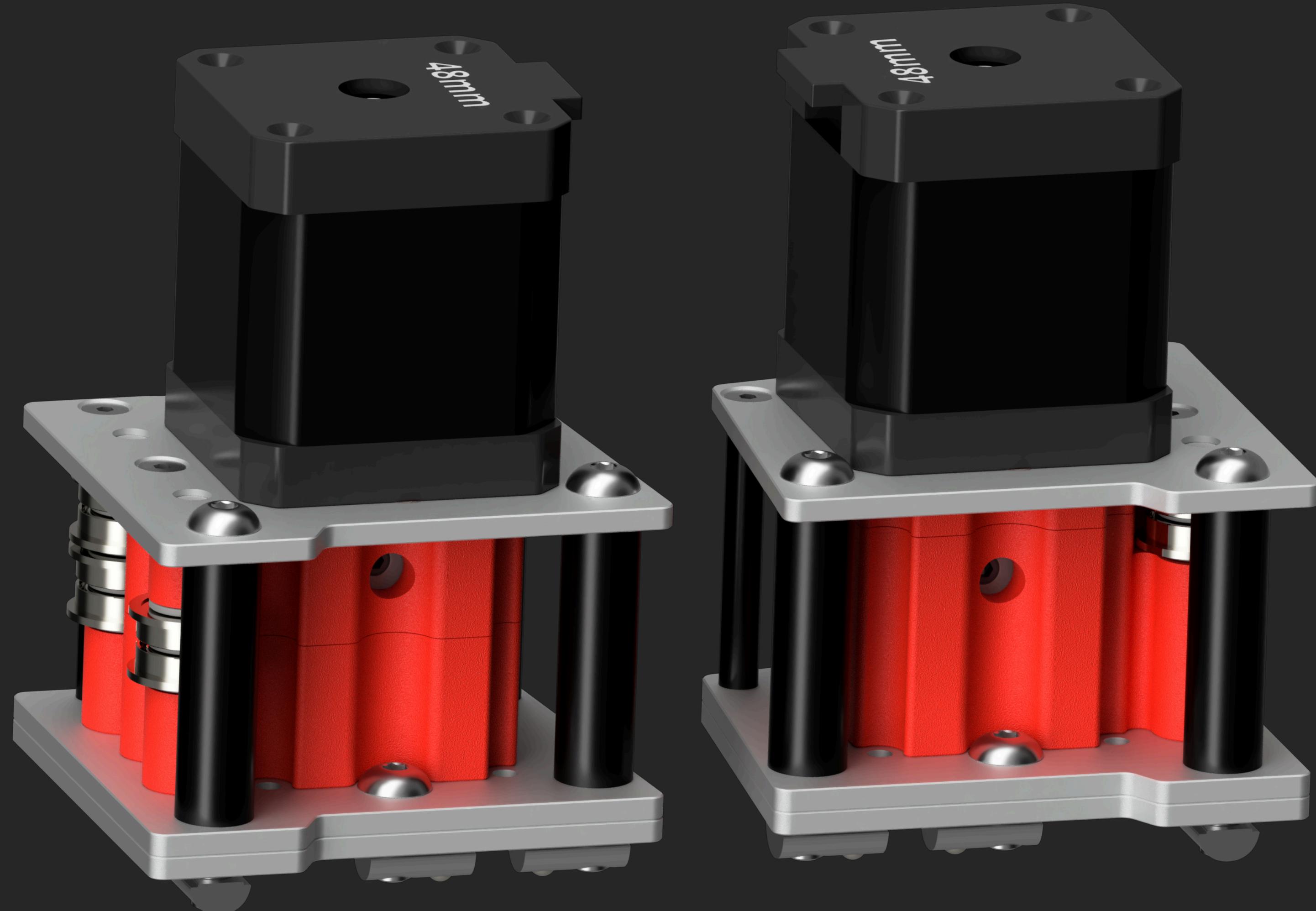
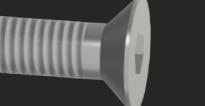
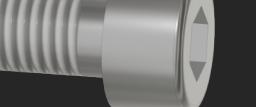
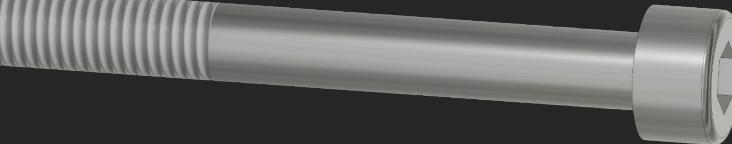
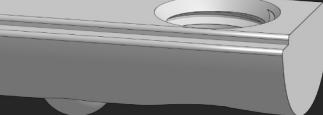
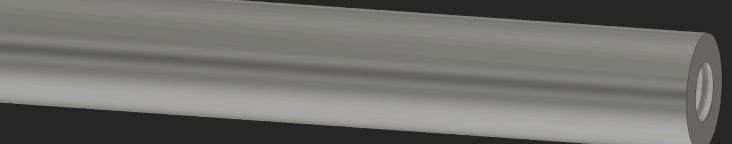
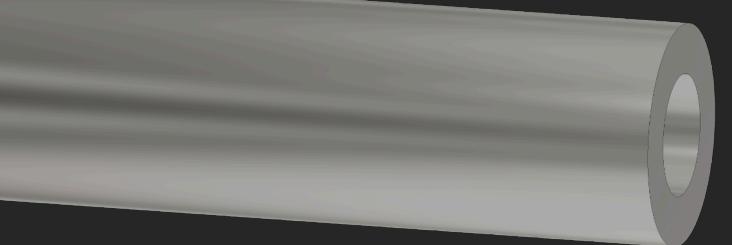


Metal Stepper Mounts

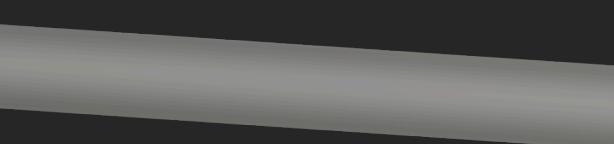
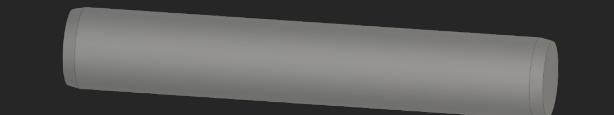
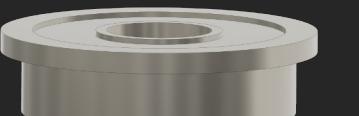


Metal Stepper Mounts - Hardware BOM

| Description | QTY | |
|---------------------------------|-----|---|
| M3 Heatset Inserts | 12 |  |
| M3x8 Socket Head Cap Screws | 8 |  |
| M3x8 Flat Head Cap Screws | 12 |  |
| M3x12 Flat Head Cap Screws | 12 |  |
| M5x12 Socket Head Cap Screws | 2 |  |
| M5x50 Socket Head Cap Screws | 4 |  |
| M5 T-nuts | 6 |  |
| M3x35mm Round Threaded Standoff | 6 |  |
| M5x35mm Smooth Spacer | 4 |  |

