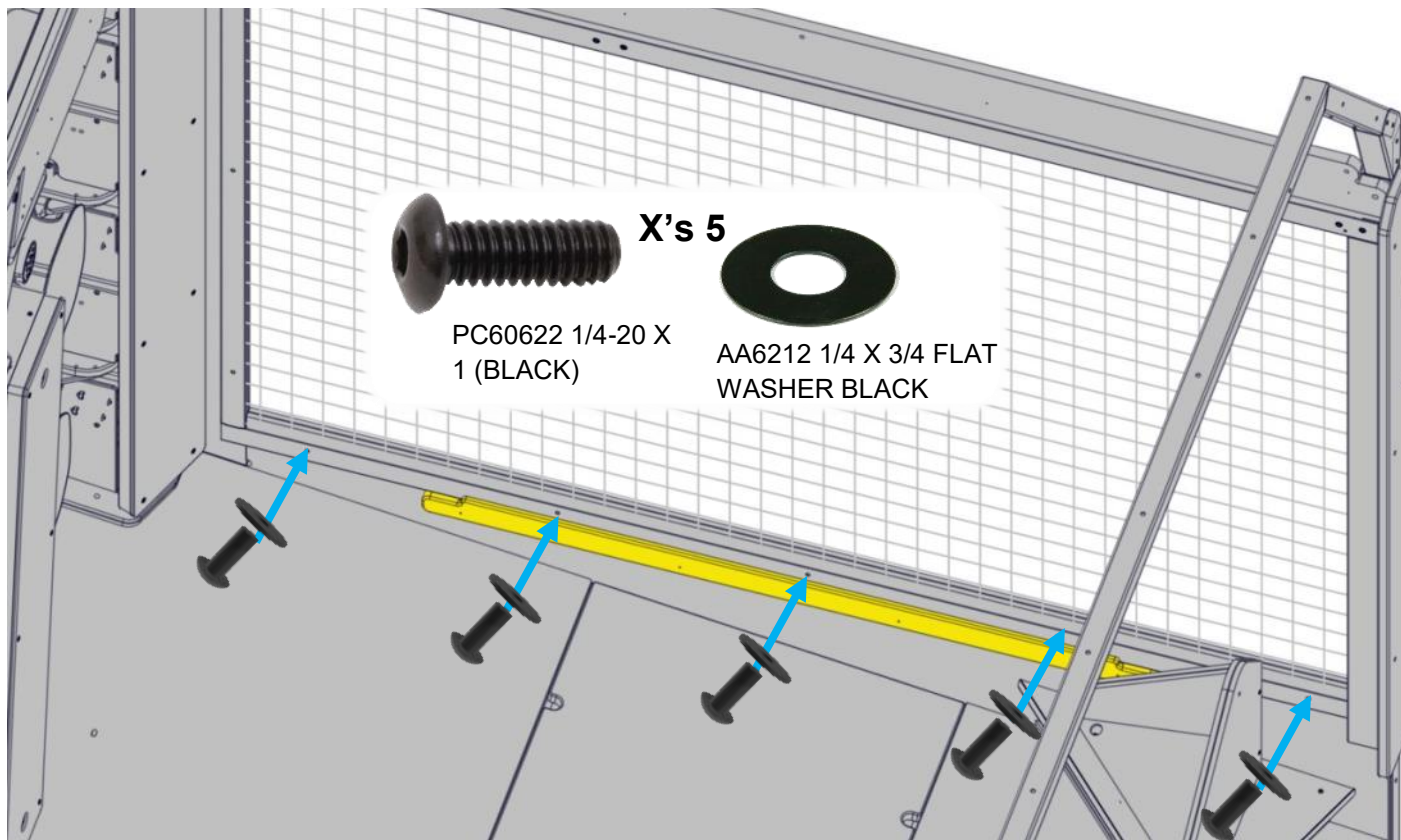
PC60622 1/4-20 X 1 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

STEP 54

Slide the top DB3158 side panel onto the right cage top.
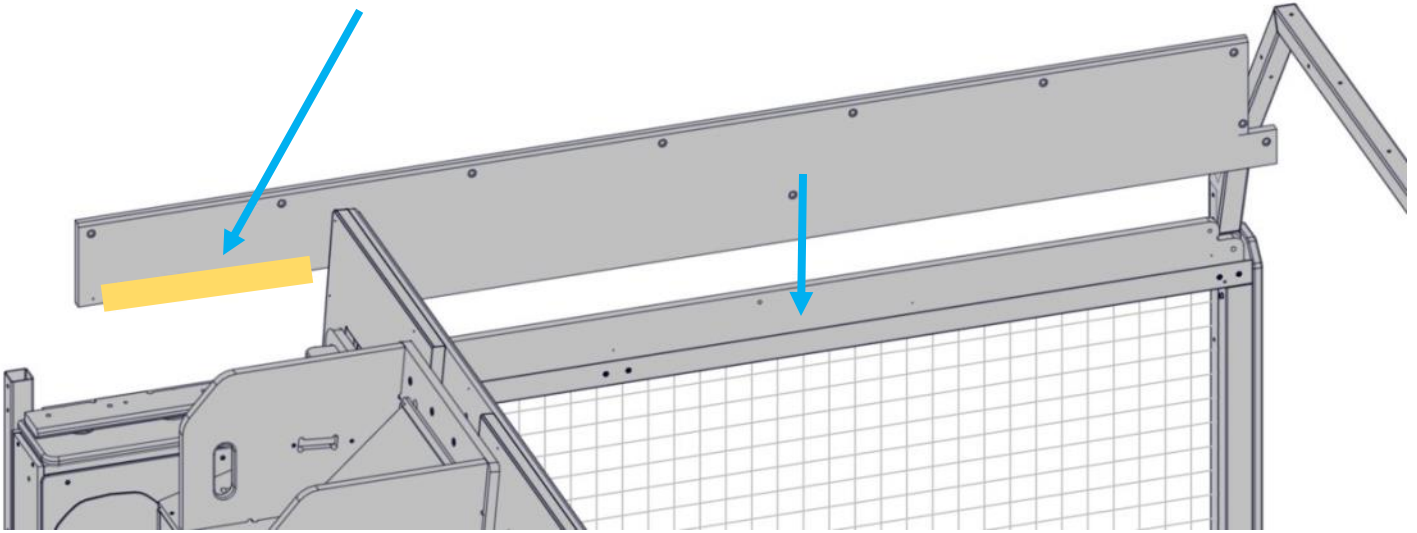
STEP 55:

Secure the cage to the front cabinet legs using one AA6369 Black Allen Bolt and AA6212 black washer.

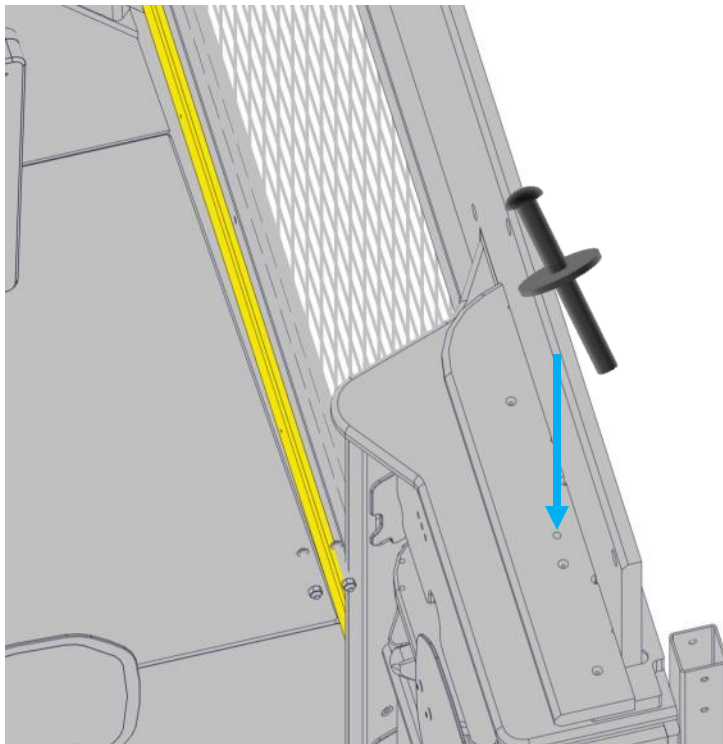**X's 1**

AA6369 - 1/4-20 X 3-1/2 BLACK

AA6212 1/4 X 3/4 FLAT WASHER BLACK

OUTSIDE
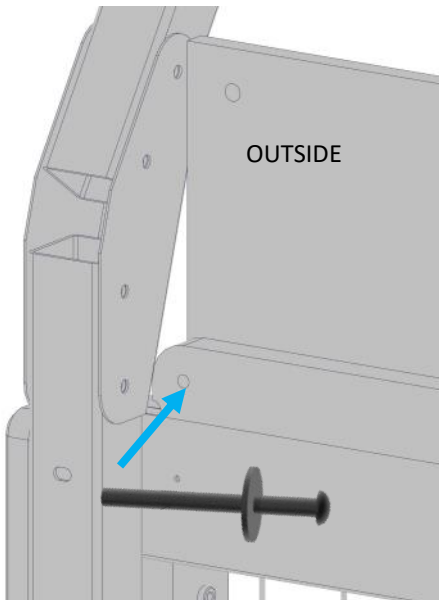
STEP 56:

Secure the cage to the DB3158 using three AA6281 Black Allen Bolts and AA6212 black washers.

X's 3
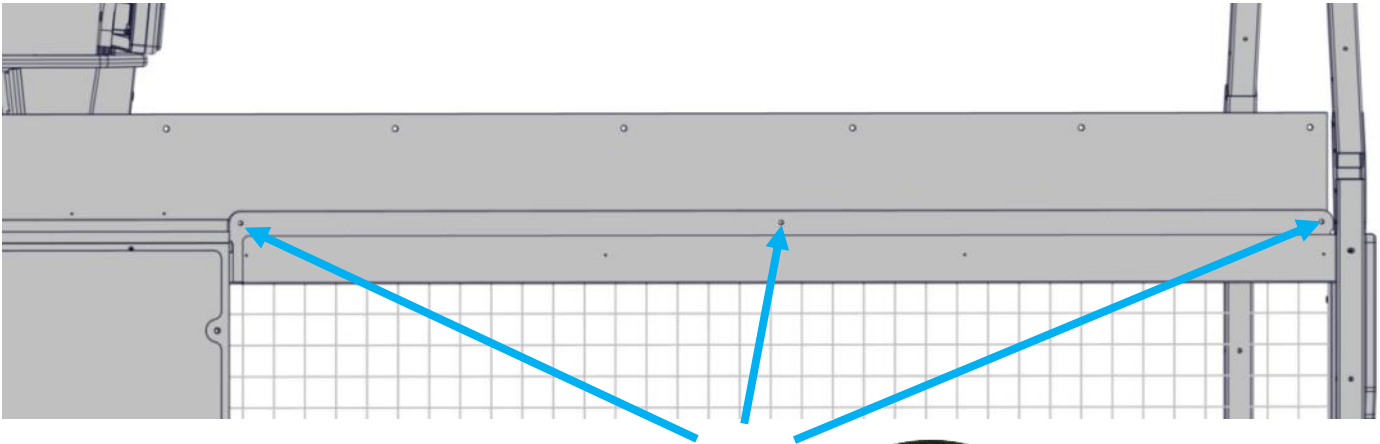
AA6281 1/4-20 X 1-1/2 BLACK

AA6212 1/4 X 3/4 FLAT
WASHER BLACK

STEP 57:

Secure the cage assembly to the back tower with one AA6125 black bolt and AA6212 black washer.
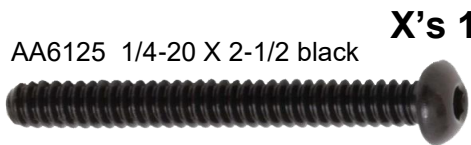
AA6125 1/4-20 X 2-1/2 black   **X's 1**

AA6212 1/4 X 3/4 FLAT
WASHER BLACK
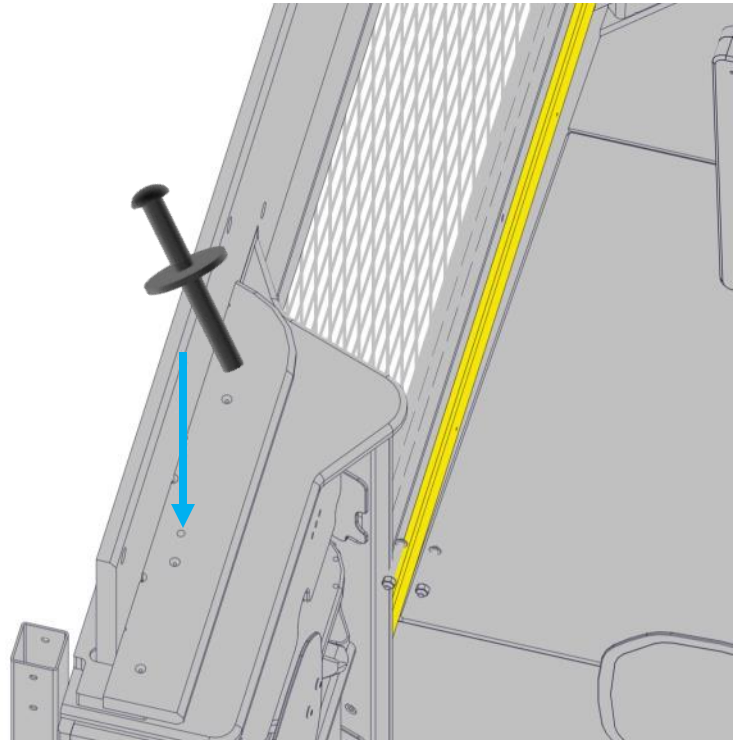
STEP 58:

Tighten all hardware for the cages.

STEP 59:

Slide the upper DB1032 support brackets onto the back legs at both sides. Loosely attach two AA6125 Allen bolts and AA6212 washers from the front and secure them with AA6966 nylon nuts at the back.

DO NOT TIGHEN HARDWARE AT THIS TIME.

X's 4

AA6125   1/4-20 X 2
-1/2 BLACK

AA6966 1/4-20 nylock black nut

DB1032 Upper Support Bracket

AA6212 1/4 X 3/4 black washer
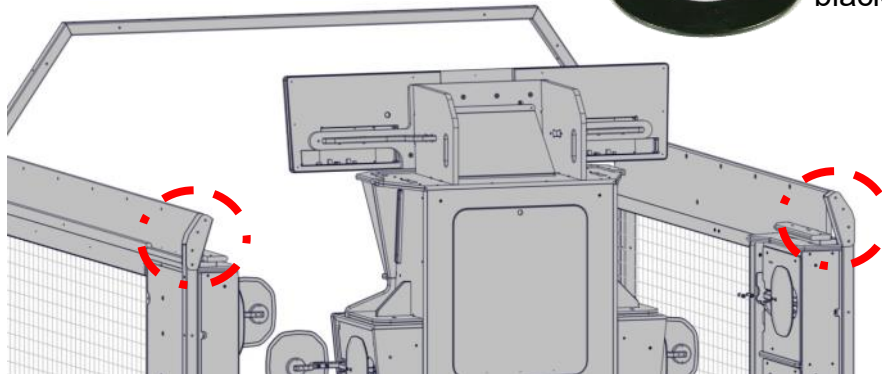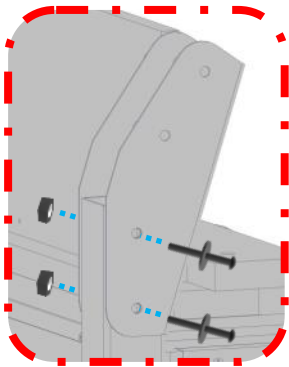
STEP 60:

Slide the back arch into the brackets
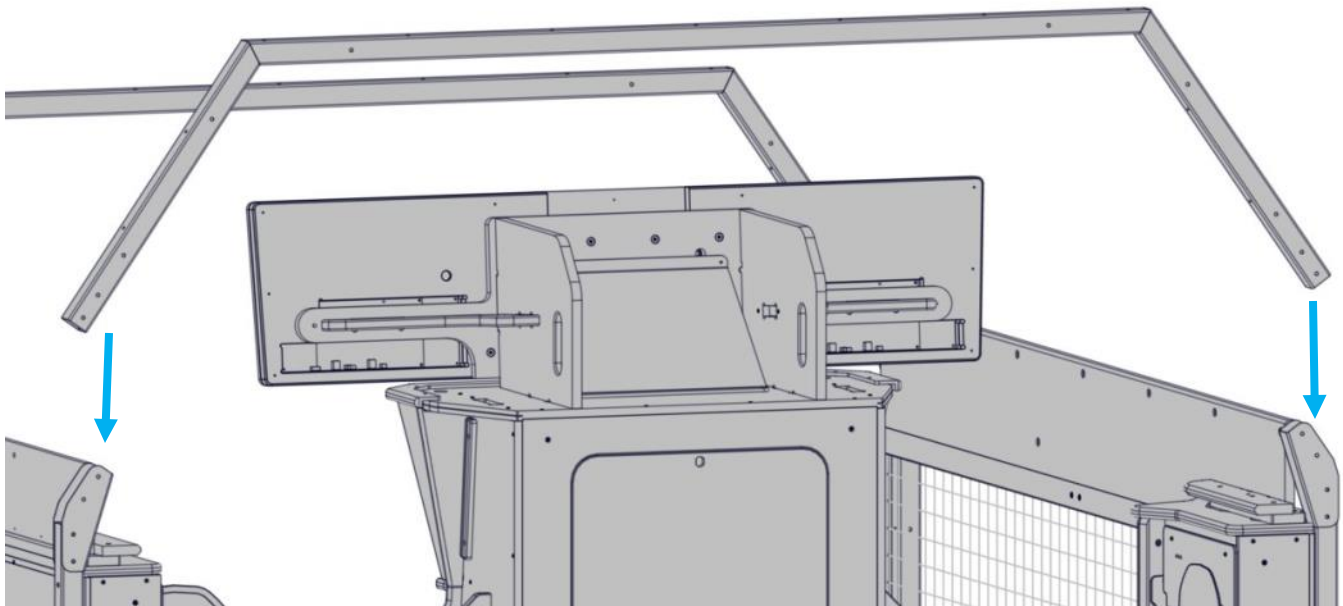
STEP 61:

Loosely secure the arch using two AA6125 Allen bolts and AA6212 washers from the backside and secure them with AA6966 nylon nuts at the front on both sides.

DO NOT TIGHTEN AT THIS TIME.

X's 4
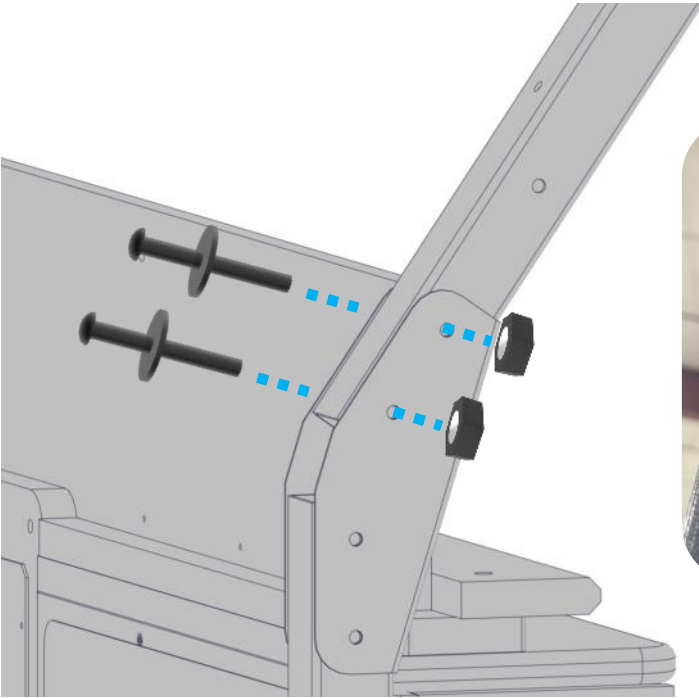
AA6125 1/4-20 X 2-1/2 black Allen

AA6966 1/4-20 nylock black nut

AA6212 1/4 X 3/4 black washer

STEP 62: DO NOT TIGHTEN HARDWARE

Install the center back panel to the back of the game loosely with six AA6584 black Allen bolts and AA6212 black washers.

X's 6
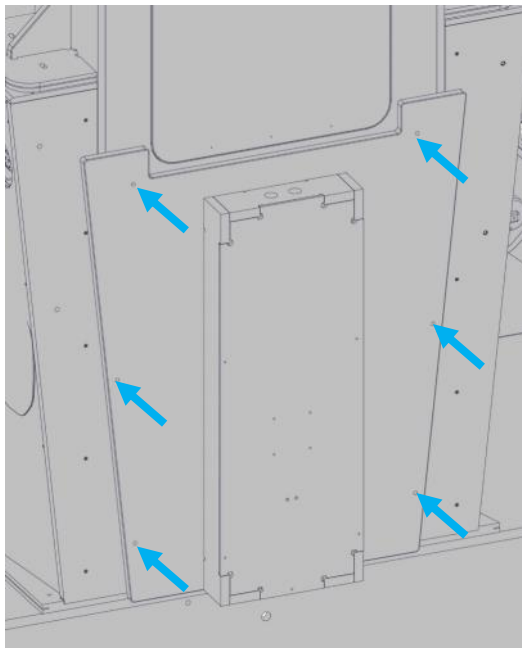
AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 black washer
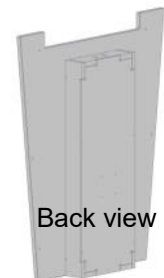
Back view

Front view

STEP 63:

Install the left back panel to the back of the game using seven AA6584 black Allen bolts and AA6212 black washers. **You might have to shift the upper archway bar.**

X's 7
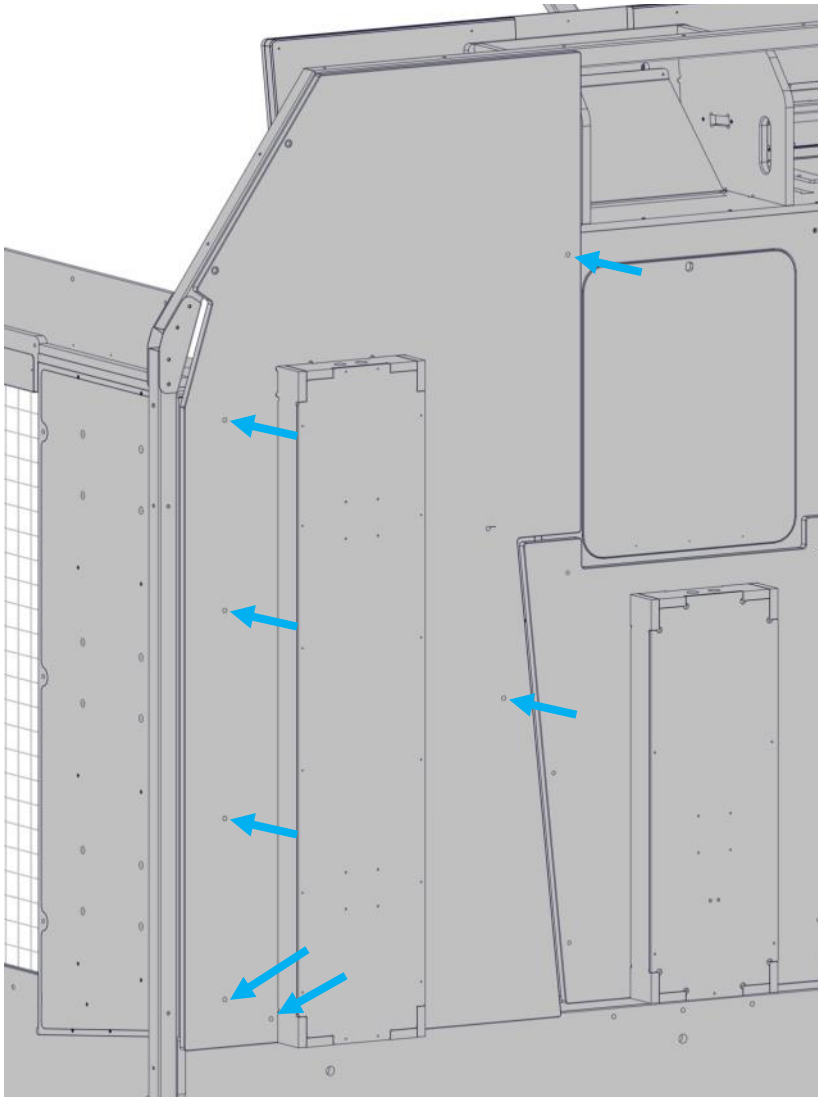
AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

Front view
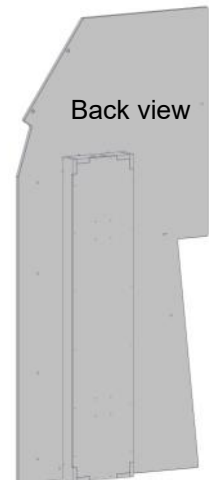
Back view

STEP 64:

From inside the game, secure the left back panel to the upper arch using two AA6125 black Allen bolts and AA6212 black washers.

X's 2
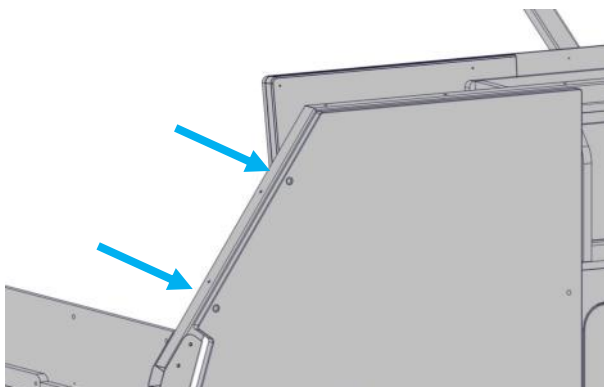
AA6125 1/4-20 X 2-1/2 black

AA6212 1/4 X 3/4 black washer

STEP 65:

Install the right back panel to the back of the game using seven AA6584 black Allen bolts and AA6212 black washers. You might have to shift the upper archway.

