Assembly Manual: Pocket NC Edition
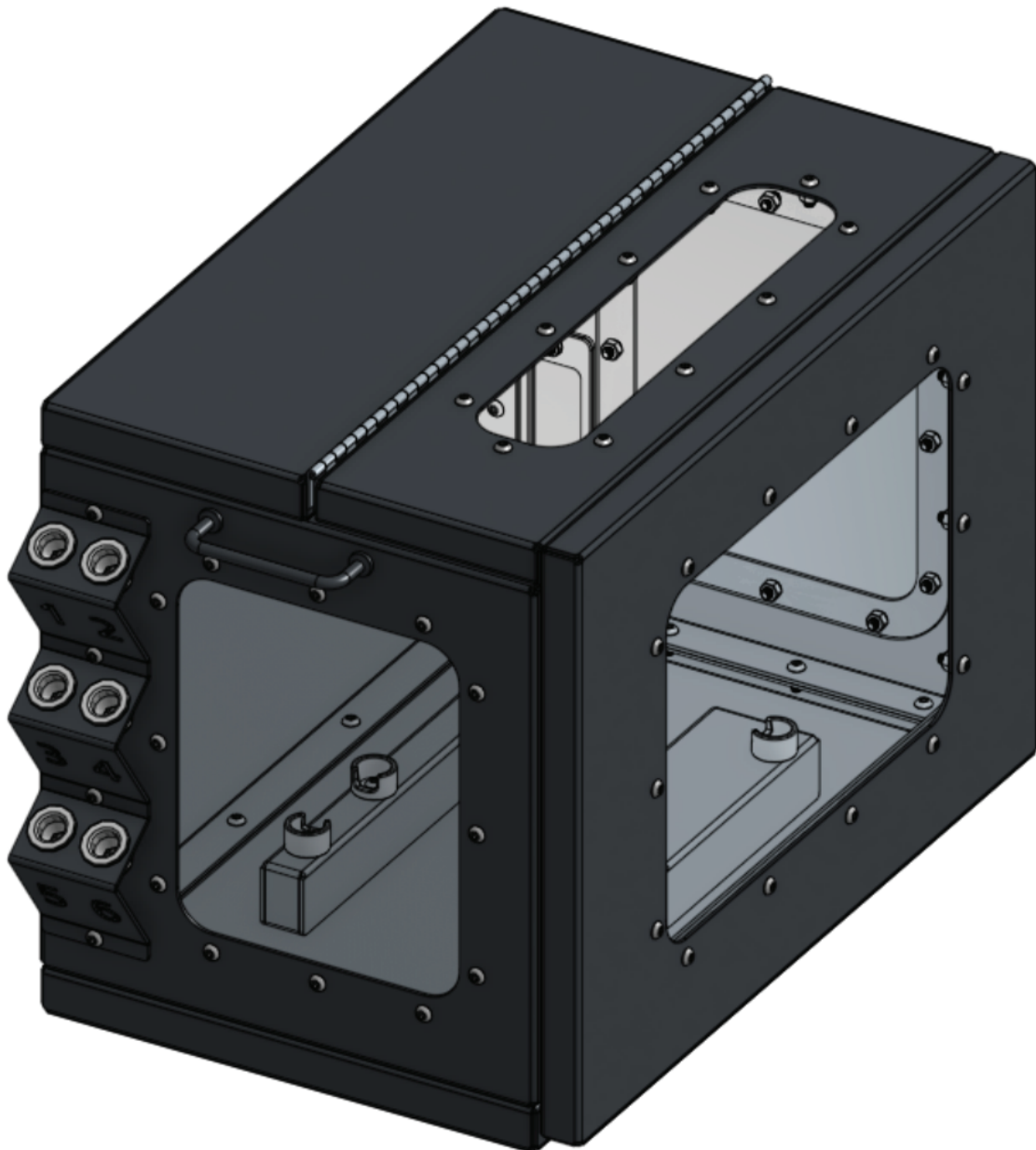
MACHINESUITS

BOM / Key / Build Preface

BOM / Key

Tools

- #10-32, 6-32 allen key
- 7/16 wrench

Hardware/Misc

- (A) #10-32 button head bolt (5/8" long)
- (B) #10-32 button head bolt (3/4" long)
- (C) 6-32 countersunk head bolt
- (D) #10-32 nylock nut
- (E) Gasket material
- (F) Piano hinge
- (G) Rubber feet

Fab Parts

- (1) Bottom panel
- (2) Back panel
- (3) Left panel
- (4) Right panel
- (5) Top
- (6) Top door panel
- (7) Front door panel
- (8) Tool rack
- (9) Tool cups

Fab Parts cont.

- (10) Tool cup nuts
- (11) Rear riser block
- (12) Front riser block
- (13) Feet cups
- (14) Right window
- (15) Left window
- (16) Front window
- (17) Top window
- (18) Chip deflector
- (19) Port plate

Build Preface
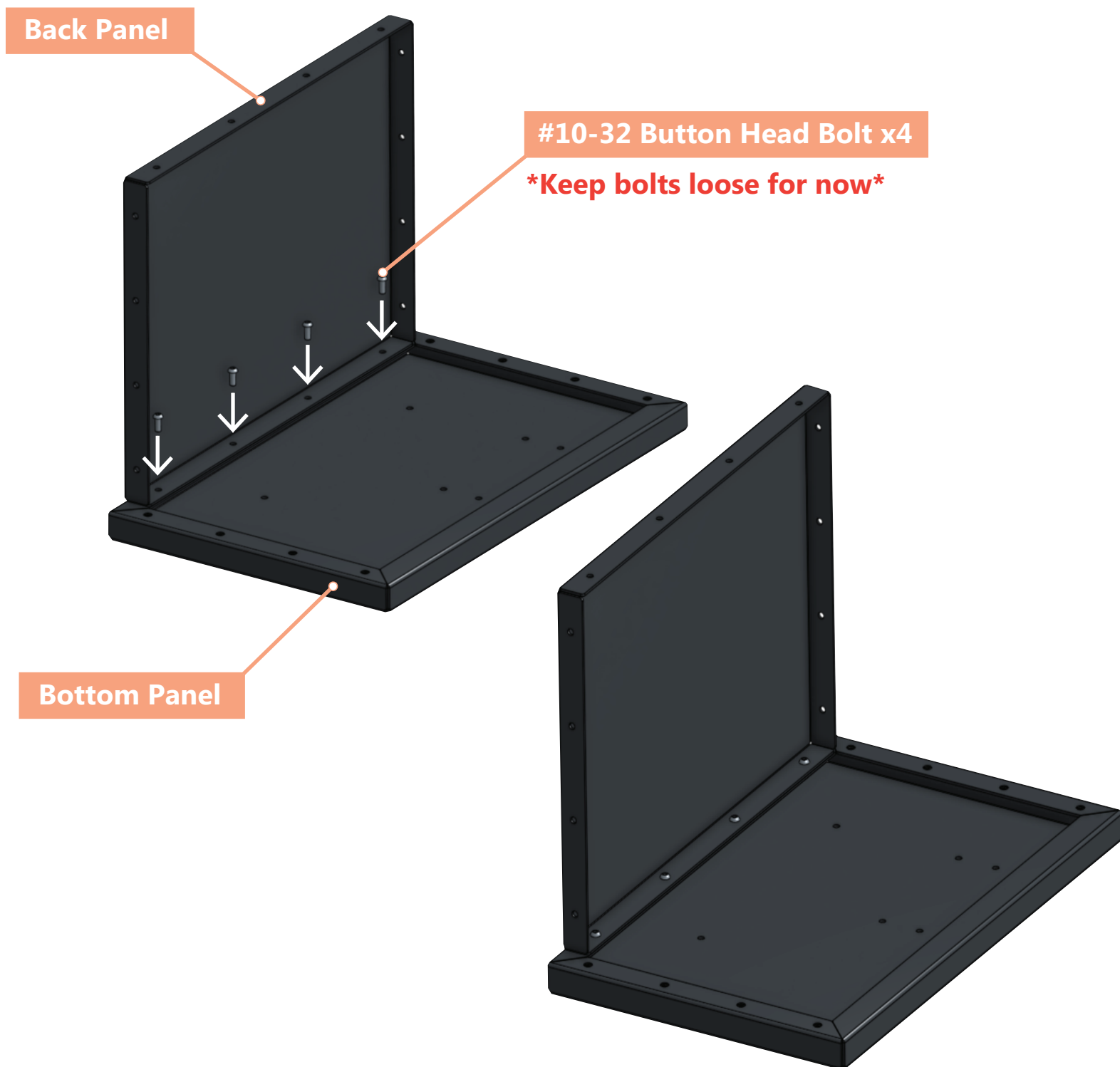
Steps 1-6

- Mount panels

Steps 7-10

- Mount riser blocks
- Assemble tool rack
- Mount tool rack

Steps 11-15

- Attach windows/deflector
- Attach gaskets
- Attach port clamp
- Attach Rubber feet