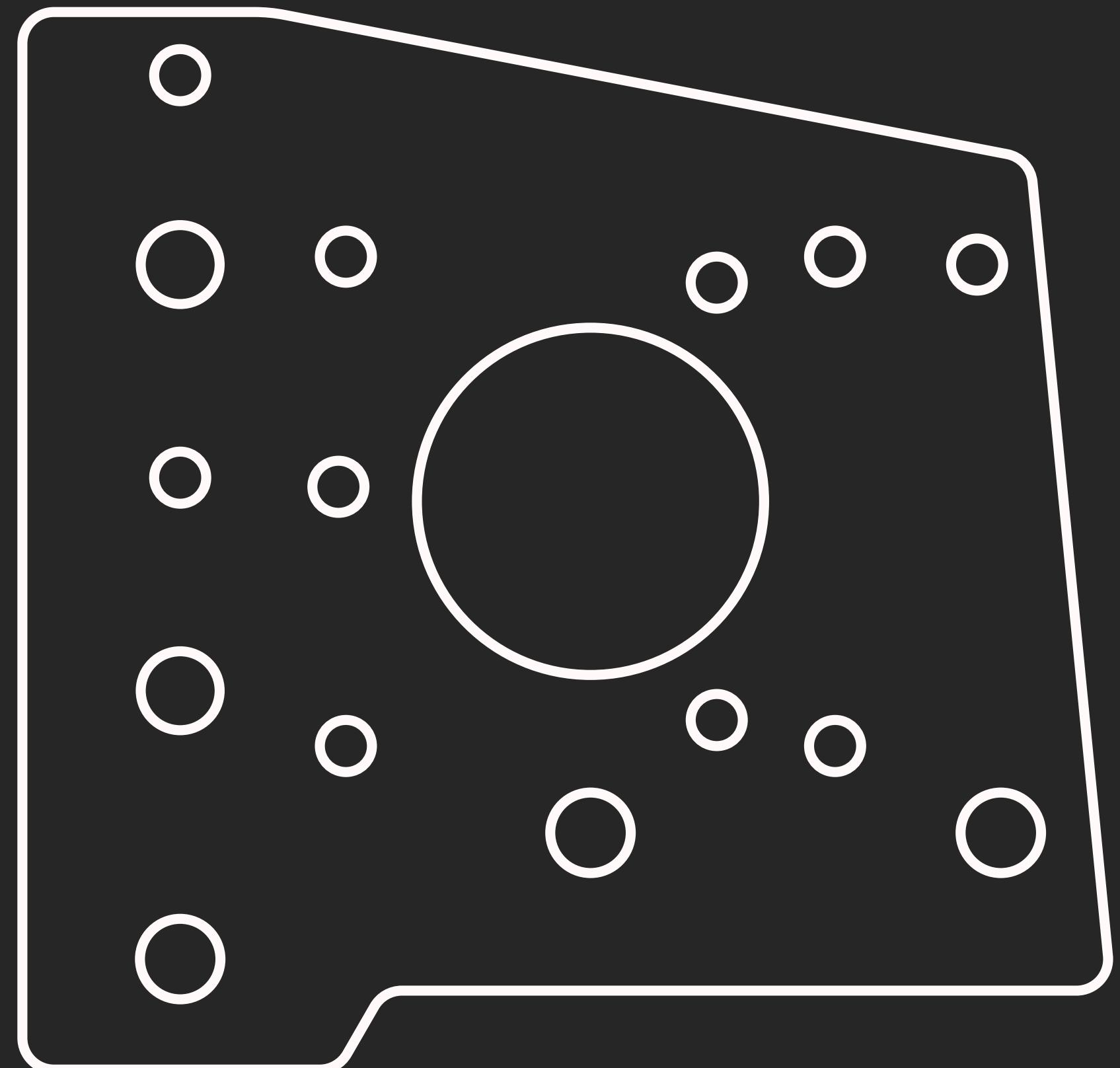


Metal Stepper Mounts - Hardware BOM

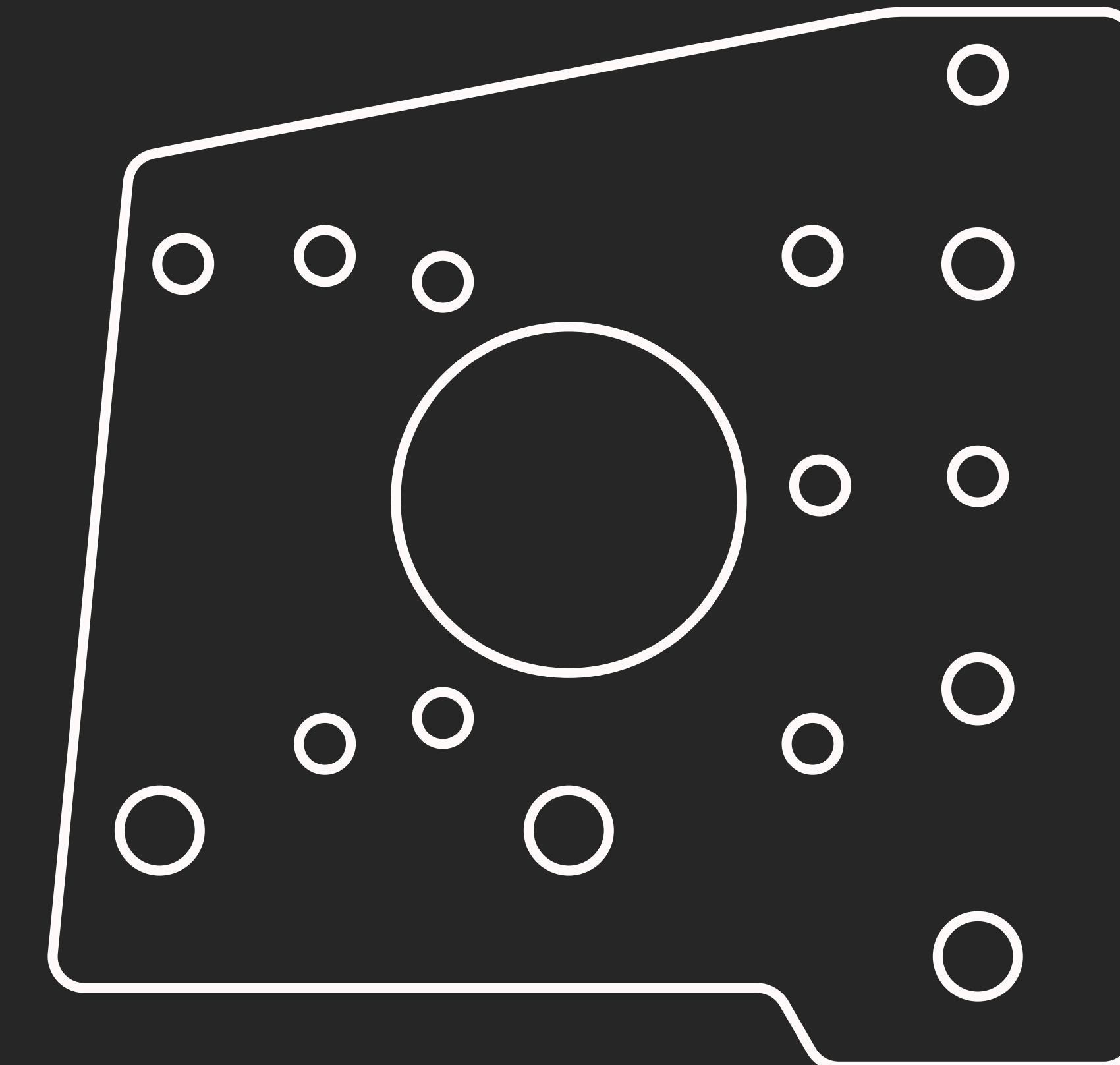
| Description | QTY | |
|--|-----|---|
| 5x40mm Dowel pins (Best) | 4 |  |
| 5x30mm Dowel pins (Optional - Stock BOM) | 4 |  |
| F695 Flanged Bearings (Stock BOM) | 12 |  |
| 5x10x1 Shim/Washer (Stock BOM) | 16 |  |