X's 7
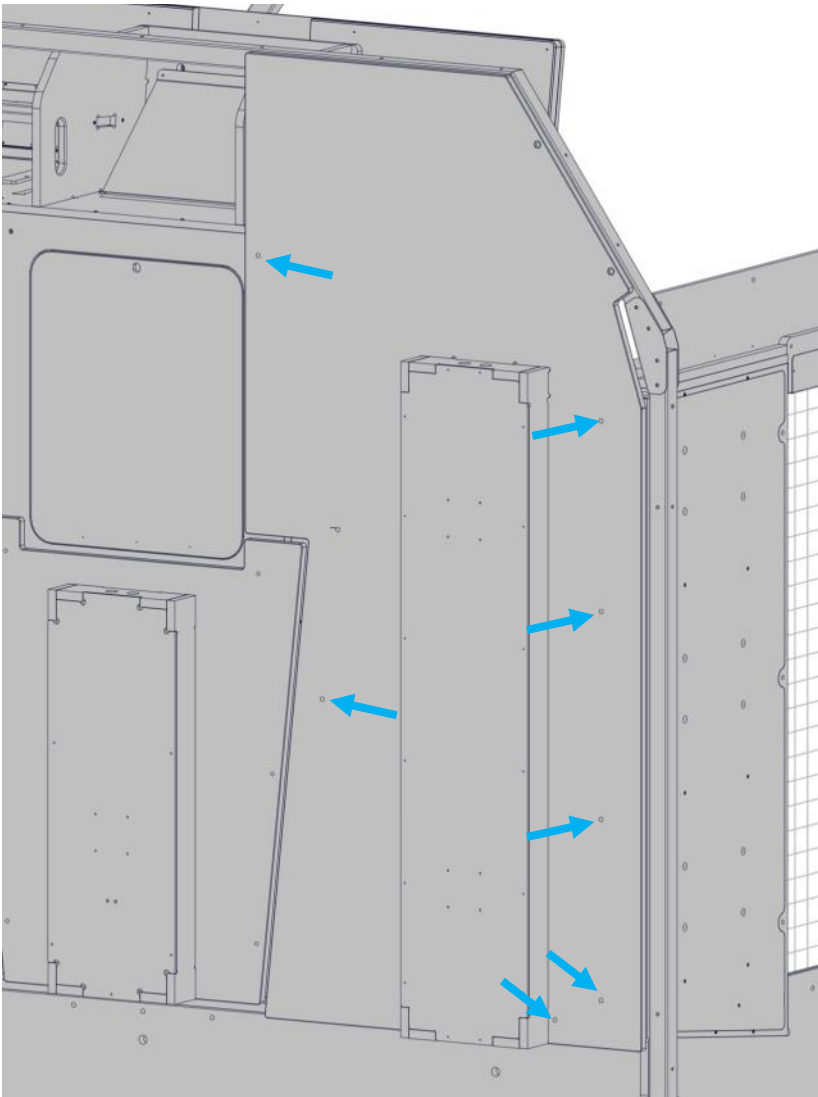
AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT WASHER BLACK

Front view
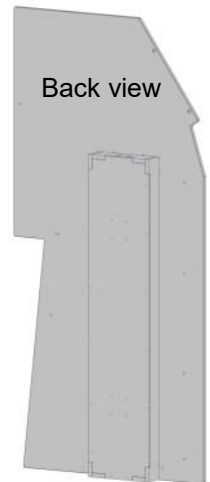
Back view

STEP 66:

From inside the game, secure the left back panel to the upper arch using two AA6125 black Allen bolts and AA6212 black washers.

X's 2
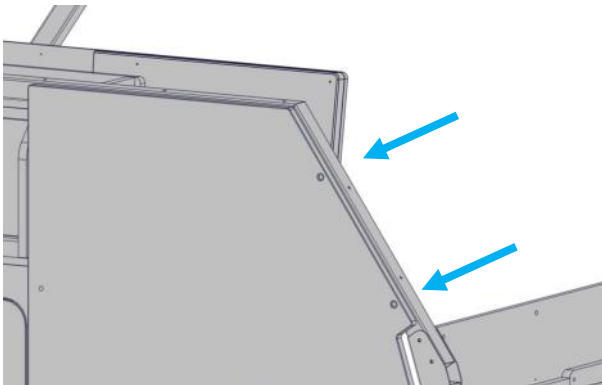
AA6125 1/4-20 X 2-1/2 black

AA6212 1/4 X 3/4 black washer

STEP 67: Tower harnesses & AC Power Module

A) Install Power Inlet Module with Qty 6 AA0655. Also apply DECALS from parts box ("CAUTION", "WARNING", "SUITABLE") see next page for details on harness fastener location.

B) Insert cables from each tower assembly into the bottom holes.

A

B

X's 6

AA0655 - #8 X 3/4 Square pan head screw
Use the 6 holes with pilot holes that match
the metal plate.
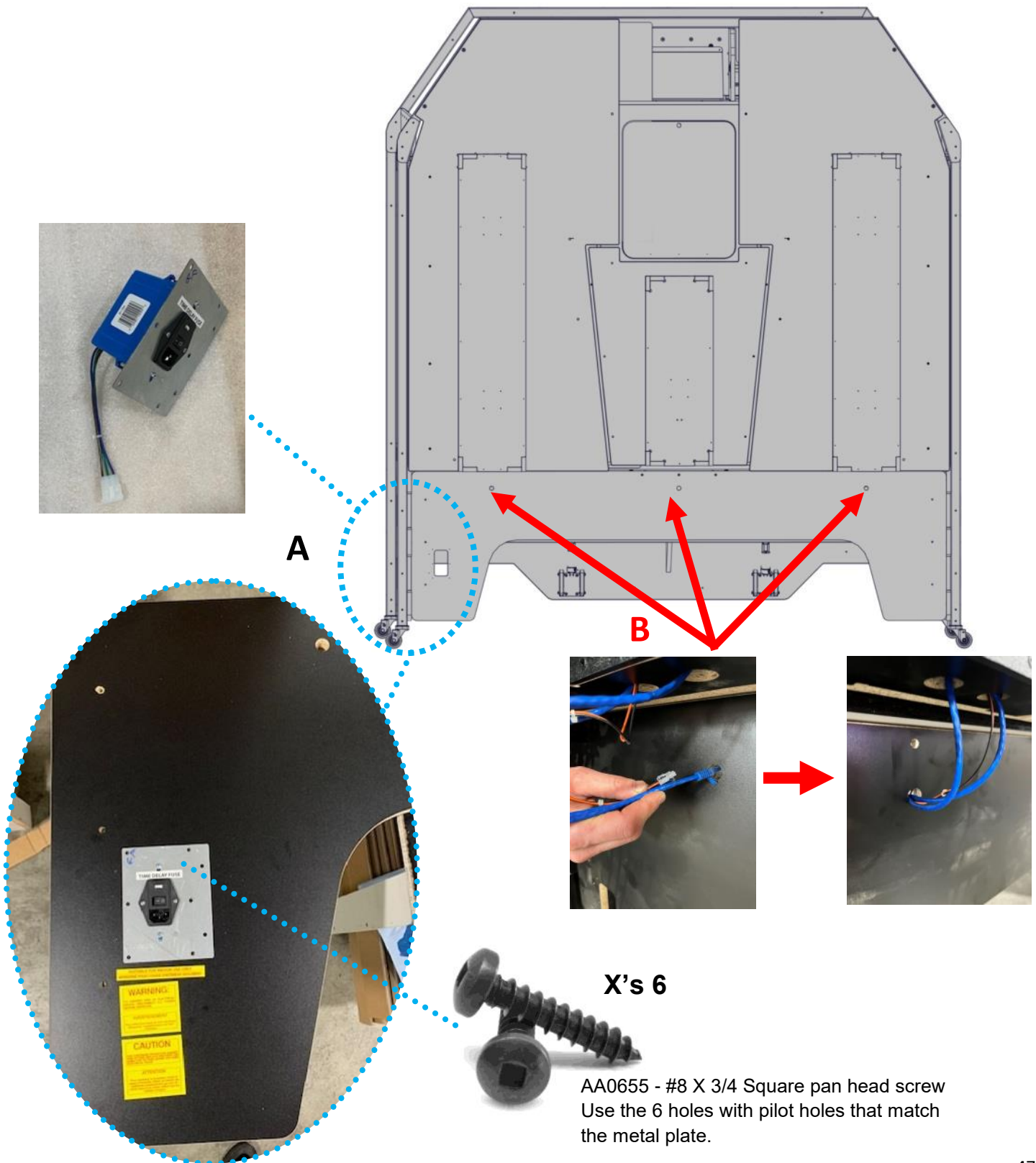
Install wire clips and plug in main AC harness

Underside of Game

E08639 HARNESS CLAMP
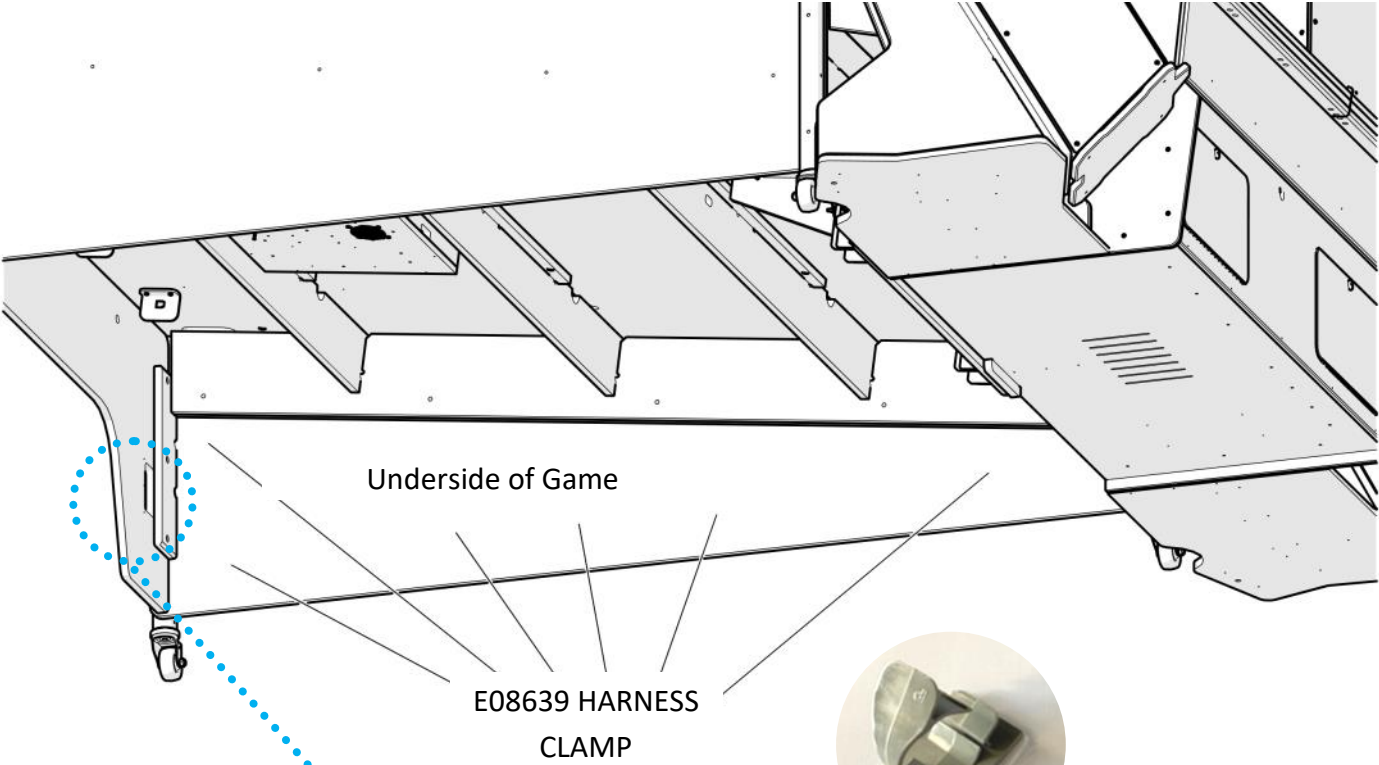
STEP 68: NETWORK CABLE FLOW

The Network cable run starts from front of game to first coupler at the back. The other side of the coupler goes up the left score tower and back down into another coupler. Each tower has two network cables. Each coupler and cable is colored coded.

Either one can be used for input or output.

DO NOT PLUG BOTH CABLES FROM A TOWER INTO THE SAME COUPLER!

Two pin DC power cables are also at each tower connection
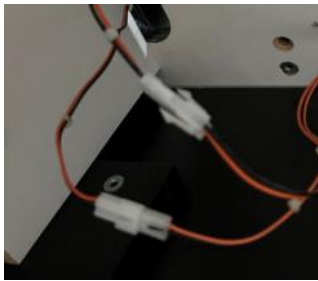
Connect the display harness coming from the center tower.
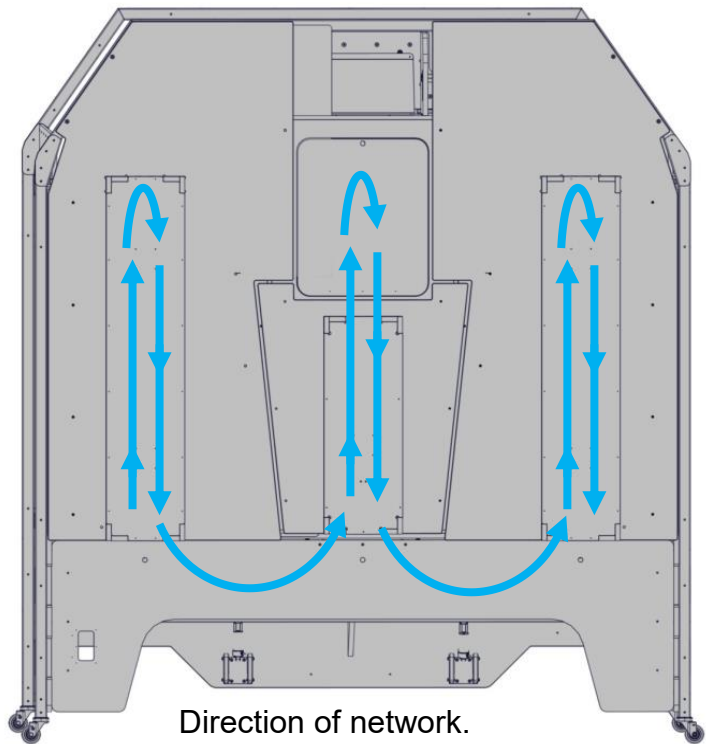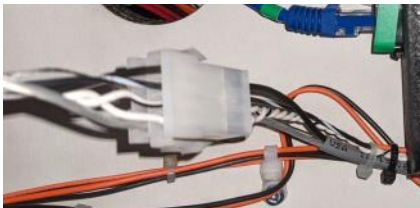
Direction of network.

Not physical connections.

Any cable with the same color can be plugged into same color coupler.

NETWORK WIRING COLOR CODE (STEP 68)

Right Tower

Right Button

Center Button

Right Center Tower

Left Center Tower

Left Button

Left Tower

TO FRONT OF GAME
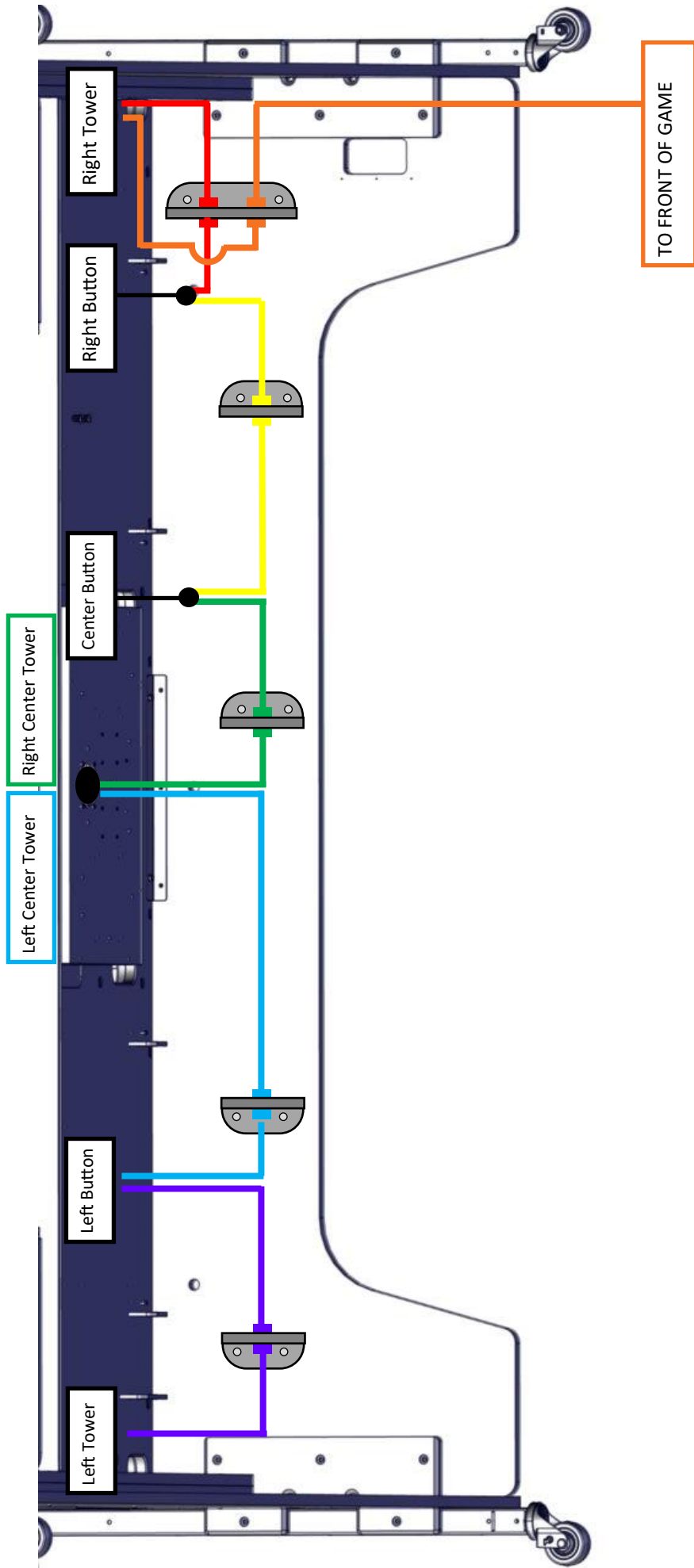
STEP 69:

Remove the upper center panel. From the back of the cabinet, the network cable on the left side comes from the middle tower on the left. The right side comes from the middle tower on the right. Both at the top. From the front of the cabinet you can reach in and route the cables up into the jumbotron assembly. The other two data harness comes from the left middle tower. This harness can be pushed up through the front of the cabinet. If you are unable to locate these cables, remove the   tower covers for easier access.
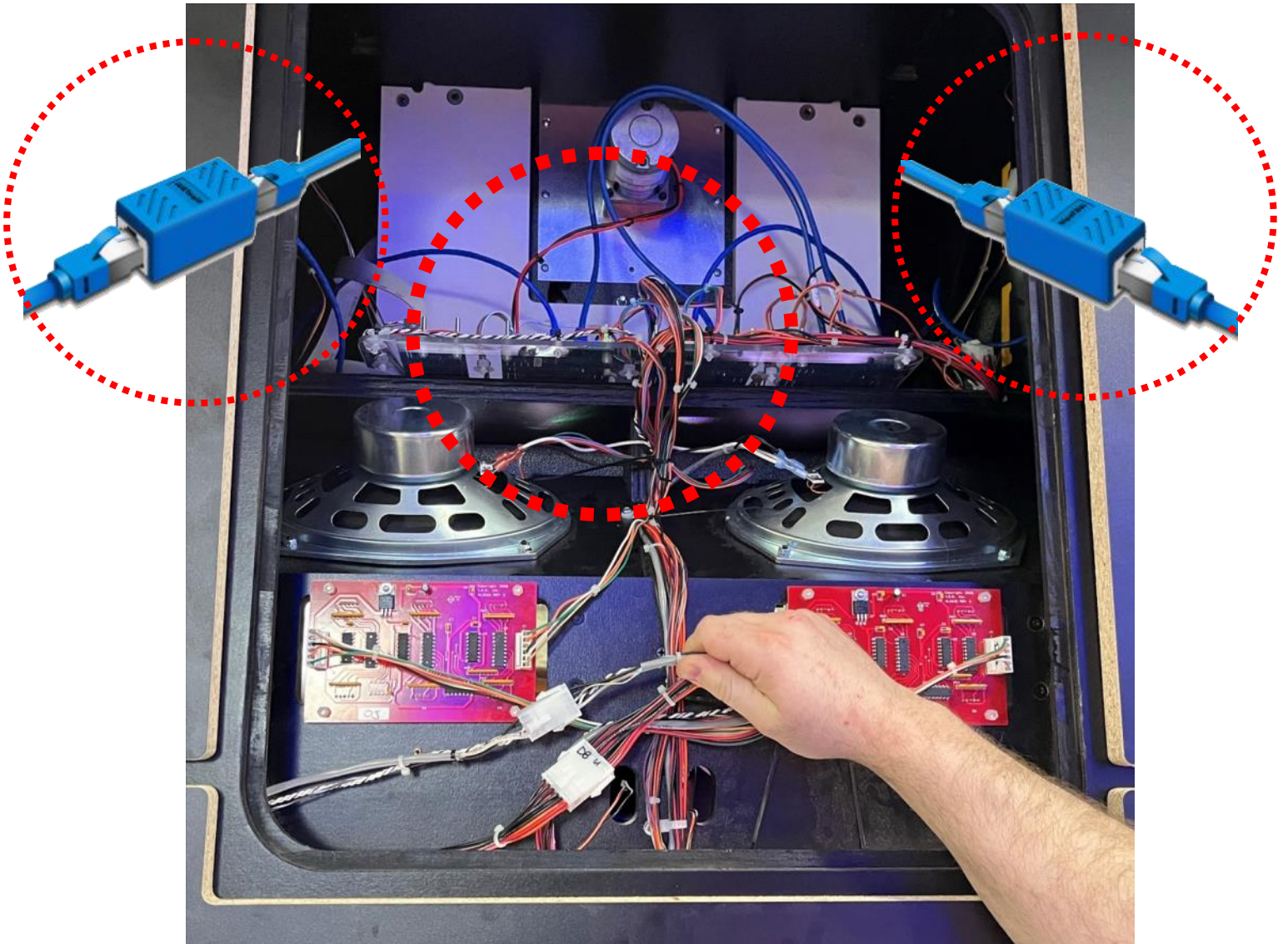
STEP 70:

Undo harnesses at either end and push out side holes. Ball gate connector is on the left. Remove keys attached to top of cabinet and put aside.

Attach the top to the podium using four AA6584 black Allen bolts and four AA6212 black washers

X's 4

AA6584 1/4-20 X 2
black Allen

AA6212 1/4 X 3/4
black washer
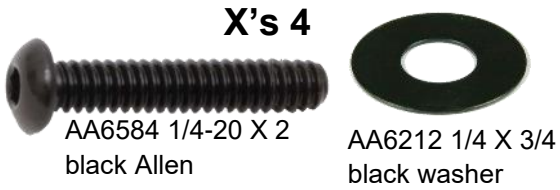
Do not pinch LED wiring at the center of the cabinet top!.

KEYS

BALLGATE HARNESS

IS HERE.
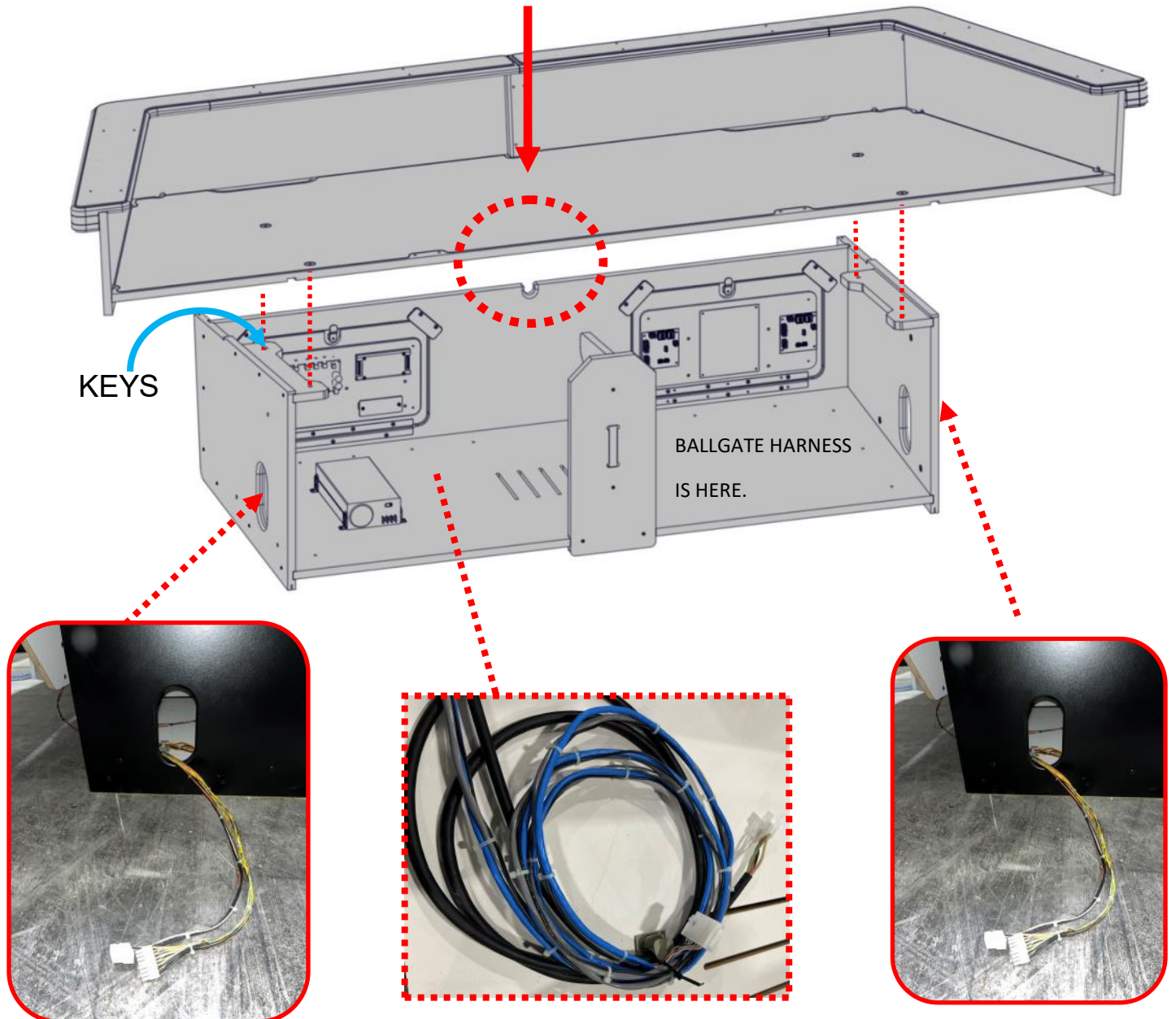
Uncoil wires and run to the
back of the game

STEP 71:

Slide the front cabinet to the back cabinet assembly.

