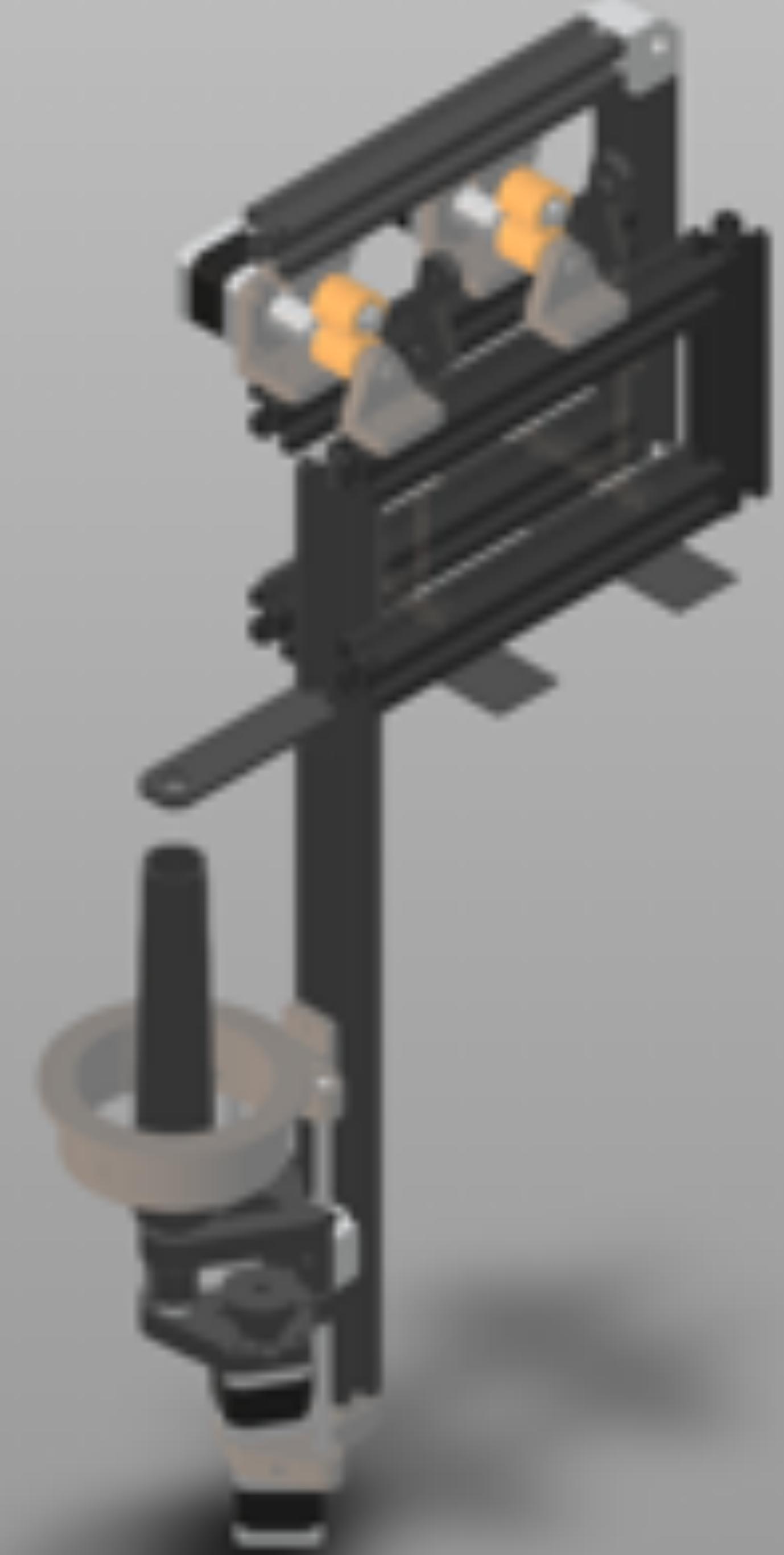


# HILO SPINNING MACHINE

3.0



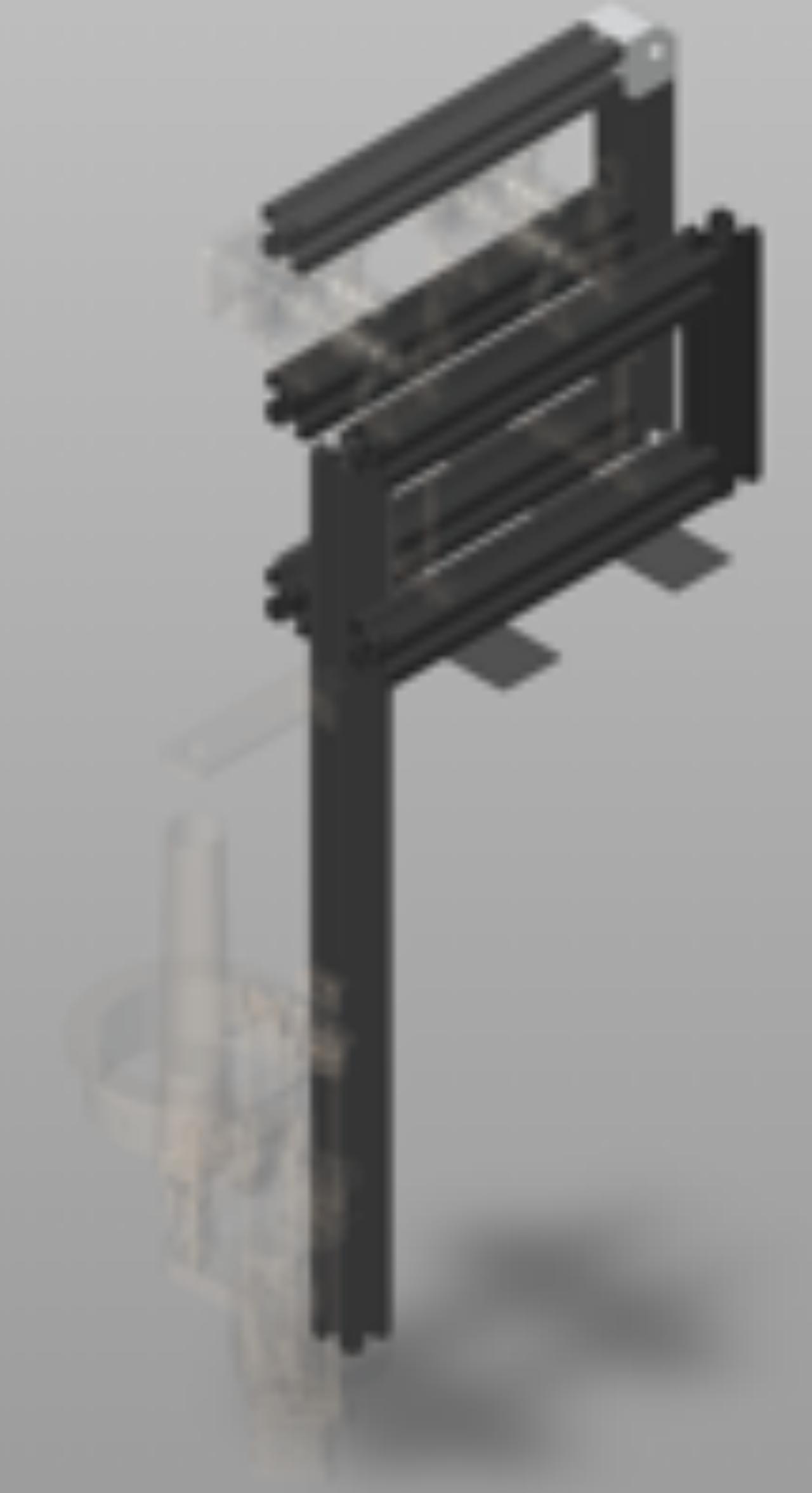
HI  
Lo



## Group: Structure

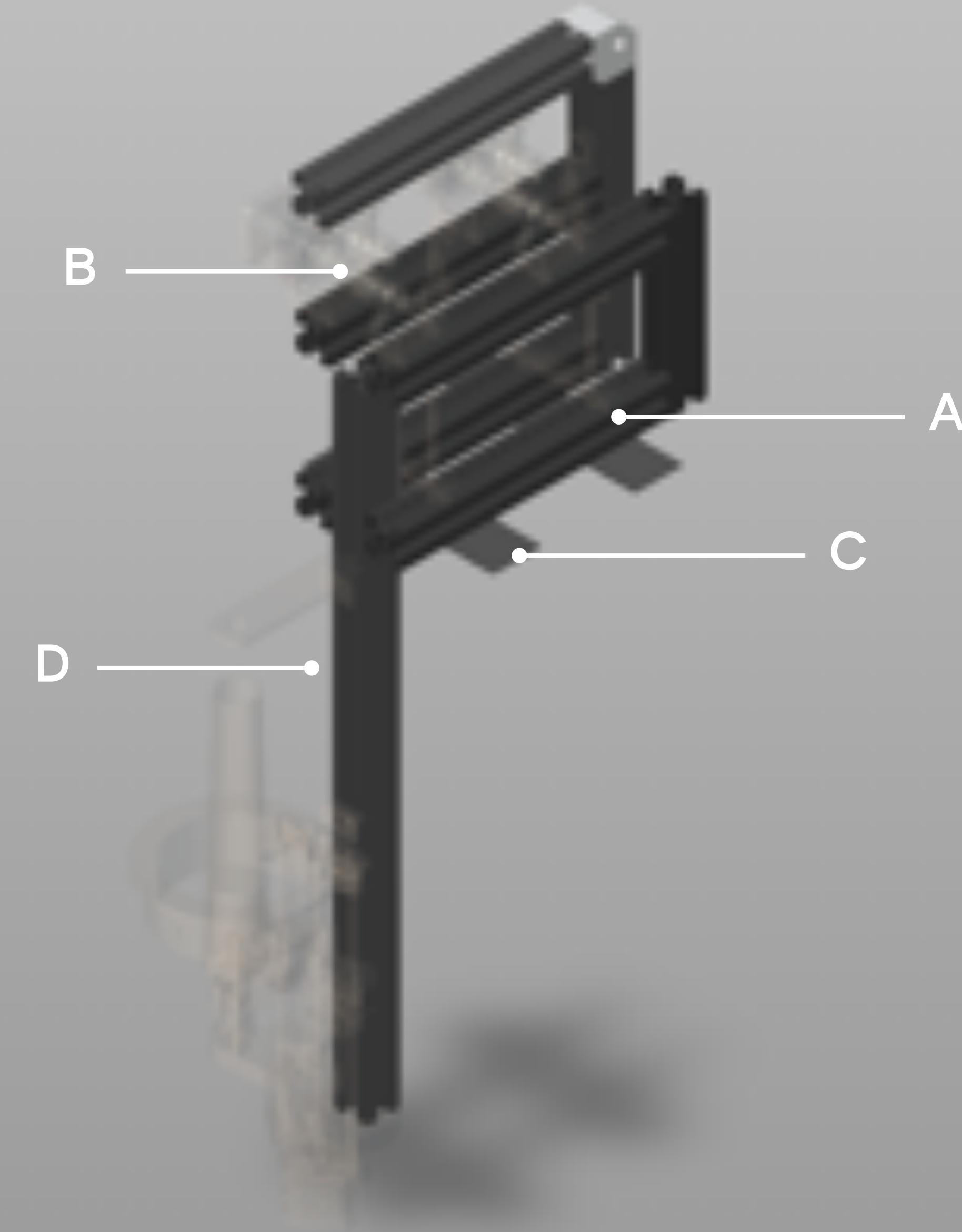
### Components

- 8 x Profile Typ 3030
- 11 x Angle slot N8
- 1 x Hinge for profile 3030
- 2 x Cylindrical screw M8x20
- 22 x Cylindrical screw M6x10
- 22 x T-nuts