Metal Stepper Mounts - Plates BOM



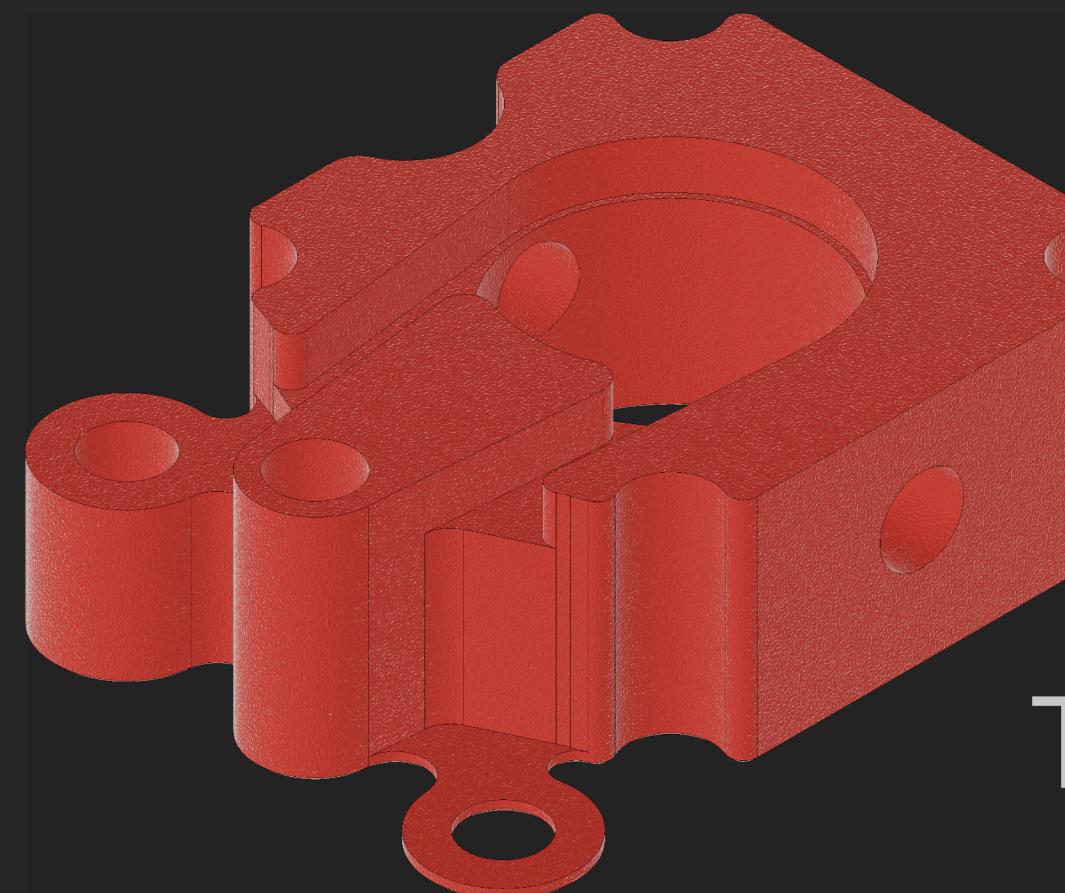
4x stepper top-center plate.dxf



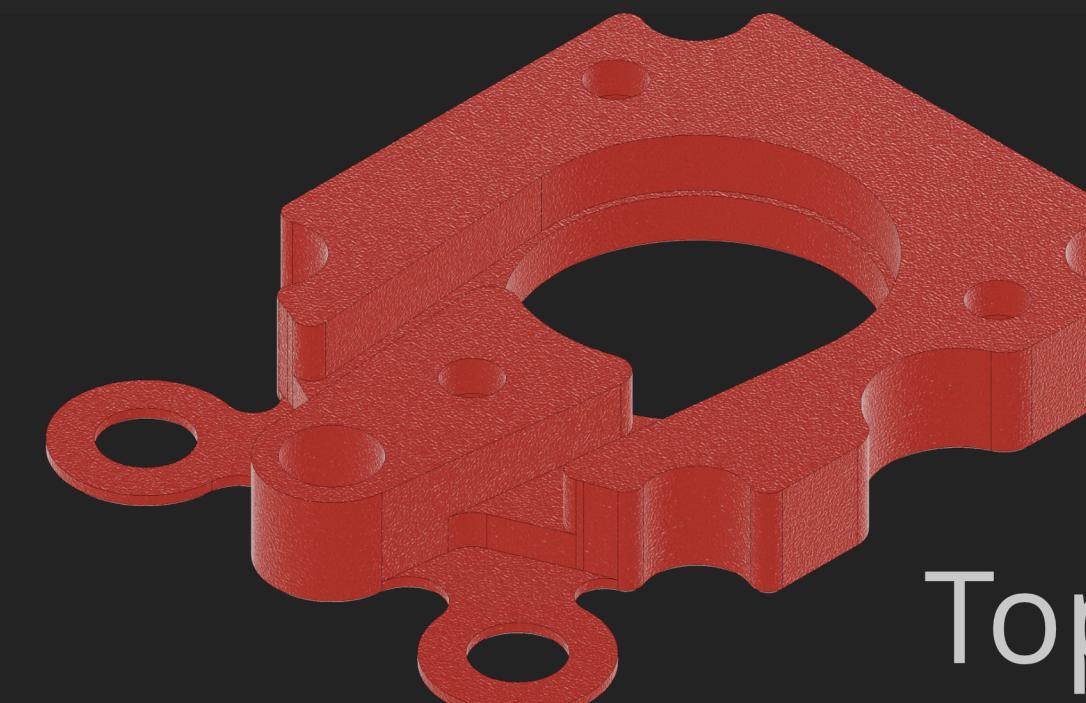
2x stepper bottom plate.dxf



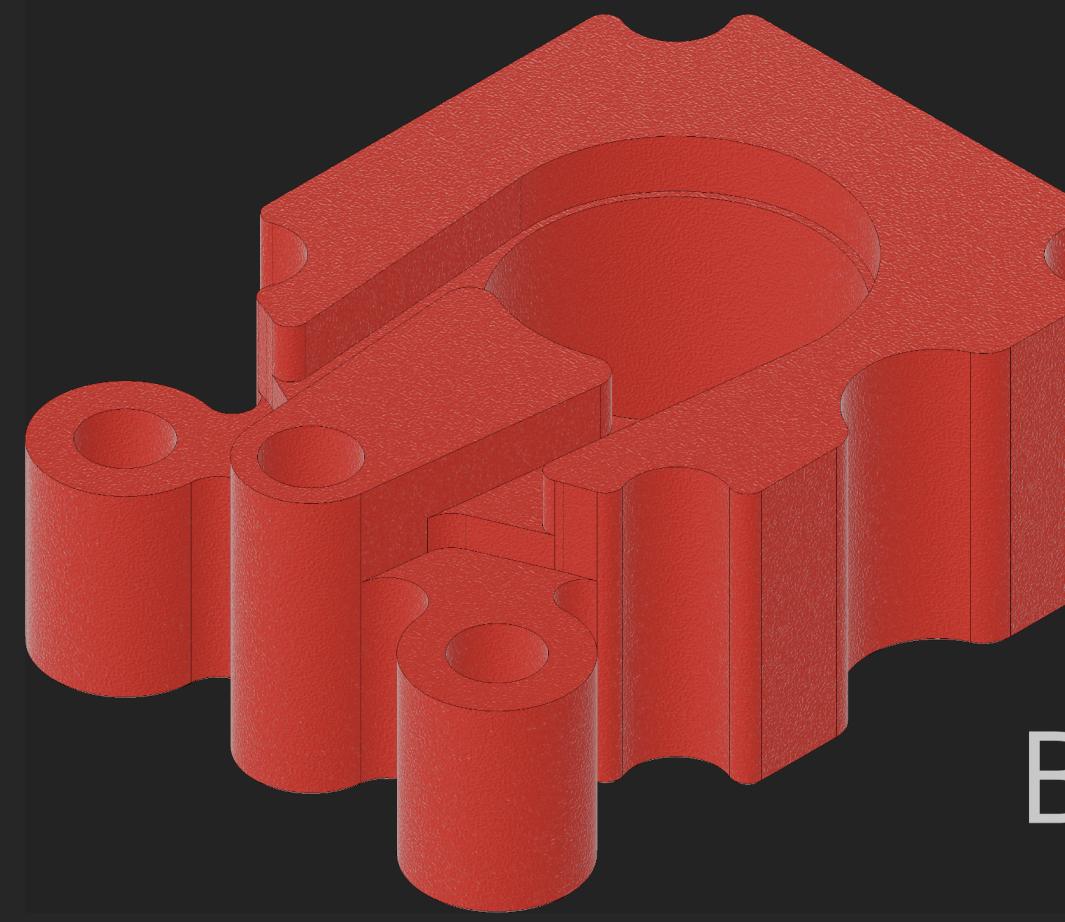
Printed Parts



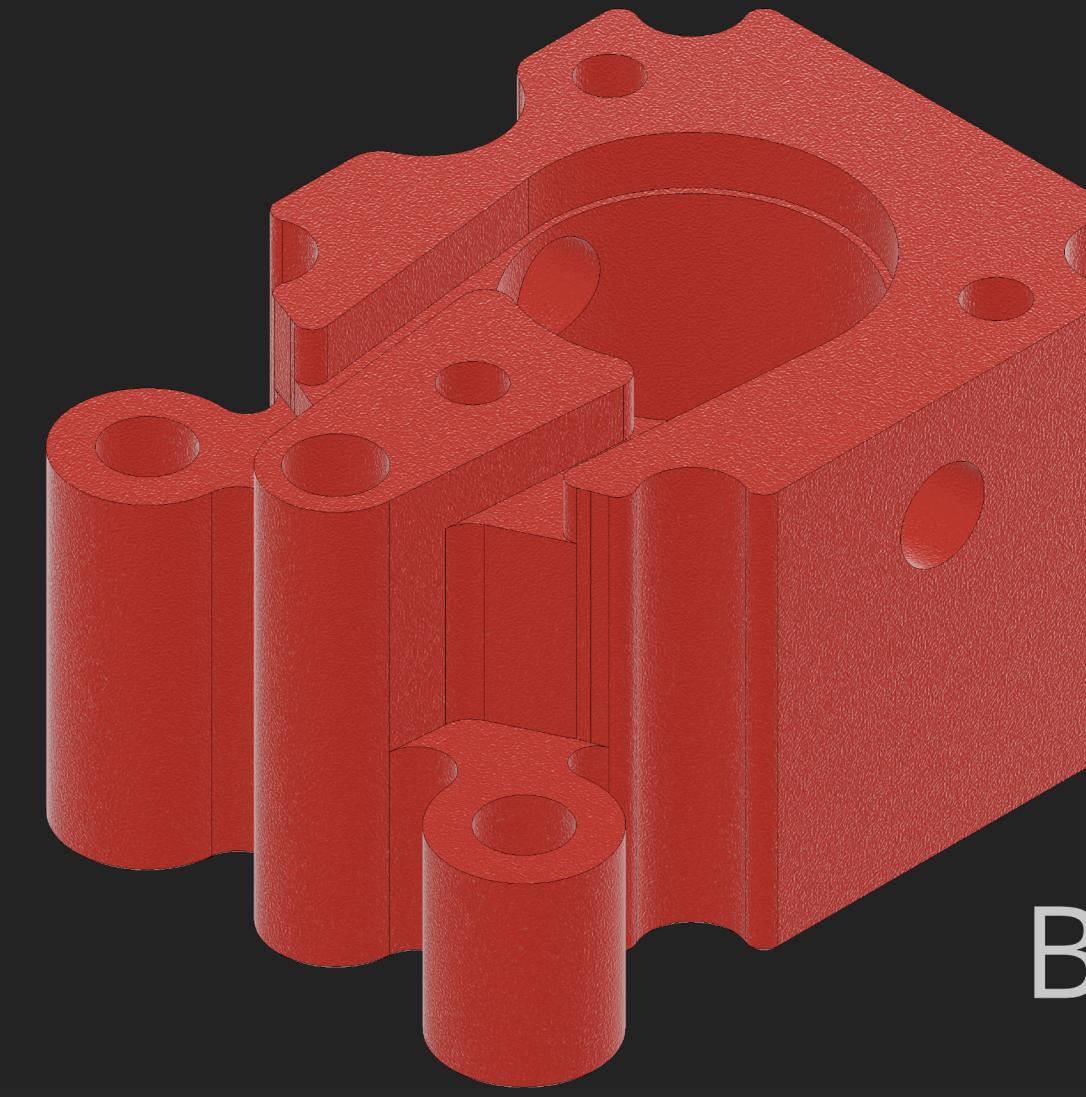
Top Left Insert.stl



Top Right Insert.stl



Bottom Left Insert.stl

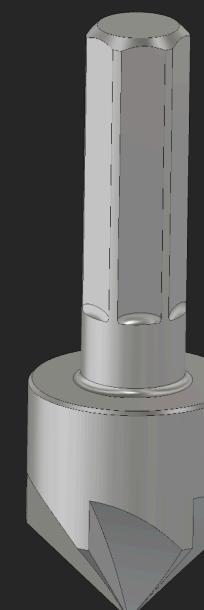
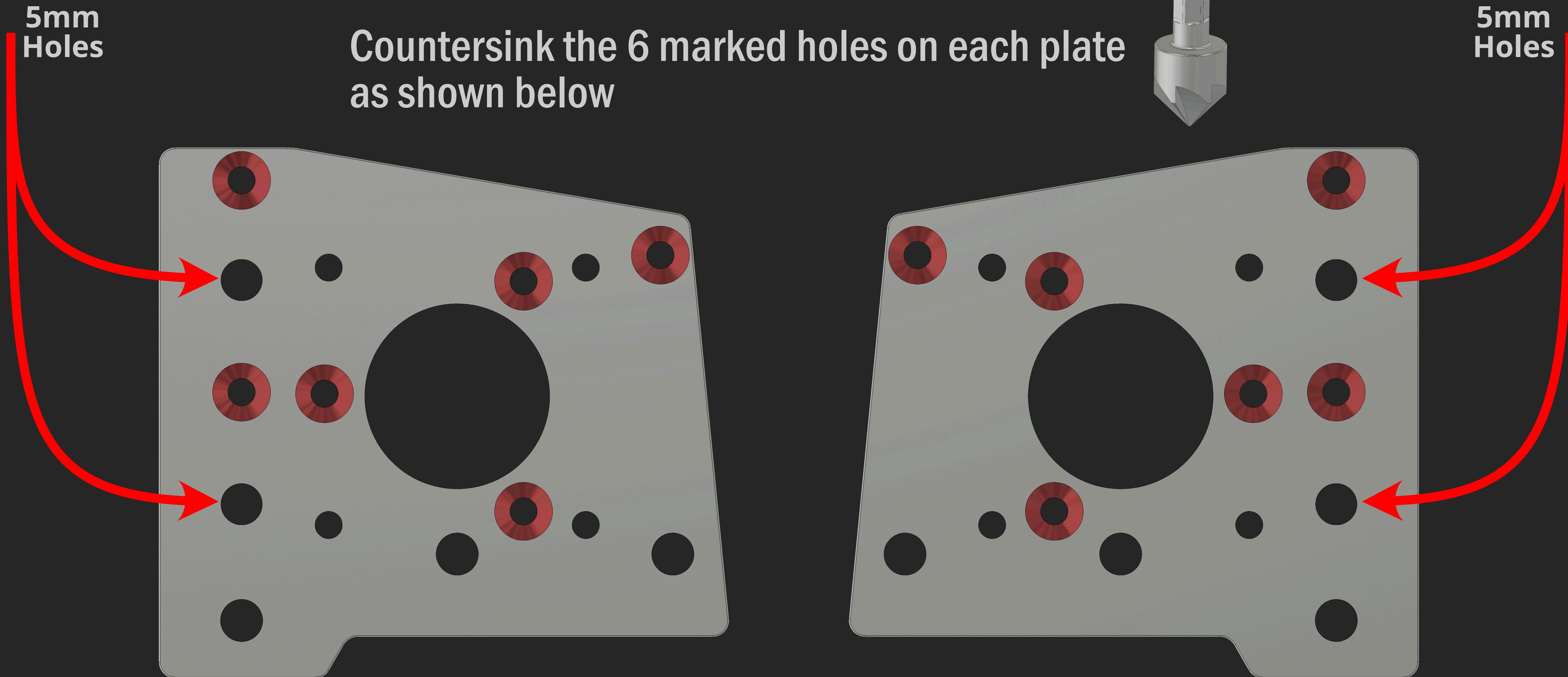