Using Unlock the left door and plug in ball gate harness.
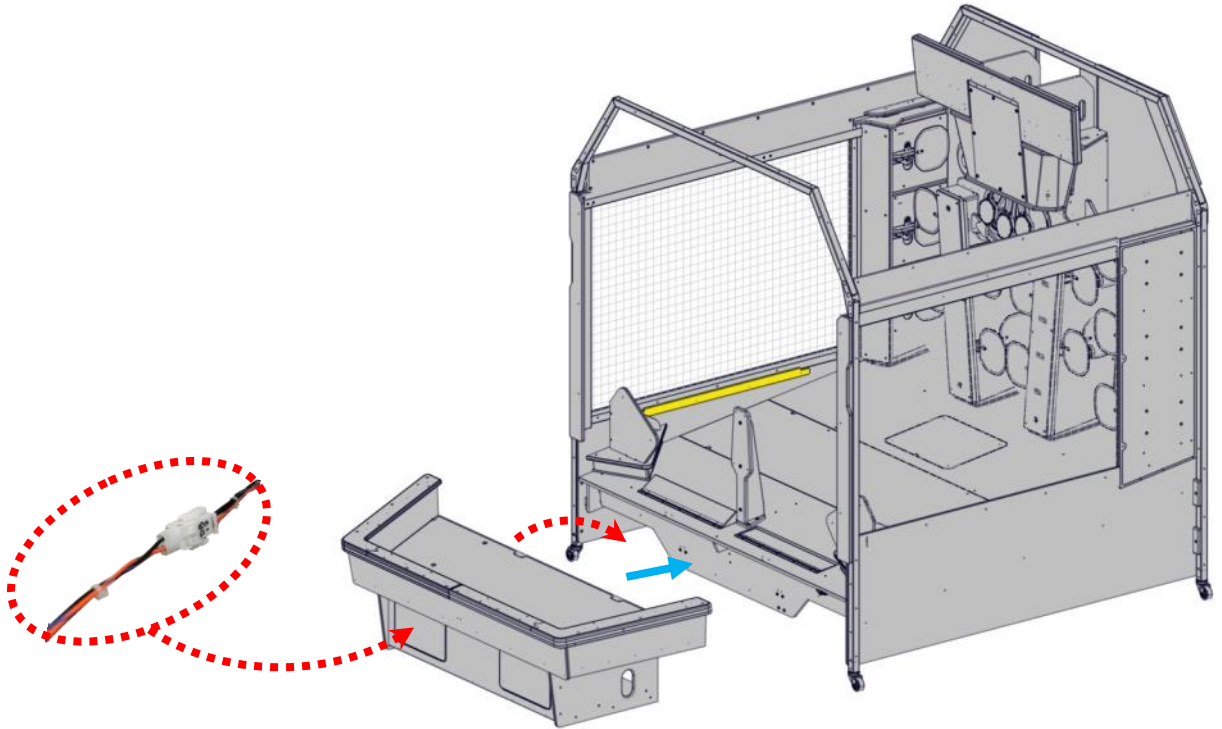
STEP 72:

The right archway base has a red start button and the left archway base has a blue start button.

Lift the front cabinet up and slide the right archway base into position and connect the button harness. Then slide the tower against the front podium.

Notch must be underneath front cabinet.
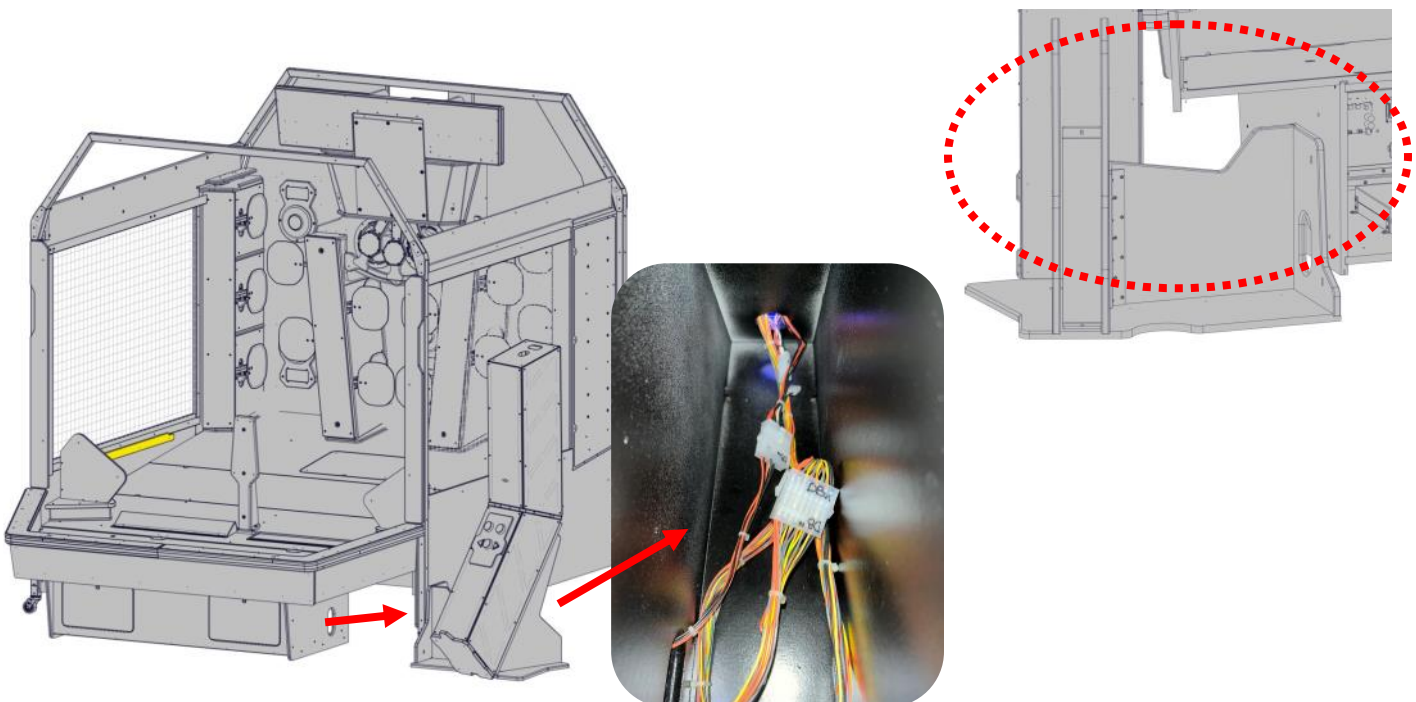
STEP 73:

Secure the tower using three AA6584 black Allen bolts and AA6212 black washers.

X's 3

AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT
WASHER BLACK
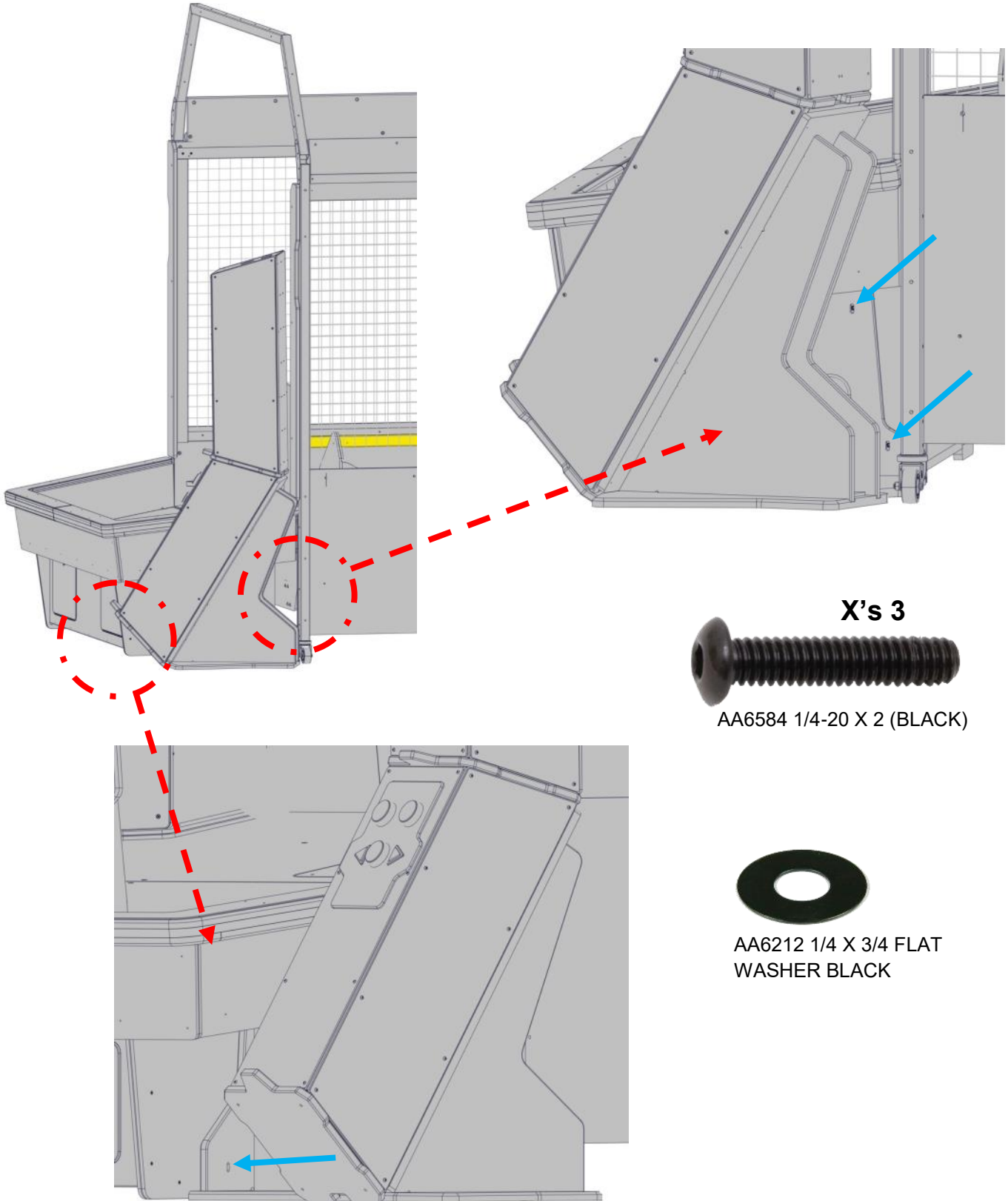
STEP 74:

Lift the front cabinet again and slide the left archway base into position and connect the button harness. Then slide the tower against the front podium. It may be necessary to slightly lift the podium to allow proper alignment with the tower.
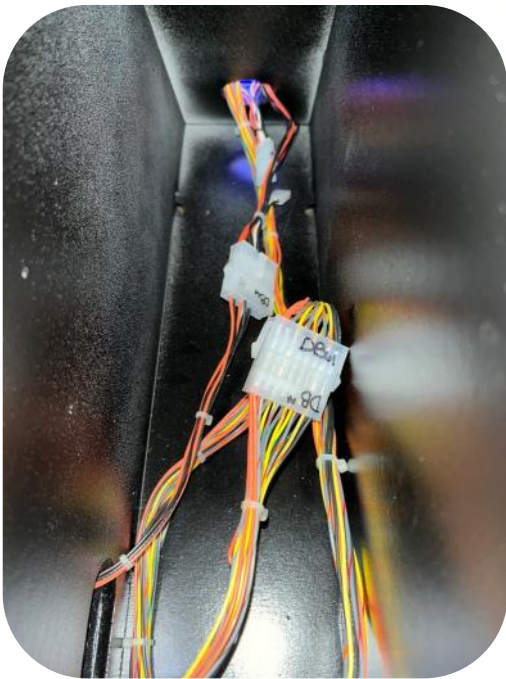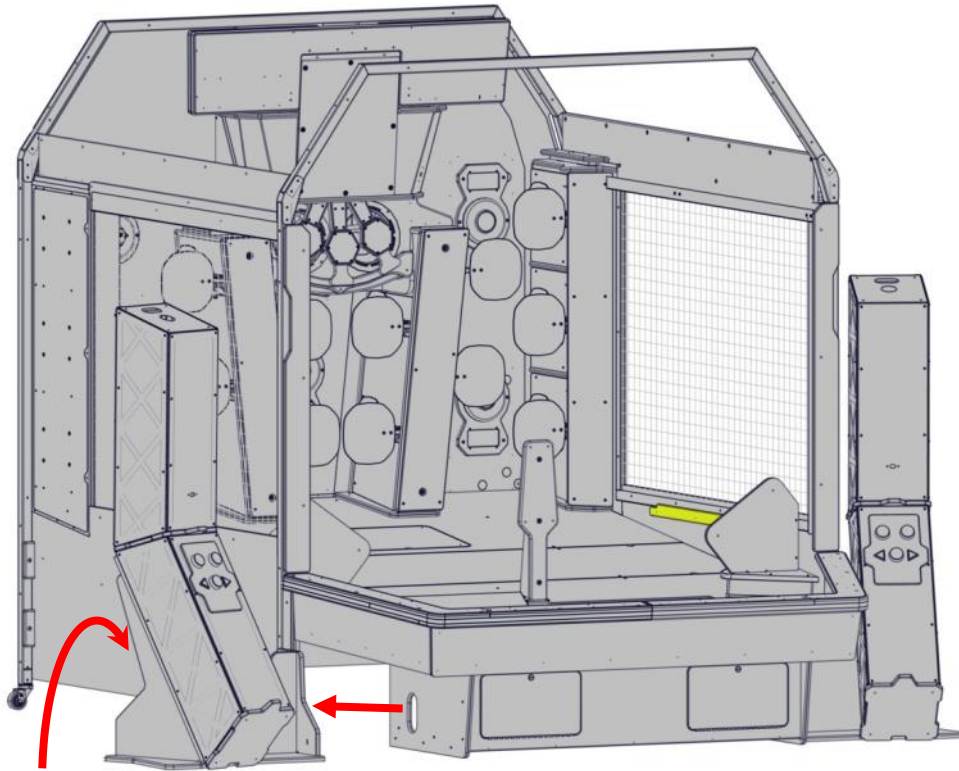
Latch the front cabinet to the back cabinet using the provided latch tool.
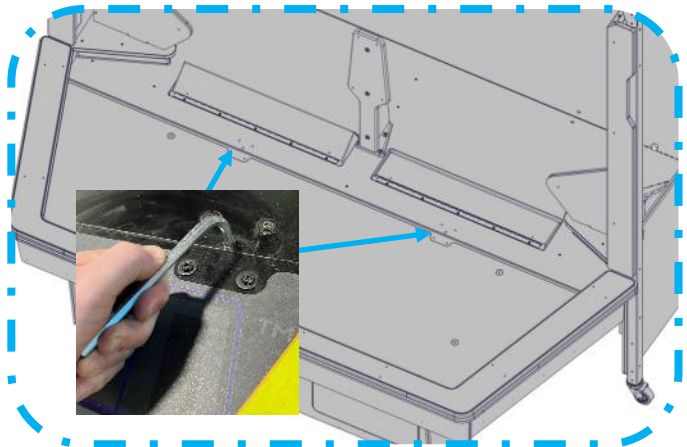
STEP 75:

Secure the archway base using three AA6584 black Allen bolts and AA6212 black washers.

X's 3

AA6584 1/4-20 X 2 (BLACK)

AA6212 1/4 X 3/4 FLAT
WASHER BLACK
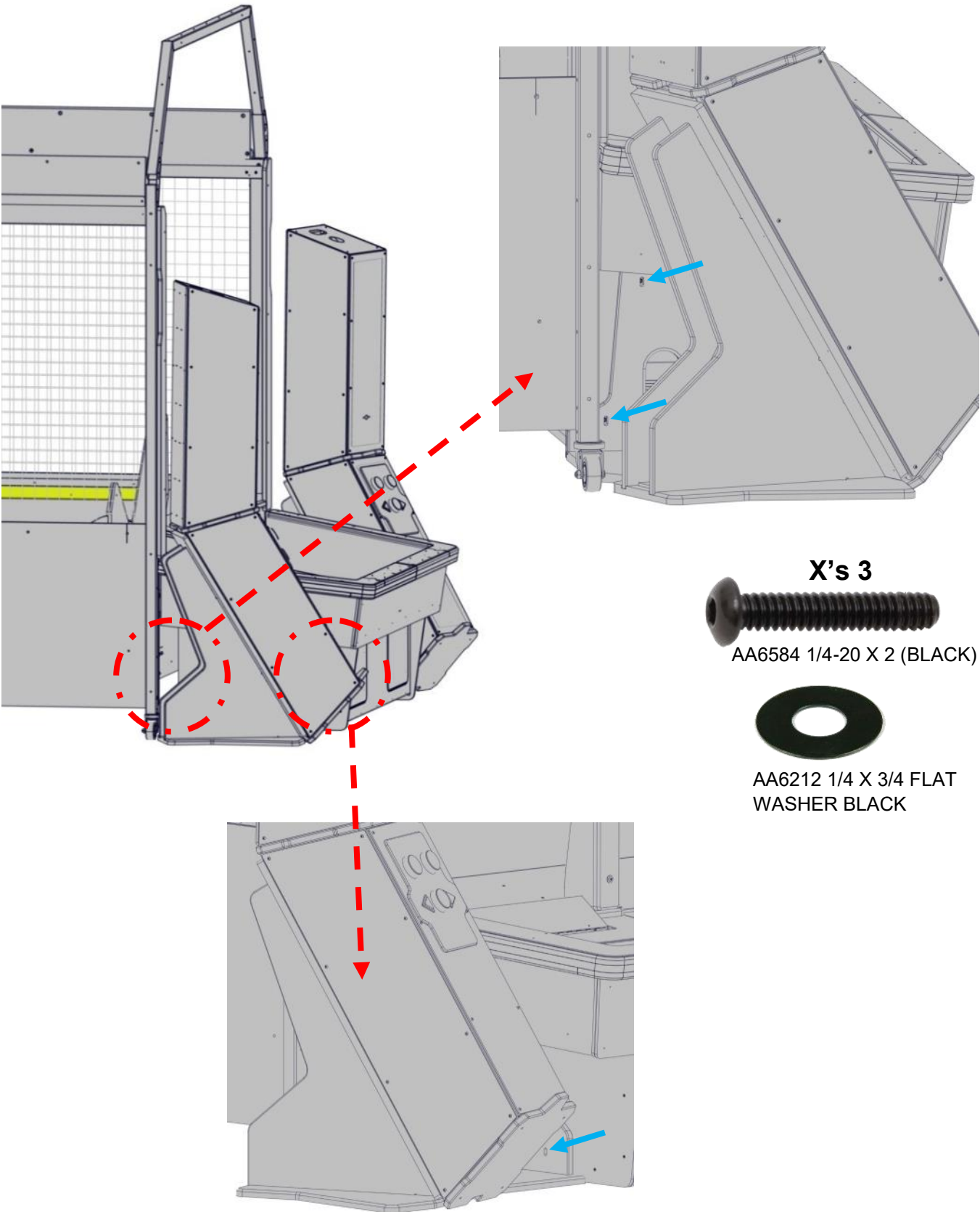
STEP 76:

Attach the left and right tower back covers to shield the harness connectors. Secure with AA6177 2 places top and bottom for Left and Right side.
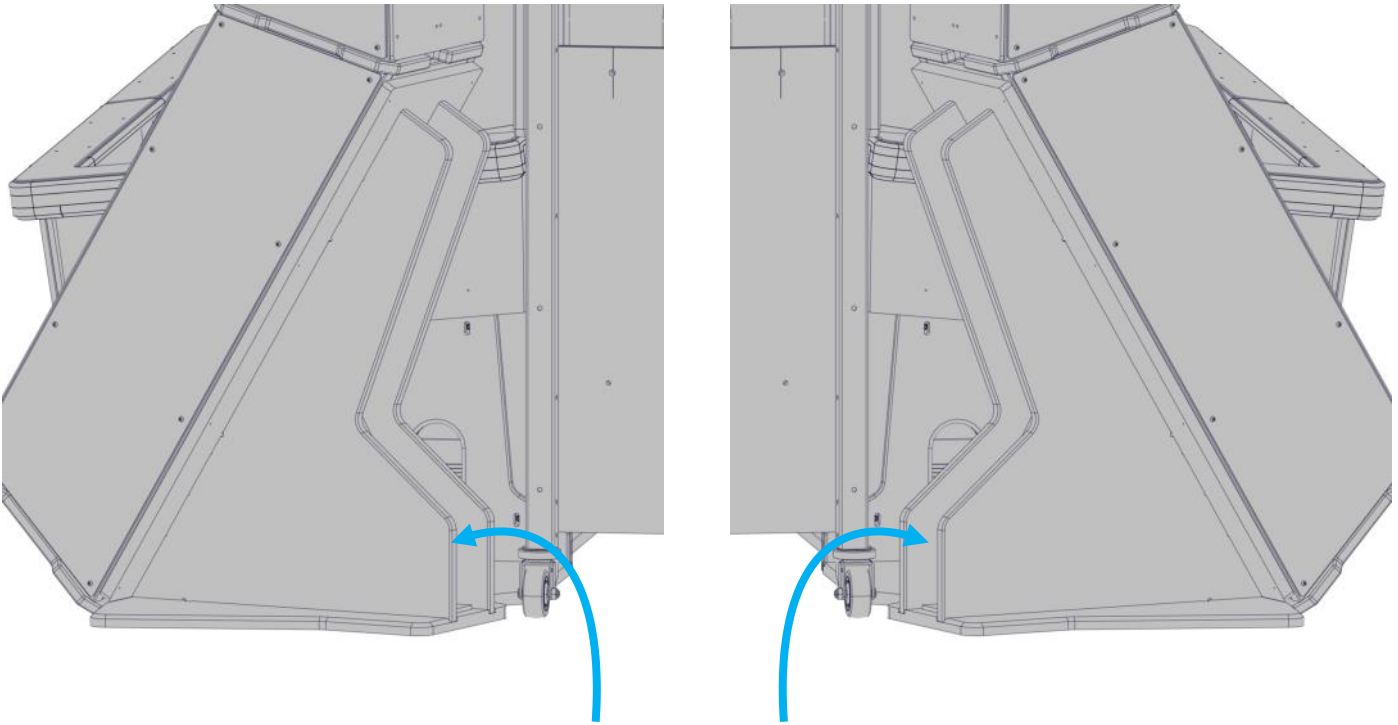
X's 4

AA6177 - 8-32 x 1
pan head silver

STEP 77:

Look inside at the LED"s in the upper archway. The LED's have arrows. For the right archway, the arrows go down. The left archway has the LED's arrow facing up. Lift the upper tower assemblies onto the lower tower assembly aligning the exposed studs.

Secure the upper tower to the lower using four PC60614 Kept Nuts.
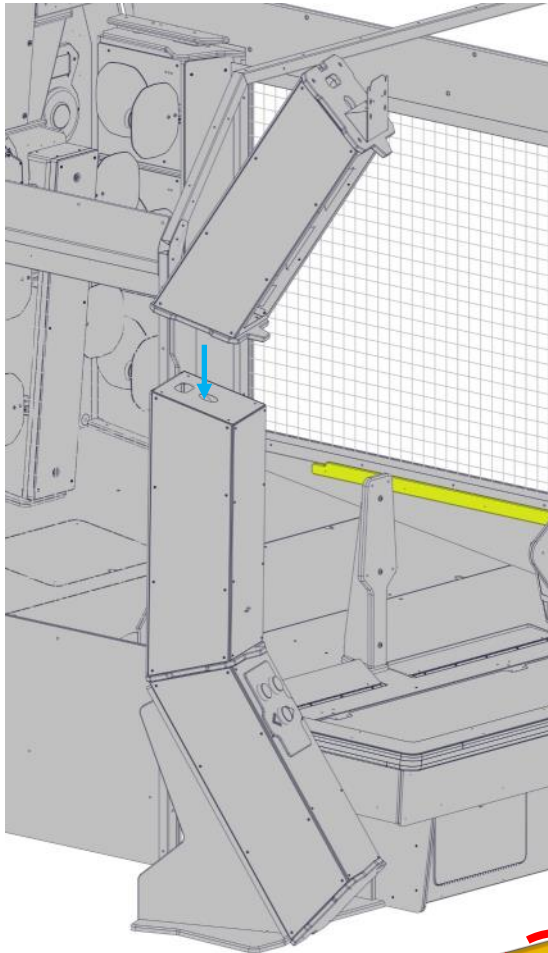
X's 4

PC60614 1/4-20
Kept Nut
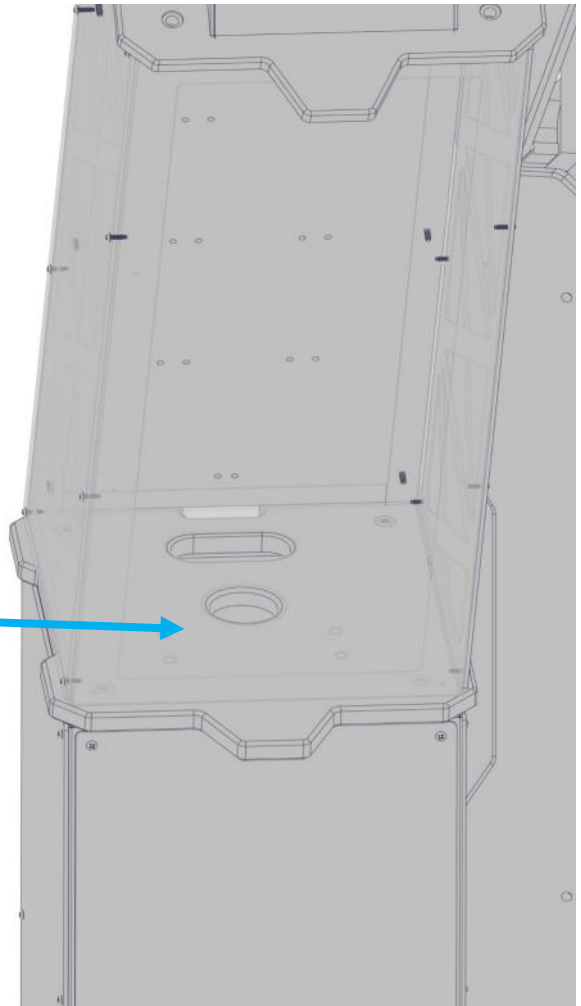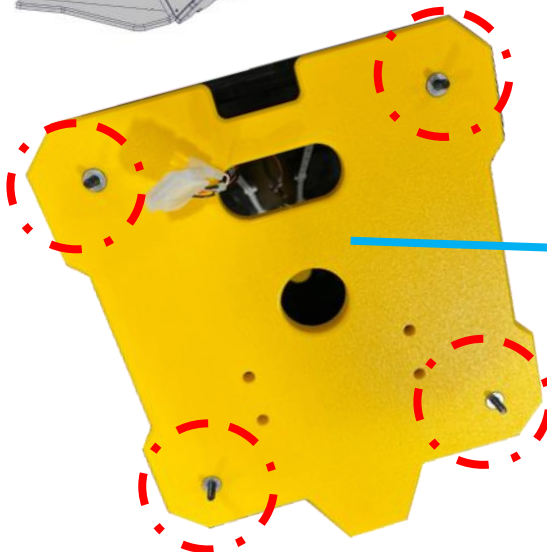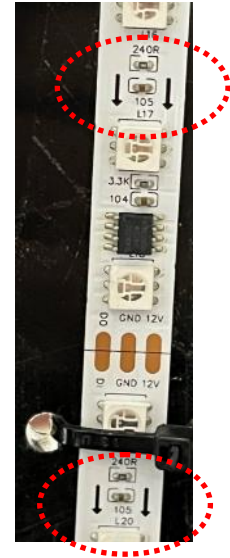
STEP 78:

The Right harness connectors will not fit the let side. Before lifting up onto the base, make sure the arrows are facing down for right and up for left.