Back Panel

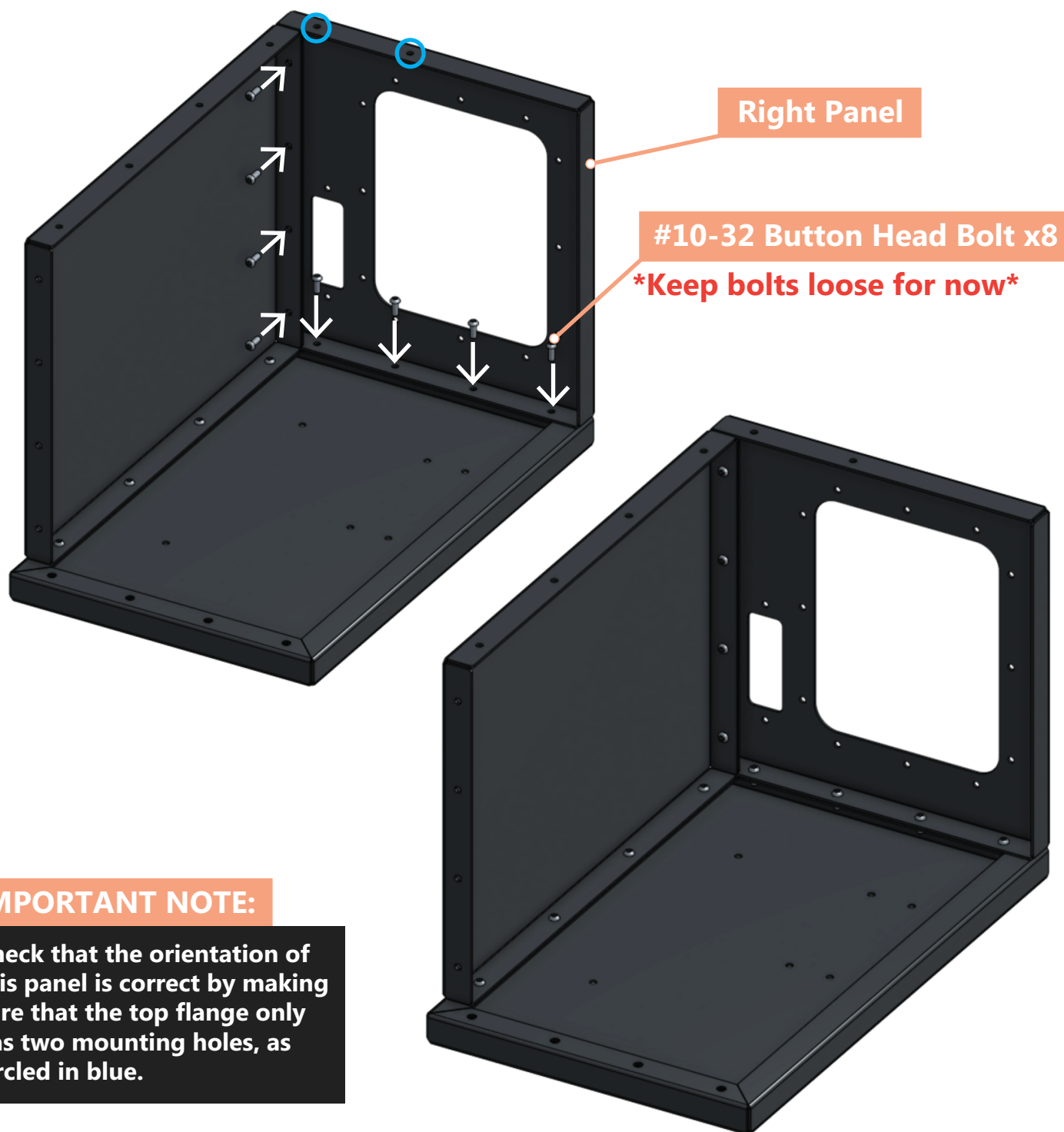#10-32 Button Head Bolt x4

Keep bolts loose for now

Bottom Panel

Tools/Materials Required:

Tools: #10-32 Allen wrench

Materials: Bottom panel, Back panel
#10-32 button head bolt (5/8") x4

Right Panel

#10-32 Button Head Bolt x8

Keep bolts loose for now

IMPORTANT NOTE:

Check that the orientation of this panel is correct by making sure that the top flange only has two mounting holes, as circled in blue.

Tools/Materials Required:

Tools: #10-32 Allen wrench

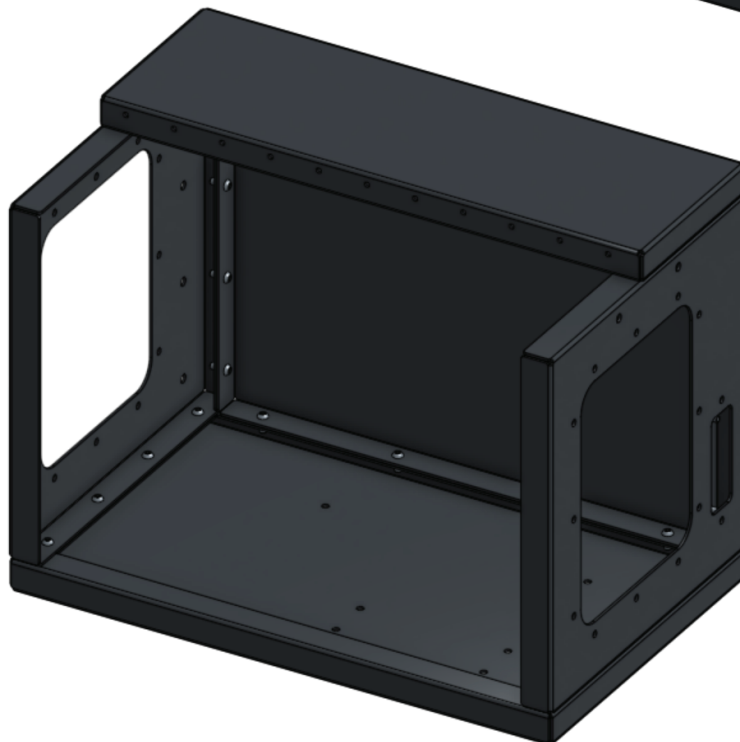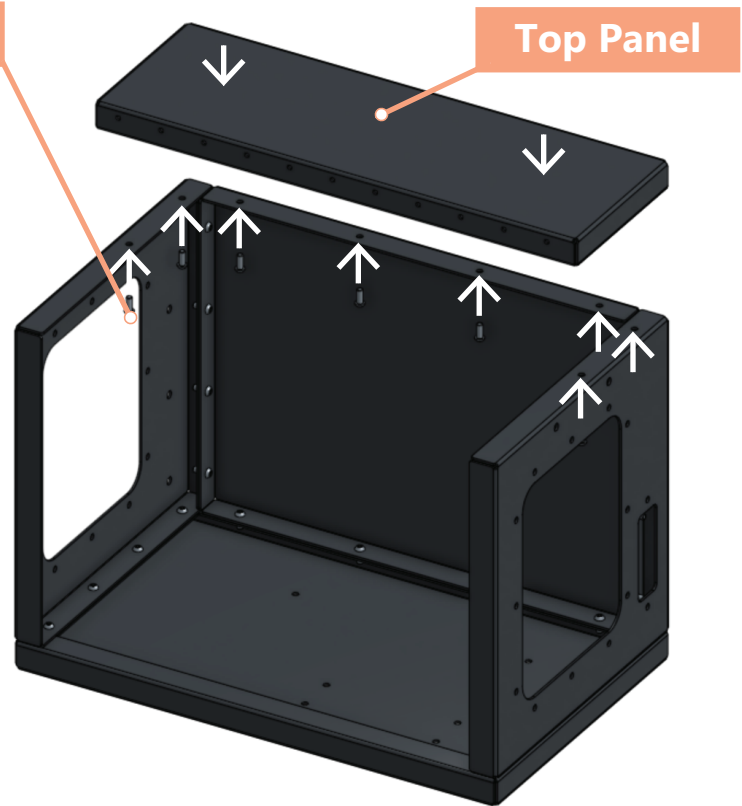**Materials:** Right panel, #10-32 button head bolt (5/8") x8