Bottom Right Insert.stl



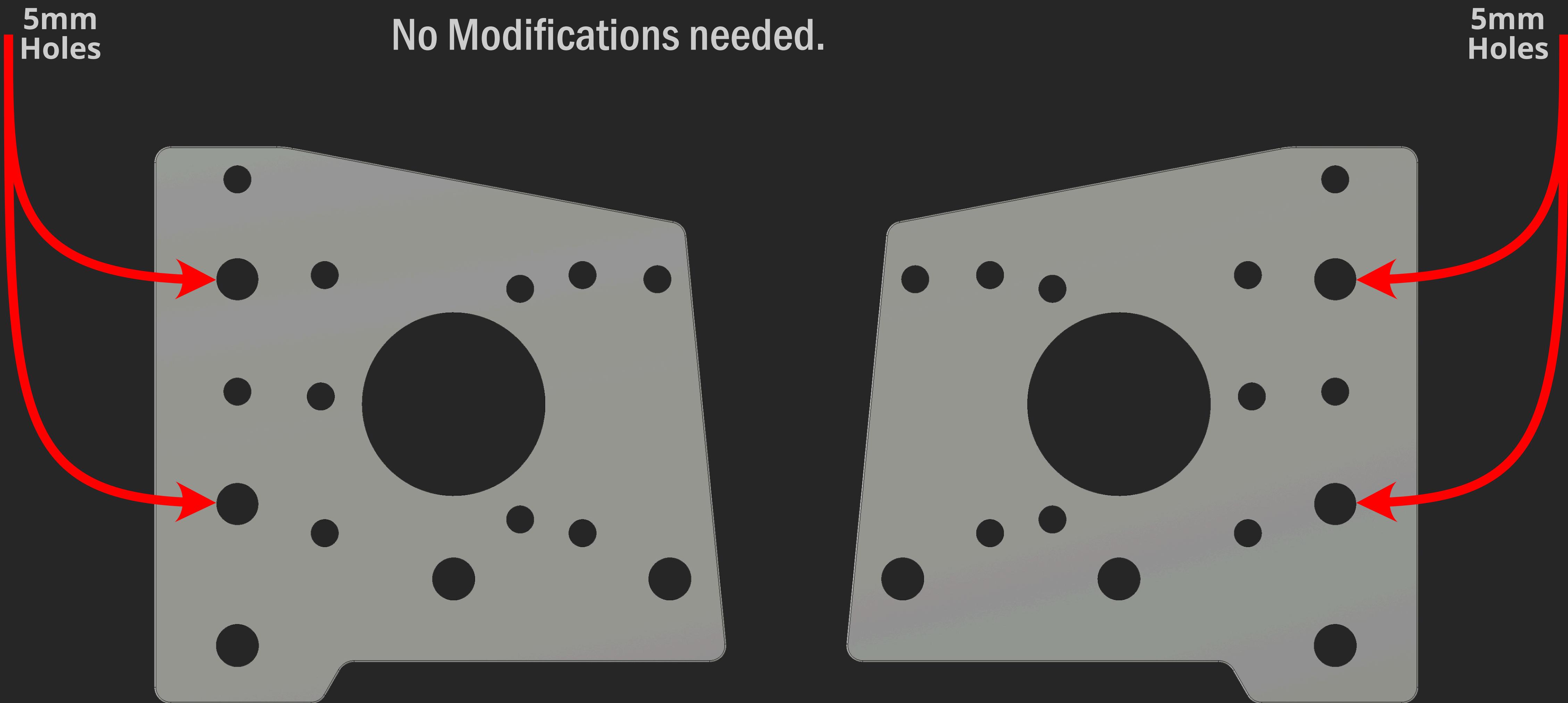
Top Stepper Mount Plates

2x stepper top-center plate.dxf



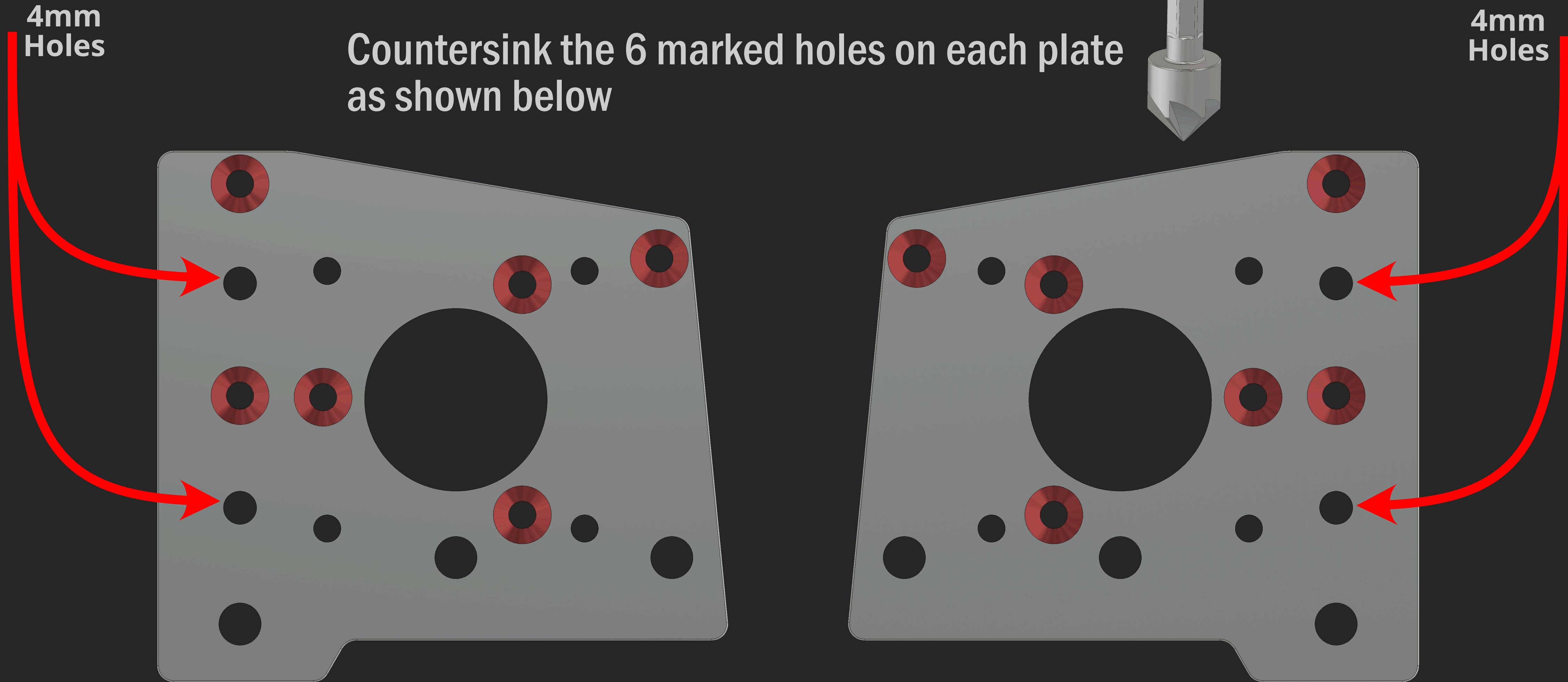
Center Stepper Mount Plates

2x stepper top-center plate.dxf



Bottom Stepper Mount Plates

2x stepper bottom plate.dxf

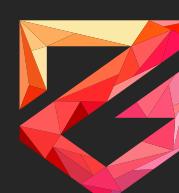
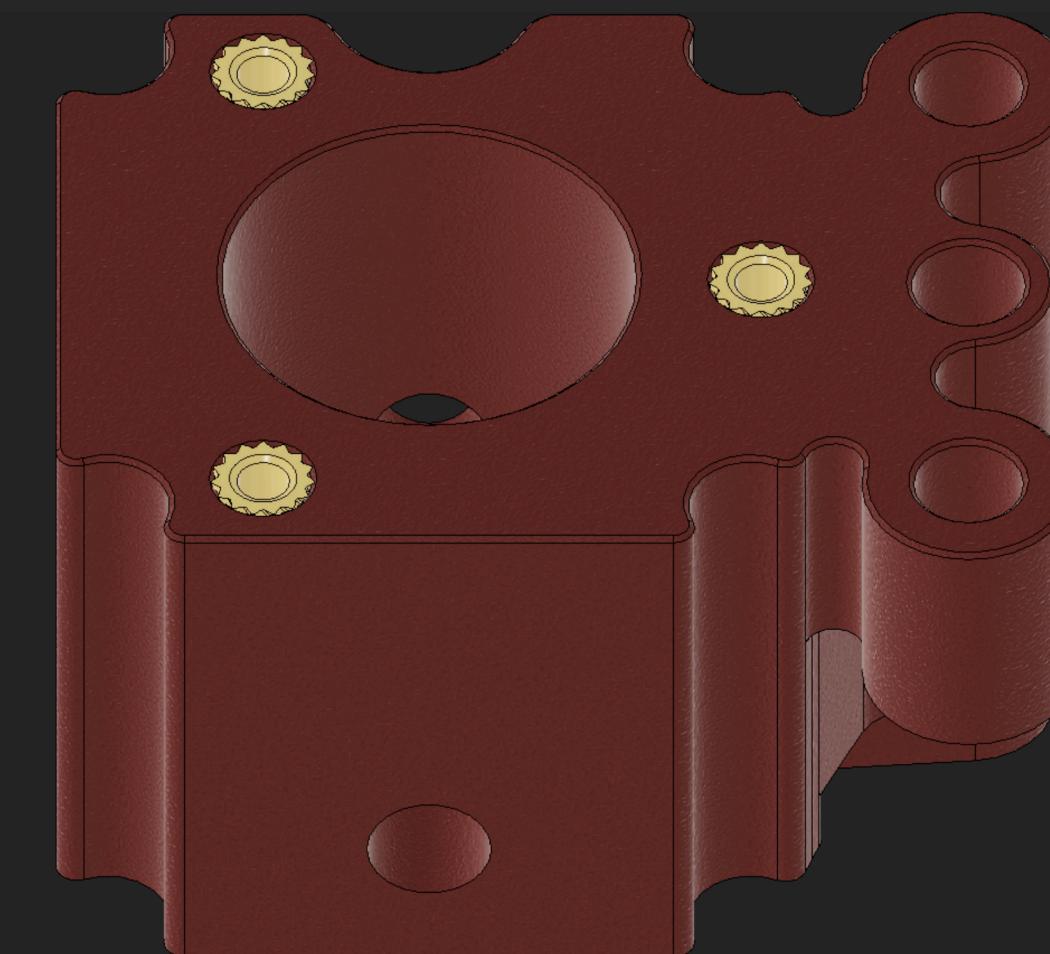
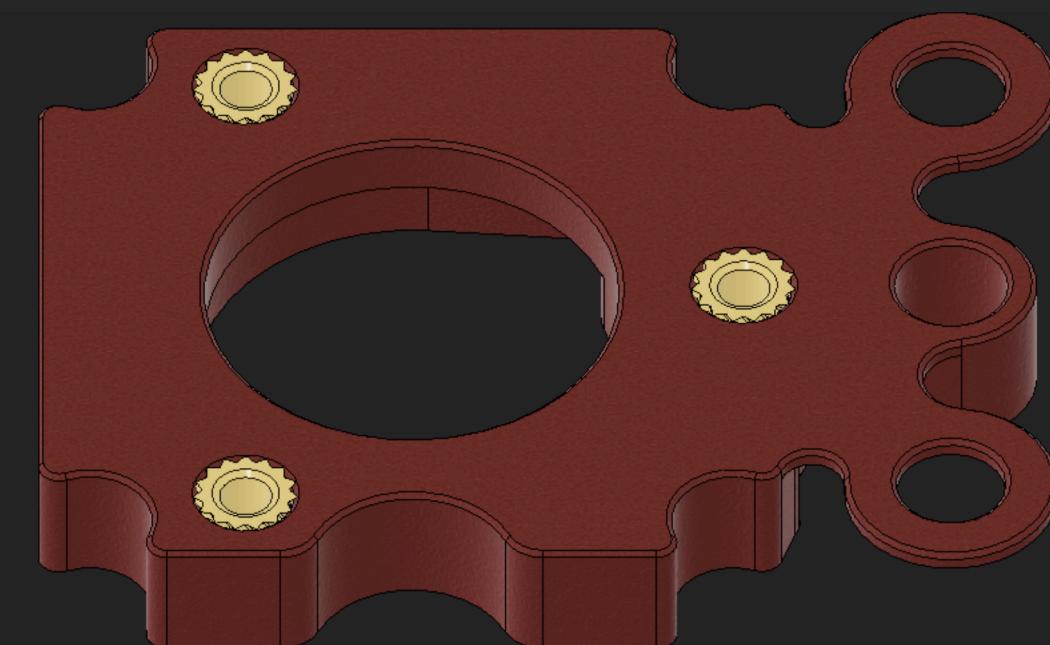
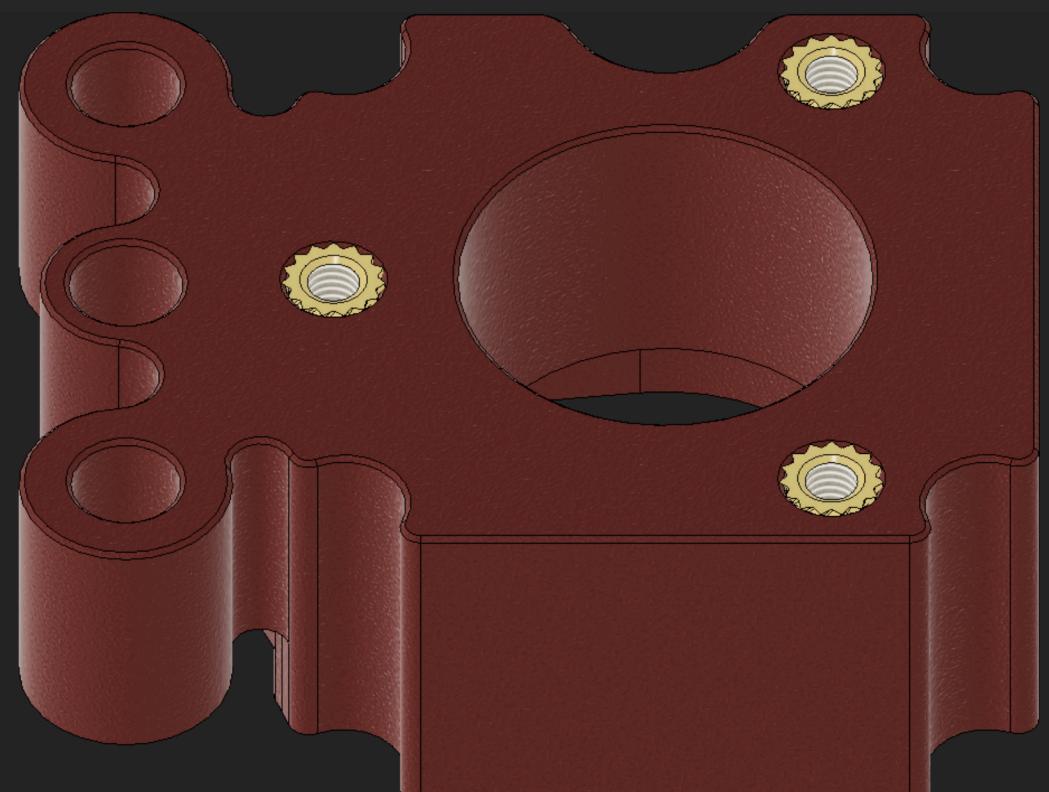
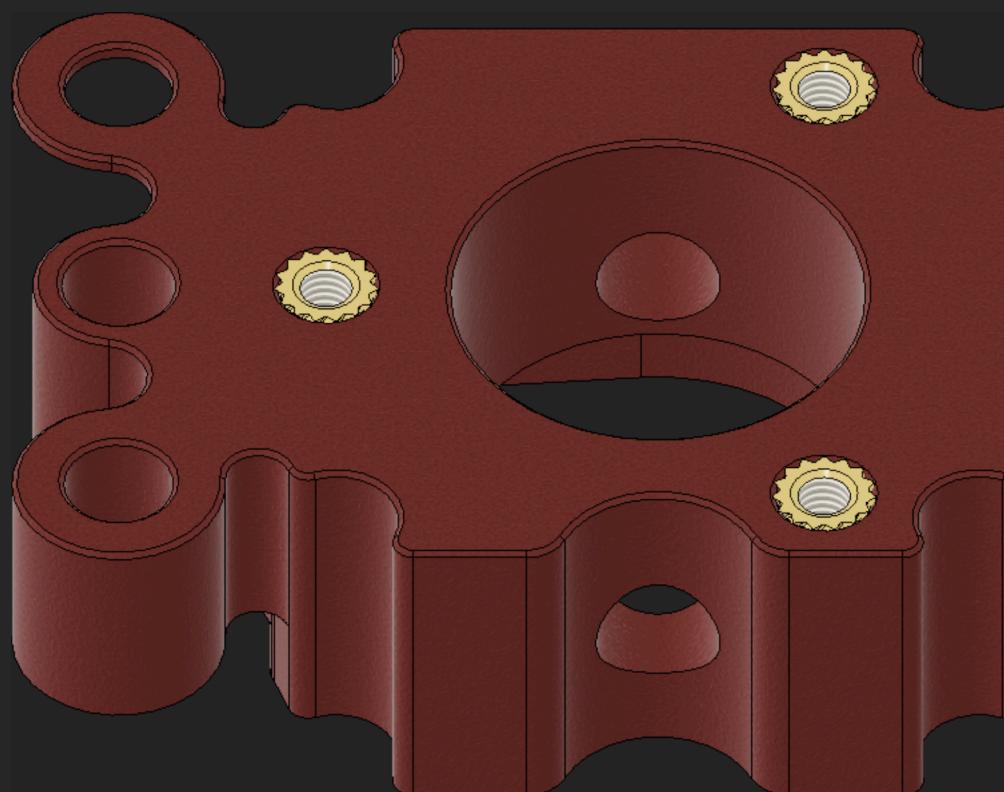