RIGHT SIDE HARNESS

LEFT SIDE HARNESS
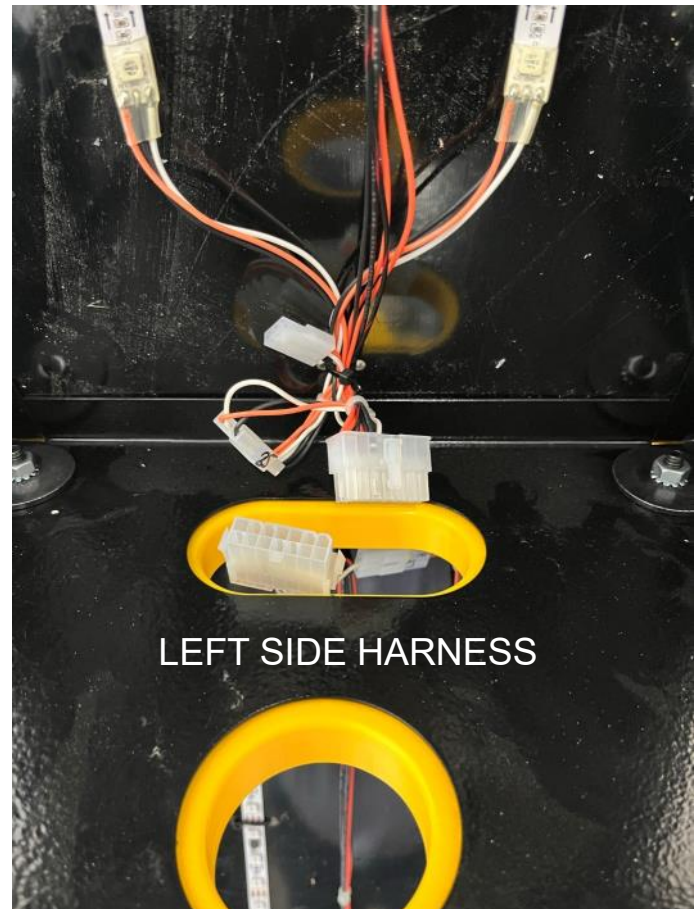
STEP 79:

Peel covers then install front cover using eight AA6514.

X's 8

AA6514 - 8 1/2
pan head silver
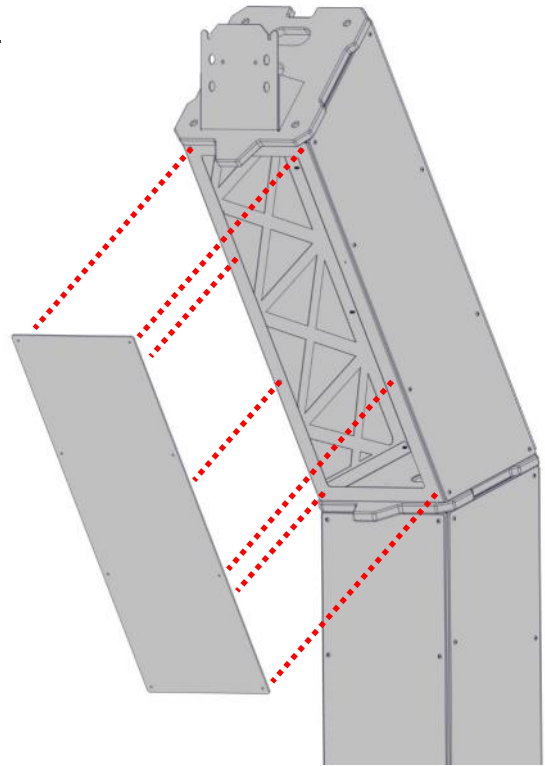
STEP 80:

Repeat steps 77 through 79 installing the right side archway top.
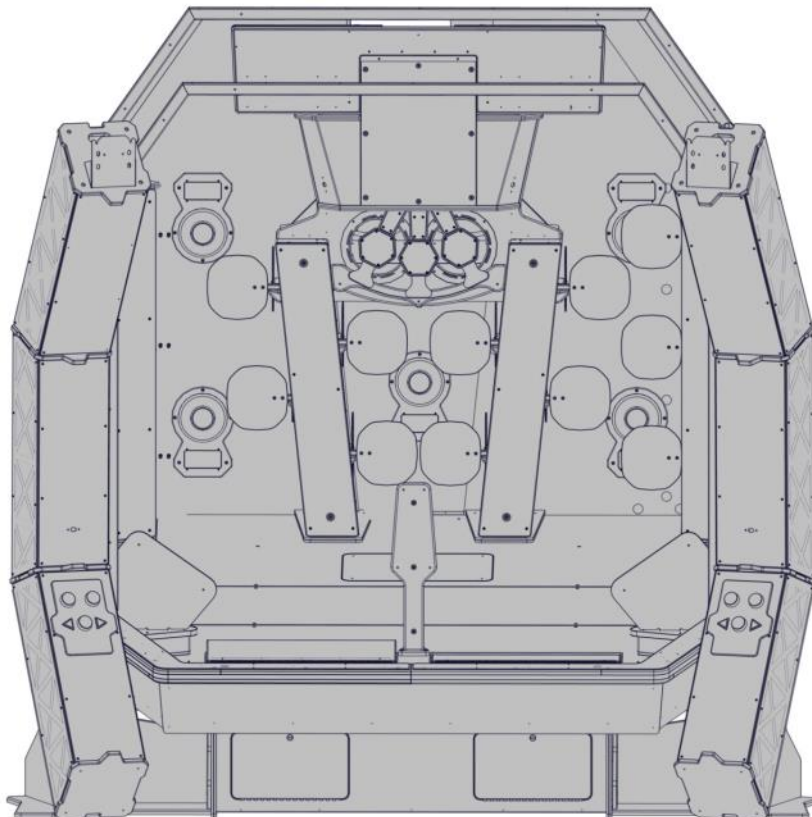
STEP 81:

Partly install two AA6281 Allen bolts and AA6212 washers on each side on the marquee assembly.

There should be about 1/2 sticking out.

X's 4

AA6281 1/4-20 X 1-1/2 BLACK

AA6212 1/4 X 3/4
black washer
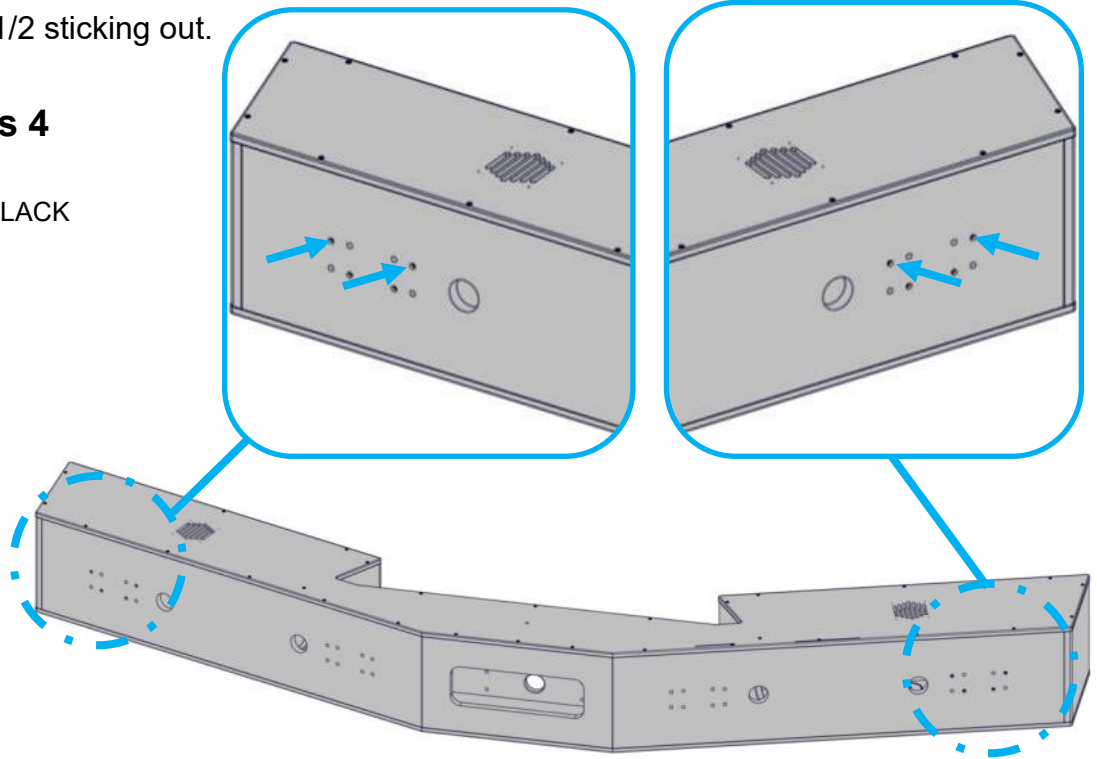
STEP 82:

With a helper, raise the marquee up and onto the brackets. The bolts you left hanging should "hook" on the bracket. Make sure the washer is on the outside of the bracket.
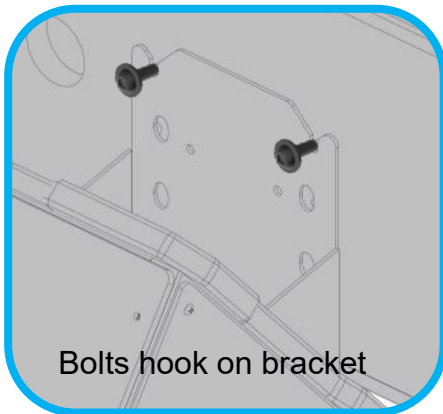
Bolts hook on bracket
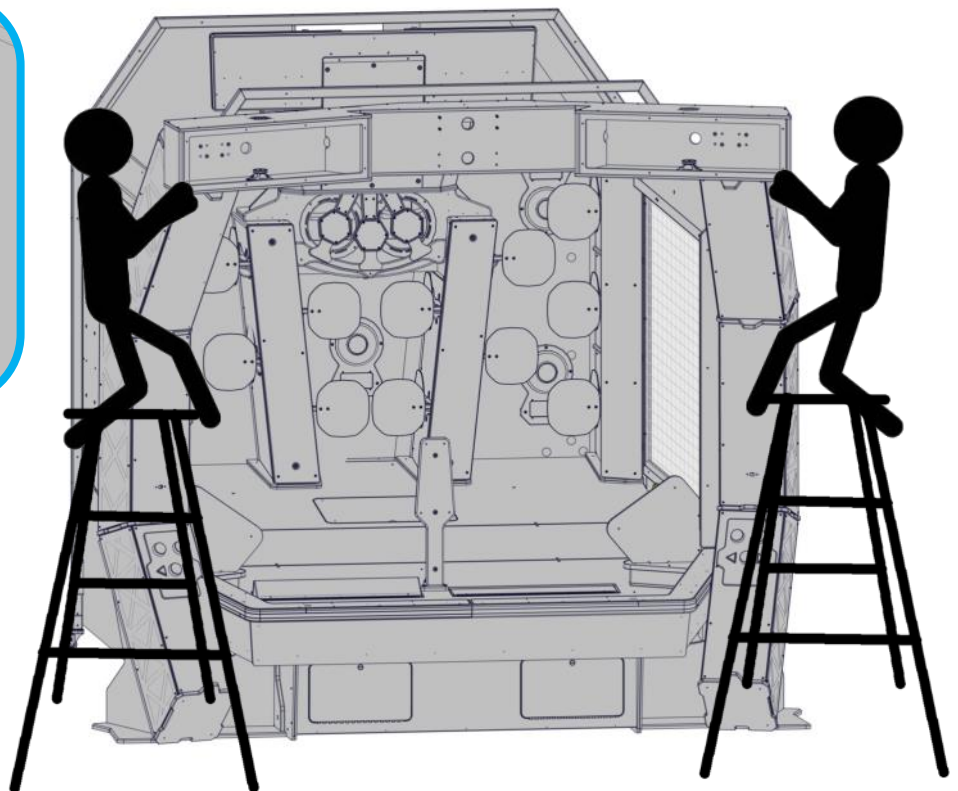
STEP 83:

Secure the marquee assembly with two PC60622 and AA6212 on each side. Then tighten the bolts used to hook the marquee assembly to the bracket.

X's 4

PC60622 1/4-20 X 1 (BLACK)

AA6212 1/4 X 3/4 black washer
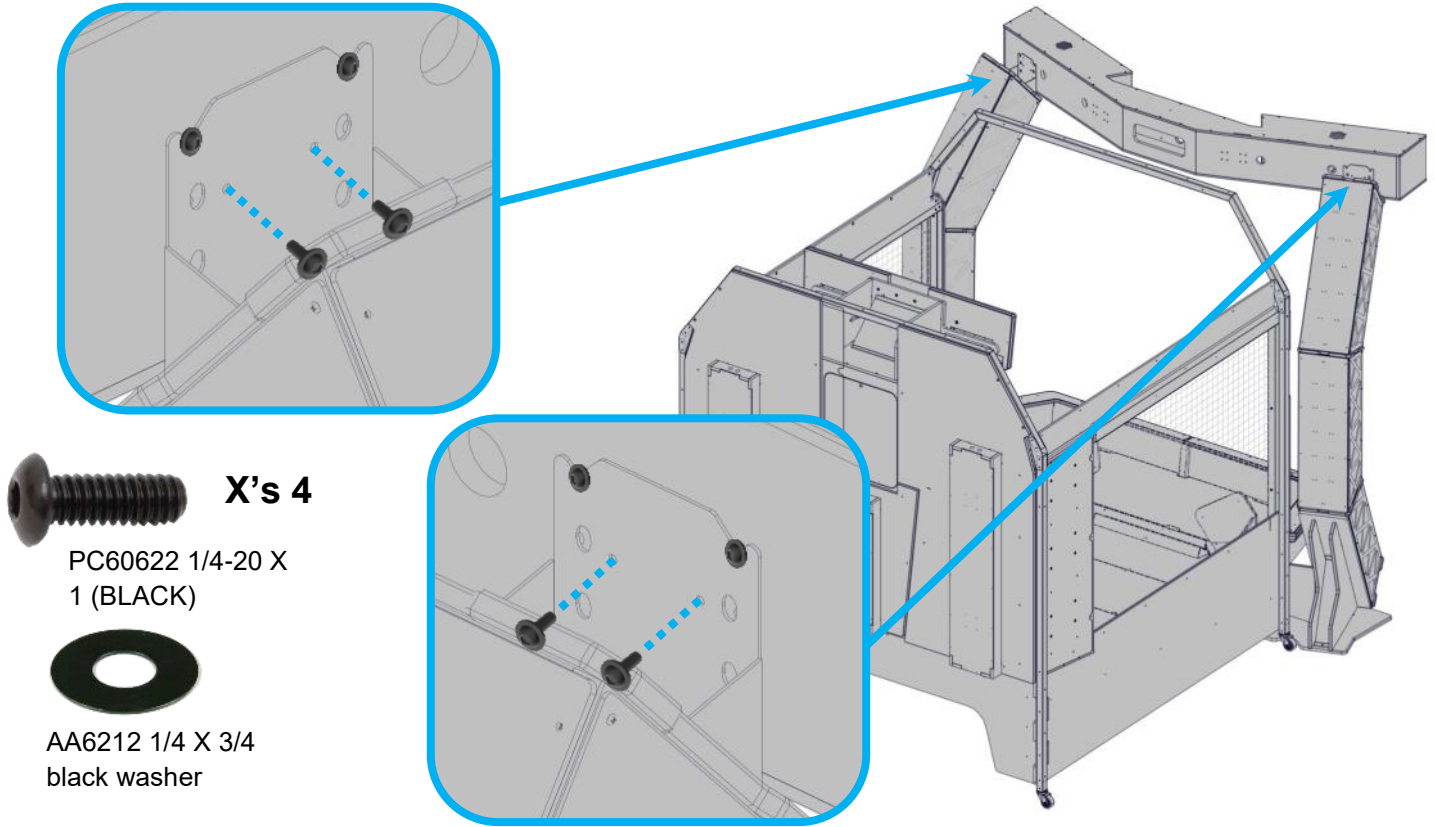
STEP 84:

Connect the marquee wiring on the left and right sides of the towers.
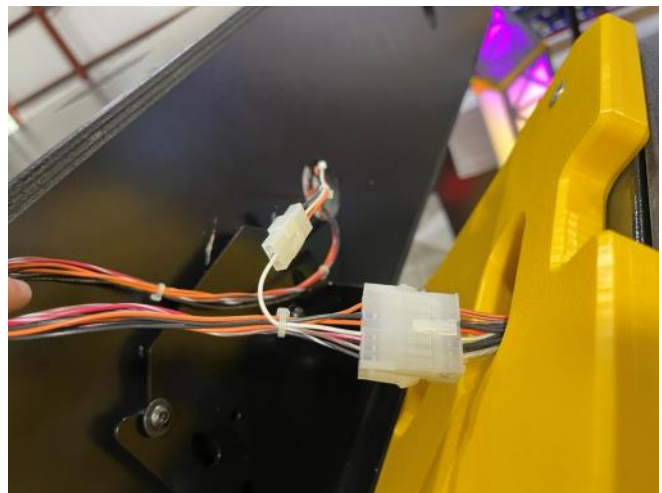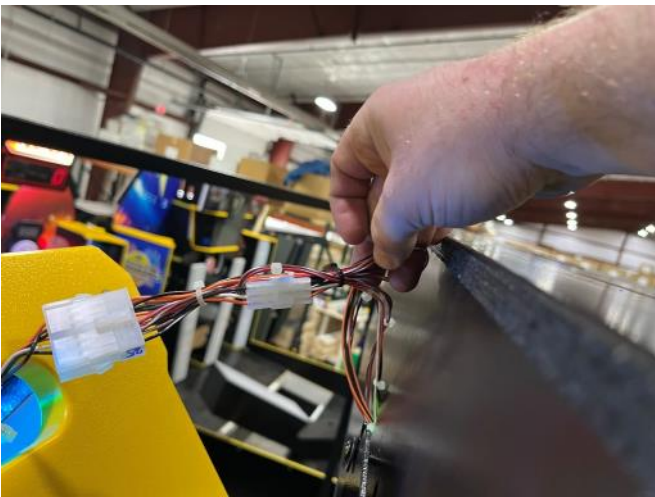
STEP 85:

Attach the marquee covers using eight AA6177 Bolts.
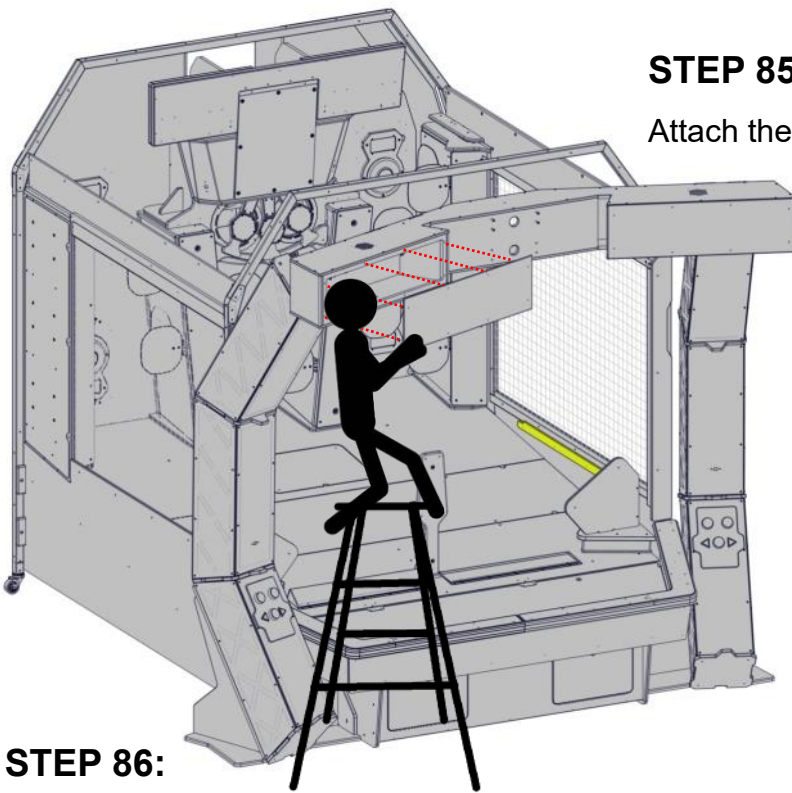
X's 8

AA6177 - 8-32 x 1
pan head silver

STEP 86:

Attach the center support for the roof using AA6630 black bolts and AA6212 black washers from the top and AA6212 black washer and AA6966 nylock nut at the bottom on the arches at both ends.

Use AA6458 bolt and AA6212 washer to attach the support to the marquee.

AA6966 1/4-20
nylock black nut

AA6125 1/4-20 X 2-1/2 black

X's 1

AA6212 1/4 X 3/4
black washer

X's 2 AA6630 1/4-20 x 4 black Allen

AA6125
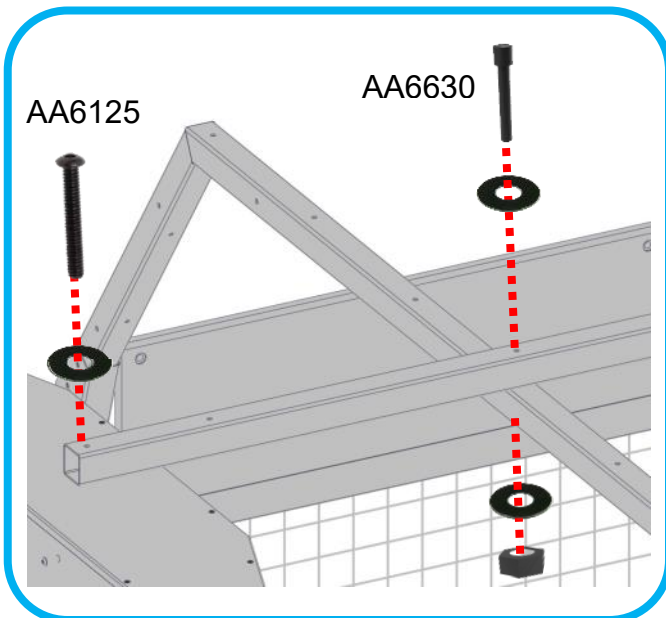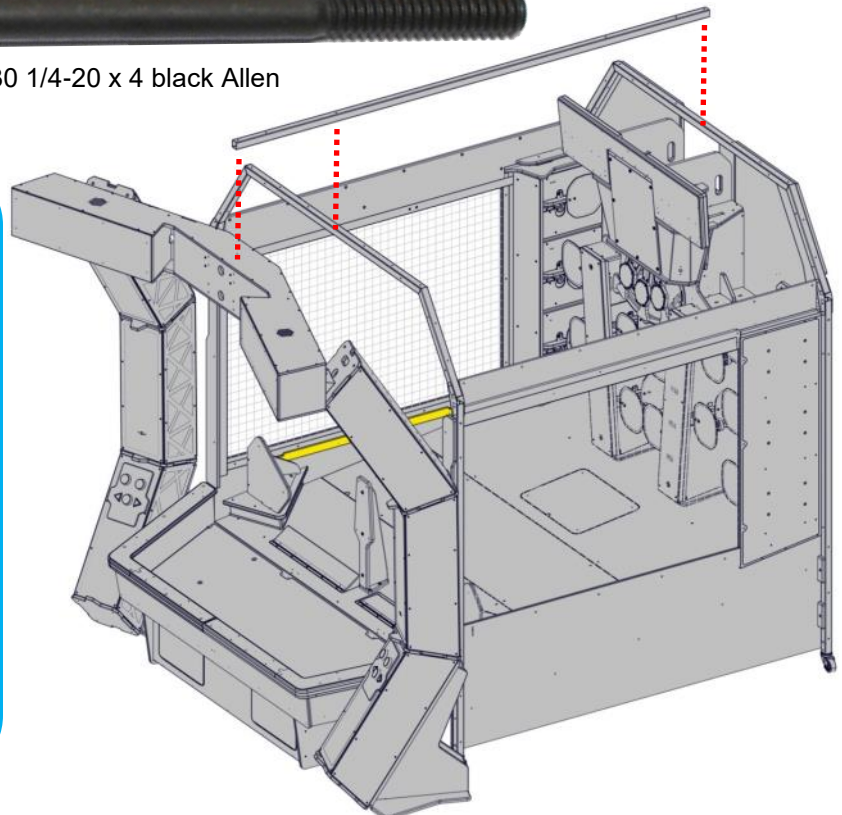
AA6630

STEP 87:

Attach the left and right supports for the roof using AA6630 black Allen bolt and AA6212 from the top and AA6212 black washer with AA6966 nylon nuts from the bottom.