Left Panel

#10-32 Button Head Bolt x8

Keep bolts loose for now
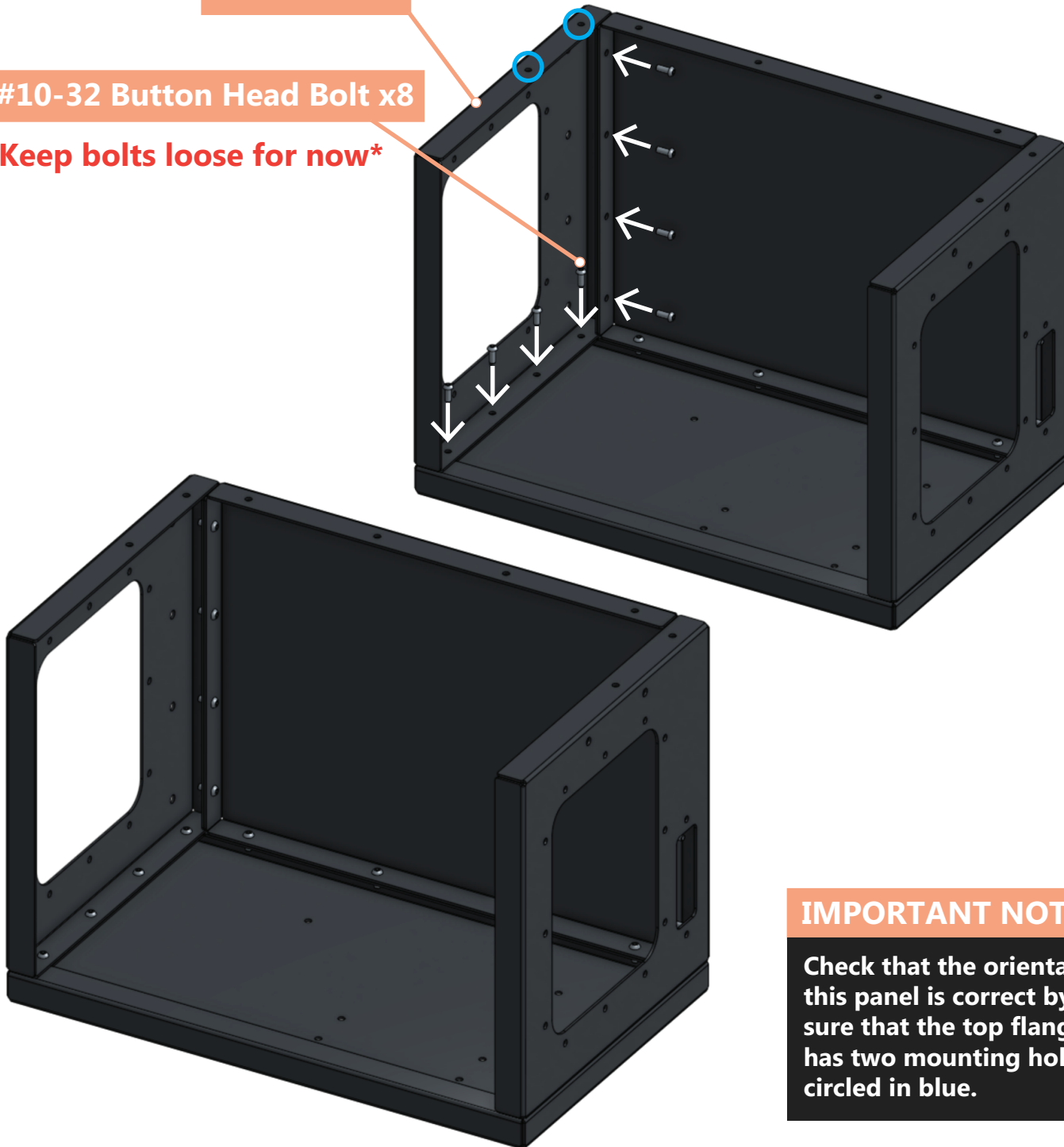
IMPORTANT NOTE:

Check that the orientation of this panel is correct by making sure that the top flange only has two mounting holes, as circled in blue.

Tools/Materials Required:

Tools: #10-32 Allen wrench

Materials: Left panel, #10-32 button head bolt (5/8") x8

#10-32 Button Head Bolt x8

Keep bolts loose for now

Top Panel

IMPORTANT NOTE:

Once you have all the bolts in loose for this step, you may tighten all of the bolts fully for this step and all previous ones.

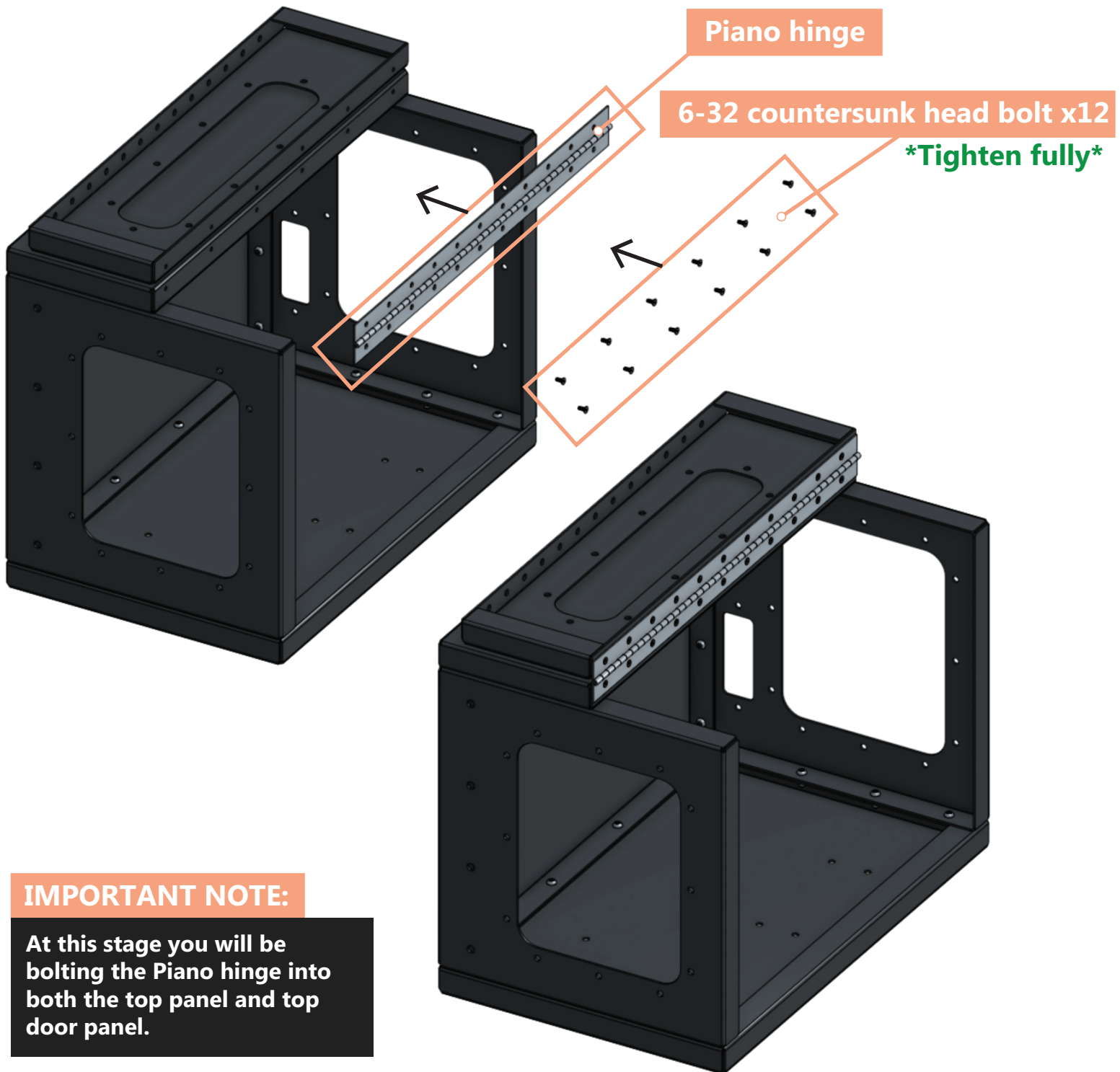# Tools/Materials Required:

Tools: #10-32 Allen wrench

Materials: Top panel, #10-32 button head bolt (5/8″) x8

Piano hinge

6-32 countersunk head bolt x12

Tighten fully

IMPORTANT NOTE:

At this stage you will be bolting the Piano hinge into both the top panel and top door panel.