Countersink the 6 marked holes on each plate
as shown below



Printed Parts Prep

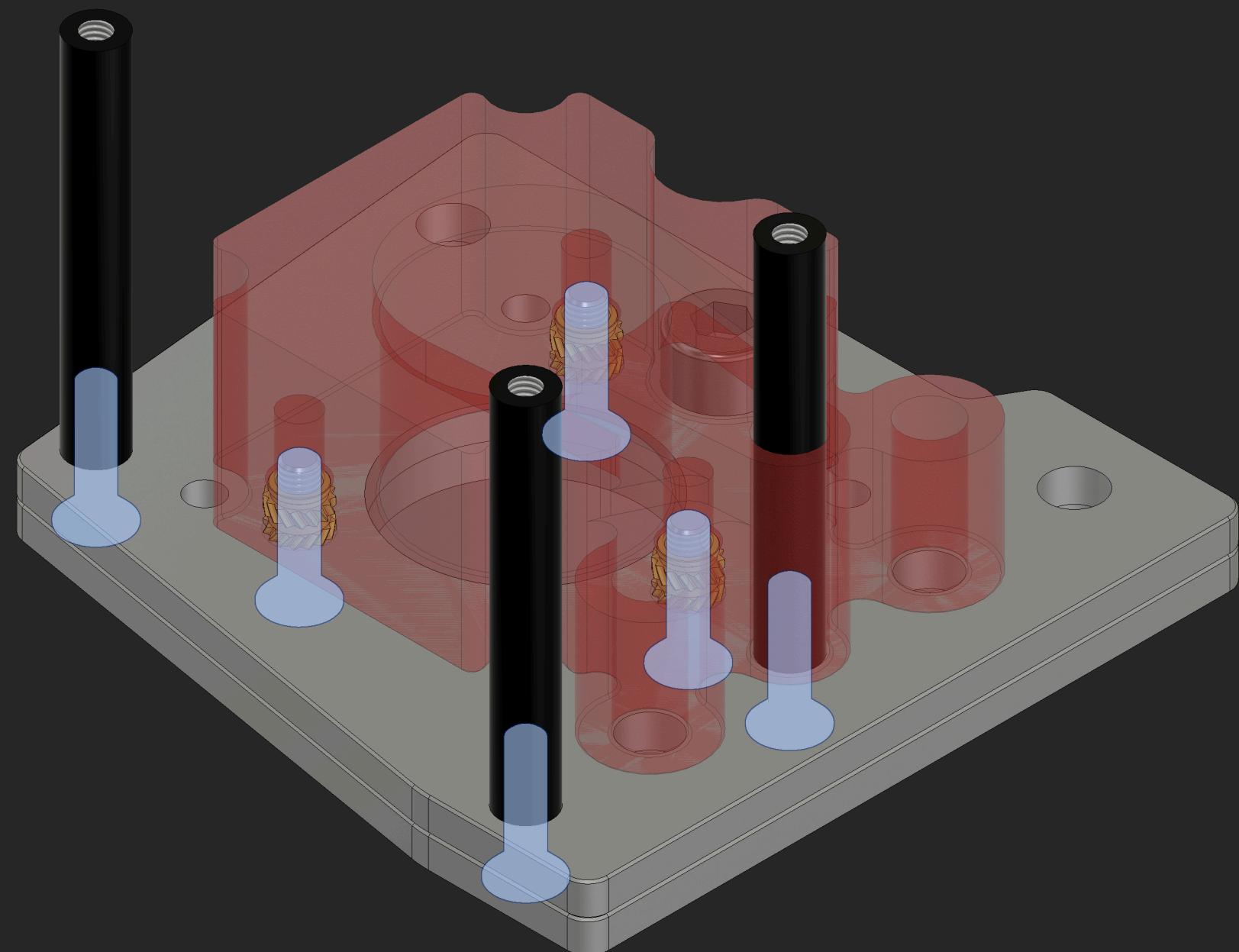
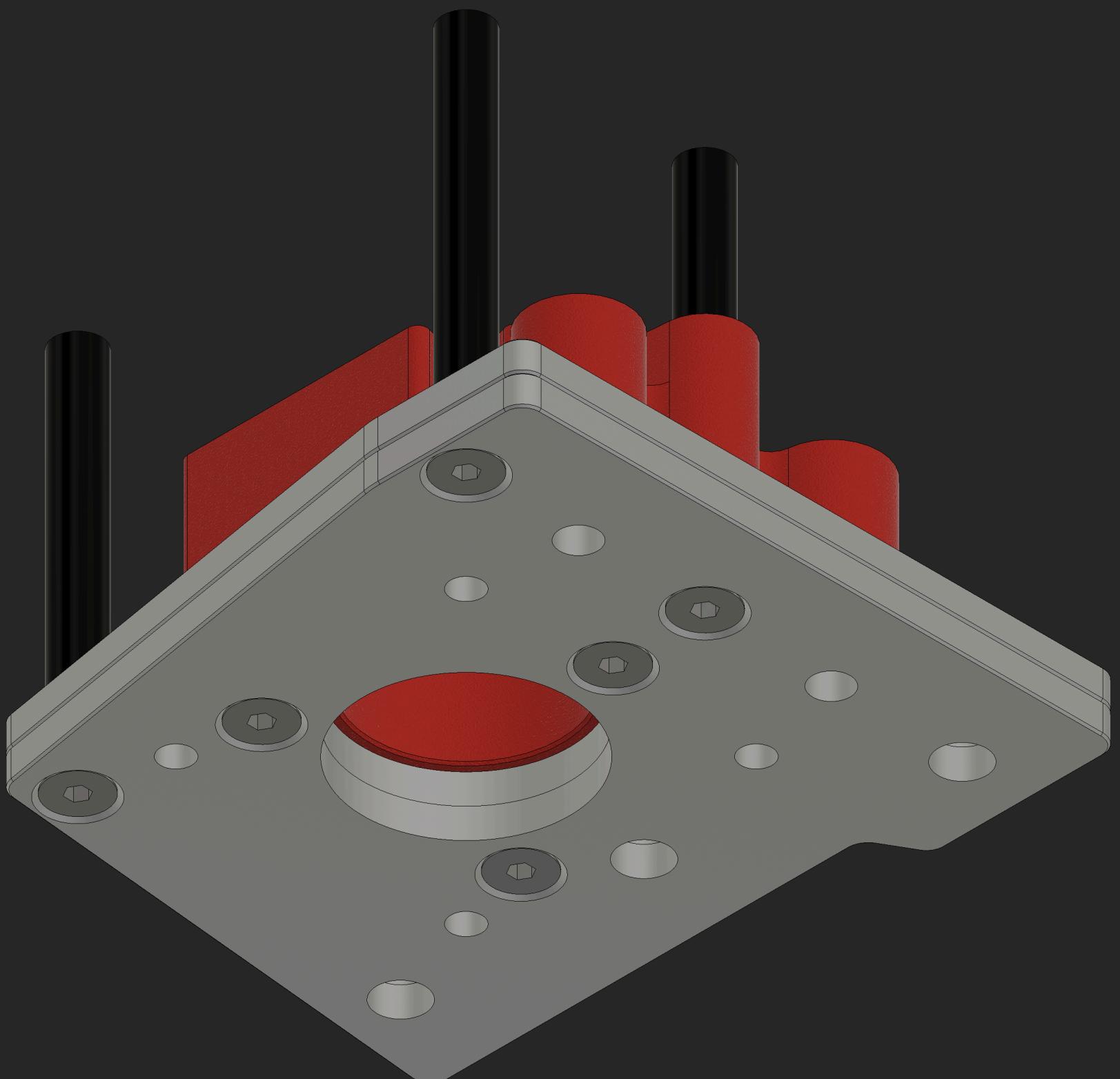
Install M3 heatsets into the printed parts as shown.