HI  
LO

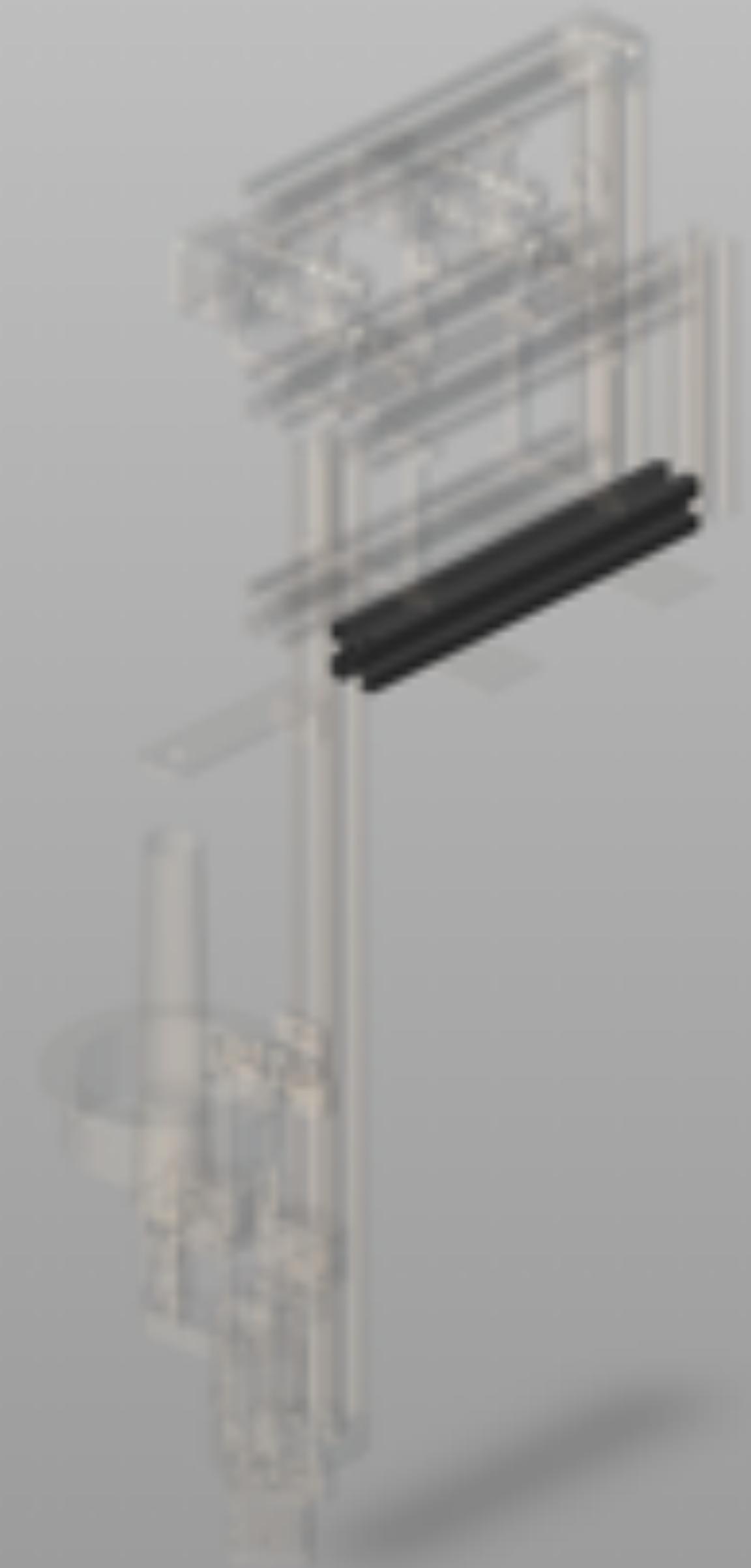
## Group: Structure



HI  
LO

## Group: Structure A

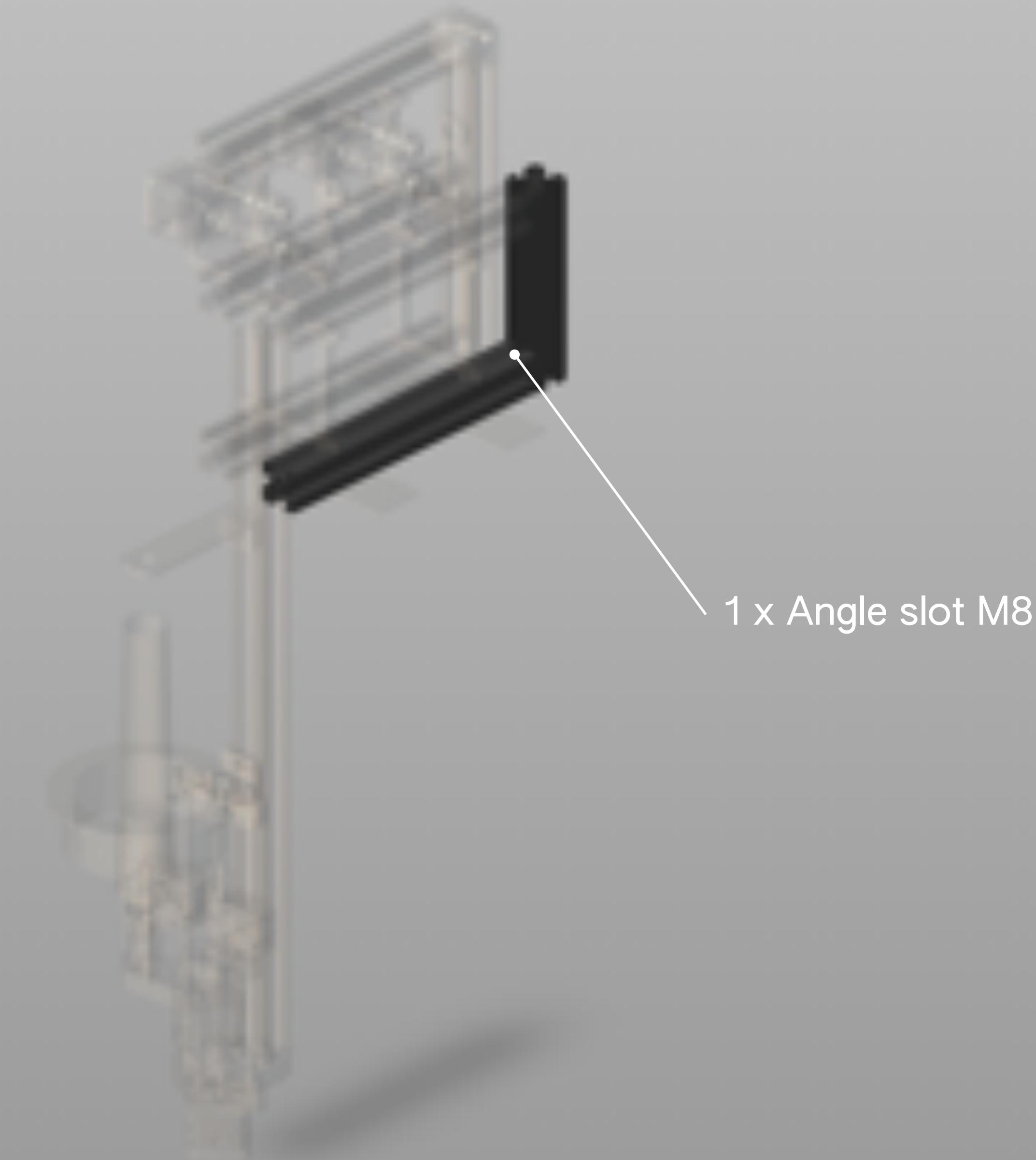
Profile Typ 3030  
1 x 230 mm



HI  
LO

## Group: Structure A

Profile Typ 3030  
1 x 113 mm

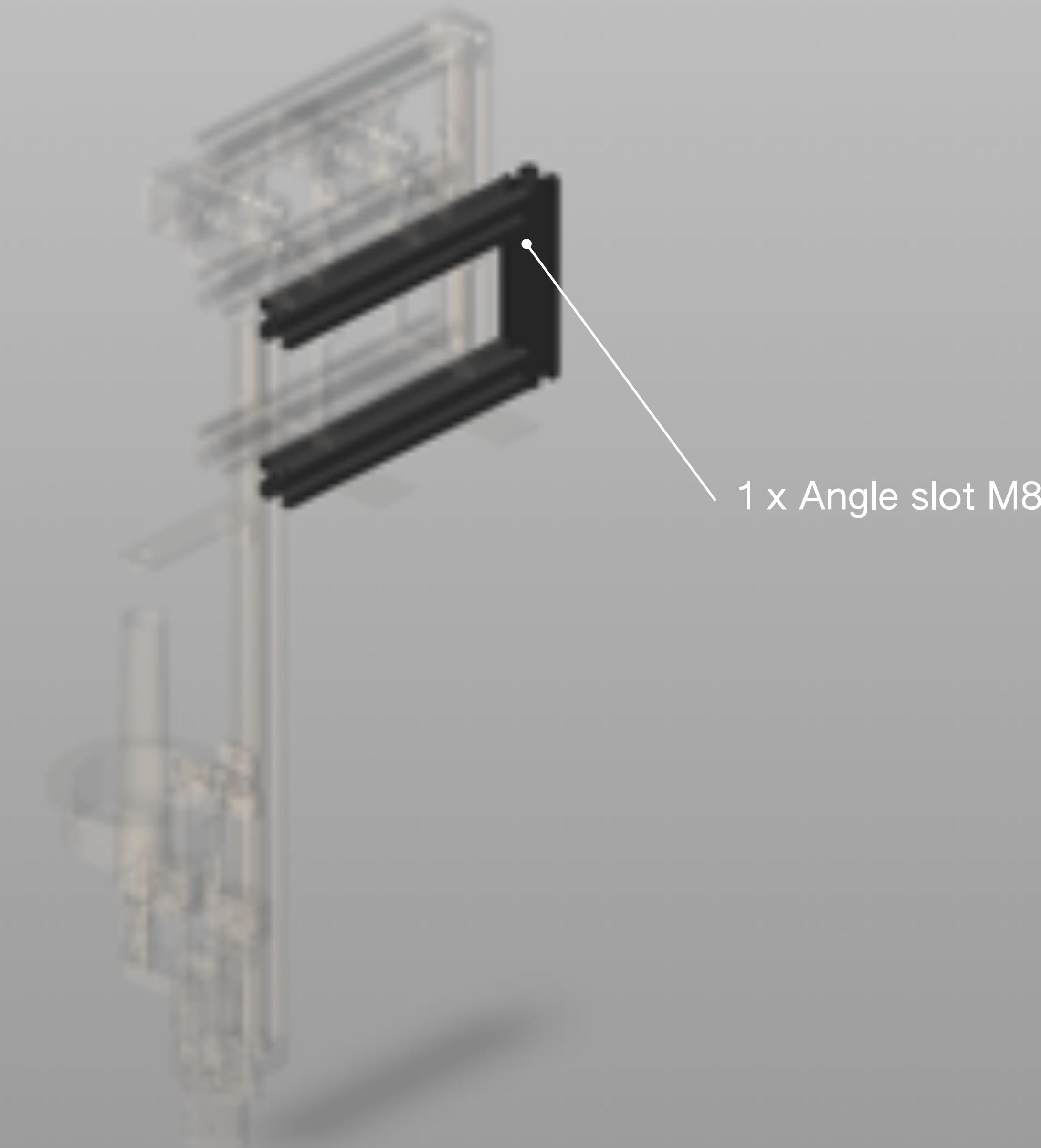


1 x Angle slot M8

HI  
LO

## Group: Structure A

Profile Typ 3030  
1 x 230 mm

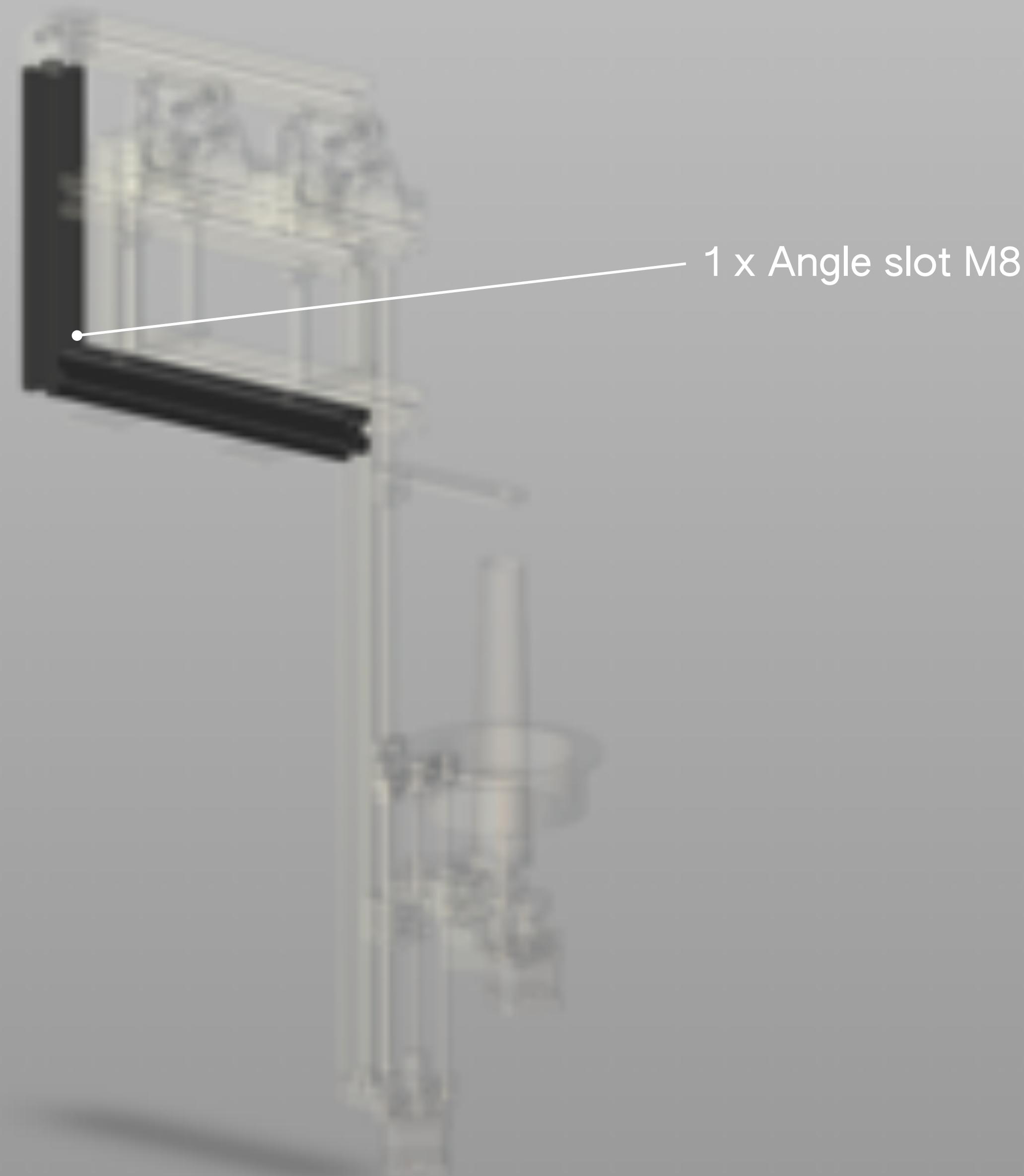