Tools/Materials Required:

Tools: 6-32 Allen wrench

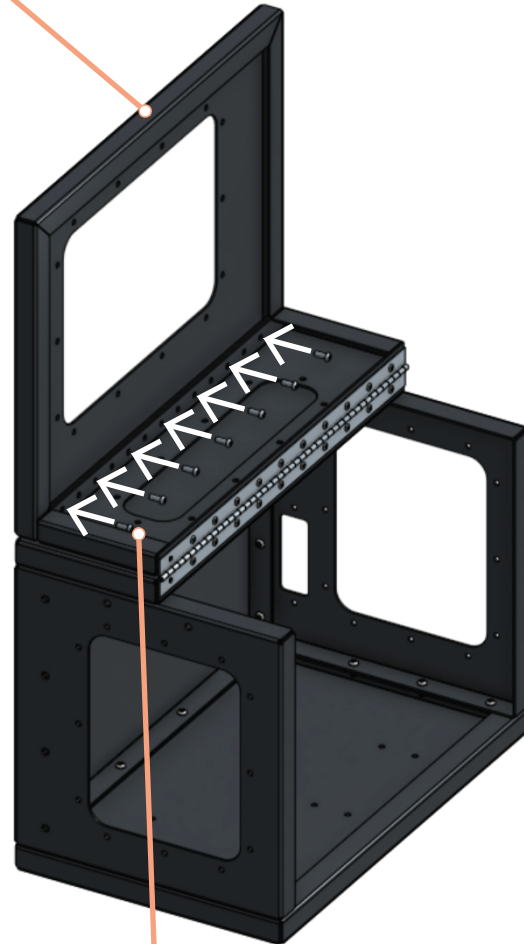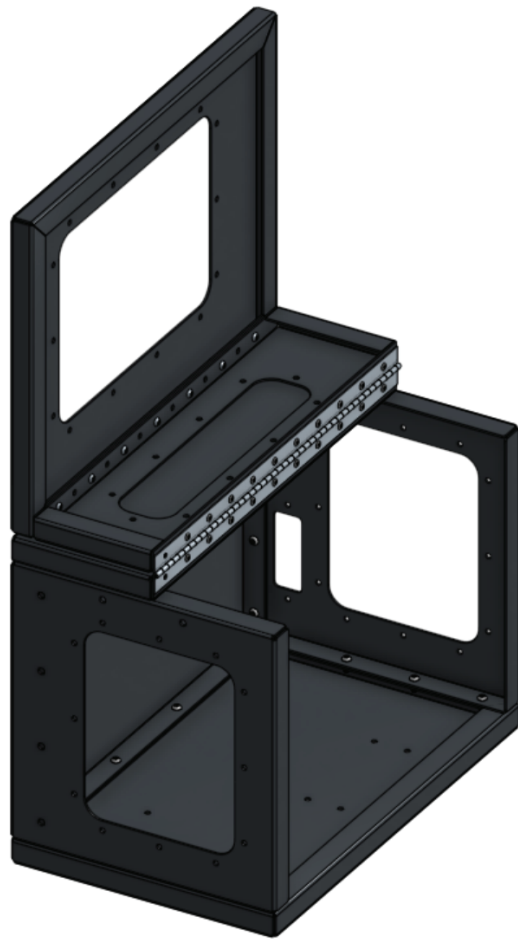**Materials:** Top door panel, 6-32 countersunk head bolt x12, Piano hinge

Front Door Panel

IMPORTANT NOTE:

Not every bolt hole here must be used. It is reccomended to use a fastener at every other bolt hole.

#10-32 Button Head Bolt x7

Tighten fully

IMPORTANT NOTE:

Fold the top door panel all the way back for this step.

Tools/Materials Required:

Tools: #10-32 Allen wrench

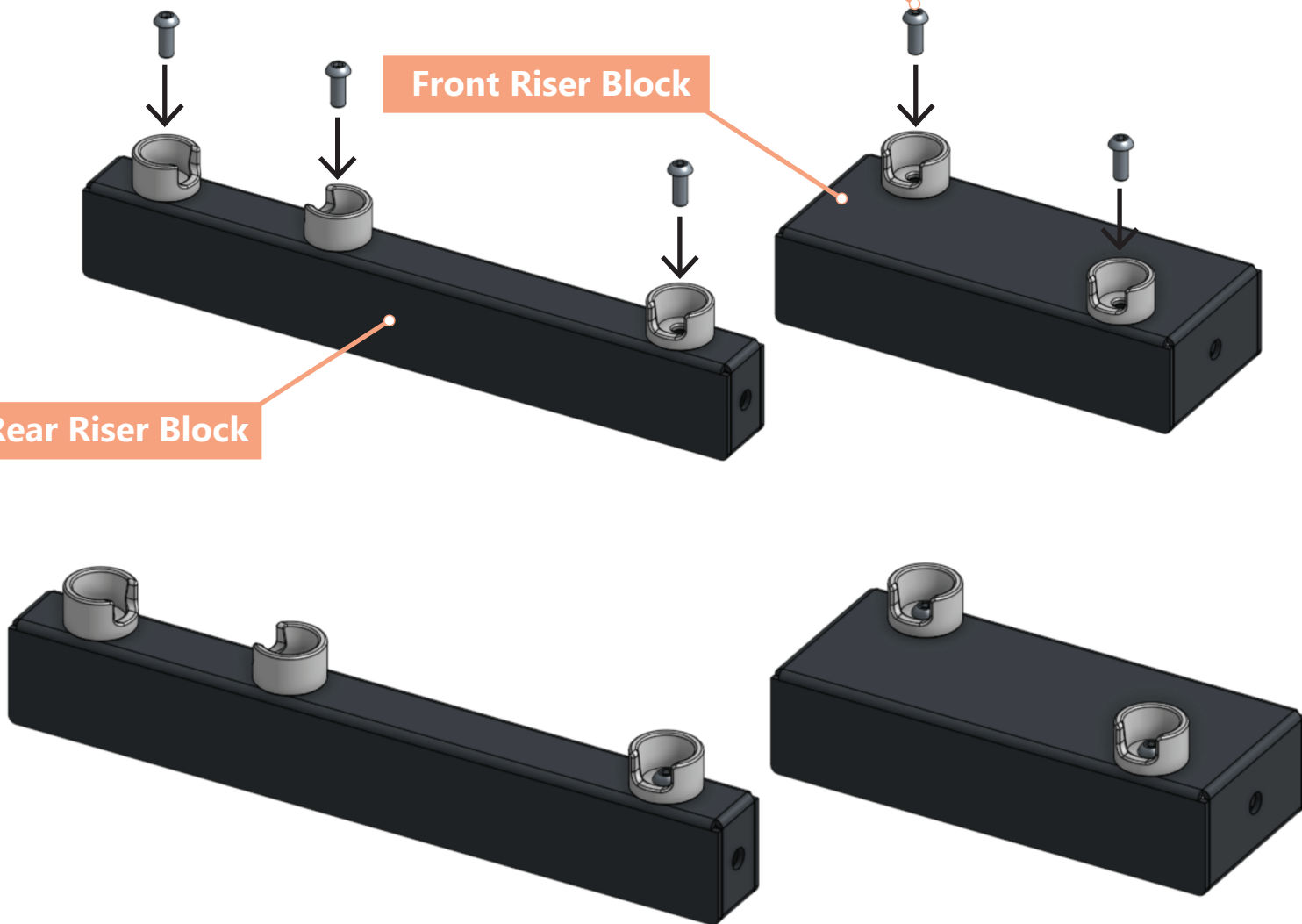**Materials:** Top/top door panel, #10-32 button head bolt (5/8") x7