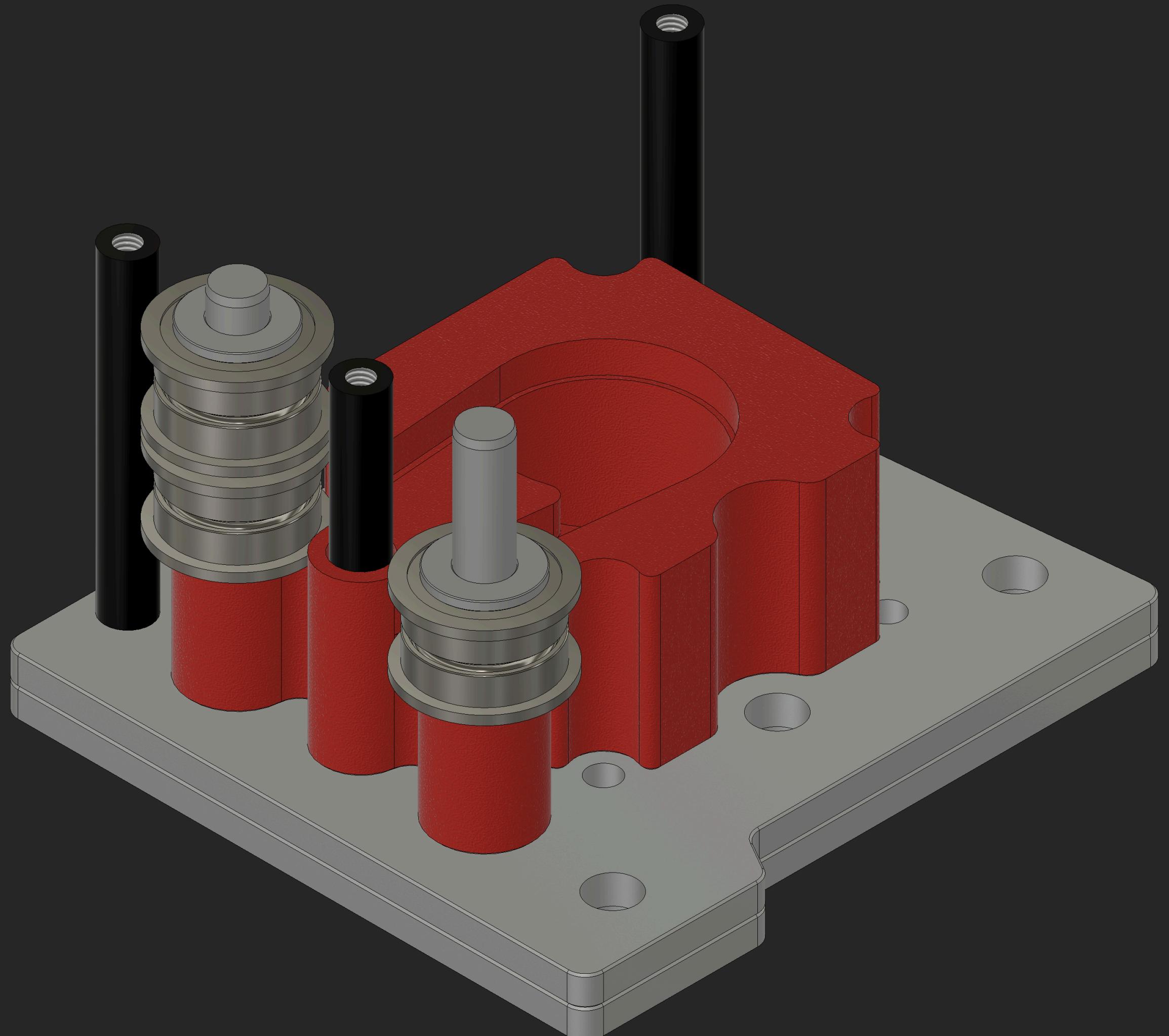
Left Tower Assembly

- Bottom Left Plate
- Center Left Plate
- Bottom Left Insert
- 6x M3x12 FHCS
- 3x M3x35mm Standoffs

Assemble the bottom half
as shown, using 6x M3x8
FHCS, leave them $\frac{1}{2}$ turn
loose.



Install Bearings

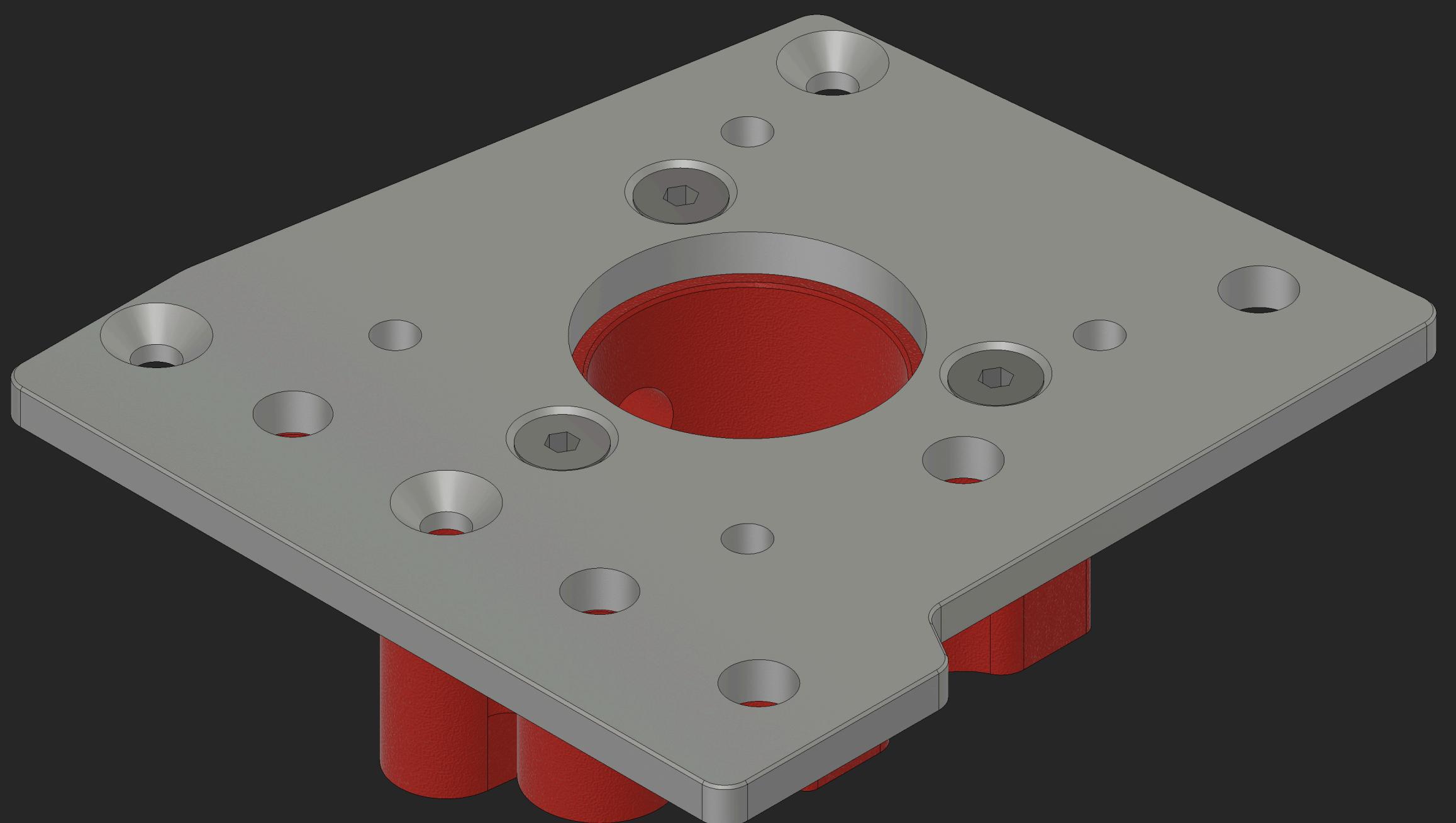


- 2x 5mm Dowel Pins
- 8x 5x1 Shims (Washers)
- 6x F695 Flange Bearings

Install a single flange stack assembly in the front, and dual flange stack in the rear.