X's 4

AA6630 1/4-20 x 4 black Allen

AA6966 1/4-20 nylock black nut

AA6212 1/4 X 3/4 black washer
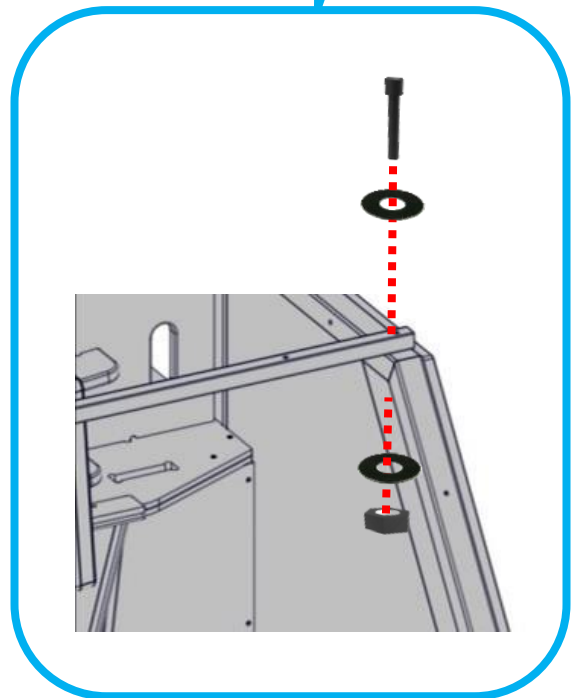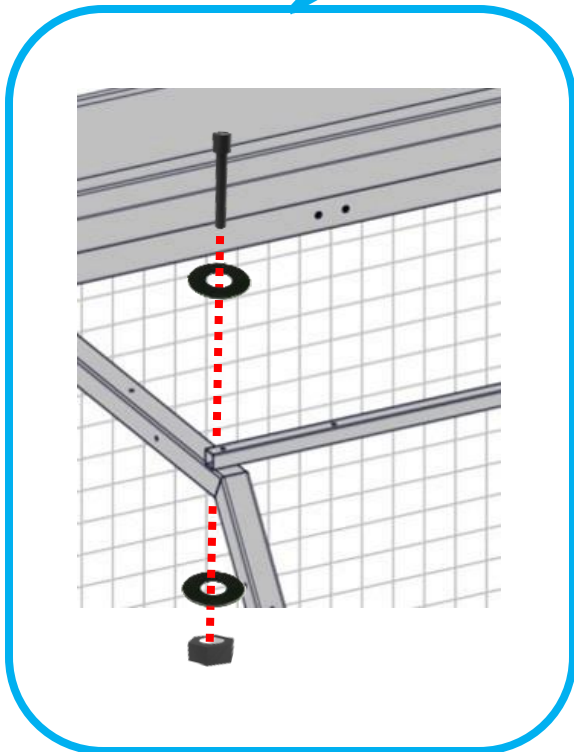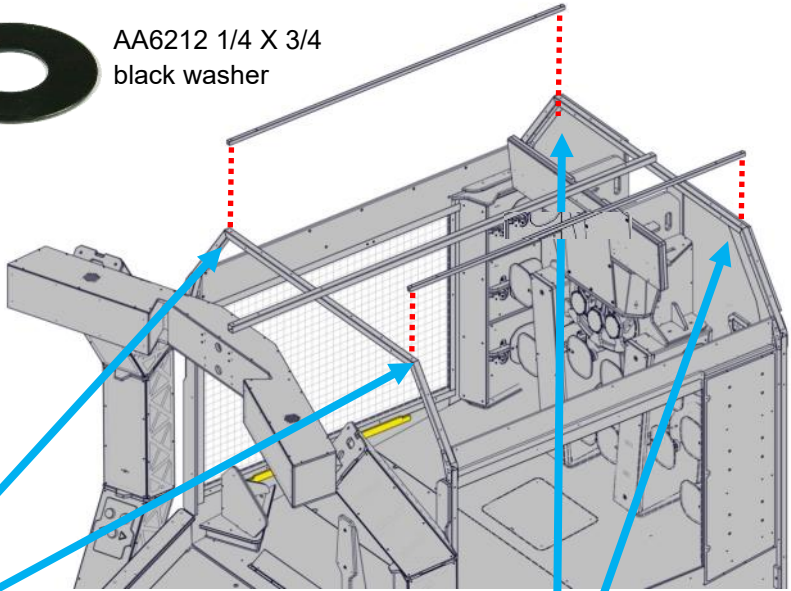
STEP 88:

At the back and front of the cabinet, secure the canopy with thirty six AA6125 black Allen bolts and AA6185 large black washers at the top. From the bottom, use AA6212 black washer and AA6966 nylock nuts. SEE RED ARROWS.

X's 36

AA6125 1/4-20 X 2-1/2

AA6966 1/4-20 nylock black nut

AA6212 1/4 X 3/4 FLAT WASHER BLACK

AA6185 1/4 x large black washer

LEFT SIDE SHOWN
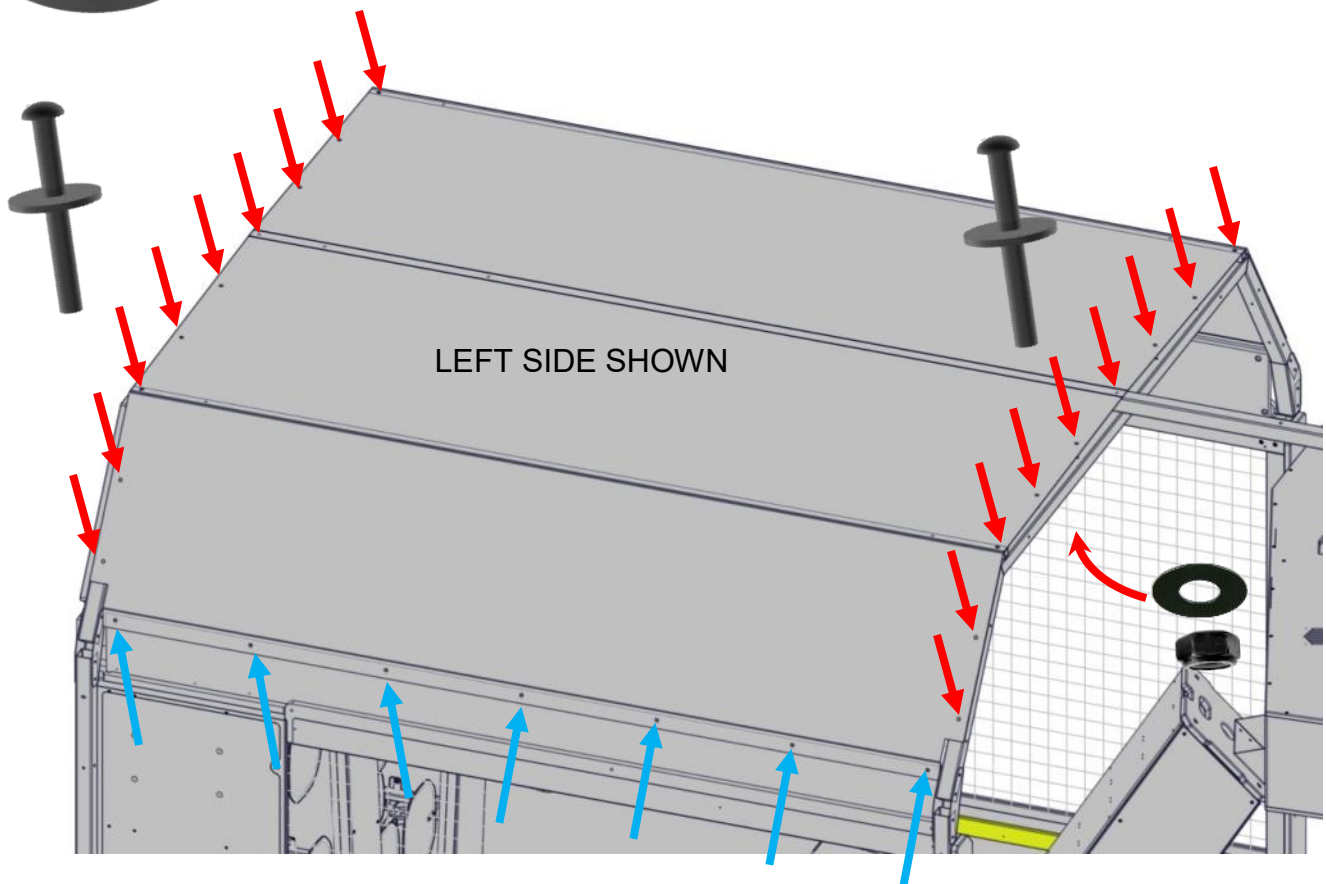
STEP 89:

Along the sides use seven PC60622 black Allen bolts with AA6185 large black washers.

SEE BLUE ARROWS

X's 14

PC60622 1/4-20 X 1 (BLACK)

AA6185 1/4 x large black washer

STEP 90:

Partly install four AA6281 bolts.

AA6281 1/4-20 X 1-1/2 BLACK

X's 4
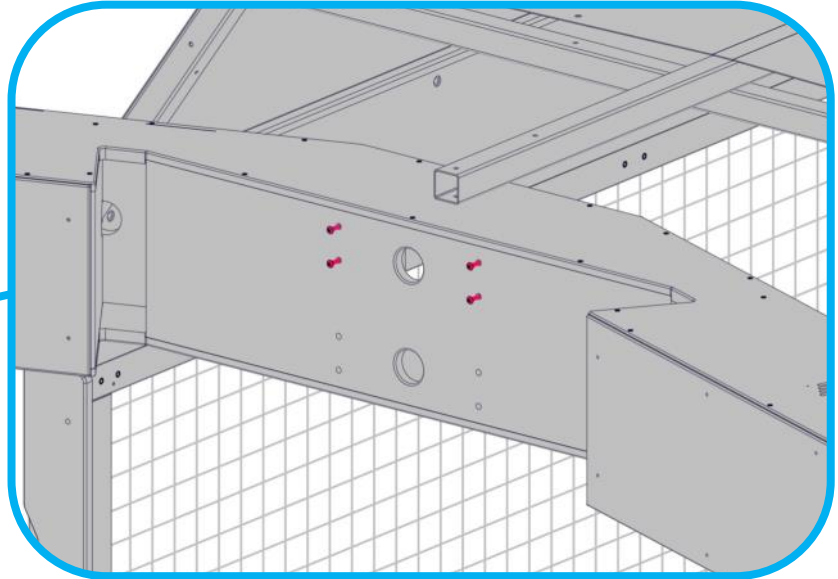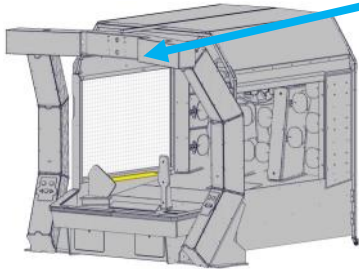
STEP 91:

Lift the marquee sign up onto the marquee assembly aligning the holes and sliding it down onto the bolts. Tighten using small Allen wrench.
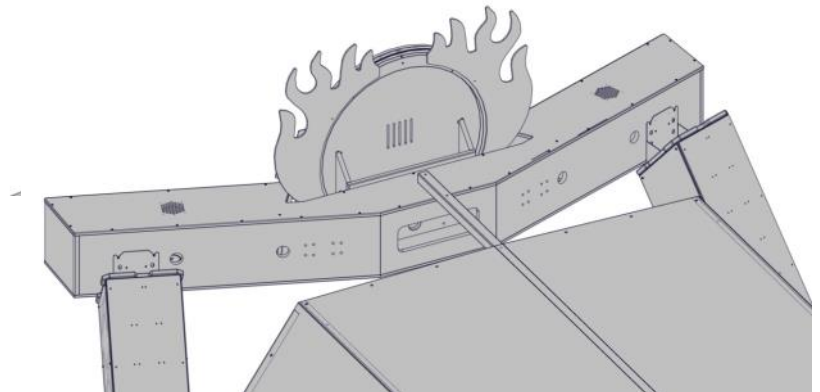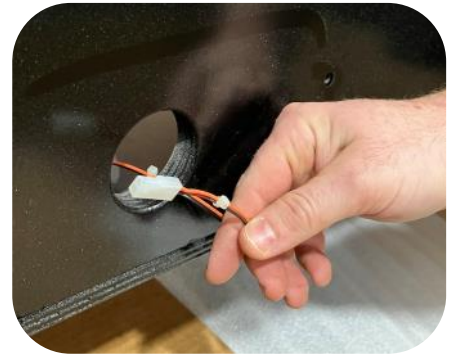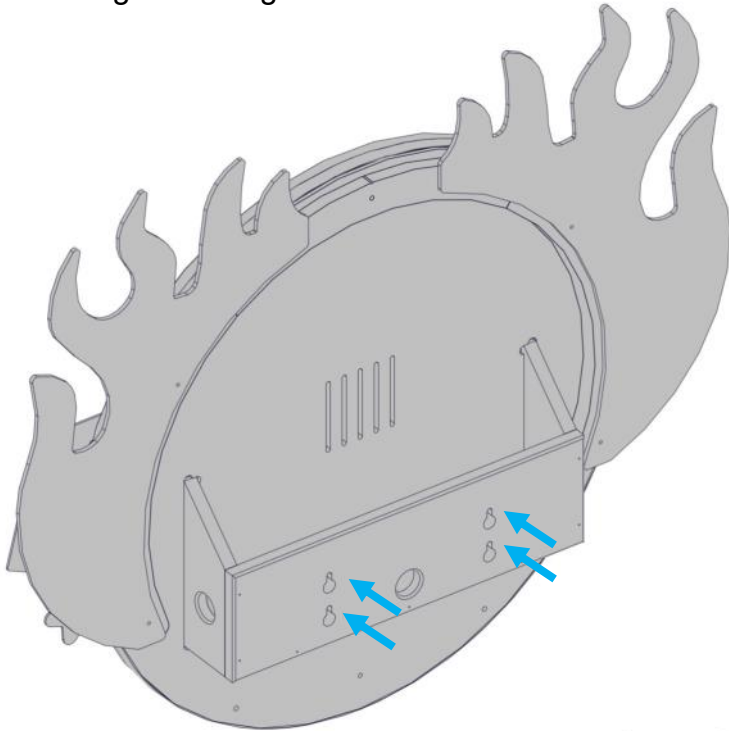
STEP 92:

Attach the left and right ball deflectors using four AA6125 black Allen bolts and AA6212 black washers at the front, DB3079 mounting plates at the back.

Right Shield from behind

Ball Deflector

Ball Deflector

DB3079 Mounting
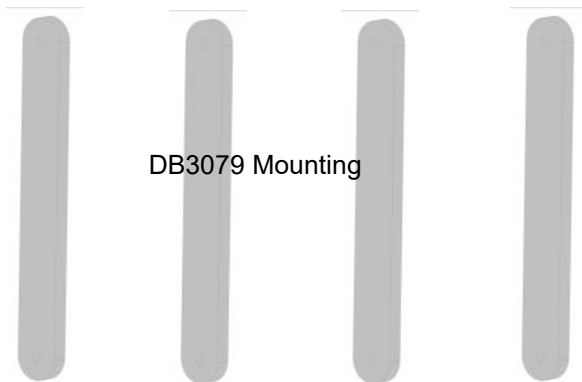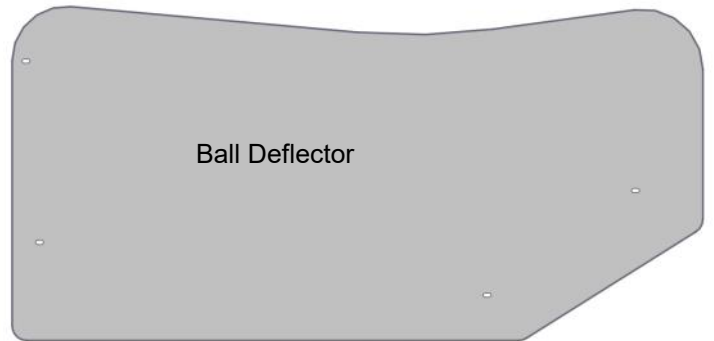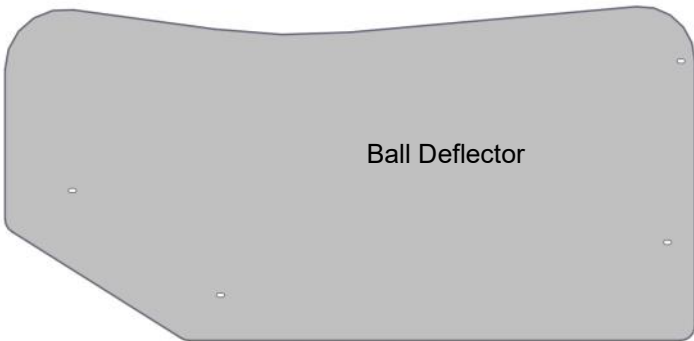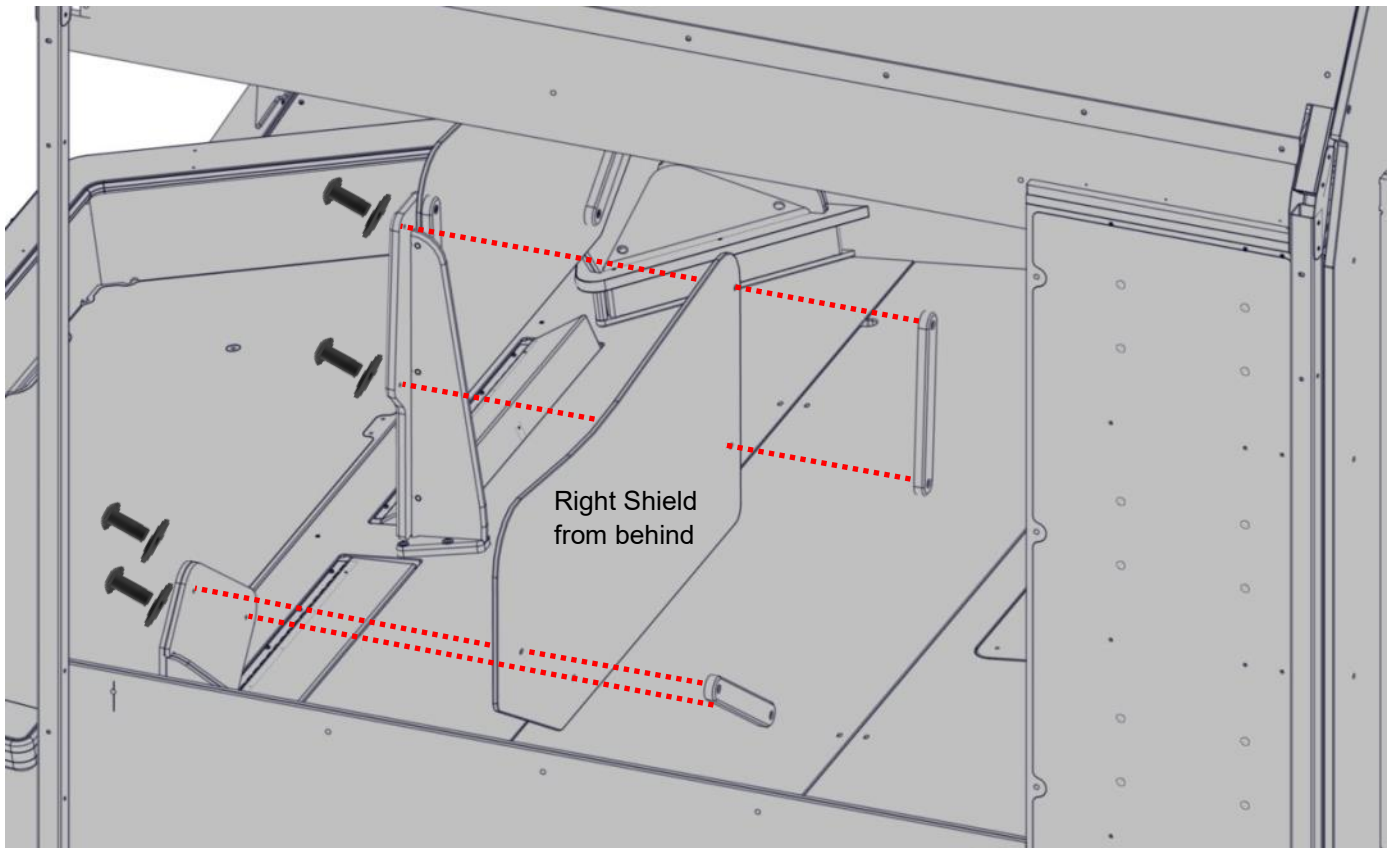
AA6125 1/4-20 X 2-1/2 black

X's 8

AA6212 1/4 X 3/4 FLAT WASHER BLACK

FROM FRONT TO BACK, RIGHT SIDE, AC POWER, COMS, AND DATA

During setup you uncoiled the main AC wiring, COMS and Data lines. From underneath the cabinet, plug them into the back of the cabinet harnesses.

AC plugs into the power module at the back cabinet wall.
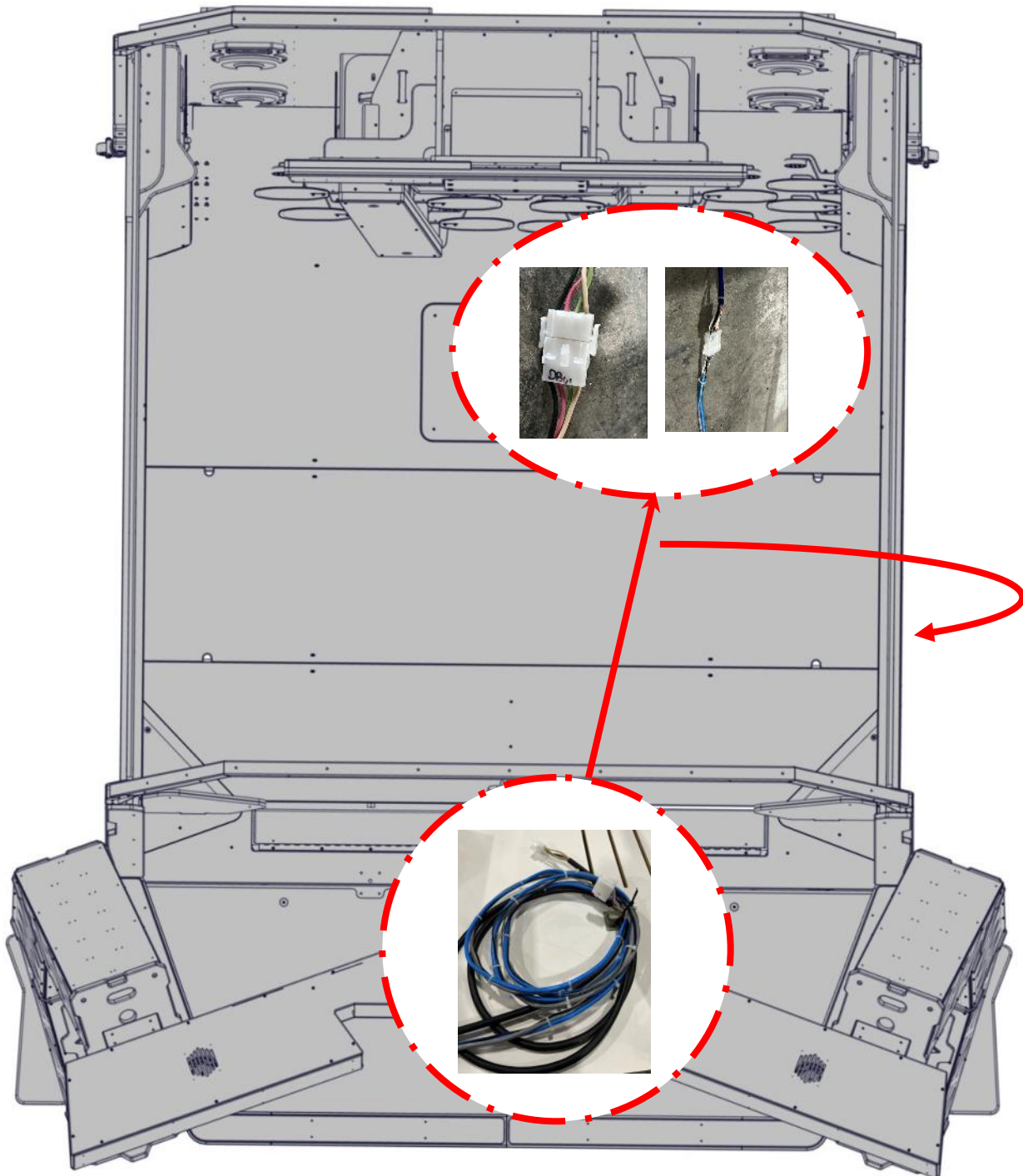
![UCL logo] Universal Card link Connection

See Wiring Insert for wire colors and which connections are used.

Pin 1. +12v- Supply to Card System = Minimum of 2A available for the card systems and a Max of 3A.

Pin 2. Coin 1 - input to the game PCB.

Pin 3. Prize Meter/Ticket Notch 2- is connected to the Ticket Notch line between the game PCB and ticket dispenser. Optional.

Pin 4. Coin Meter 1 - is connected to the coin meter 1 output from the game PCB and can be used by card systems for monitoring purposes.

Pin 5. Ticket Run/Enable 2- is connected to the ticket run line between the game PCB and ticket dispenser. Optional.

Pin 6. Prize Meter/Ticket Notch 1- is connected to the Prize or Ticket Meter output from the game PCB and can be used by card systems for monitoring purposes. Optional.

Pin 7. Coin Inhibit/Enable- is connected to the Coin or Note Inhibit/Enable output from the Game PCB and is used where the game has this feature for disabling any payment. This is normally for states like New Jersey that limit the amount of money that can be inserted at one time.

Pin 8. Ticket Run/Enable 1 - is connected to the ticket run line between the game PCB and ticket dispenser in standard redemption games. This is commonly used for systems using paperless or E-ticket. Not Used if the game doesn't have this output.

Pin 9. Ground- is connected to the common Ground connection, the same ground as the Game PCB.