#10-32 Button Head Bolt x5

Tighten fully

Front Riser Block
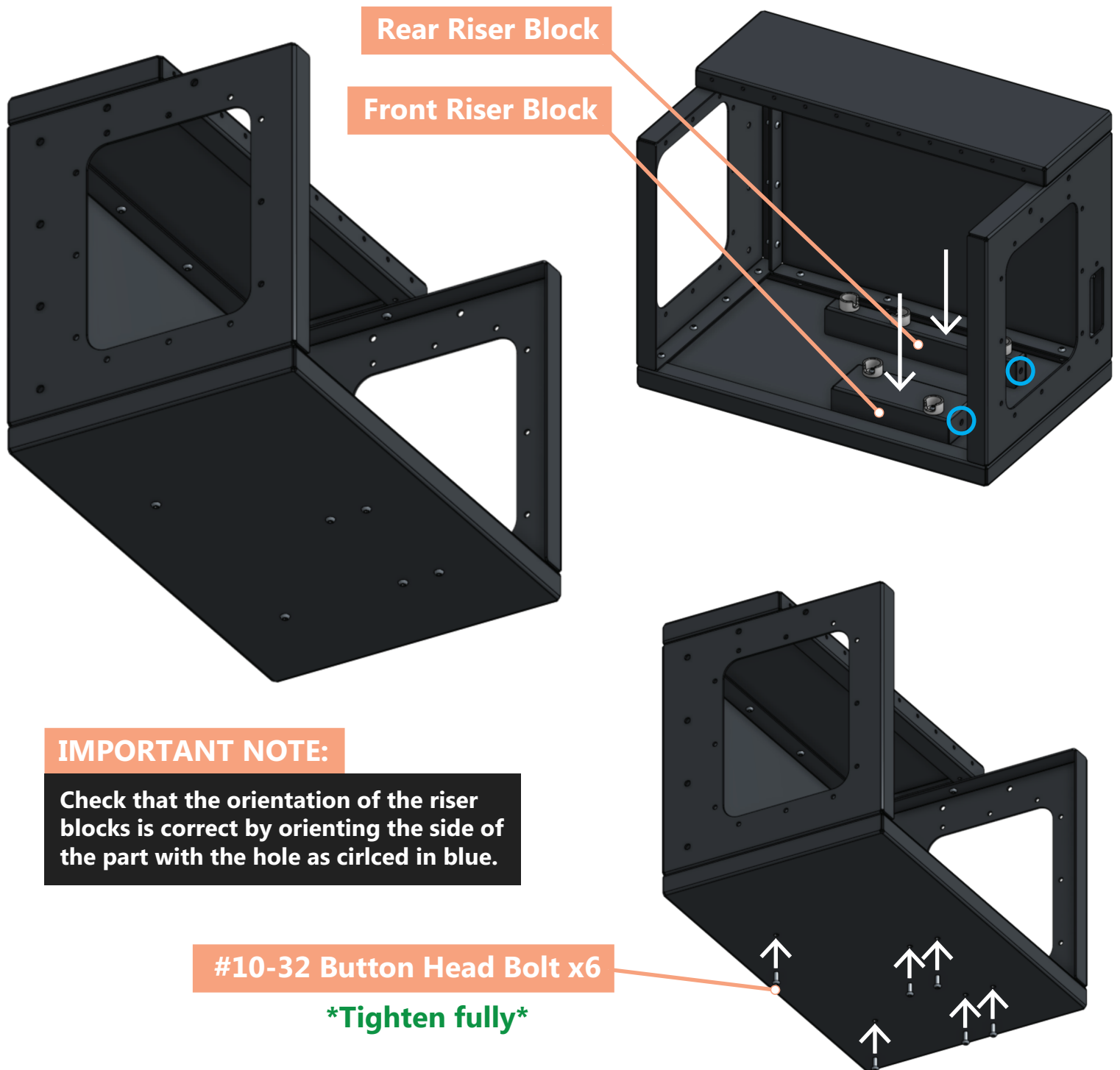
Rear Riser Block

Tools/Materials Required:

Tools: #10-32 Allen wrench

Materials: Front riser block, Rear riser block, Feet cups x5, #10-32 button head bolt (5/8") x5

Rear Riser Block

Front Riser Block

IMPORTANT NOTE:

Check that the orientation of the riser blocks is correct by orienting the side of the part with the hole as cirlced in blue.
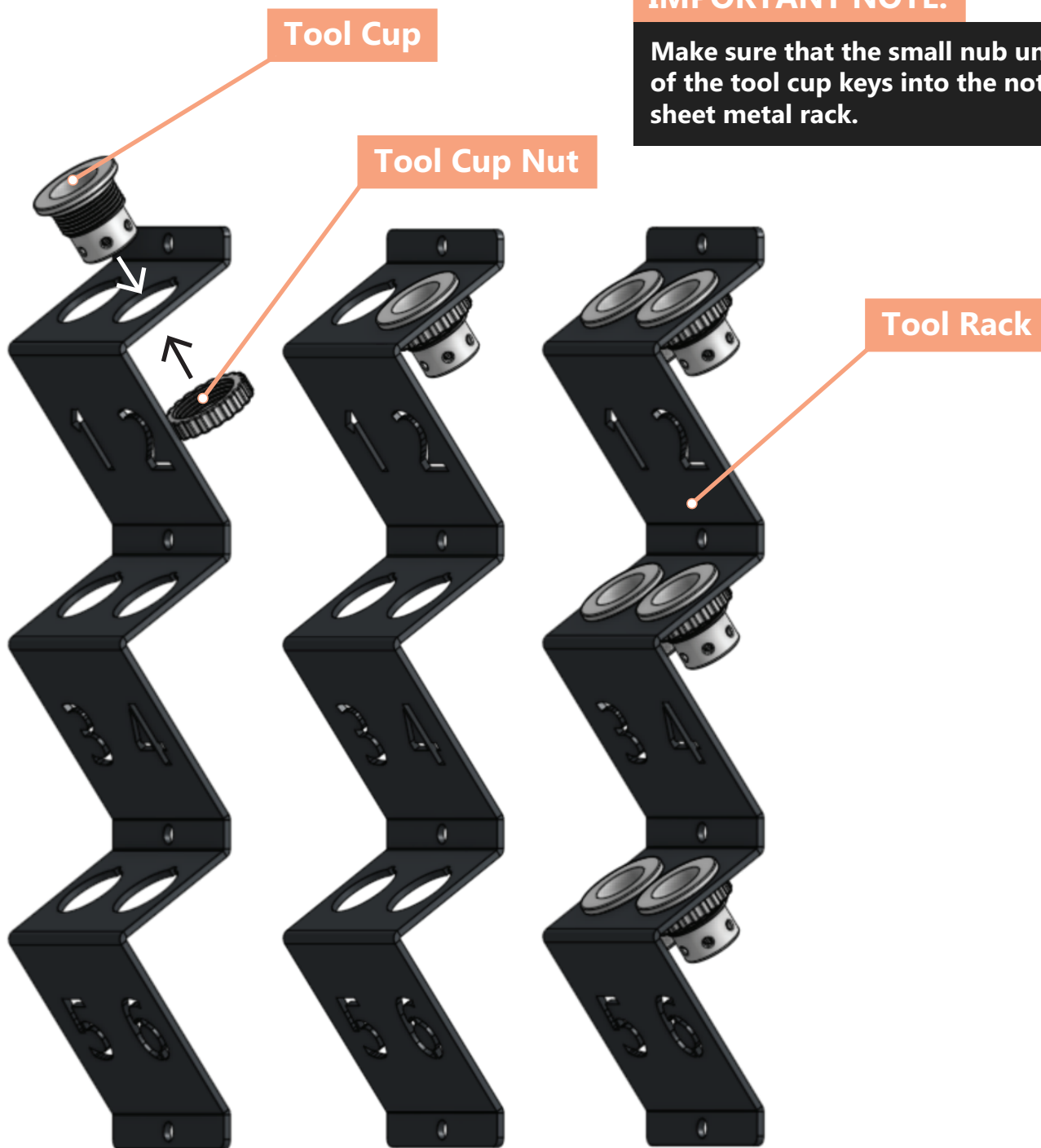
#10-32 Button Head Bolt x6

Tighten fully

Tools/Materials Required:

Tools: #10-32 Allen wrench

Materials: Front riser block, Rear riser block, #10-32 button head bolt (5/8") x6

Tool Cup

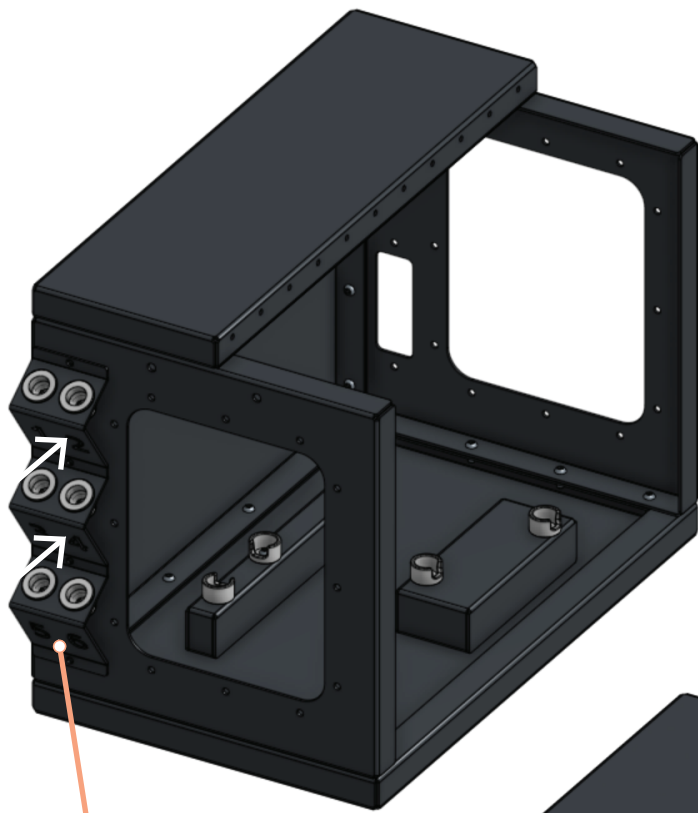**Tool Cup Nut**

IMPORTANT NOTE:

Make sure that the small nub under the lip of the tool cup keys into the notch in the sheet metal rack.