Assemble Top Plate

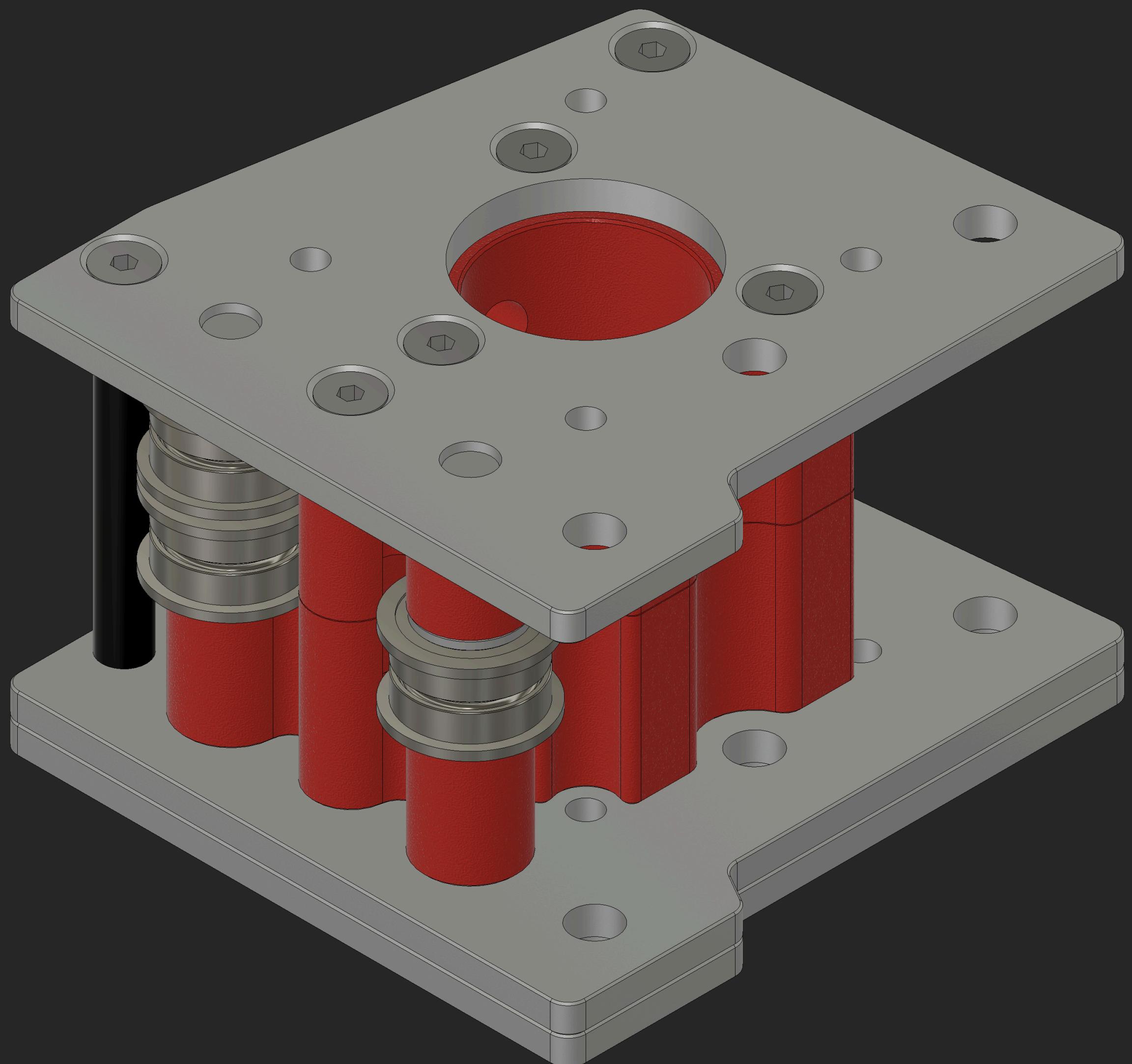


- Top Plate
- 3x M3x8 FHCS
- Top Left Insert

Fasten the top left insert to the top plate using 3x M3x8 FHCS, leave them $\frac{1}{2}$ turn loose.



Assemble Top Plate

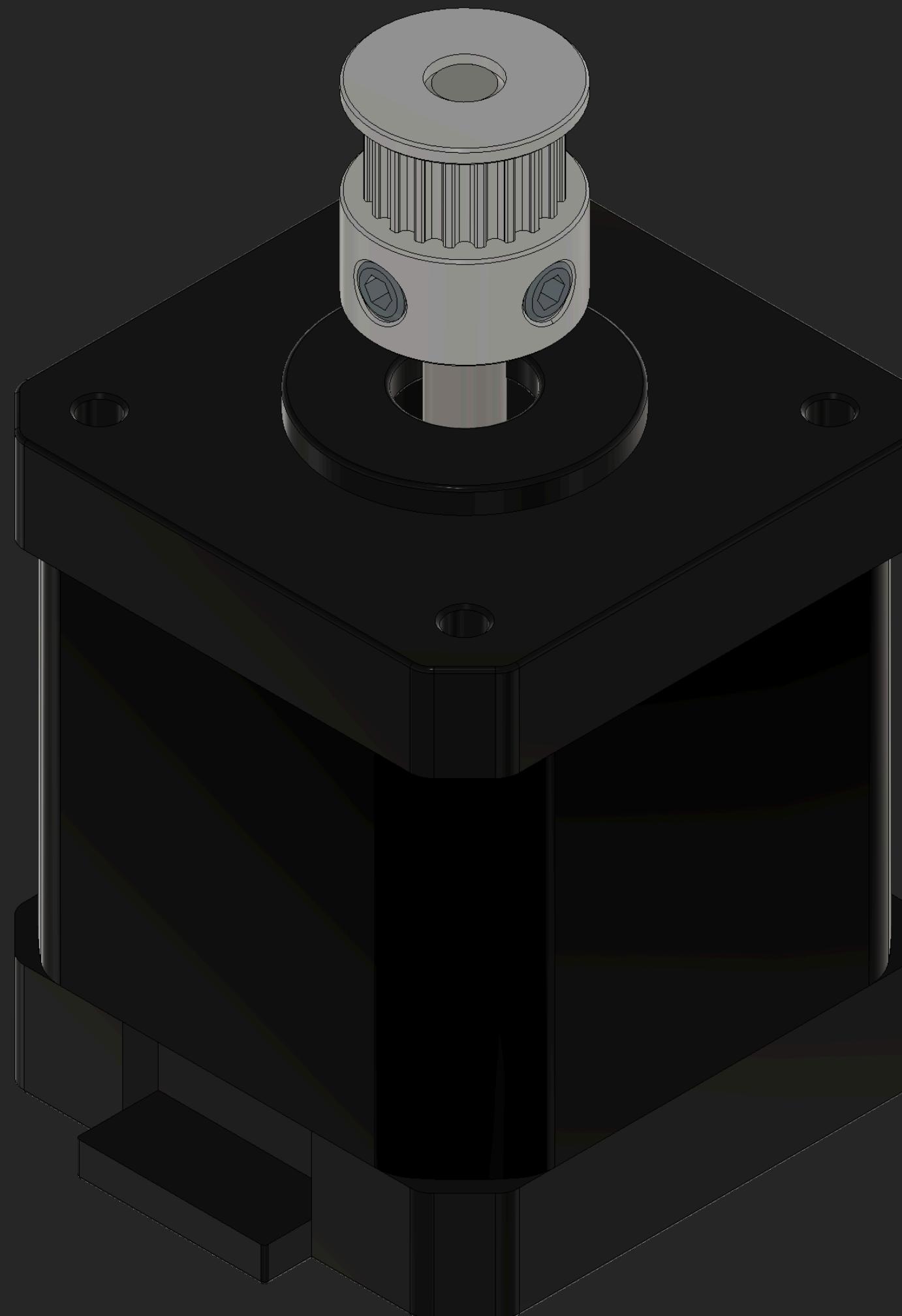


- 3x M3x8 FHCS

Press the top assembly onto the bottom assembly now, and install the last 3x M3x8 FHCS. You can now fully tighten the rest of the M3 screws.

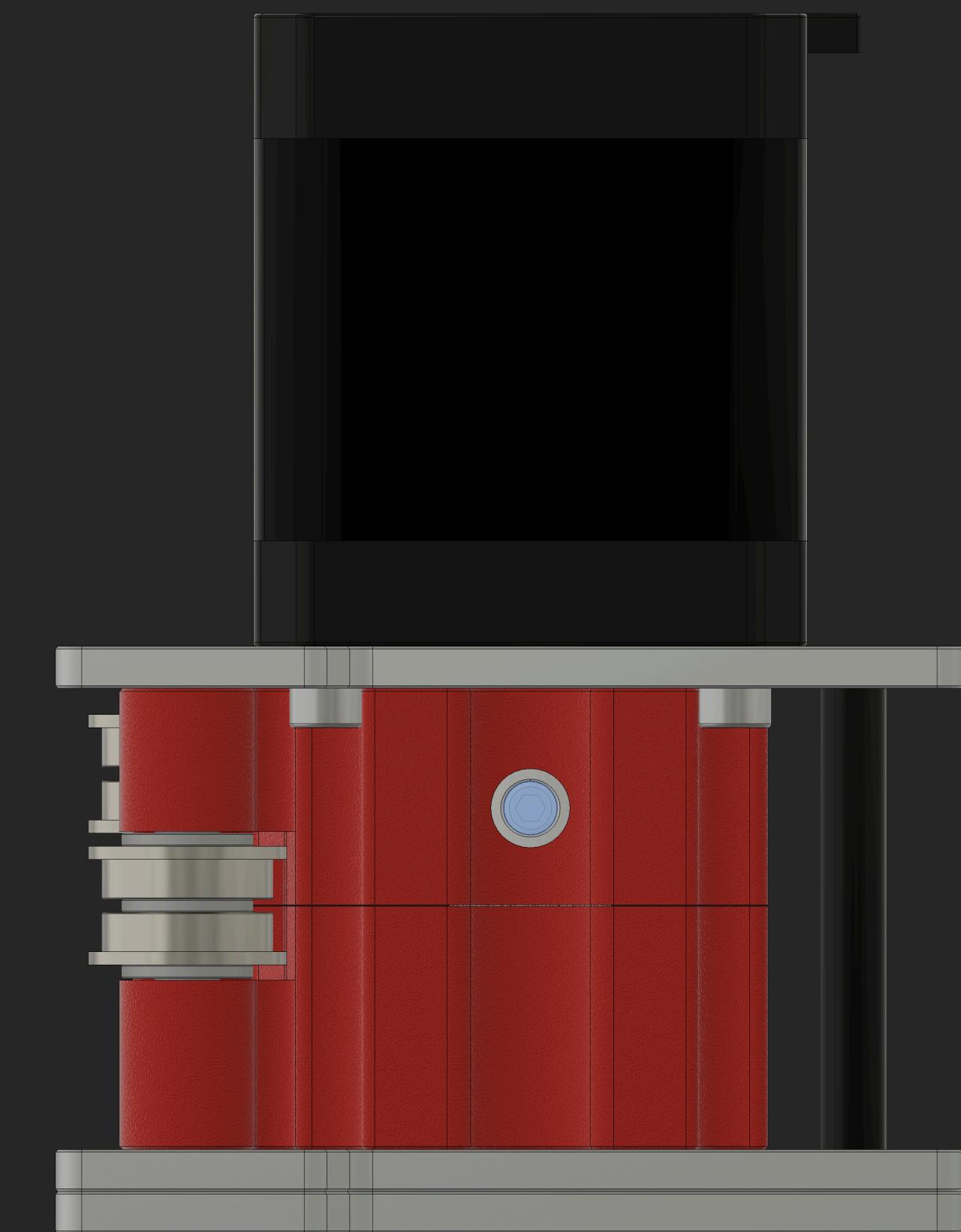


Stepper Pulley



Install the pulley as per the Mercury 1.1 instructions, you can use the pulley alignment tool for a rough placement.