Debit Card Housing use:

Molex 9-pin housing 03-09-2092

9-PIN MOLEX
03-09-1093 OR 1094

FEMALE TERMINALS:
22-24 GA: 02-09-1119
14-20 GA: 02-09-1104

MINIMUM REQUIREMENTS ARE SHOWN IN BOLD TEXT

1.	**+12V**
2.	**PLAYER 1/COIN 1**
3.	PRIZE METER/TICKET NOTCH 2
4.	**COIN METER 1**
5.	TICKET RUN/ENABLE 2
6.	**PRIZE METER/TICKET NOTCH 1**
7.	COIN INHIBIT/ENABLE
8.	**TICKET RUN/ENABLE 1**
9.	**GROUND**
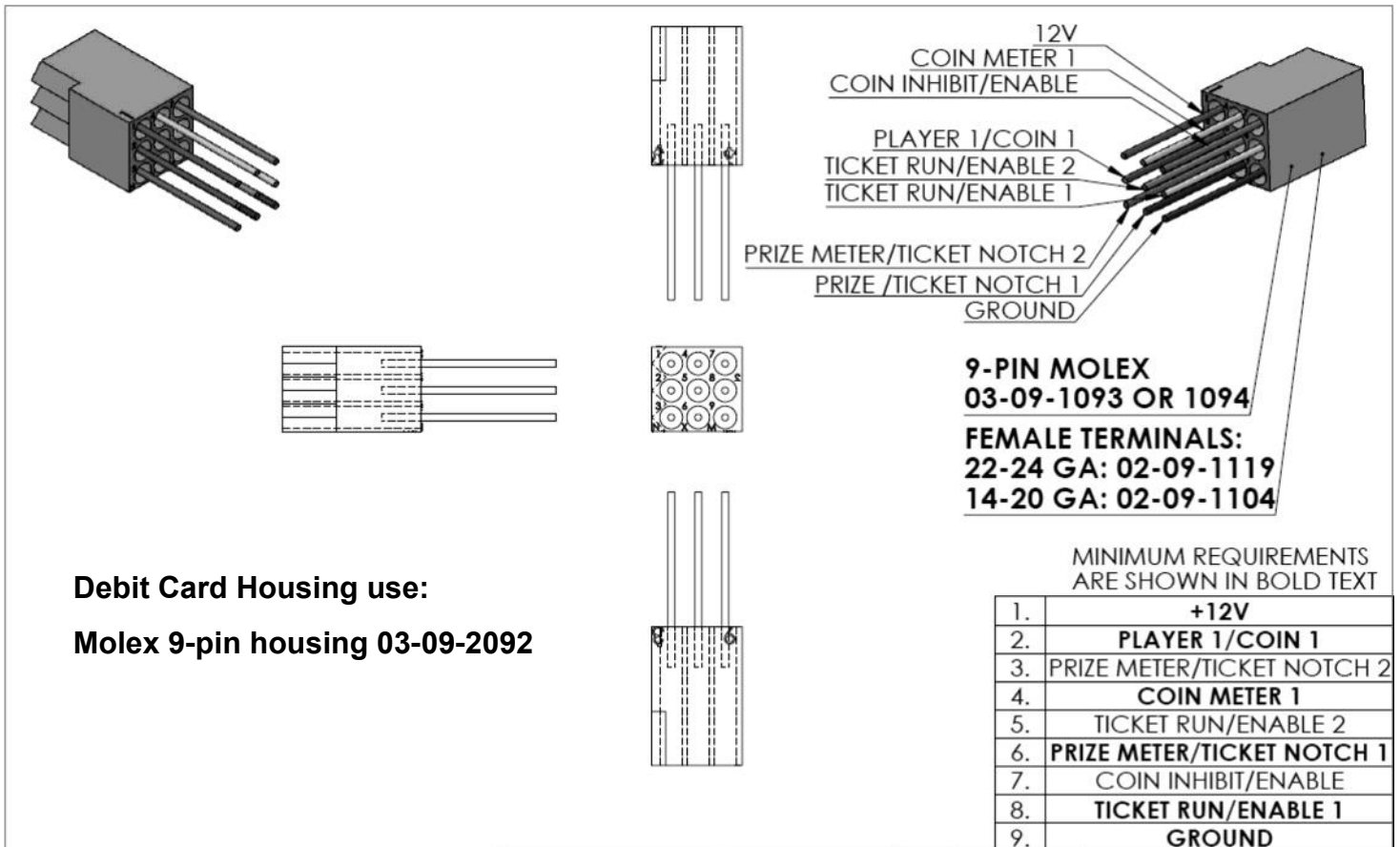
PROGRAM SETTINGS - DIAGNOSTICS - VOLUME - POWER CONTROLS

Located at the front are two access panels. The left panel contains the operator control panel board.

The right panel contains the amplifier for volume and AC power control.
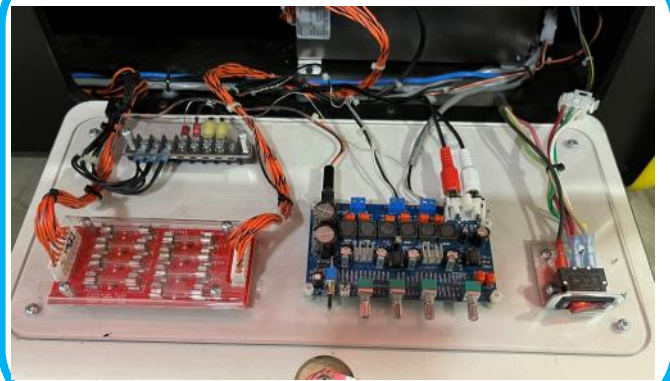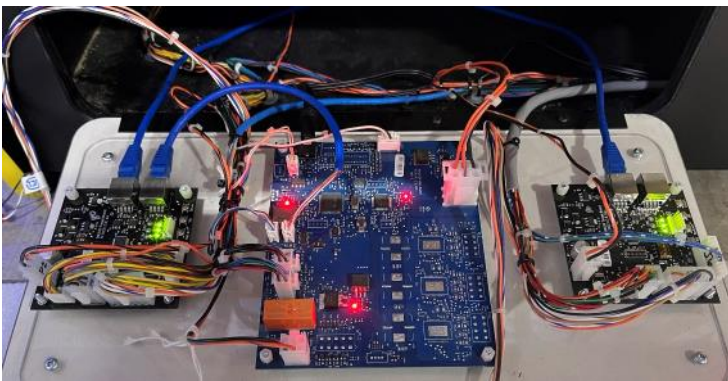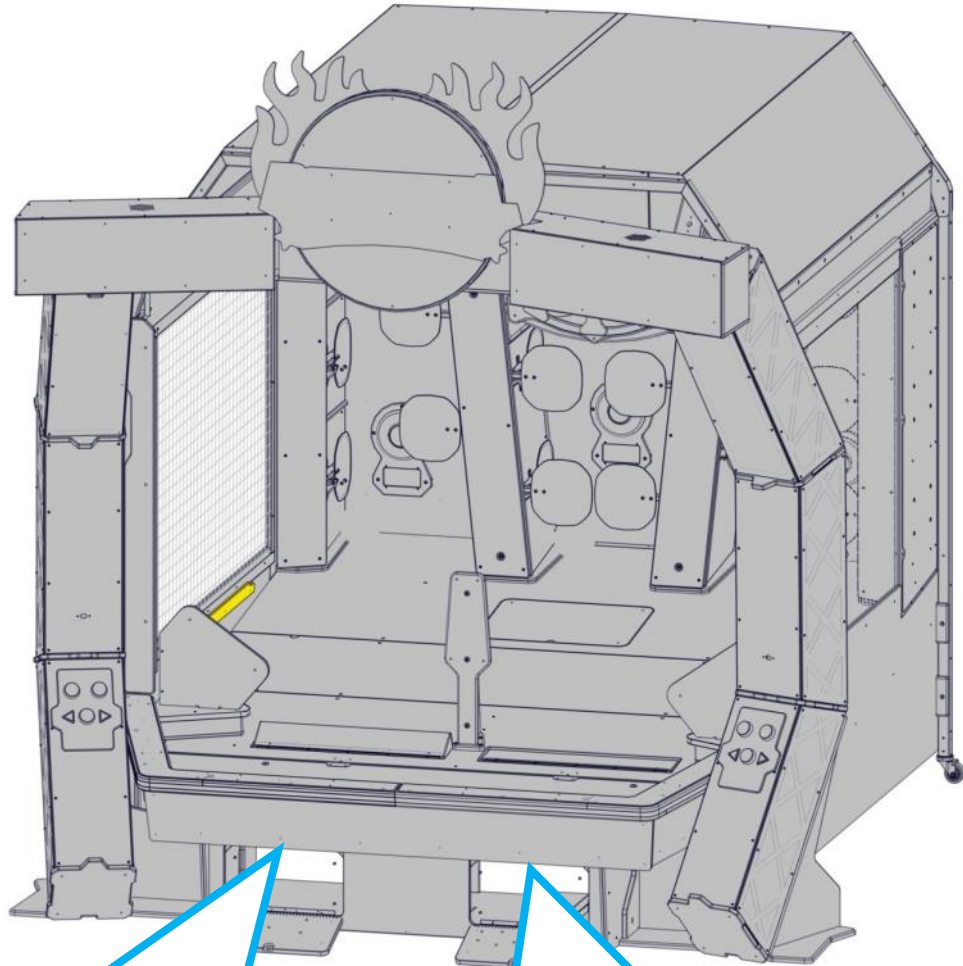
PROGRAM SETTINGS

The program button is located on the left board set. The right board set is not used for programming.

Press the program button to enter programming. Use either the select, up and down buttons on the board or the podiums' left and right arrows to navigate through the menus. The center button is used to change the values or clear options.
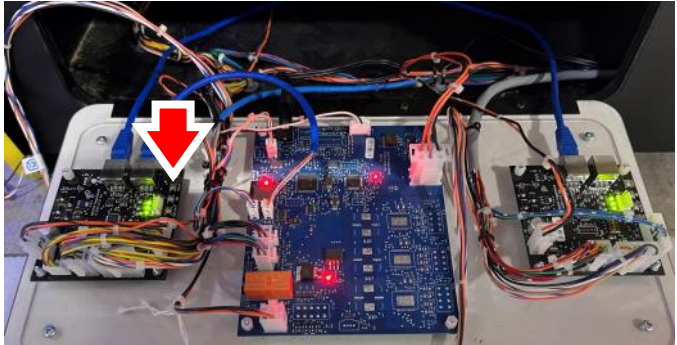
	Meaning	Min	Max	Inc	Default
0	Attract time	0	30	1	1
1	Coin 1	0	9	1	1
2	DBV	0	9	1	1
3	Ticket Multiplier	0	2	1	1
4	Solo swing target starting value	420	990	10	500
5	competitive swing target starting value	420	990	10	990
6	solo bonus score	0	90000	100	30000
7	solo bonus tickets	50	2000	10	500
8	competitive bonus score	0	99900	100	50000
9	competitive bonus tickets	100	2000	10	1000
10	solo button target starting value	400	990	10	500
11	solo button target decrement amount	10	50	5	10
12	solo hole value	500	1000	10	500
13	competitive button target starting value	400	990	10	990
14	competitive button target decrement value	10	50	10	10
15	competitive hole value	500	1000	10	1000
16	solo score per ticket	100	100	100	1000
17	competitive score per ticket	100	100	100	500
18	minimum ticket payout	1	100	1	10
19	solo score to dec from bonus	100	1000	10	100
20	competitive score to dec from bonus	100	100	10	100
21	Fixed Tickets Payout/26	0	1	1	0
22	Fixed Ticket payout /27	1	100	1	10
23	Max Multiplier/28	1	4	1	3
24	Factory Reset	0	1	1	0
25	Main board rev	202			
26	Left Front board REV				
27	Right front board REV				
28	Slave Processor Rev				

Diagnostics and trouble shooting guide

Your game comes with extensive diagnostics to aid you in keeping your game running correctly.

To access the diagnostics, open the left lower door assembly.

Press the "SELECT" and "DOWN" buttons at the same time in attract mode.

GAME MUST BE IN ATTRACT MODE TO ENTER DIAGNOSTICS
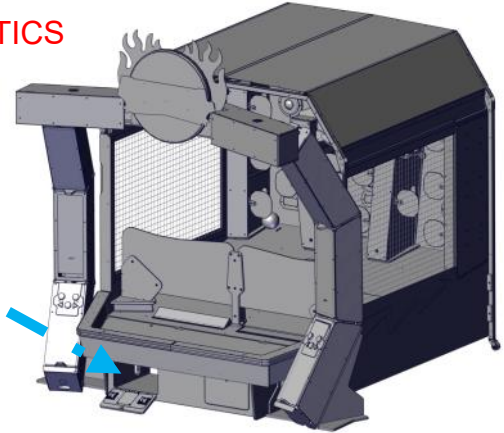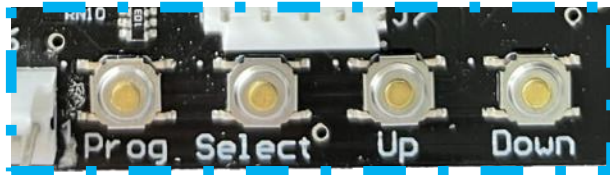
In diagnostics, the Jumbotron will show the layout of the sensor boards.

It will light the location of the board in green when elected. You will notice the remainder of the sensors are yellow. This indicates the remaining boards are sending and receiving information. If you see any red, this would indicate the board in that location is not receiving   or sending information.

GREEN   = Selected Sensor board.

YELLOW   = Communication is established.

RED   = No communication:

                    check power

                    RJ45 for proper connections

You will also notice the numbers under "ID DIPS". This indicates the proper dip switch setting for this location. IT IS NOT READING THE DIPSWITCHES! It is only showing you the proper settings for that location. White means it should be set to on while blue means it should be set to off.

At the bottom of the screen, it will show you which RGB color the target should be. It will cycle from Red to green to blue and repeat.

S1 and S2 have different meanings depending on which sensor you are testing.

More details on this later on.

When in diagnostics if you press the "Press to enter initials" button it will cycle through the sensor board numbers and light the location of the sensor.

Each press of any podium button will flash that button. You can use either podium.

When you press the "LEFT" button on any swing target, the swing arm will move inward. If you press the "RIGHT" button the swing arm will move outward. S1S2 shows means switch 1 and switch 2. On a swing arm target, only S1 is used. When the arm swings inwards S1 will appear. When the swing arm is returned to the outward position, S1 will disappear. When visible, the status of that switch is high. When invisible, the status of that switch is low.

    "PRESS TO ENTER INITIALS" = Change sensor board number.

    "LEFT" = Swing target arm inward (only on sensor 1 through 14).

    "RIGHT" = Swing target outward (only on sensor 1 through 14).

    "S1S2" = Status for switch 1 and switch 2. Visible = high, invisible = low.

Press the "1P" button and the game will dispense 5 tickets.

If you trigger the coin line a sound will play.

The selected sensor board will show the digits on the display counting up.

For target board 15, S1 indicates the left hole and S2 indicates the right hole.

For target board 16, the upper red display will cycle numbers and the "LEFT" and "RIGHT" buttons will swing the arm back and fourth.

For target board 17, the upper blue display will cycle numbers and when you press "LEFT" and "RIGHT" buttons, the ball gate will   operate.

Boards with IDs 18 through 22 only use S2 and will disappear when you press the back wall buttons.

Accounting Mode:

Accounting is accessed by pressing DOWN and then UP on the RED player DB2035.

The left and right arrows on the podium are used to navigate the menu and the center select button is used to change the values of the "clear" options.

These audits roll over after 65535.

Clear High Score tables by holding the Blue player's Competitive and Solo buttons for 10 seconds and exiting the menu.

Clear Audits by holding the Blue player's select button for 10 seconds and exiting the menu.

For either of these options, allow the game to run for 10 seconds to save all of the values properly.

DB2033X Target PCB ID numbers

Boards 1 - 14 are Swinging Targets.

Board 16 is Block Arm and Player 2 score display.

Boards 18 - 22 are bonus button assemblies.

Board 15 is Bonus holes and displays.

Board 17 is Player 1 display and strobe lights.

JUMBOTRON BOARDS

16 15 17

RIGHT TOWER

14 13 12

RIGHT BUTTON WALL

22 21

RIGHT MIDDLE TOWER

10 11
9   8

CENTER BUTTON WALL

20

LEFT BUTTON WALL

18 19

LEFT MIDDLE TOWER

6 7
4 5

LEFT TOWER

3 2 1
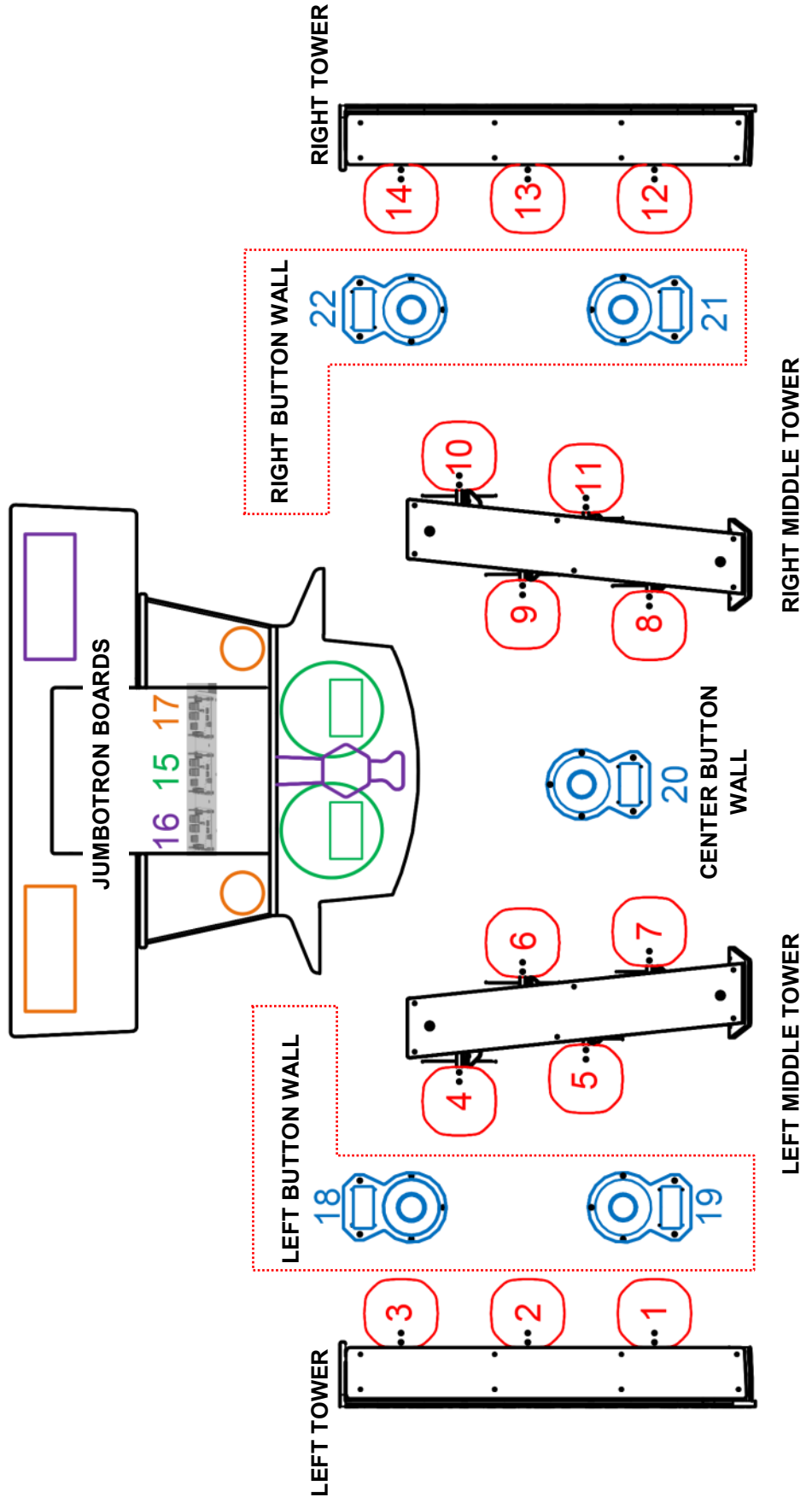
DB2033X Target PCB Dipswitch settings

Each board has two sets of dipswitches. These dipswitches determine the position and function. When installing any replacement boards, confirm the location of the board and set the dipswitches to match the location.
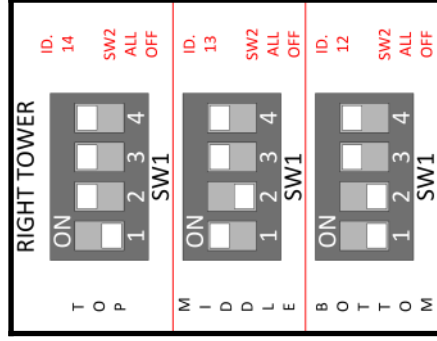
Both RJ45 ports are identical. Either can be used for in or out communications.

RIGHT TOWER — TOP: ID. 14, SW2 ALL OFF; MIDDLE: ID. 13, SW2 ALL OFF; BOTTOM: ID. 12, SW2 ALL OFF (SW1)

RIGHT BUTTON WALL — TOP: ID. 22; BOTTOM: ID. 21 (SW1 / SW2)

LEFT TOWER — TOP: ID. 3, SW2 ALL OFF; MIDDLE: ID. 2, SW2 ALL OFF; BOTTOM: ID. 1, SW2 ALL OFF (SW1)

LEFT BUTTON WALL — TOP: ID. 18; BOTTOM: ID. 19 (SW1 / SW2)

RIGHT MIDDLE TOWER — TOP RIGHT: ID. 10, SW2 ALL OFF; BOTTOM RIGHT: ID. 11, SW2 ALL OFF; TOP LEFT: ID. 9, SW2 ALL OFF; BOTTOM LEFT: ID. 8, SW2 ALL OFF (SW1)

LEFT MIDDLE TOWER — TOP LEFT: ID. 4, SW2 ALL OFF; BOTTOM LEFT: ID. 5, SW2 ALL OFF; TOP RIGHT: ID. 6, SW2 ALL OFF; BOTTOM RIGHT: ID. 7, SW2 ALL OFF (SW1)

JUMBOTRON BOARDS — ID. 15, SW2 ALL OFF; ID. 16; ID. 17 (SW1 / SW2)

CENTER BUTTON WALL — TOP: ID. 20 (SW1 / SW2)

75

Dodge Ball
Target Graphic Location Guide
Part Numbers DB7030A- DB7030N

A

M

B

L

C

D

K

N

E

J

F

G

H

I
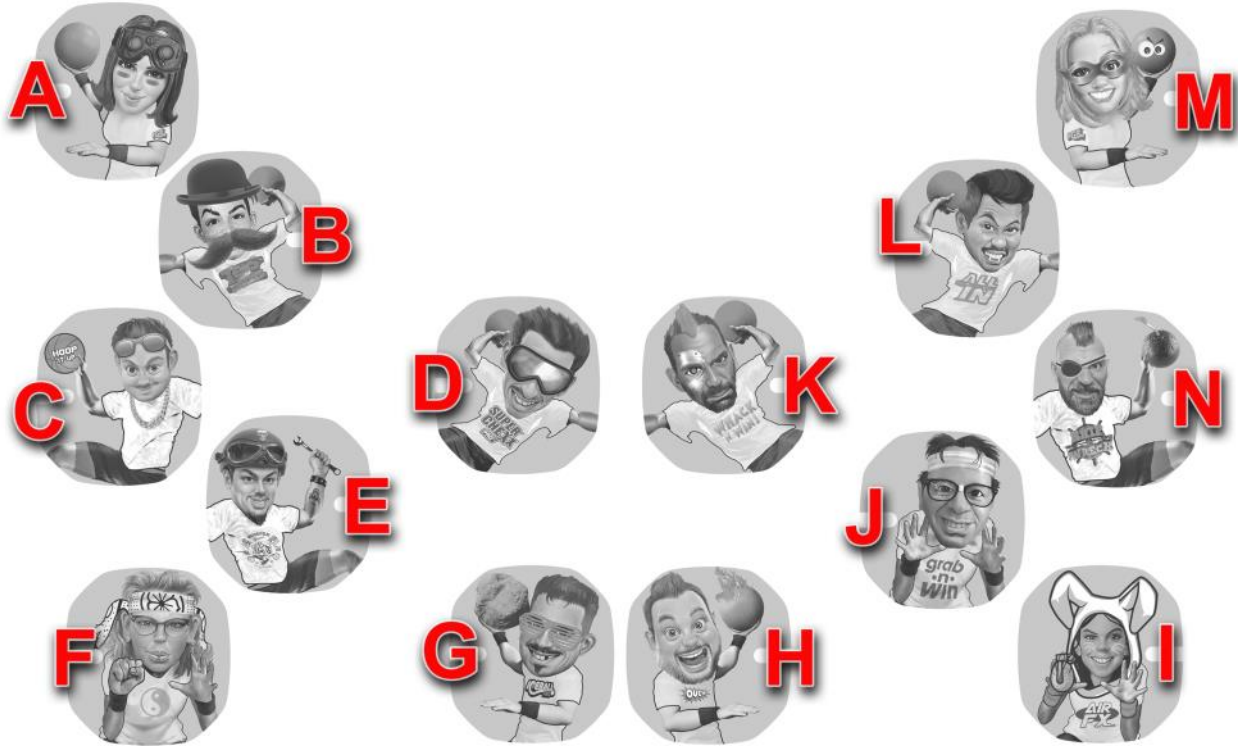
5-24-22

Tower Covers Part Numbers

DB3065

DB3065C

DB3065A

DB3065D

DB3048A

DB3034A

DB3034B

DB3048B

DB3065B

DB3065E
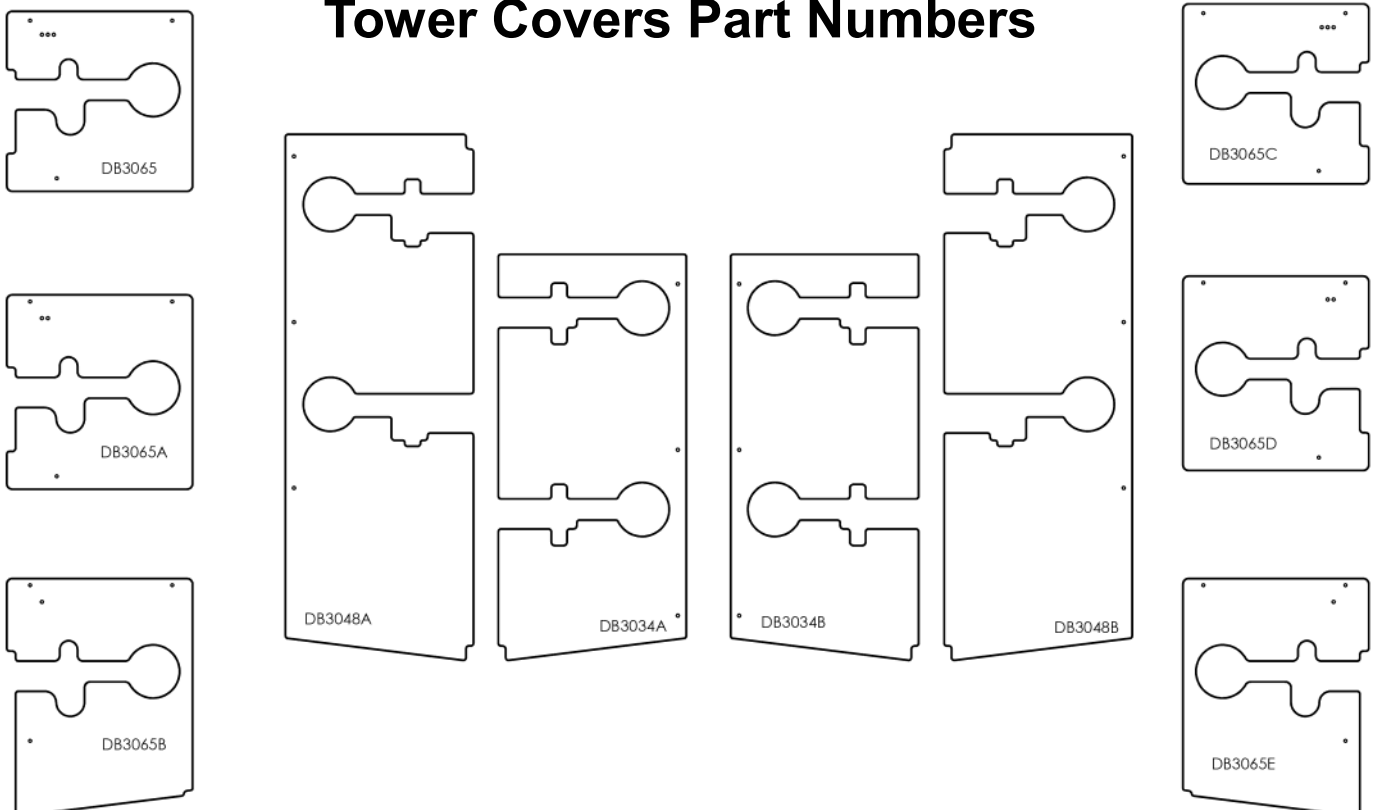
DECAL PART NUMBERS

DB7064 (left)   DB7065 (right)