Tool Rack

Tools/Materials Required:

Tools: None   **Materials:** Tool rack, Tool cup x6, Tool cup nut x6
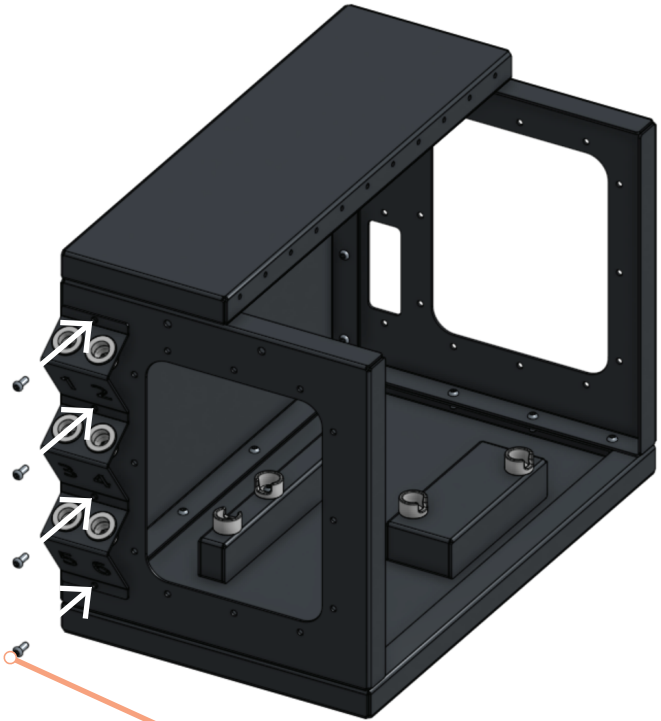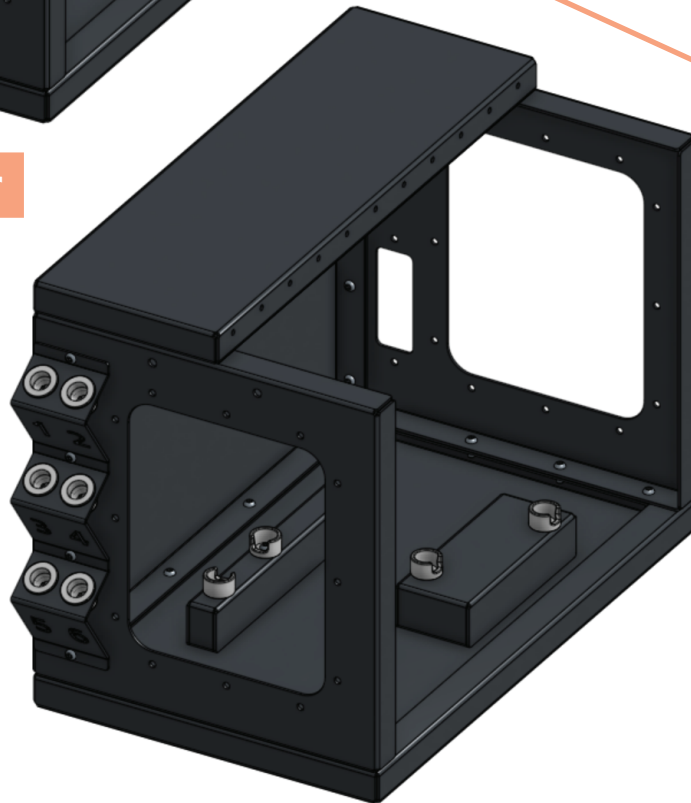
Tool Holder

#10-32 Button Head Bolt x4

Tighten fully

Tools/Materials Required:

Tools: #10-32 Allen wrench

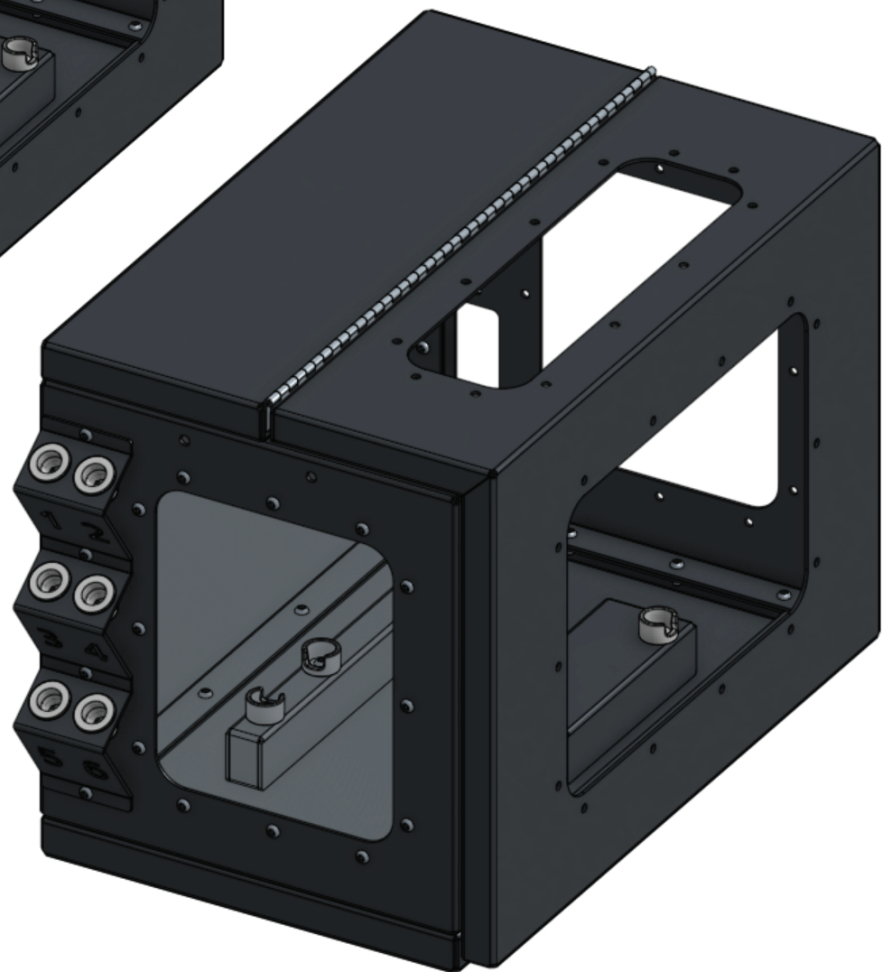**Materials:** Tool holder, #10-32 button head bolt (5/8") x4
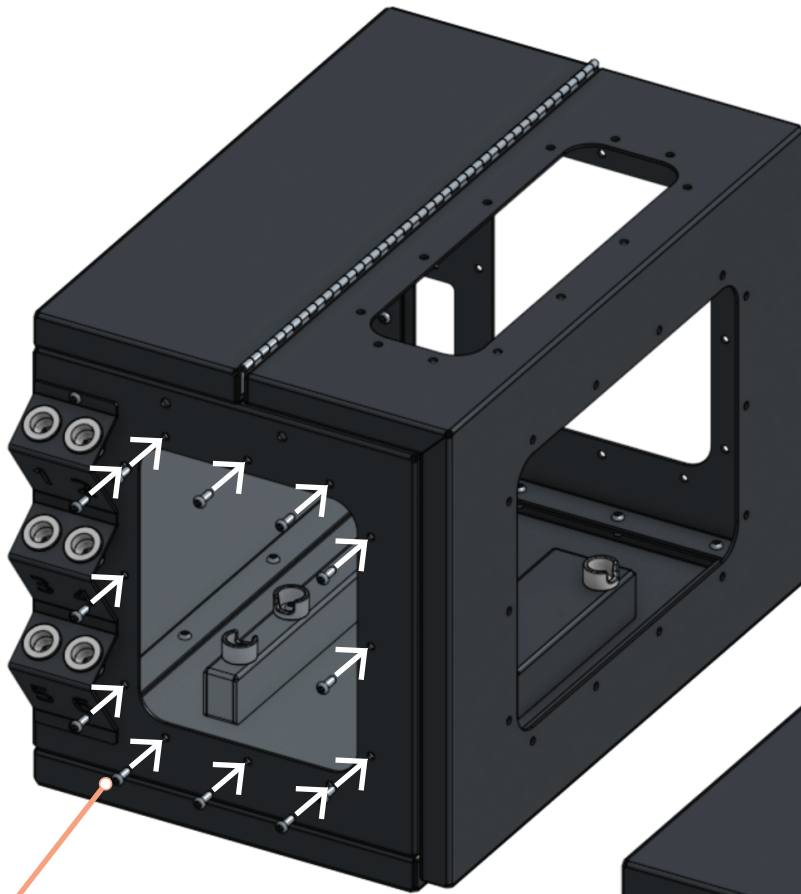
IMPORTANT NOTE:

Make sure to attach the windows to the inside of the enclosure panels, and to attach an 1/4-20 nylock nut to the end of each bolt.