1 x Angle slot M8

HI  
LO

## Group: Structure B

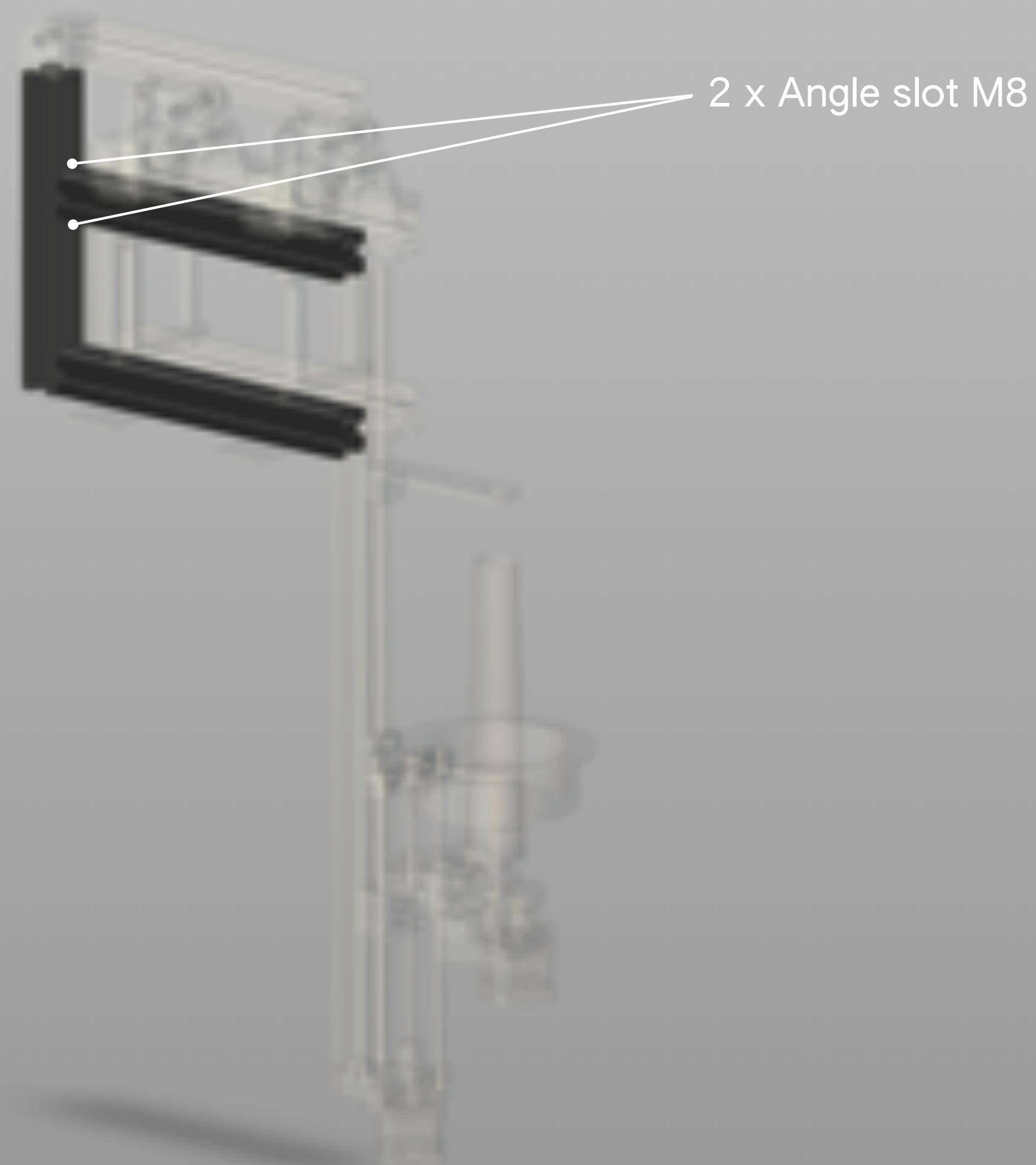
Profile Typ 3030  
2x 230 mm



HI  
LO

## Group: Structure B

Profile Typ 3030  
1 x 230 mm



HI  
LO

## Group: Structure B

Profile Typ 3030  
1 x 230 mm



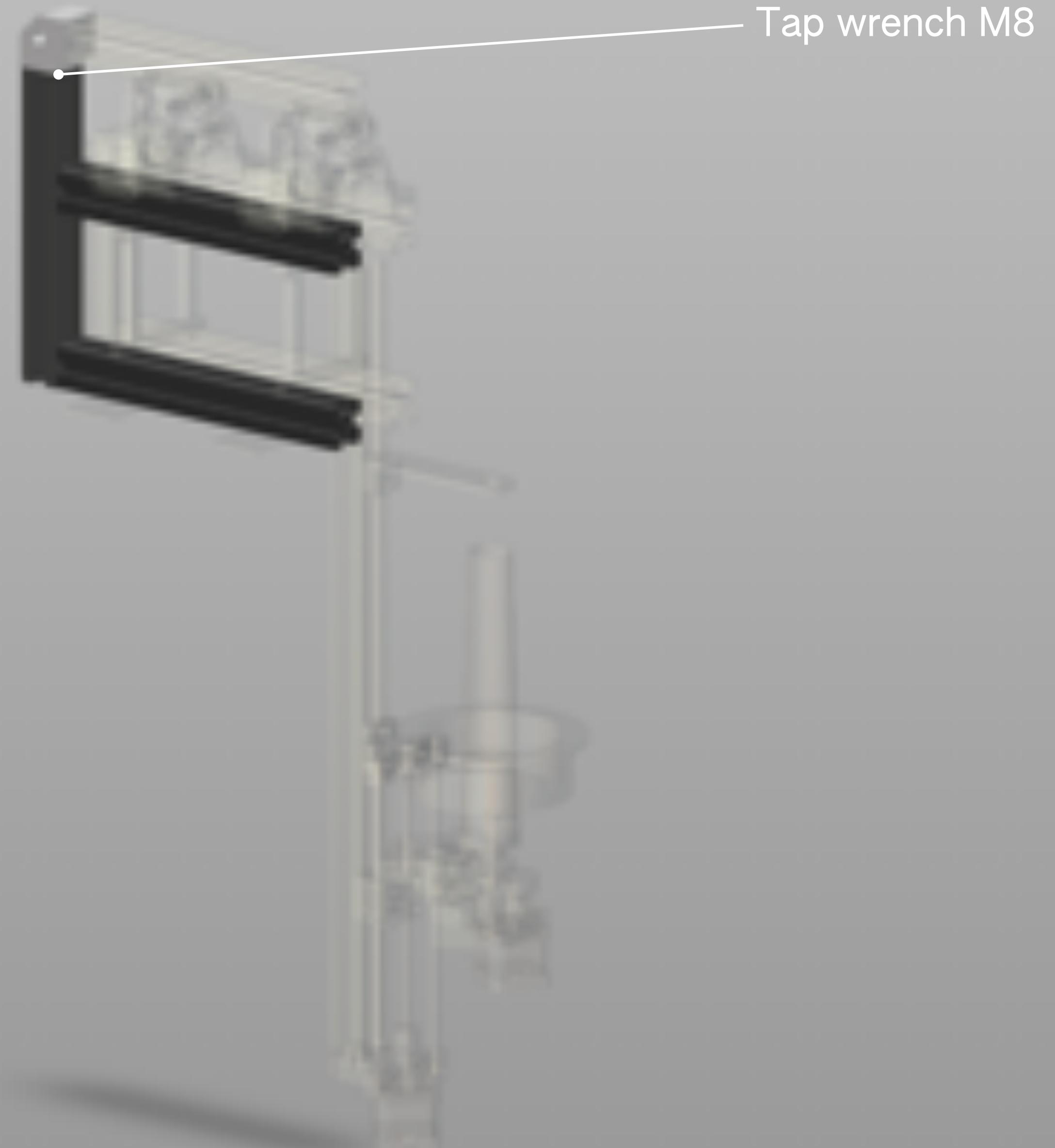
Tap wrench M8

HI  
LO

## Group: Structure B

1 x Hinge for M8

1 x Cylindrical screw M8x20



## Group: Structure B

Profile Typ 3030