DB7011

DB7012

DB7008   DB7009

DB7015   DB7016

DB7001   DB7002

DB7005   DB7006   DB7007

DB7062   DB7070   DB7071   DB7072   DB7018

DECAL PART NUMBERS

DB7063A-J
Note - There is no "i"

DB7063C 8.5 x 17.5
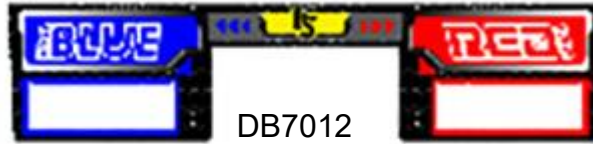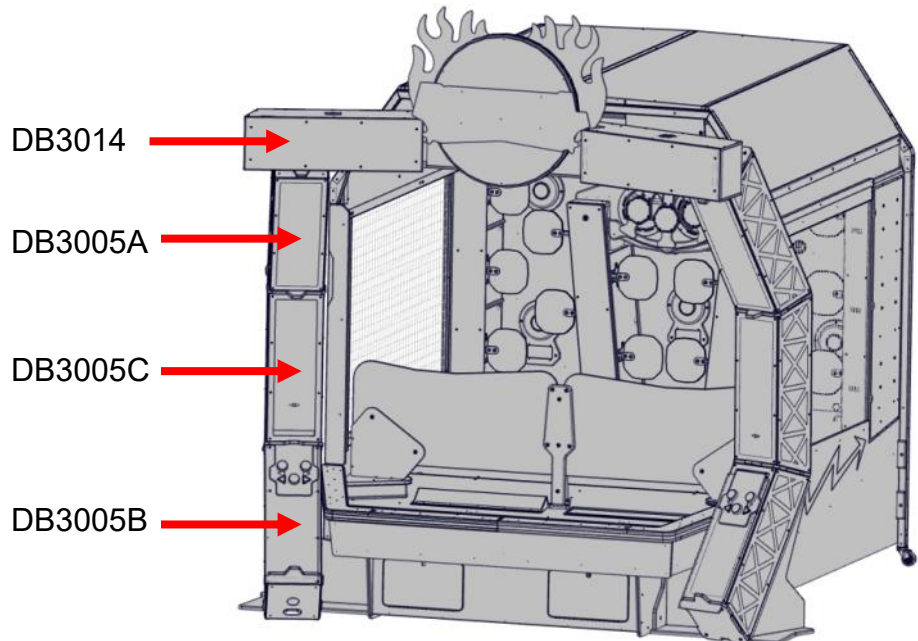
DB7063E 8.5 x 17.5

DB7063B 27 x 13.5

DB7063F 27 x 13.5

DB7063D 62 x 3.75

DB7063A 9.5 x 26.75

DB7063G 9.5 x 26.75

DB7063H - 2 per game 21 x 12

DB7063J 28 x 15.5

DB7032

DB7066

DB7028

DB7067

DB3014

DB3005A

DB3005C

DB3005B
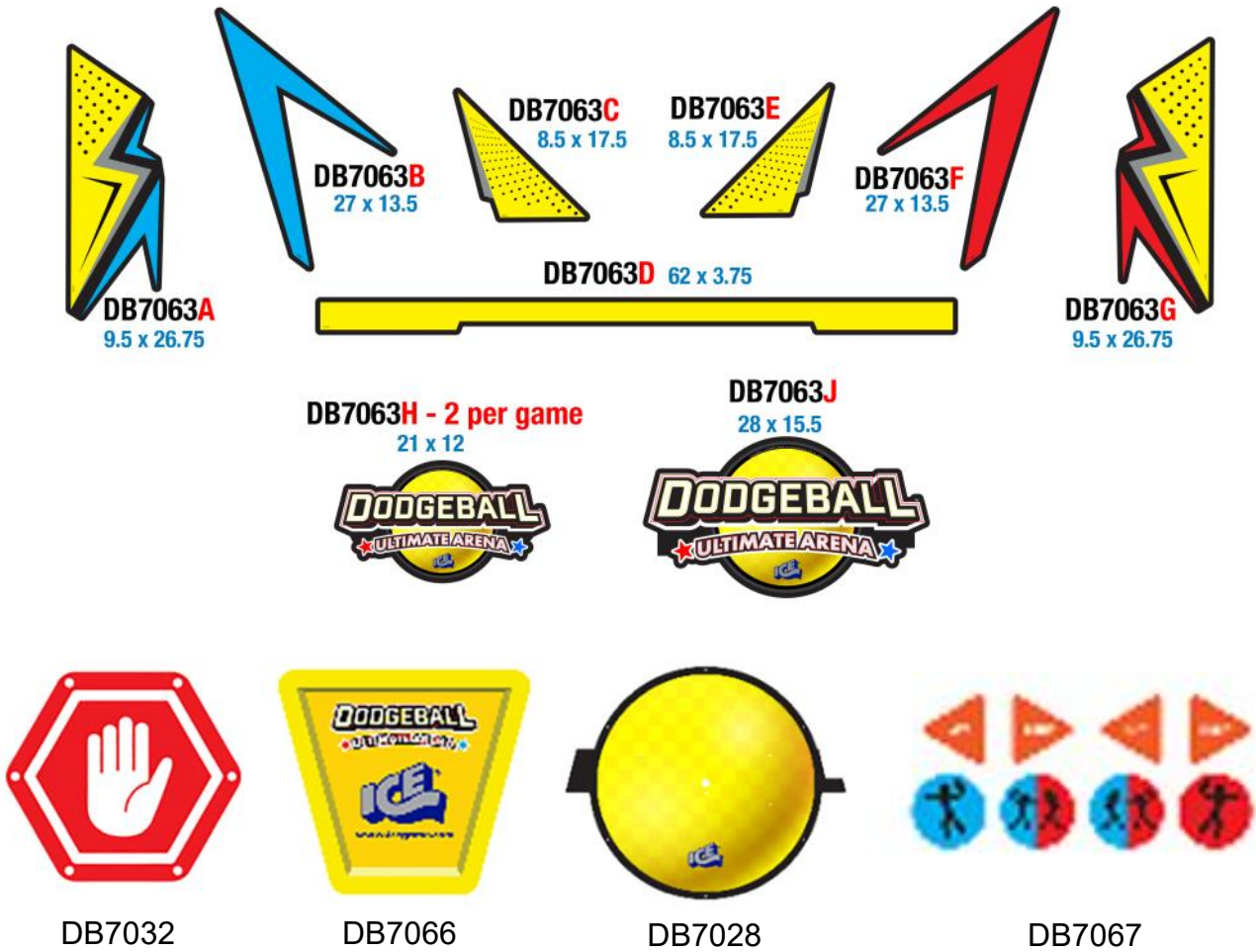
DB3216X Leaderboard Assembly and Parts
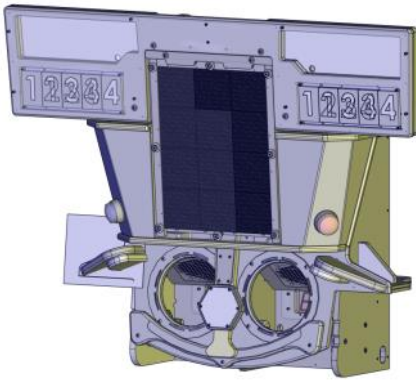
The leaderboard assembly contains the leaderboard displays, two WR2032X five digit displays, Multiple LED strips, WH2236X matrix display board, 2 RB2009EX receiver sensors, 2 FP2009EX Transmitter boards, DB3102X Blocker arm and motor assembly, three DB2033X target boards, two ML2032X display boards, and a DB3068X Dot Matrix Grid.

Removing the DB3068X Dot Matrix grid assembly.
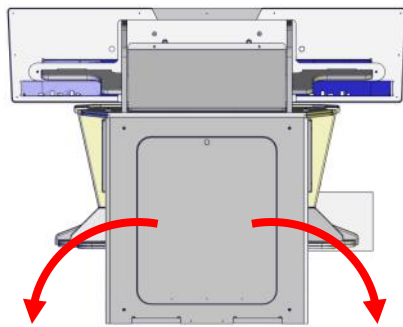
1) Open the upper back door access panel.

2) Unplug the two ribbon cables.

   (Mark the cables A and B to note where they go).

3) Disconnect the DC power cables.
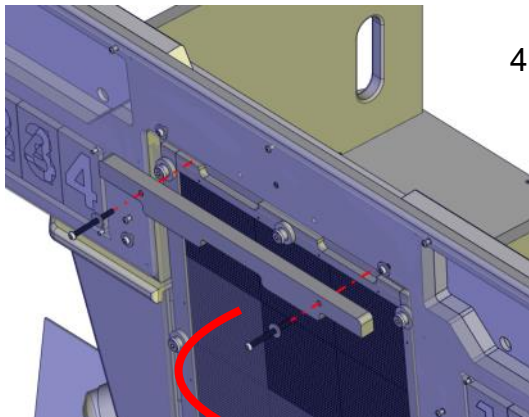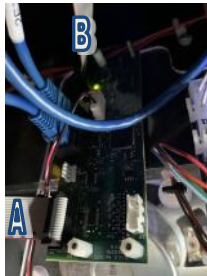
4) Then from the front, remove the upper support bar.

DB3216X Leaderboard Assembly and Parts

WR2032X

WR2032X

NB2035DB
BLUE

SX2535DBX
RED

ML2032X - Display
DB3054 - Display cover
AA6953 - Hardware

ML2032X - Display
DB3054 - Display cover
AA6953 - Hardware

AA6281

AA6753

DB3111

AA6281

DB3112

PC60643

RB2009EX

AA0675

DB3155

AA0644

FP2009EX

AA0675

DB3111
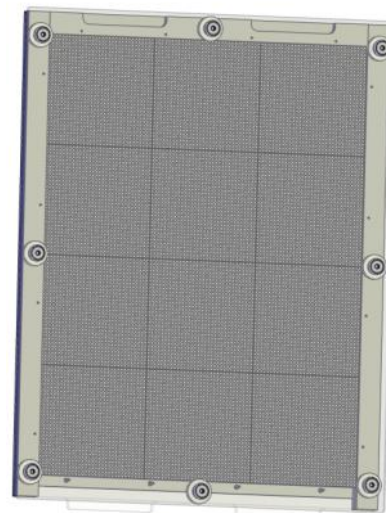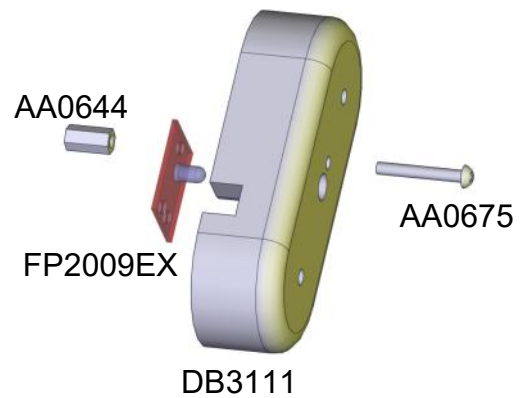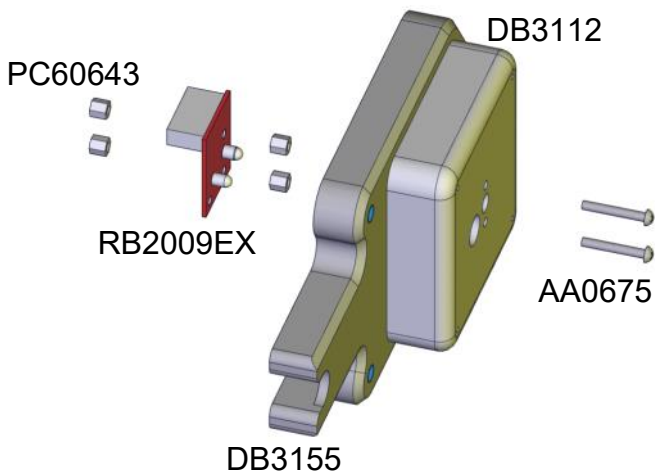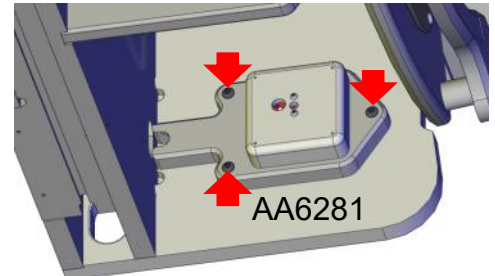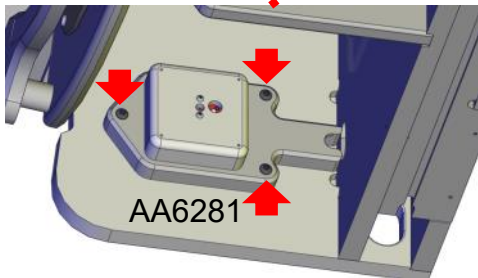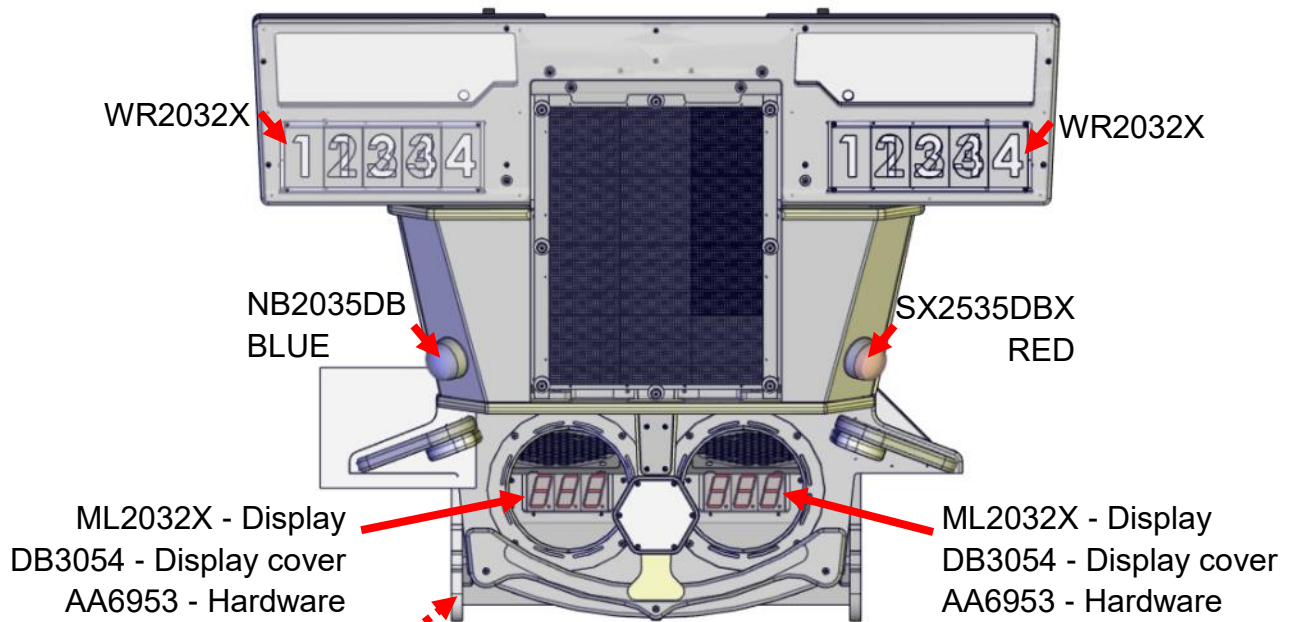
Removing the DB3102X Blocker arm & Motor assembly
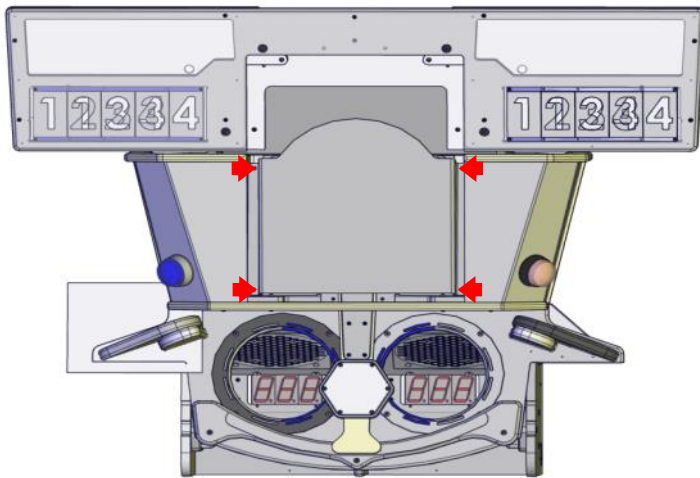
1) Remove DB3068X leaderboard display first then remove the four AA6177 screws holding the DB3154 Motor guard plate to the cabinet.

2) Remove the four AA6967 shoulder bolts and BL1086 springs.

AA6967

BL1086
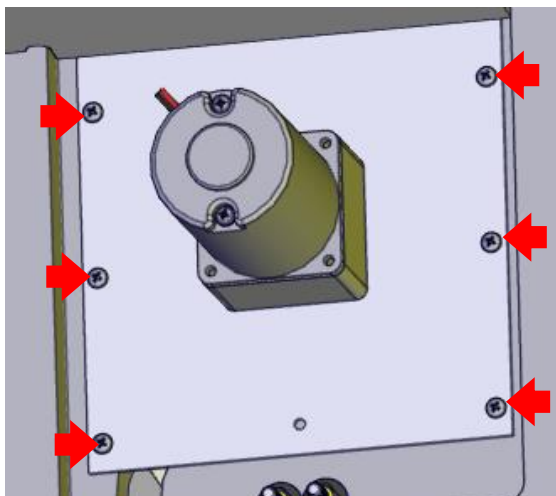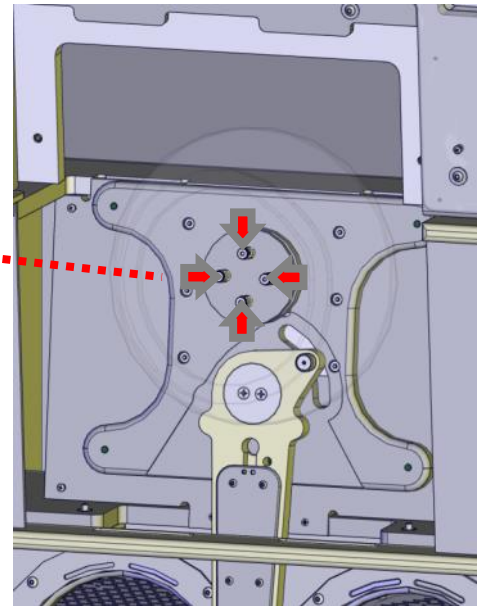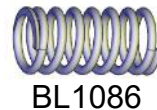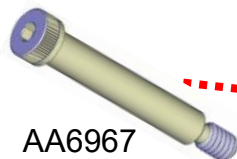
3) Remove the six AA6831 Phillip screws holding the Motor/gearbox assembly.