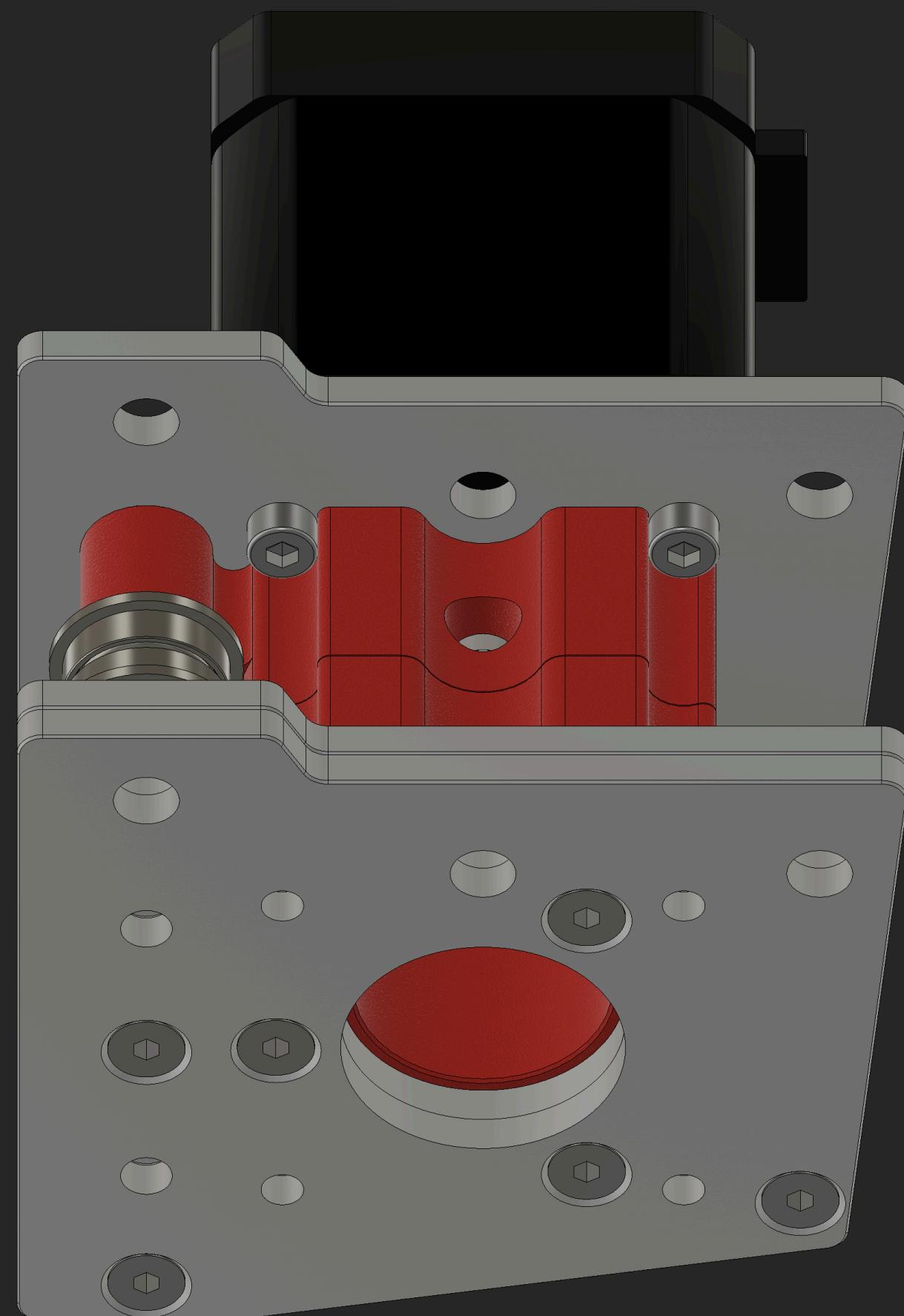
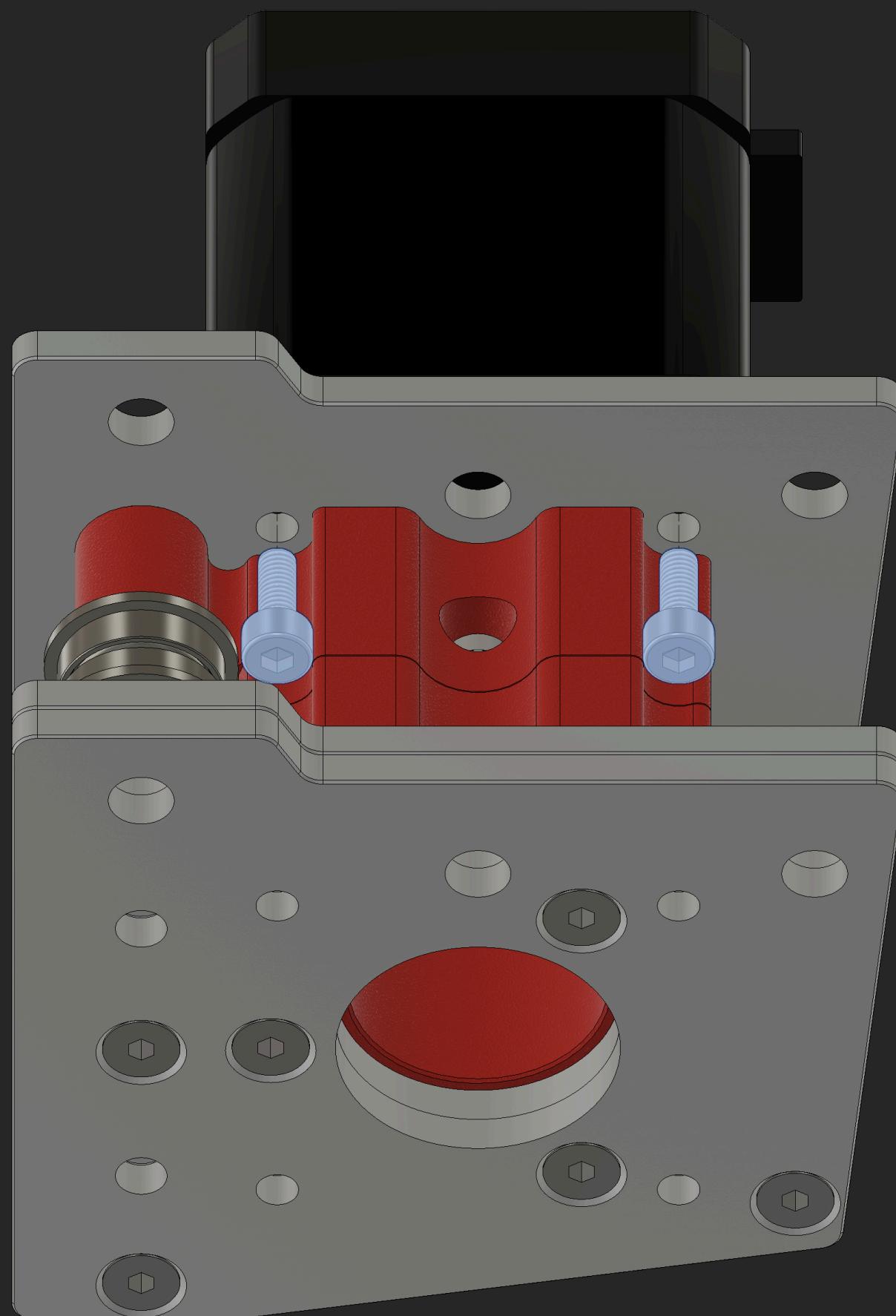
The set screw should align with the access hole after the stepper is installed. Adjust if needed.



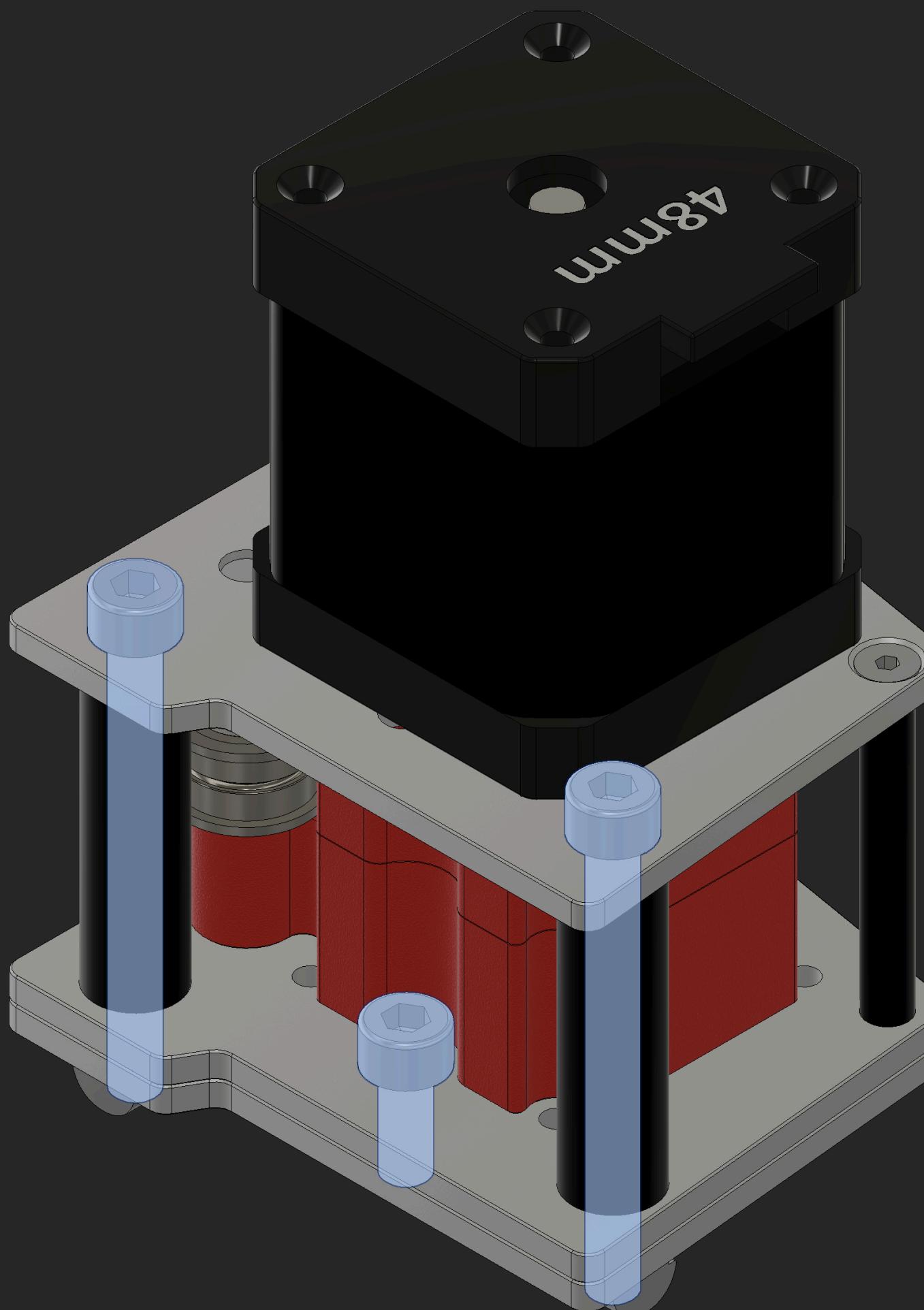
Install Stepper

- 4x M3x8 SHCS

Seat the stepper with the wires facing as shown, away from the bearings. Use the access holes in the bottom plate to install the mounting screws.



Install Stepper



- 2x M5x50 SHCS (or BHCS)
- 1x M5x12 SHCS (or BHCS)
- 2x M5x35mm Spacer

Slide in the M5x35 spacers into the 2 front corners, then drop in a M5x50 SHCS to hold them in place.

Install 1 additional M5 t-nut into your frame for the center M5 screw. Then install the stepper tower.