1 x 230 mm

1 x Cylindrical screw M8x20



Tap wrench M8

HI  
LO

Group: Structure C

Structure A+B

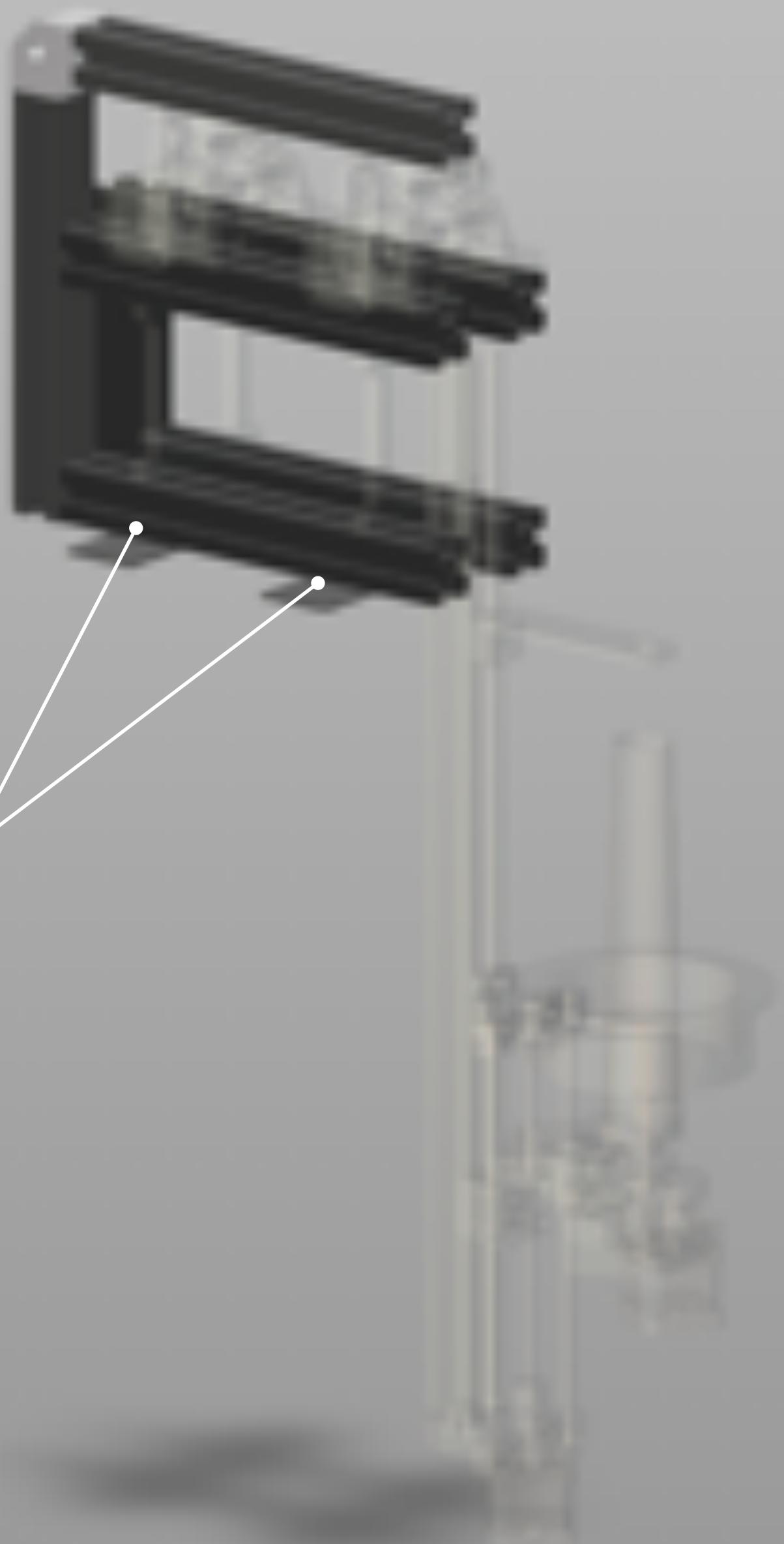


HI  
LO

## Group: Structure C

Profile Typ 3030  
2x 230 mm

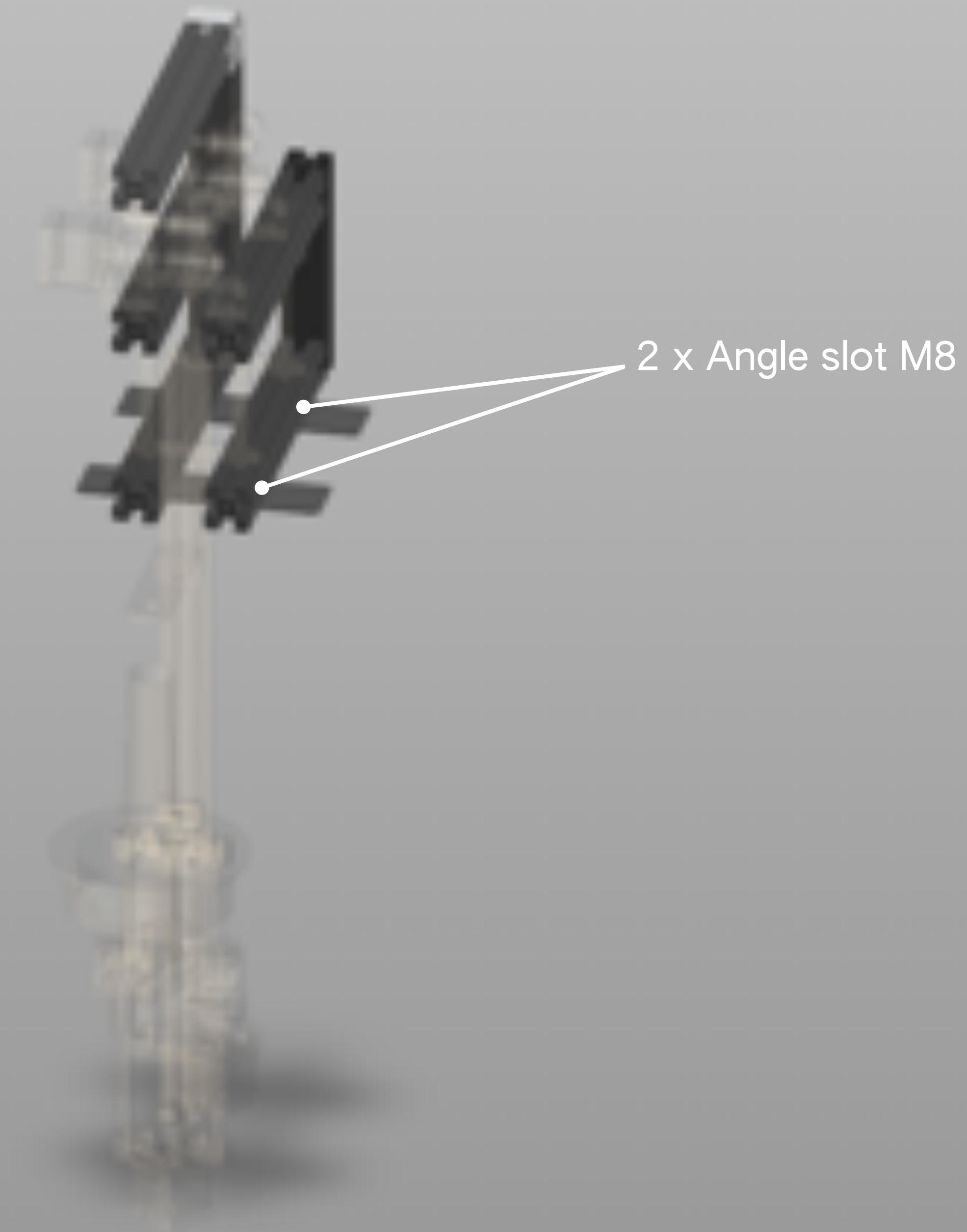
2 x Angle slot M8



HI  
LO

## Group: Structure C

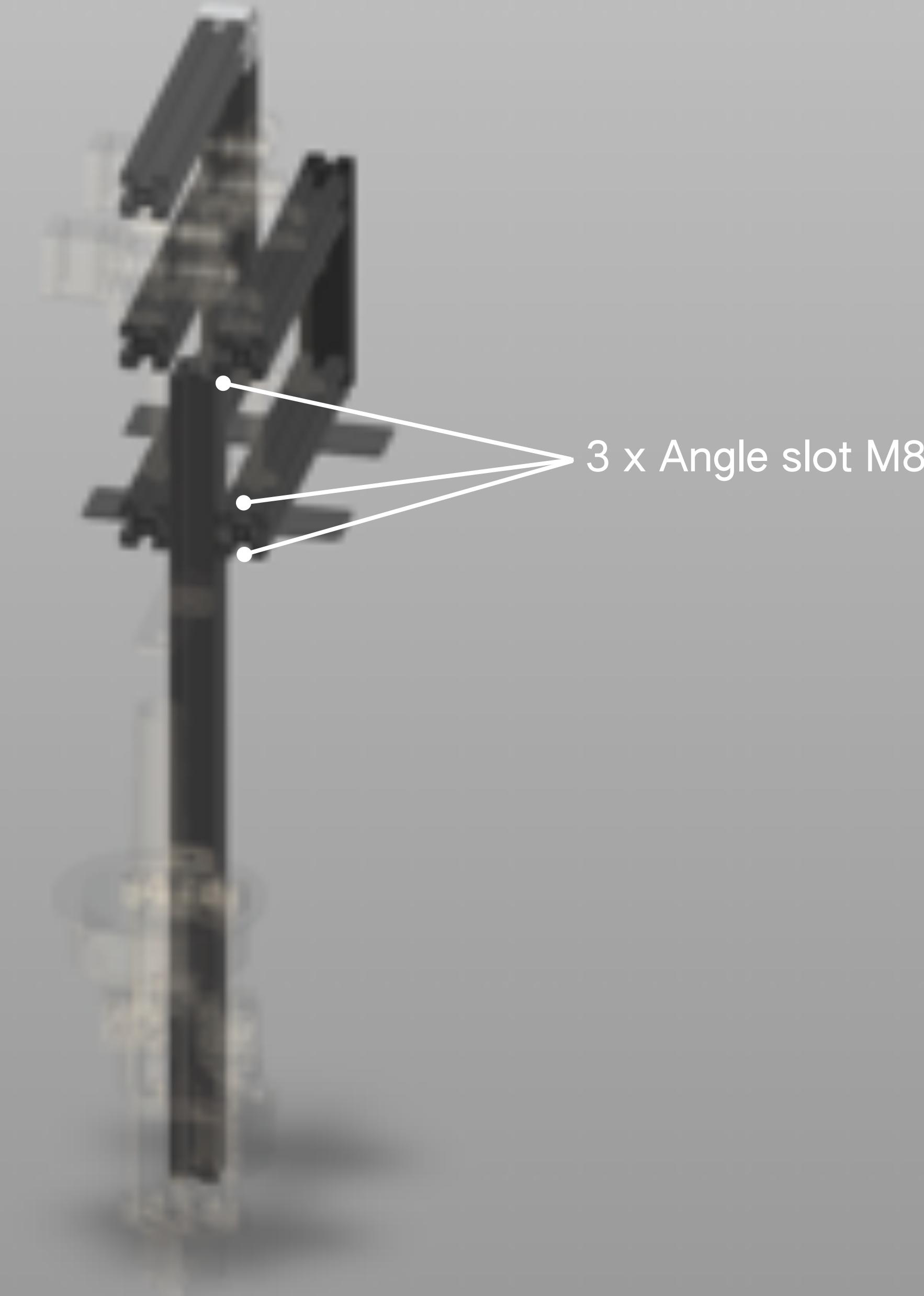
Profile Typ 3030  
2x 230 mm



HI  
LO