#10-32 Button Head Bolt x36

Tighten fully

IMPORTANT NOTE:

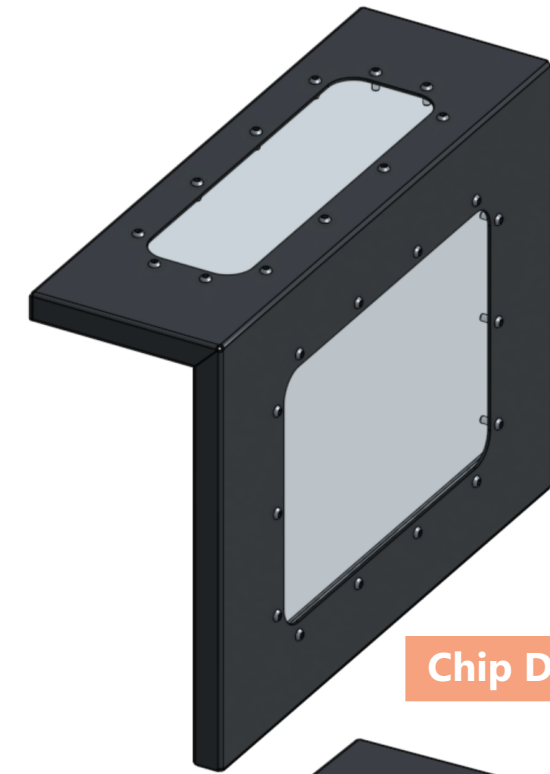Repeat this process for the right side window and top window.
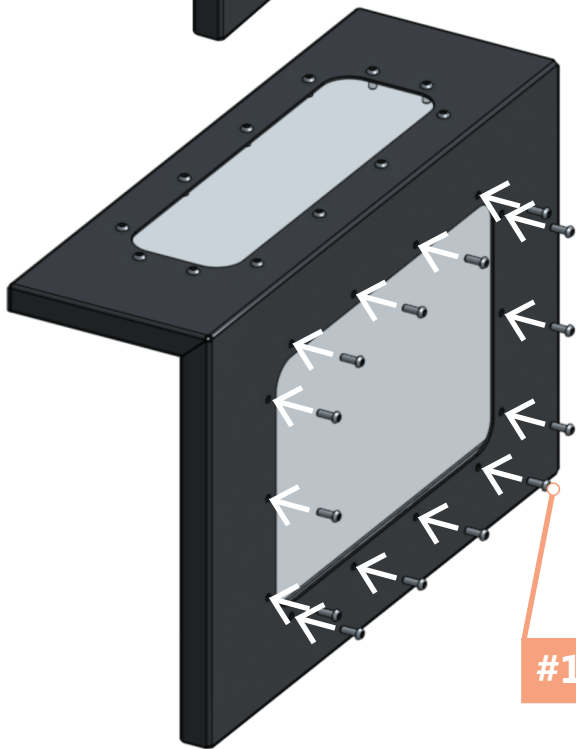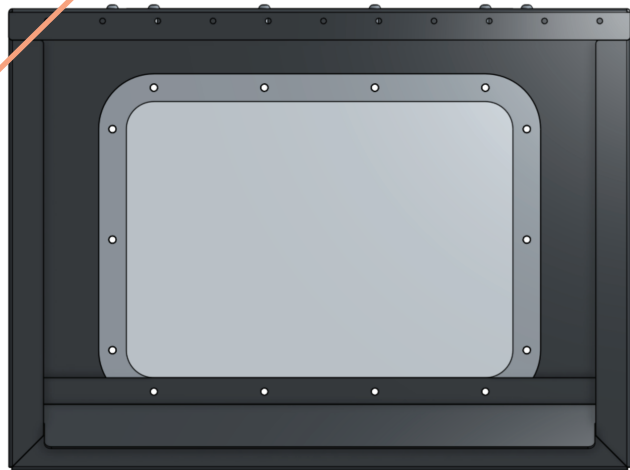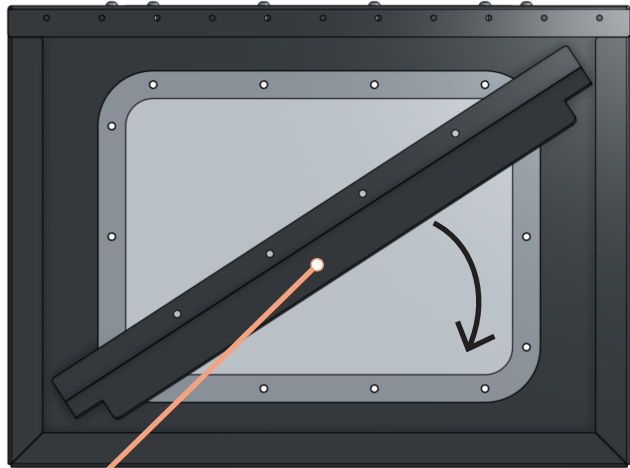
Tools/Materials Required:

Tools: #10-32 Allen wrench, 7/16 wrench

Materials: Left window, Right window, Top window, #10-32 button head bolt (5/8") x36, #10-32 nylock nut x36

Chip Deflector

#10-32 Button Head Bolt x14

Tighten fully

IMPORTANT NOTE:

Make sure to attach the windows to the inside of the enclosure panels, and to attach an #10-32 nylock nut to the end of each bolt.

IMPORTANT NOTE:

Insert chip deflector after window. To insert the chip deflector into the door panel, you must first rotate it to about 30 degrees, then set it in and rotate it back down to horizontal.

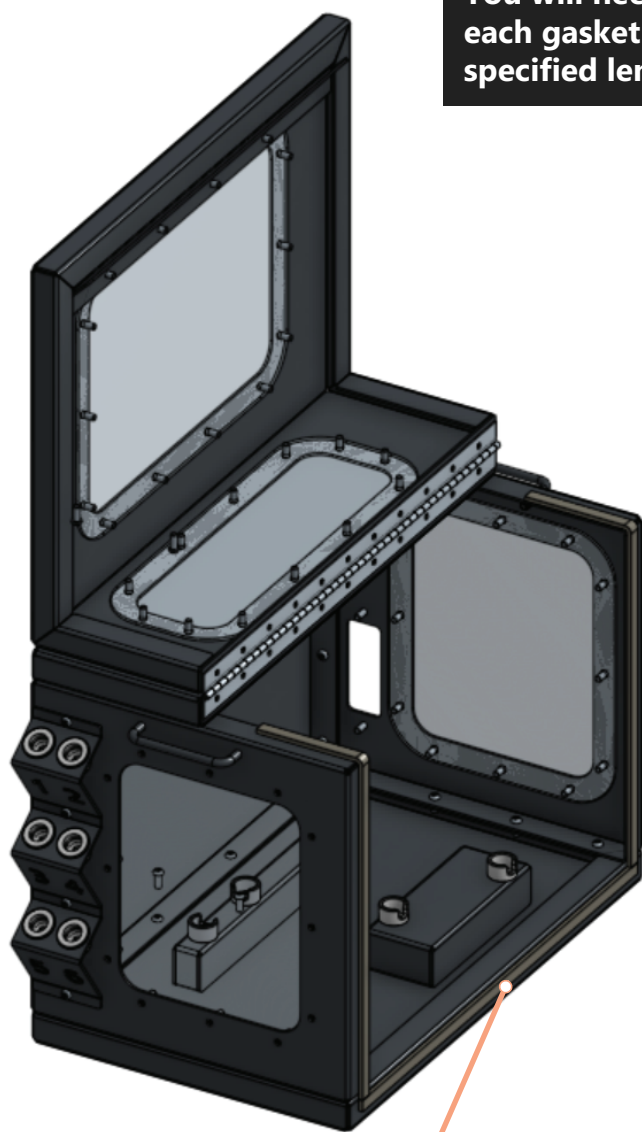# Tools/Materials Required:

Tools: #10-32 Allen wrench, 7/16 wrench

Materials: Front window, Chip deflector, #10-32 button head bolt (5/8") x14, #10-32 nylock nut x14

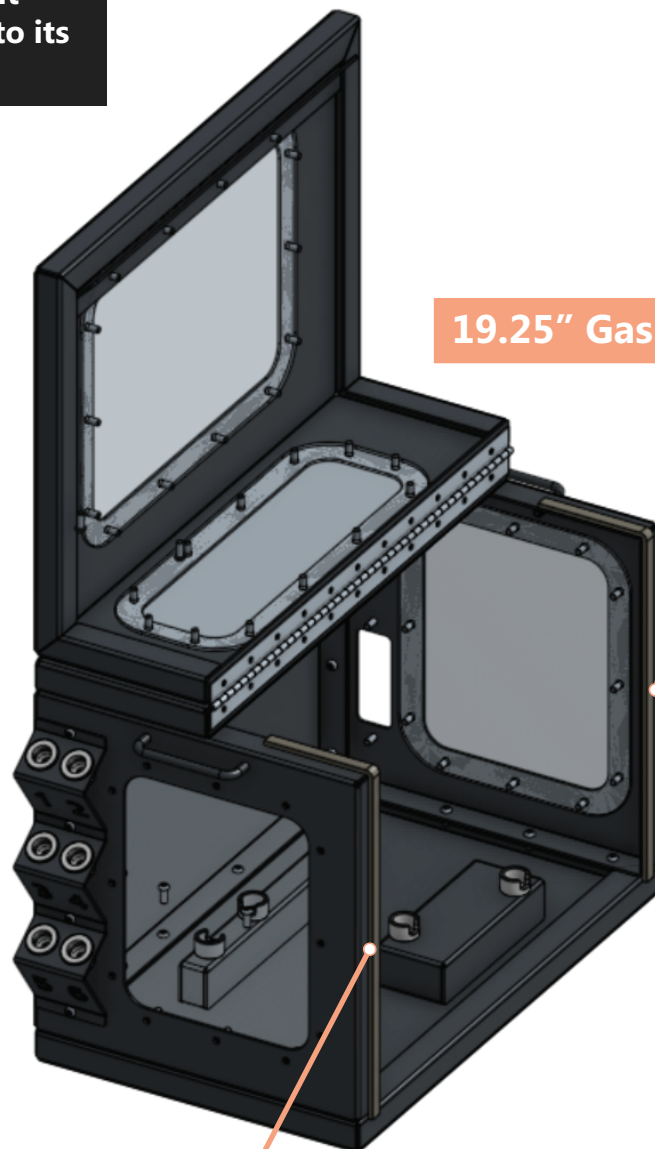**IMPORTANT NOTE:**

You will need to cut each gasket piece to its specified length.