GF1194

AA6460

GF2008D

GF2008DBX

WP1058

AA6831
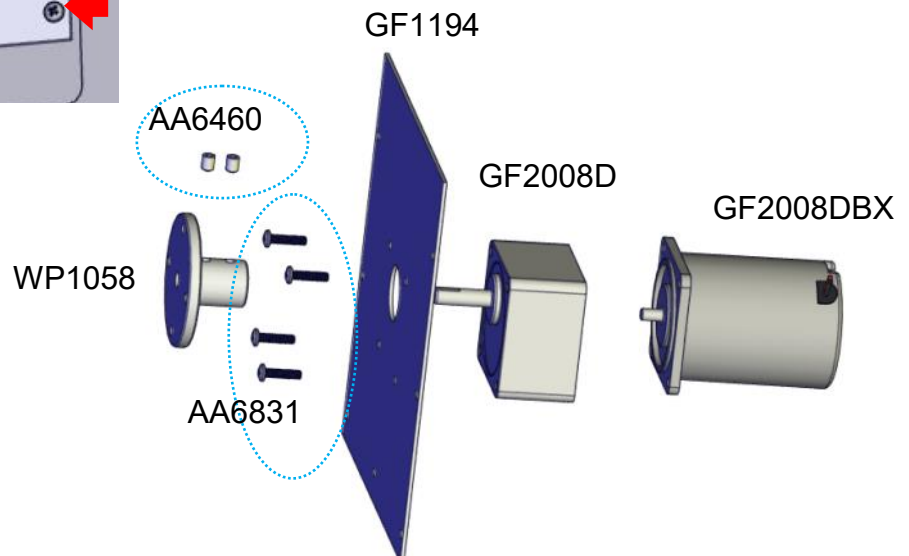
DB3102X Swing Arm Assembly

AA6212

PC60604

DB3100

DB1054

DB3101

AA6915

AA6831

DB7032X

DB3849X - Button Target

E01667

DB3847

AA6926

AA6177

PC60643

AA6584

AA6203

DB3845X

AA0644

ML2032X

DB2033X

E02907BLX

BL4009

AA6020

AA0655

DB2033X

DB4001

AA6227 DB1045

DB4045

DB4045 DB1045

AA6072

E01662

AA6512

PC60610

DB1052 3 per game

DB1053

DB1051

WH3005

PC60610

AA6438

FB2008DBX
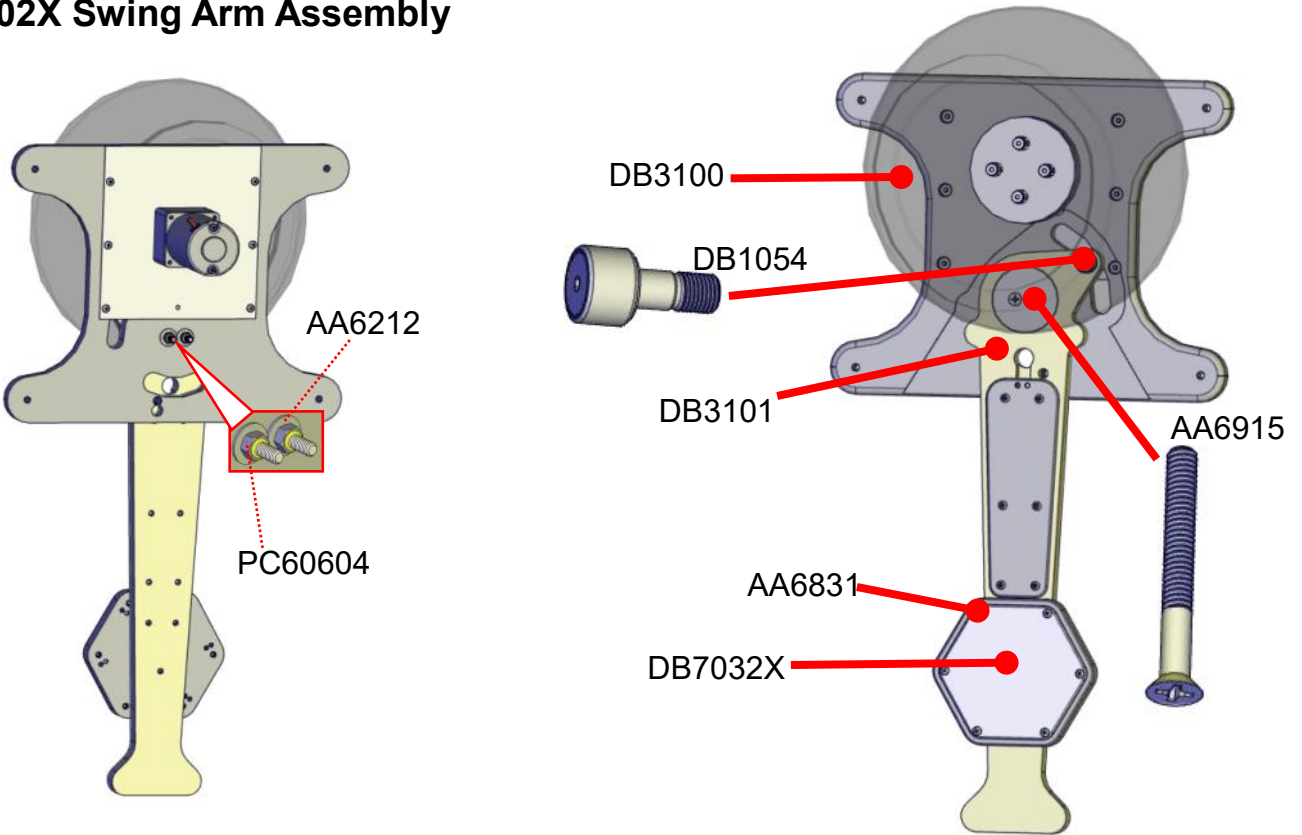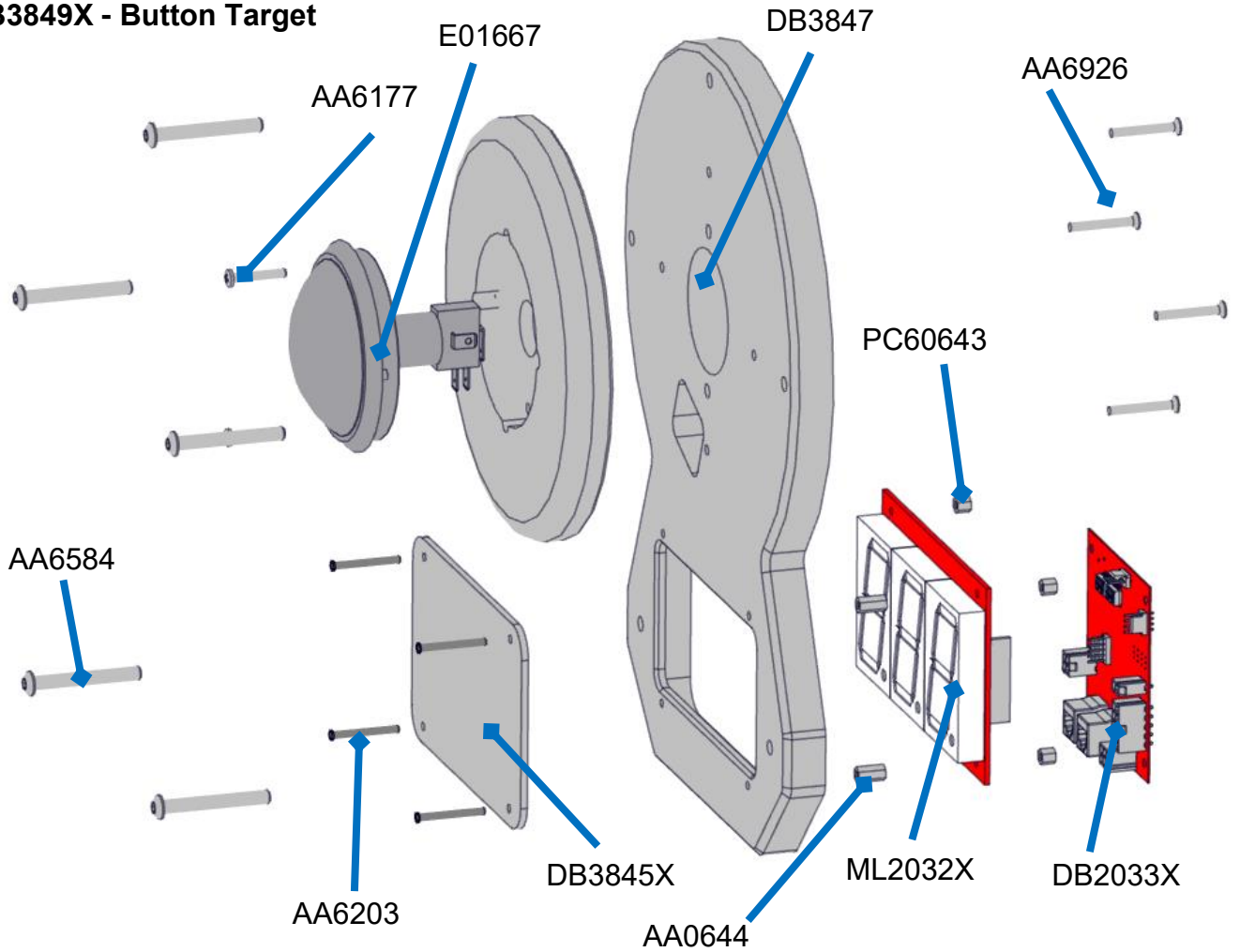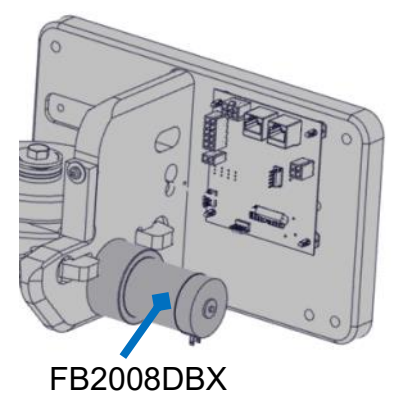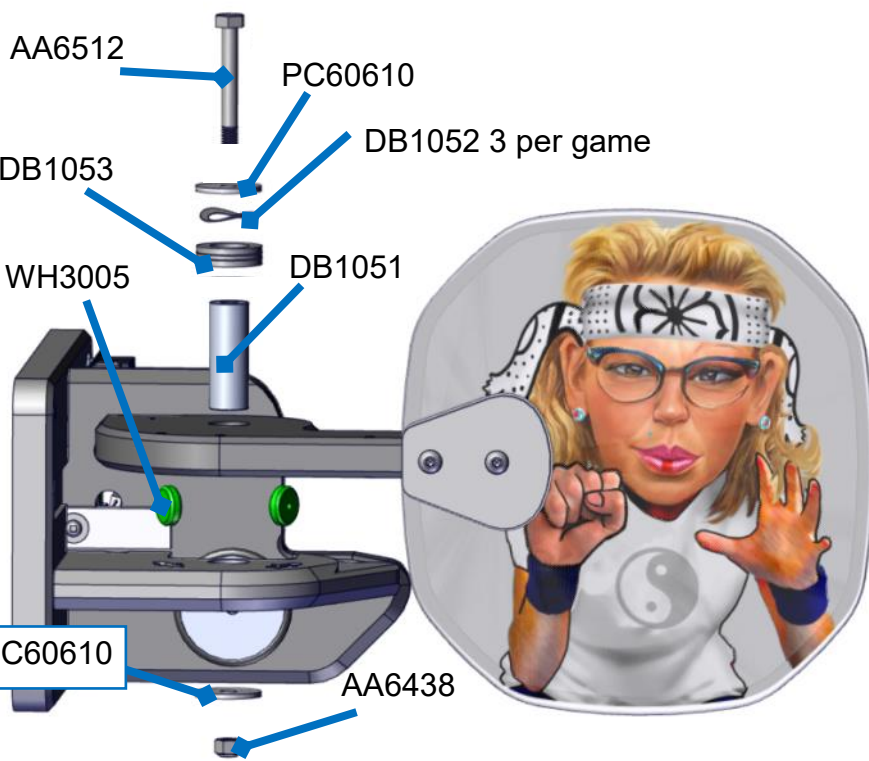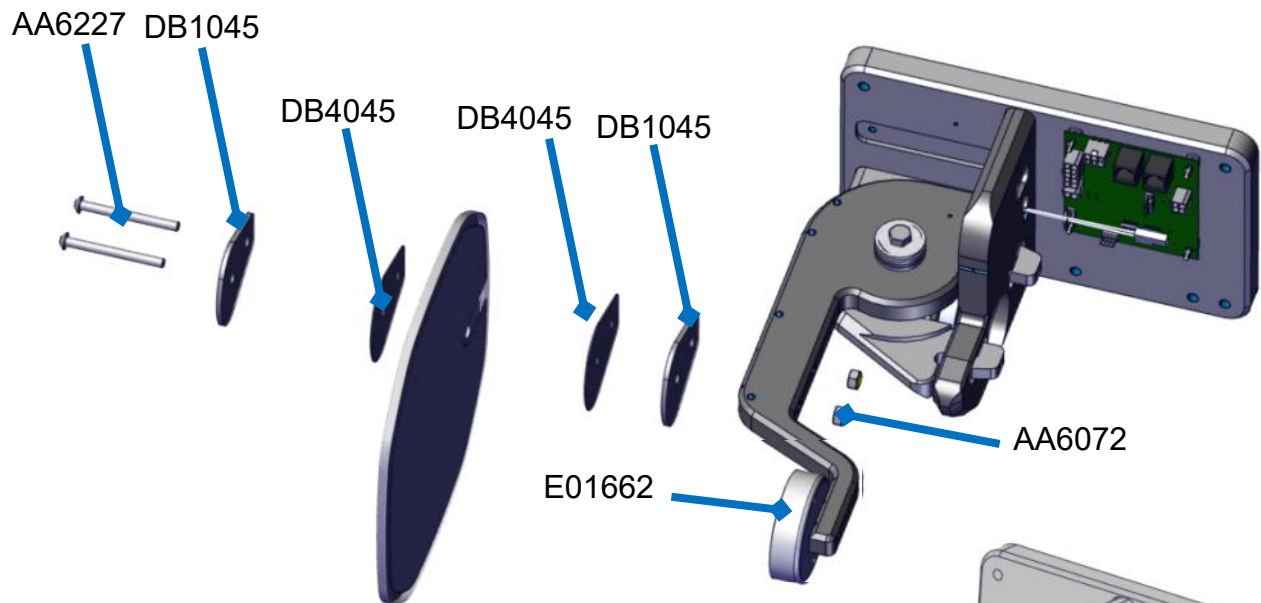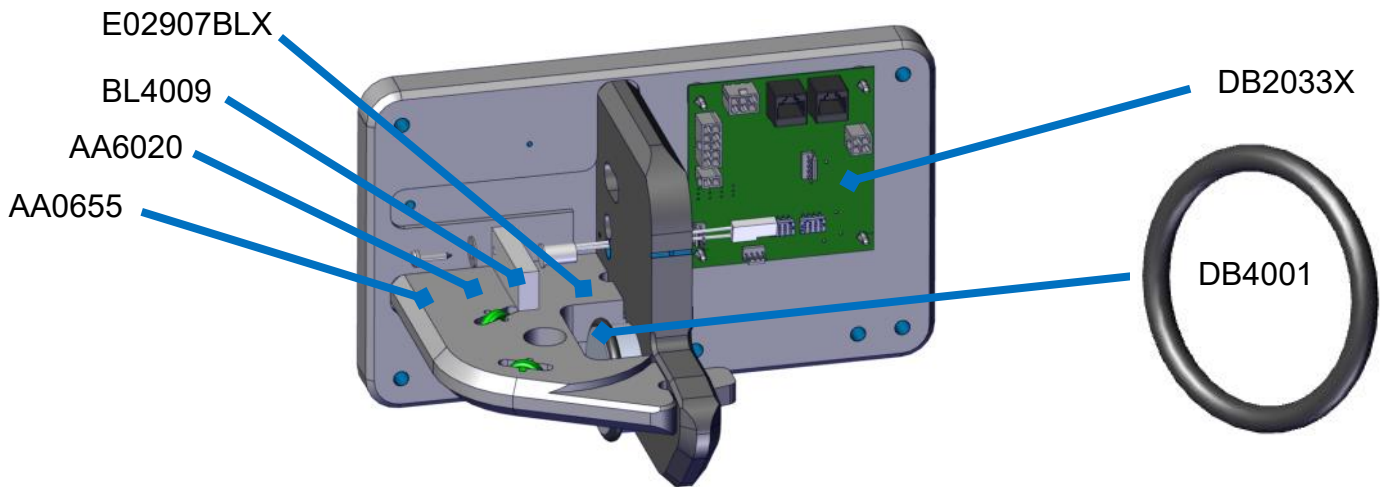
**Target Assembly
DB3500X**

DB3277X- ball-gate Assembly
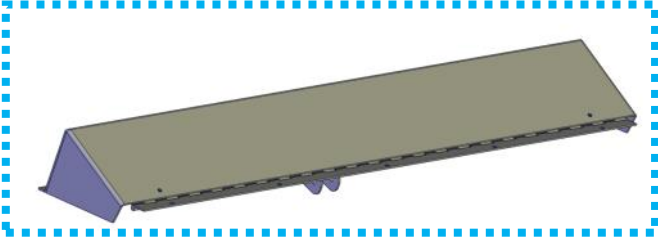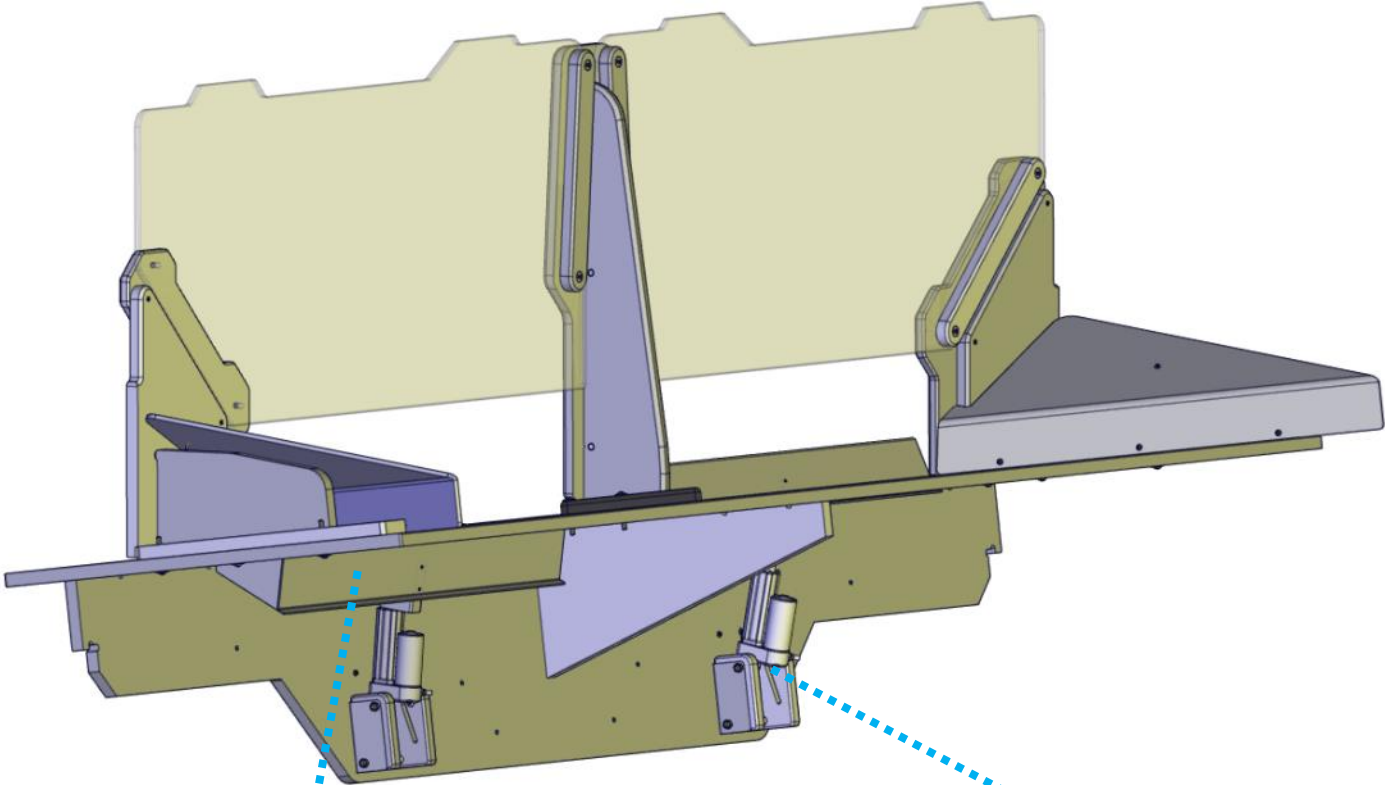
NS1022-P802 (black)

NS1022-P509 (blue)
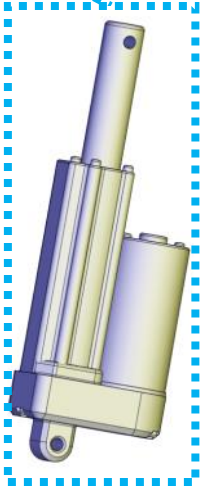
ZS2015X Actuator

BALLGATE:

How to measure the voltage at connector P15 when testing your actuators. Do not measure between the black/blue and orange/blue on P15, you will never see the12VDC.

Use pin 5 or 6 on P11 (where the black wires go to).

Your should see the following:

- When the ball gate is up even in attract if you put the red meter lead in the black/blue on P15 there should be +12VDC.

- In game play when the ball gate is up, he should see +12V if you move the red meter lead on the orange/blue at p15.

- If you see +12V when you do both of these things, then the board is working properly.

- It may not be exactly there **WH2134DBX**

  Main board

12V. If it is 11.5 or so, then it is good. If not, some sort of   voltage drop.
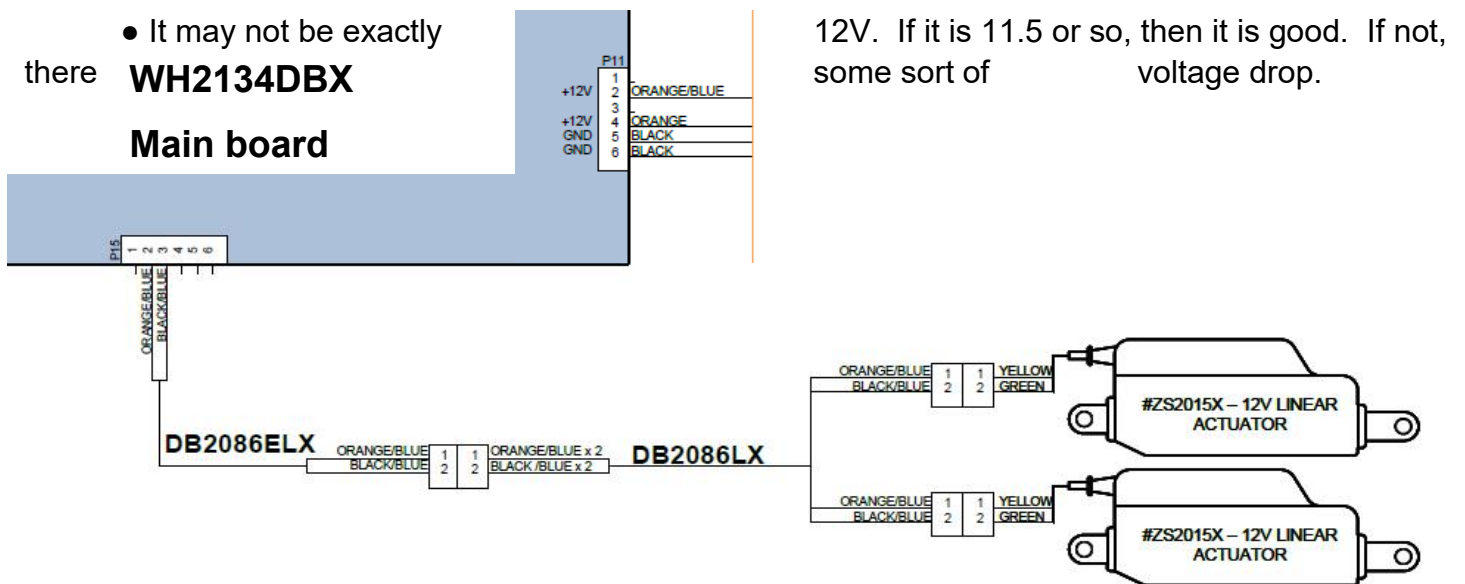
Trouble Shooting Tips

DB2033X - TARGET BOARDS

On power up each target board will first display the version number of the firmware. It then will identify their location ID. Any board that is showing "888" has failed and should be replaced.

DB2033X

Both RJ45 Ports are identical. Either can be used for in or out communications. A coupler could be used to diagnose network issues if needed to eliminate the target board completely in the chain. The communication break should be between the last seen board shown in yellow or green and the next shown in red when in diagnostic mode. There is an extra 20' Cat 5 cable included for finding com errors.
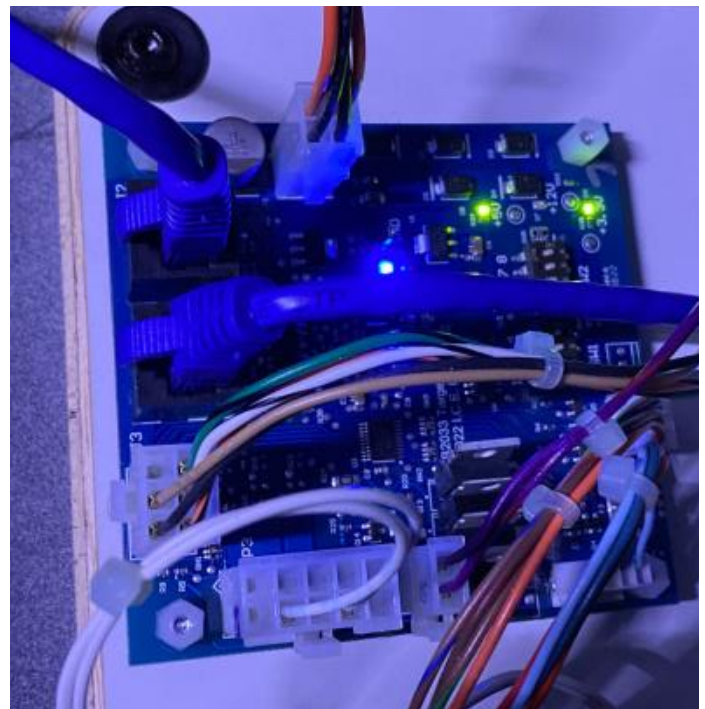
Target arms not moving or partially but motor is fine

O-RING or Spring washers are pinched in assembly. Two springs where used. Short spring washers have Ø1.225 O.D.; Tall spring washers have Ø1.103 O.D. Short spring washers require two to be installed.

How to test your target assembly:

> Coin in a 2 player game and allow it to run

>> All targets should present in round 2, final score should be 0-0

Solutions to try:

> 1) General Target check:

> 2) Ensure O-Ring Tire and arm are clean and free of dust and oil (use air duster and/or mild cleaner)

> 3) Ensure motor wheel is positioned correctly on motor shaft (slight clearance from screw heads) 1/16 max between head of screw to back of the pulley.

> 4) Ensure Motor wheel set screw is tightened on shaft flat

> 5) Spring washer specific:

Replace with tall spring (MU750-0160, Ø1.103 O.D.) or double up on the spring.
Position the wheel so that the head of the screw will not rub against the wheel. The use of blue Loctite to secure the grub screw is recommended.

WHEEL MUST NOT RUB SCREW HEAD
DO NOT EXCEED 1/16" CLEARANCE

SET SCREW MUST ALIGN
WITH SHAFT FLAT
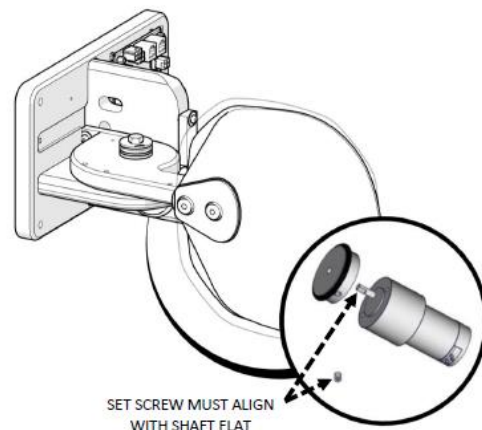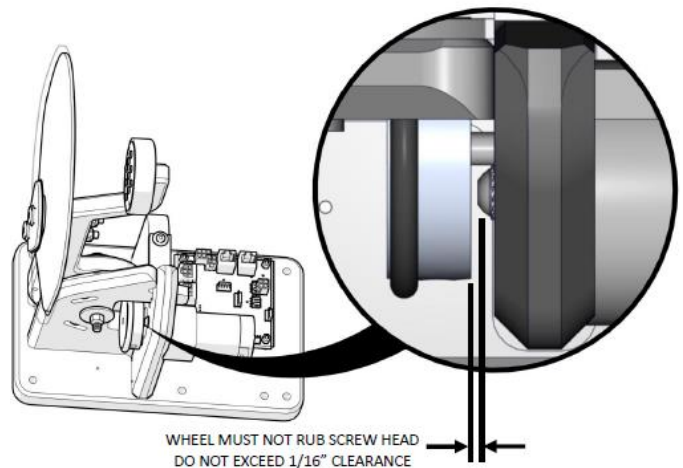
Spare Parts list:

Electronic Parts:		**Misc. Items.**	
DB2033X	Target Board	DB3024X	Case of 6 dodgeballs
FB2008DBX	Target Motor	DB4001	O-Ring .326
ZS2015X	Actuator	DB1052	Target Wave Spring
E01667	Large push button	E00039	8 Amp Fast BLO fuse
GF2008D	Gear box for swing arm	E08702	7' Cat
GF2008DBX	Swing arm swing arm	E01691	15' blue Cat 5 cable
RB2009EX	Receiver PCB	E01690	15' Gray Cat 5 cable
FP2009EX	Transmitter	E01666	3' Cat 5 cable
MJ2032X	Target Display	E01665	2' Cat 5 cable
NB2035DB	Blue Strobe light assembly		
SX2535DBX	Red Strove light assembly		
WR2032X	5 Digit display assembly		
E01357	Dot Matrix Grid		
E00837DBX	SDCARD		
DB2035X	Front board		
WH2034DBX	Main board		
FE2006	Audio Amp		
WH2136X	Face board for matrix		

Power Supplies

GF2010	+12 VDC 26.7A power supply
KF2010	+12 VDC power supply
WN2010	+5 VDC 40A power supply
KF2011RMX	Fuse board 6 amp fuses

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I.C.E. Inc warrants all components in new machines to be free of defects in materials and workmanship for the period listed below:

- 180 days on Main PCB's, Computers & Motors
- 1 year on all LCD monitor panels
- 90 days on all other electronic and mechanical components
- 30 days on all I.C.E. repairs and parts purchases

I.C.E. Inc shall not be obligated to furnish a warranty request under the following conditions:

- Equipment or parts have failed through normal wear and tear
- Equipment has been subjected to unwarranted stress, abuse or neglect
- Equipment has been damaged as a result of arbitrary repair/modification

Products will only be covered under warranty by obtaining an I.C.E. authorized RMA #. To obtain an RMA # please provide I.C.E. tech support with the game serial # or original I.C.E. invoice # and a detailed description of the failure or fault symptoms.

I.C.E. Inc will assume no liability whatsoever for costs associated with labor or travel time to replace defective parts. All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications.

I.C.E. Inc will cover domestic UPS ground, or comparable shipping costs during the warranty period. International or expedited shipments are available for an additional charge. To obtain credit defective parts must be returned to I.C.E. Inc, at the customer's expense, within 30 days. After 30 days a 15% re-stocking fee will apply to all returns.

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