## Group: Structure D

Profile Typ 3030  
1x 540 mm



HI  
LO

## Group: Structure D

Profile Typ 3030  
1x 540 mm

3x Angle slot M8

Tap wrench M8



## Group: Drive Wheel

### Components

2 x 3D Printed Motor Holder

2 x 3D Printed Motor Axle Mount

2 x 3D Drive wheel

2 x Nema 17 Stepper Motor

2 x Round Metal Bar; D: 8 mm, L: 60 mm

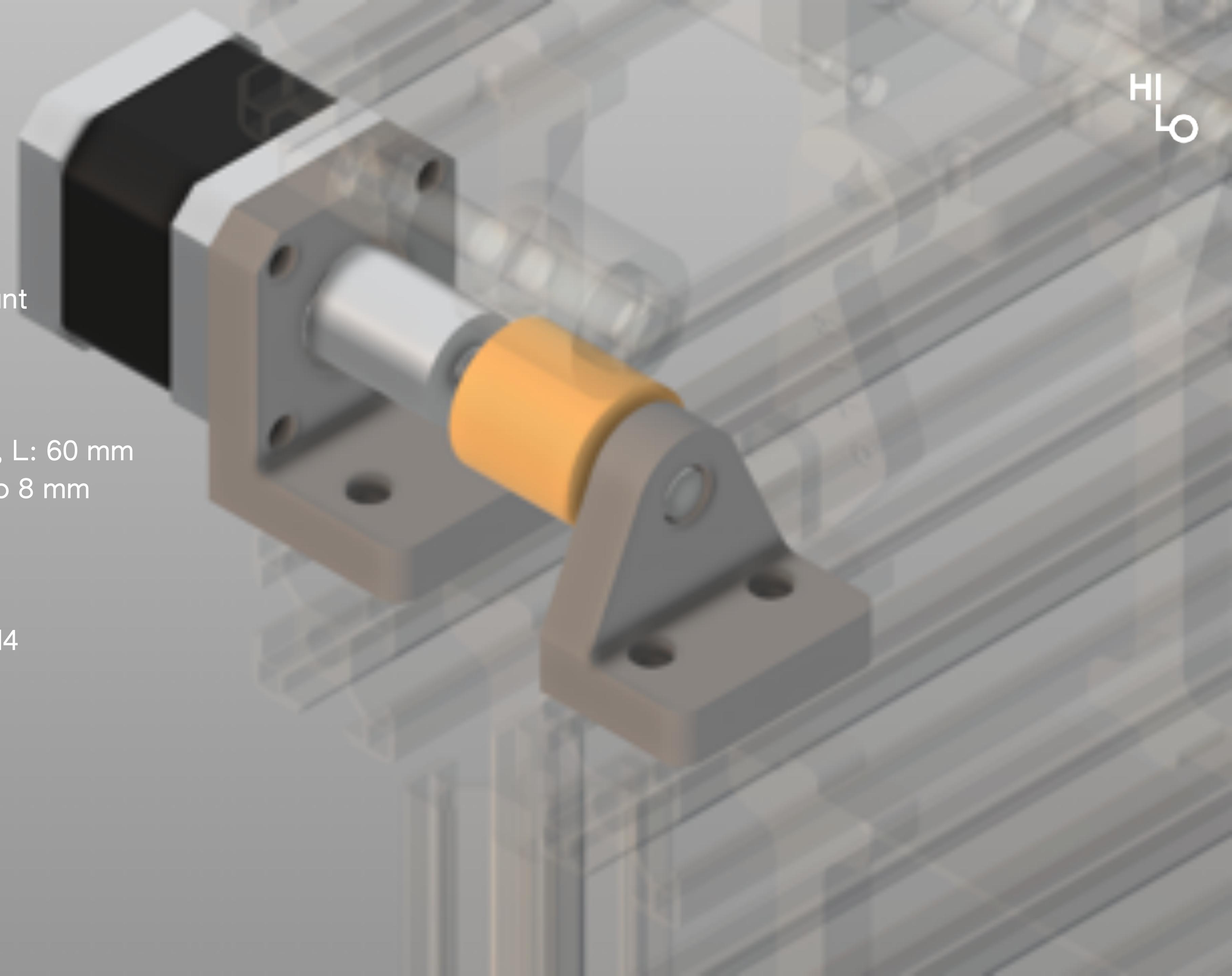
2 x Motor coupling; D: 5 mm to 8 mm

8 x M3 x 16 mm