19.25" Gasket

19.25" Gasket

21" Gasket

Tools/Materials Required:

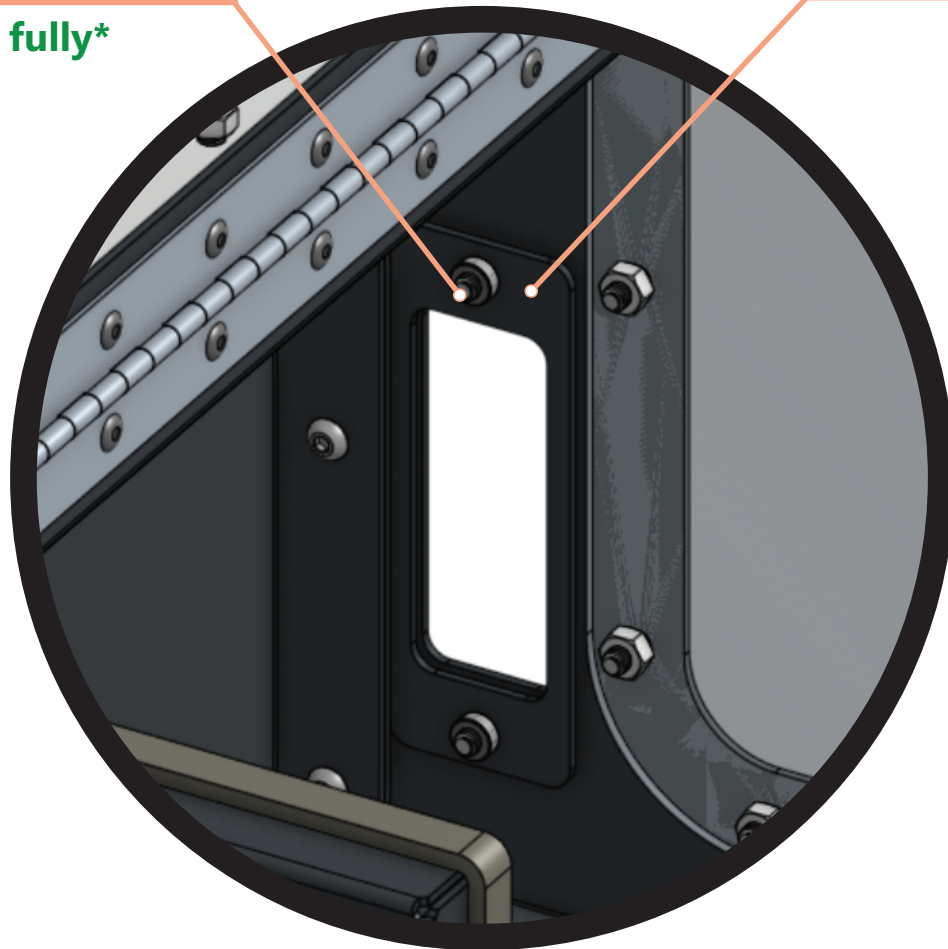**Tools:** None   **Materials:** 21" gasket x1, 19.25" gasket x2

#10-32 Button Head Bolt x2

Tighten fully

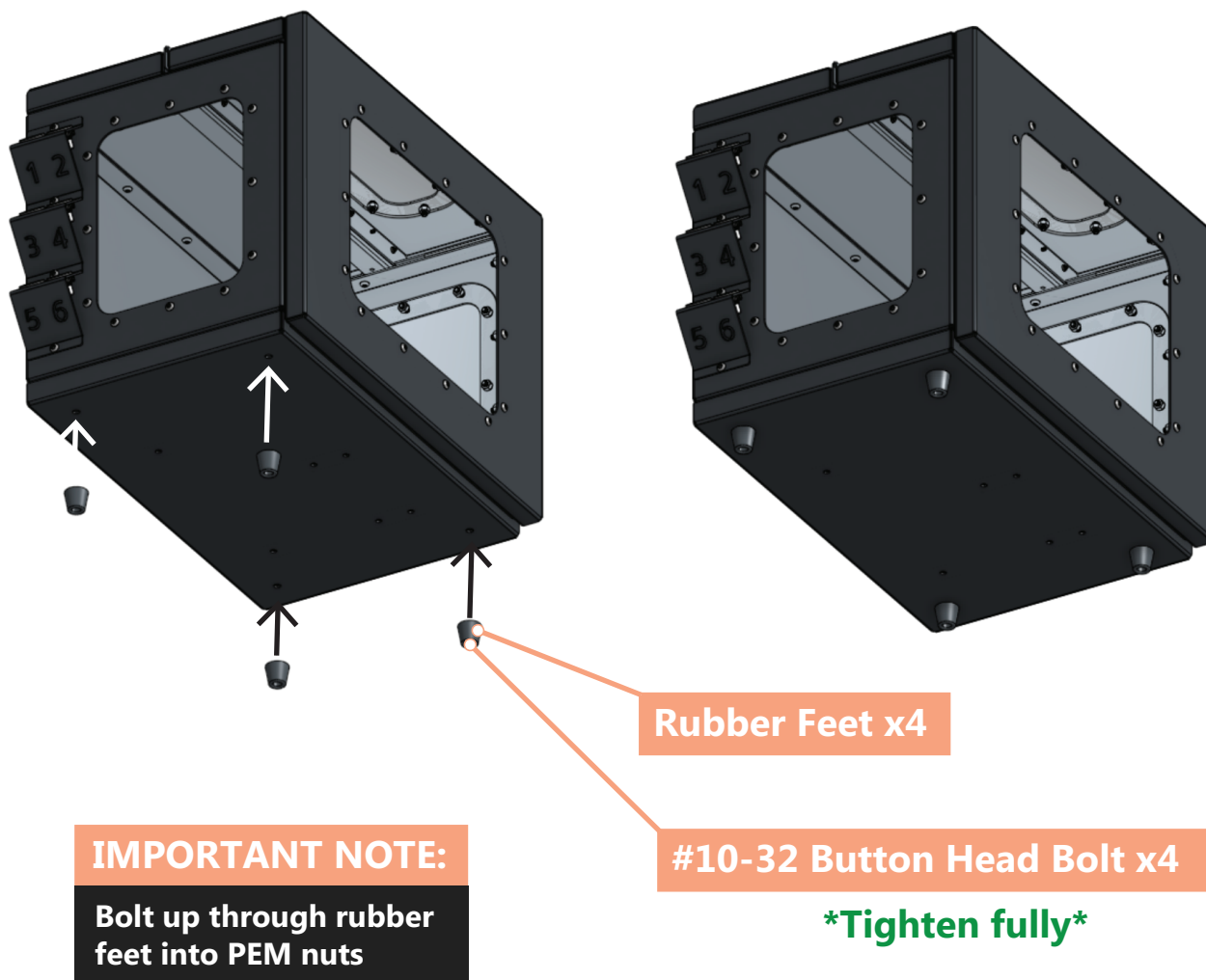**Port Clamp**

IMPORTANT NOTE:

Between the port clamp and the inside face of the right panel, you may clamp any custom cable interface you like or leave it open just as a pass-through.

Tools/Materials Required:

Tools: #10-32 Allen wrench   **Materials:** Port clamp, #10-32 Button head bolt (5/8") x2

Rubber Feet x4

#10-32 Button Head Bolt x4

Tighten fully

IMPORTANT NOTE:

Bolt up through rubber feet into PEM nuts

Tools/Materials Required:

Tools: None

Materials: Rubber Feet x4, #10-32 Button head bolt (3/4") x4

MACHINESUITS

COMPLETED!