2 x Cylindrical screw M8x20

4 x T-Nut Hammer Head Nut M4

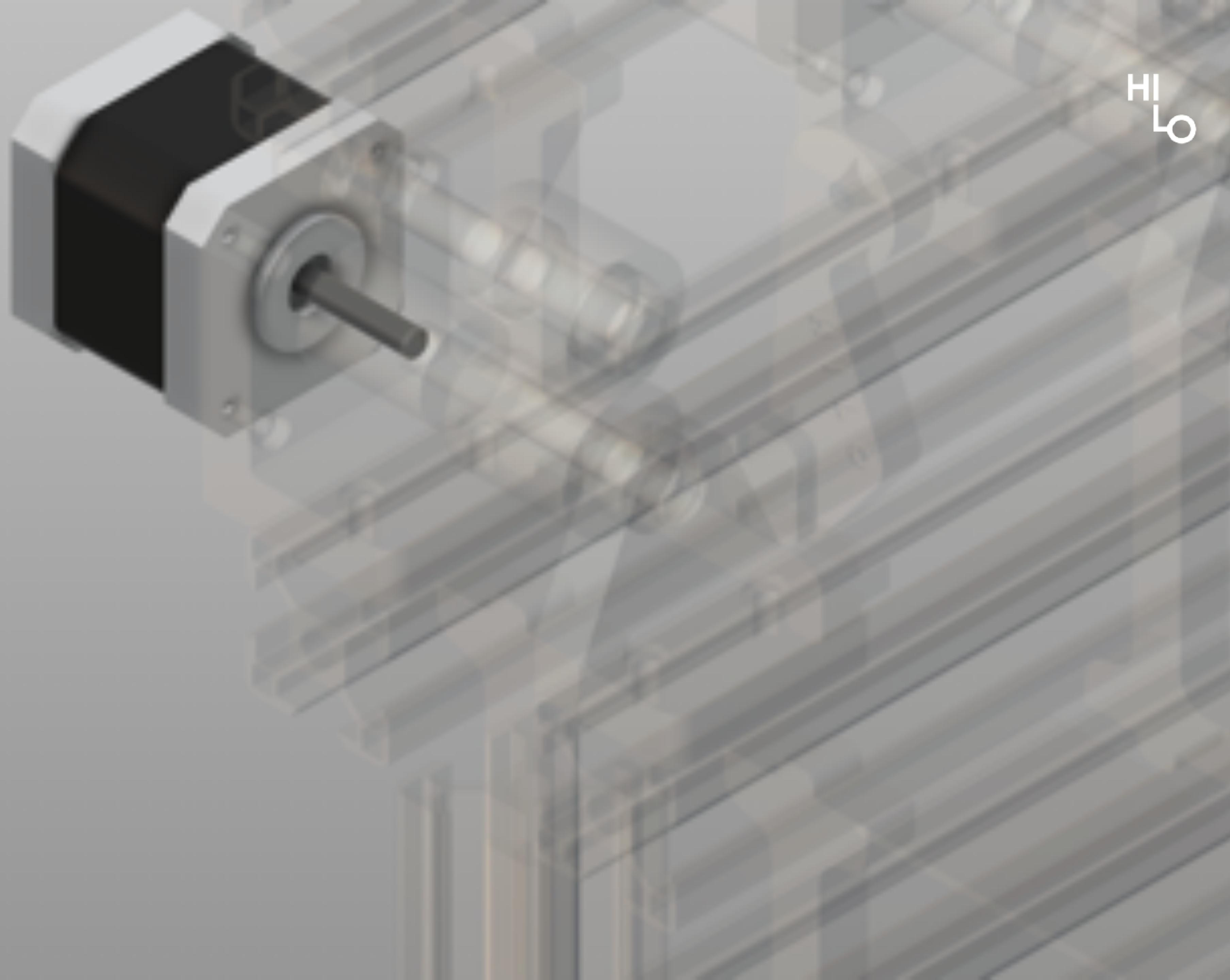
4 x M4 x 14



HI  
LO

Group: Drive Wheel

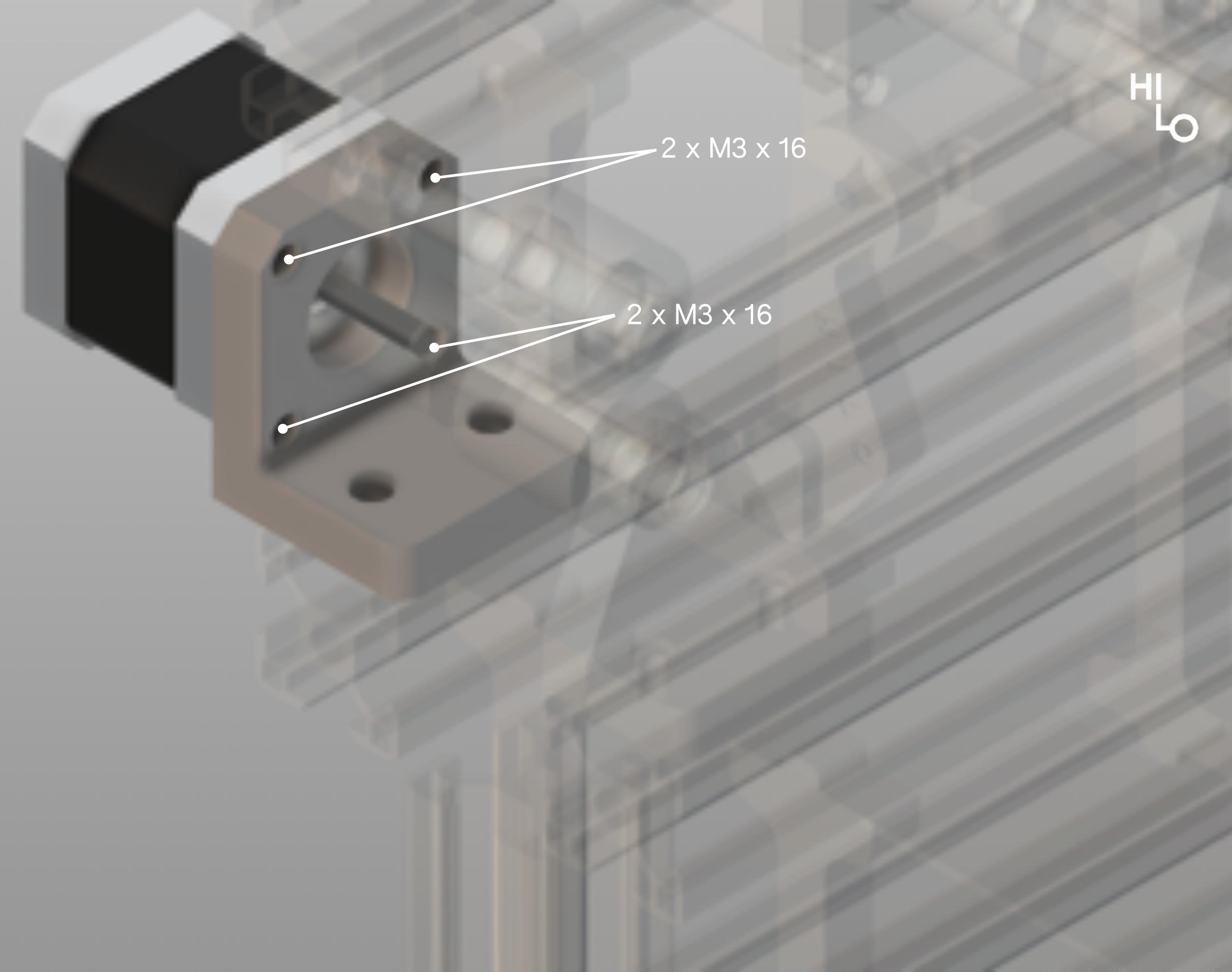
1 x Nema 17 Stepper Motor



HI  
LO

## Group: Drive Wheel

3D Printed Motor Holder



HI  
LO

## Group: Drive Wheel

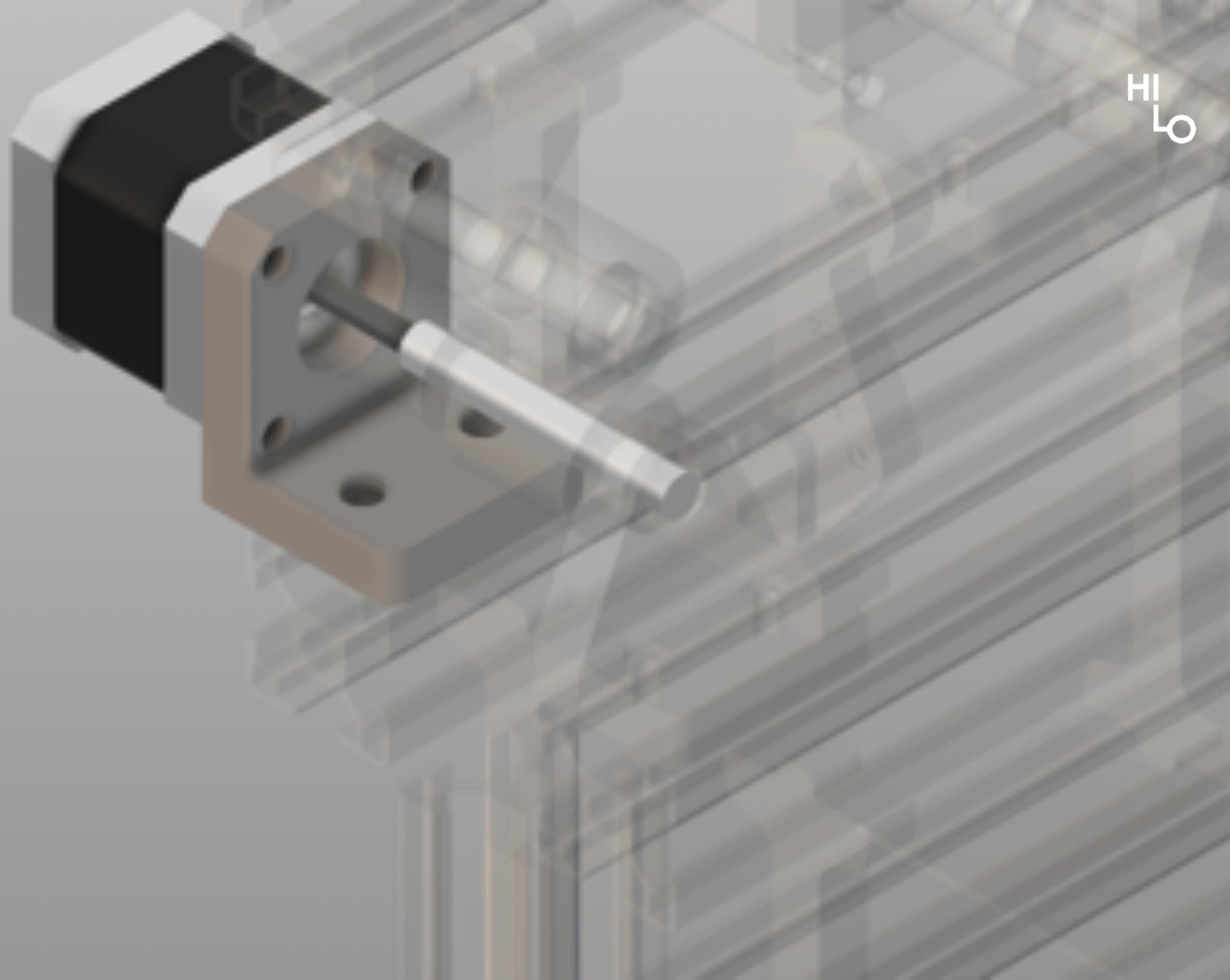
3D Printed Motor Holder

2x T-Nut Hammer Head Nut M4  
2 x M4 x 14

HI  
LO

## Group: Drive Wheel

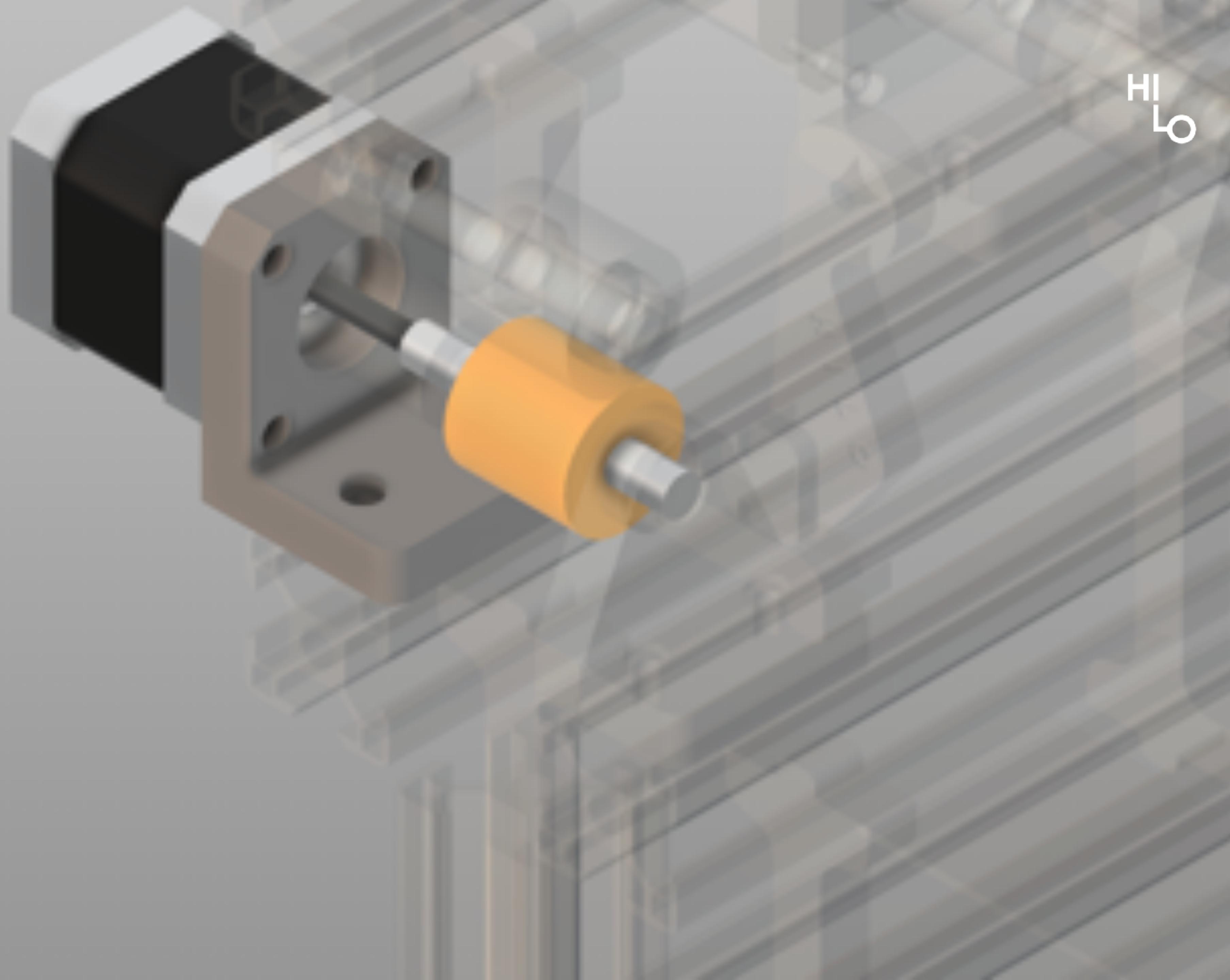
1 x Round Metal Bar  
D: 8 mm, L: 60 mm



HI  
LO

Group: Drive Wheel

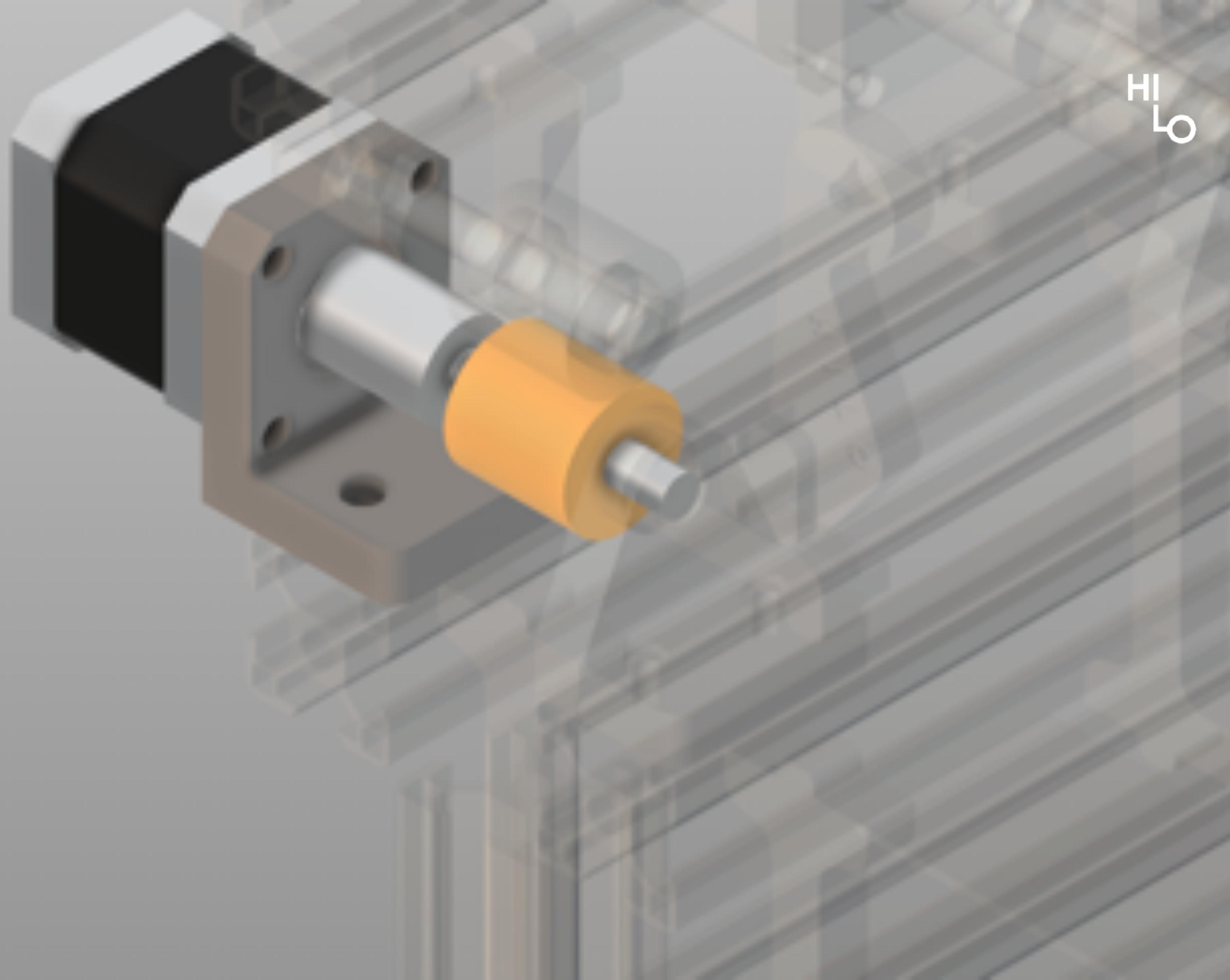
1 x 3D Drive Wheel



HI  
LO

## Group: Drive Wheel

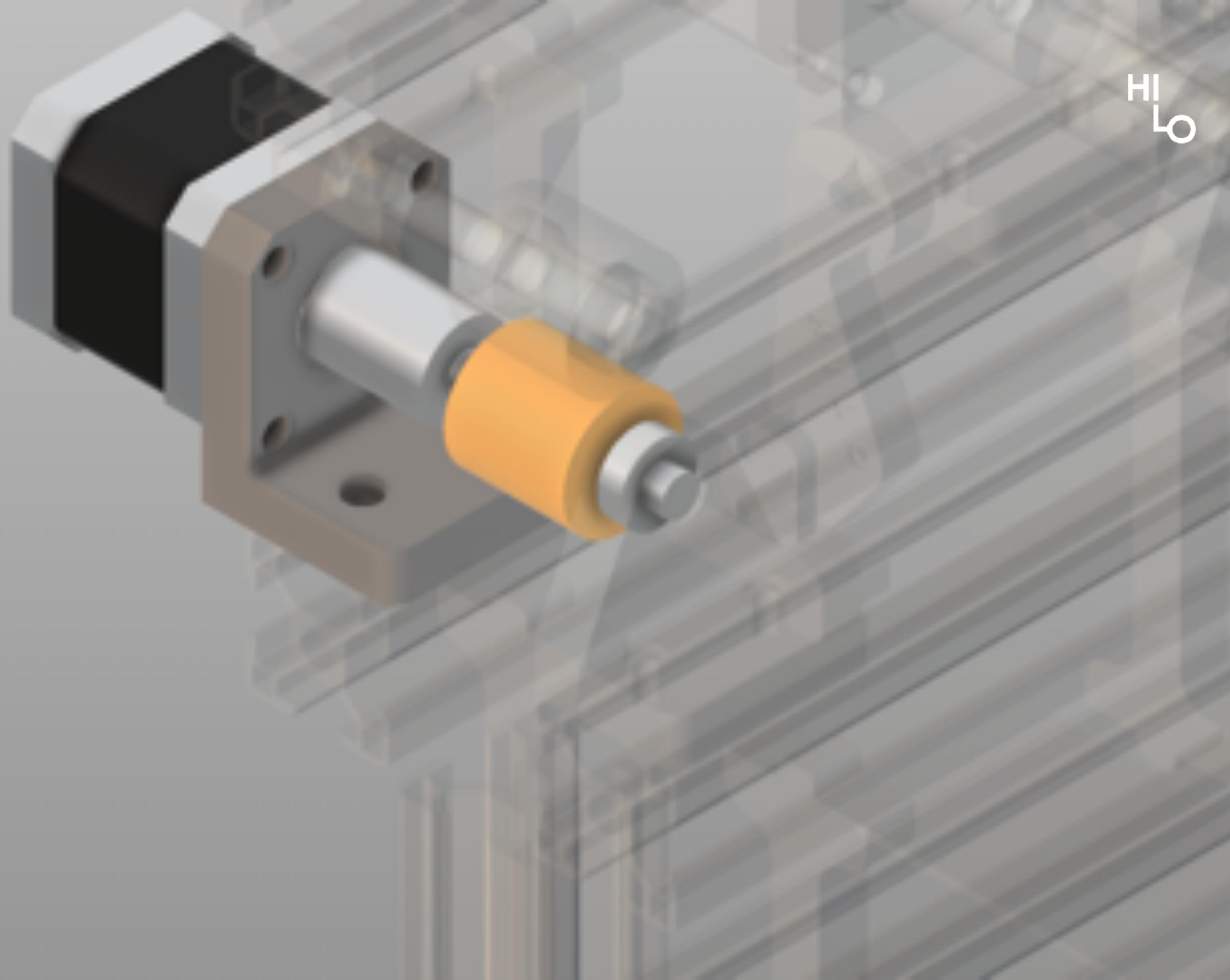
1 x Motor Coupling  
D: 5mm to 8mm



HI  
LO

Group: Drive Wheel

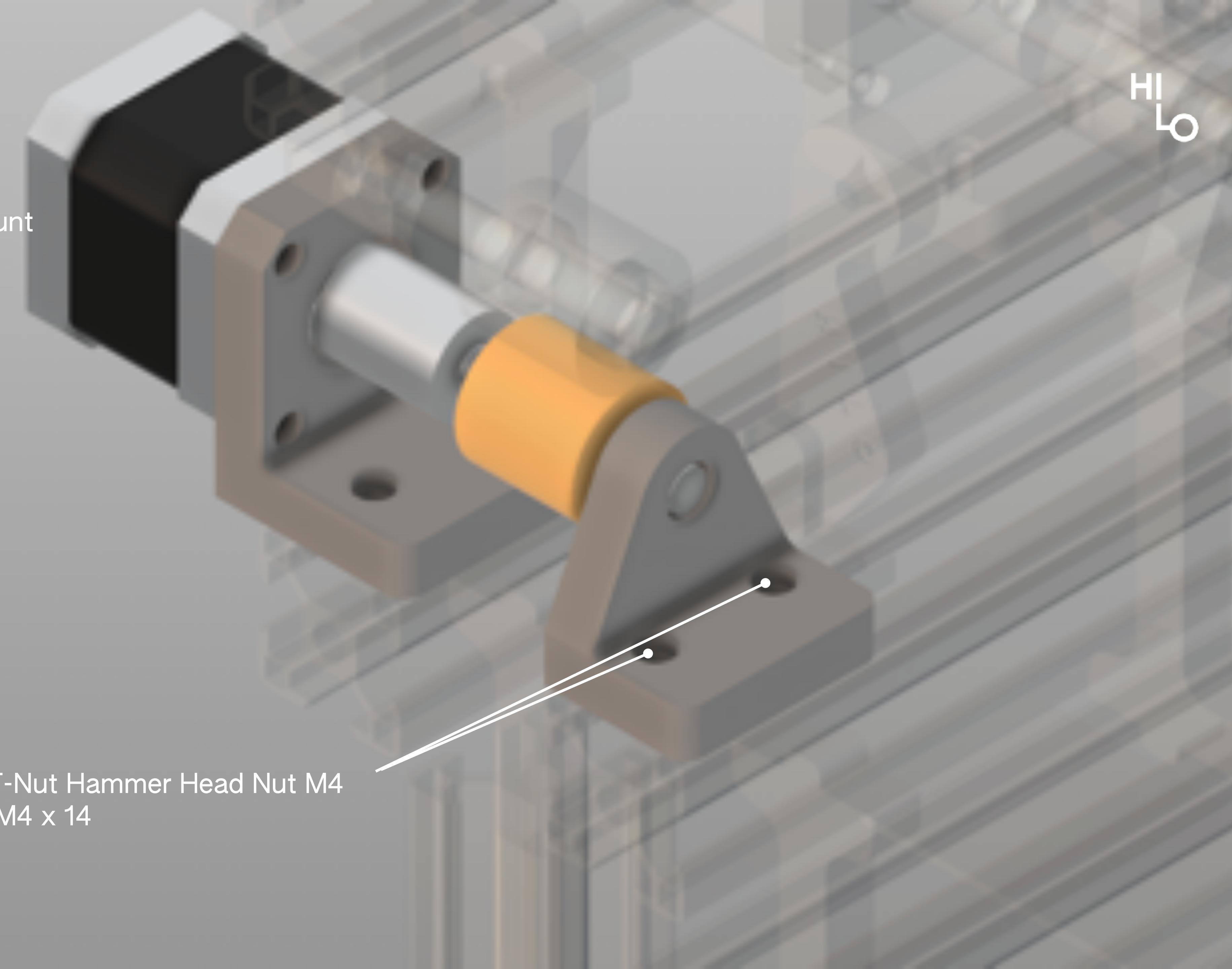
1 x Bearing



HI  
LO

## Group: Drive Wheel

1 X 3D Printed Motor Axle Mount

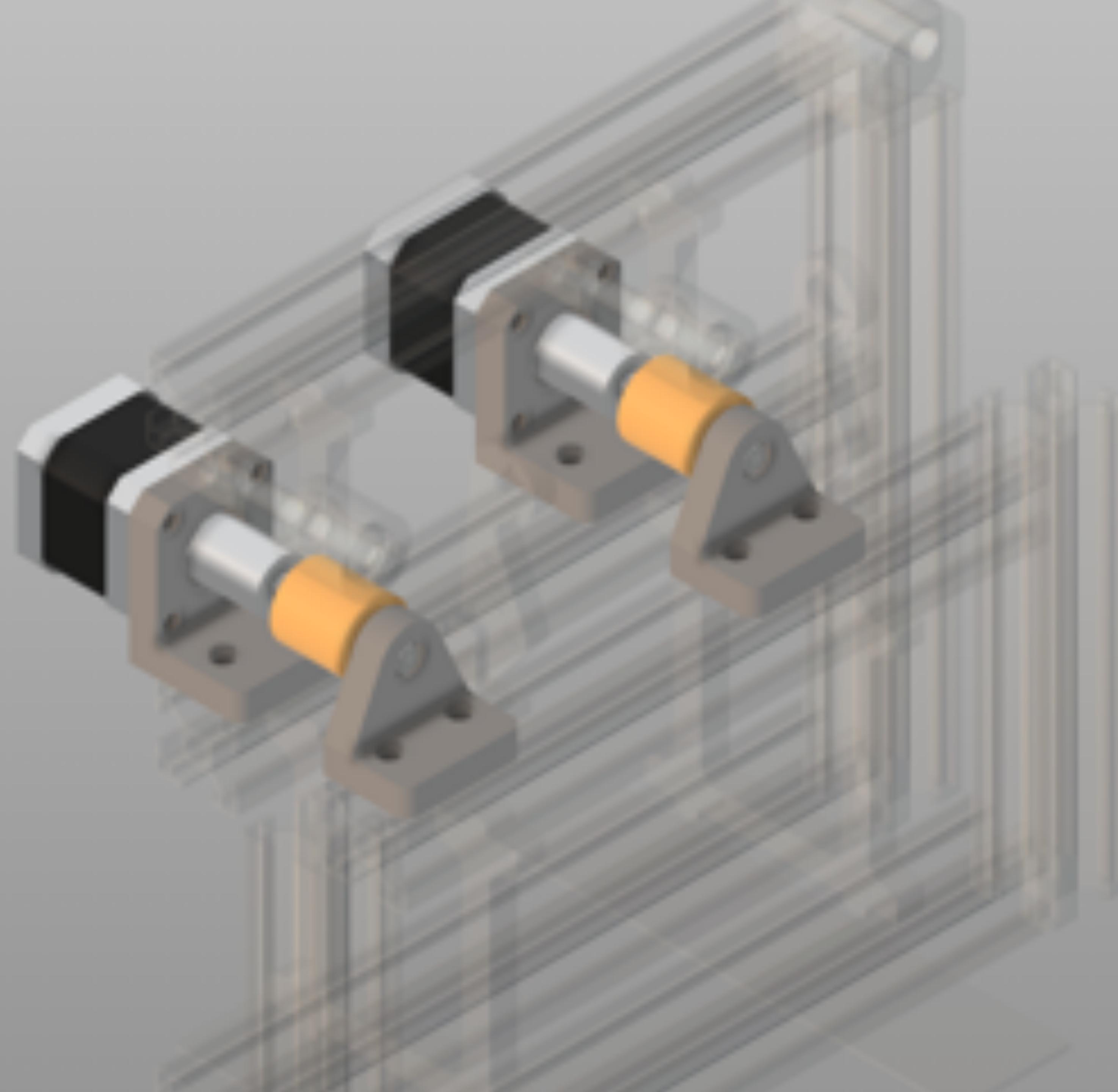


2x T-Nut Hammer Head Nut M4  
2 x M4 x 14

HI  
LO

Group: Drive Wheel

2x Motor Holder



## Group: Trailing Wheel

### Components

2 x 3D Printed Axle Holder Trailing Wheel

2 x 3D Trailing Wheel

4 x Spacer Sleeve 5 mm

4 x Bearing

2 X Hex Screws M8 x 80

2 x Lock Nut M8

4 x T-Nut Hammer Head Nut M4

4 x M4 x 14

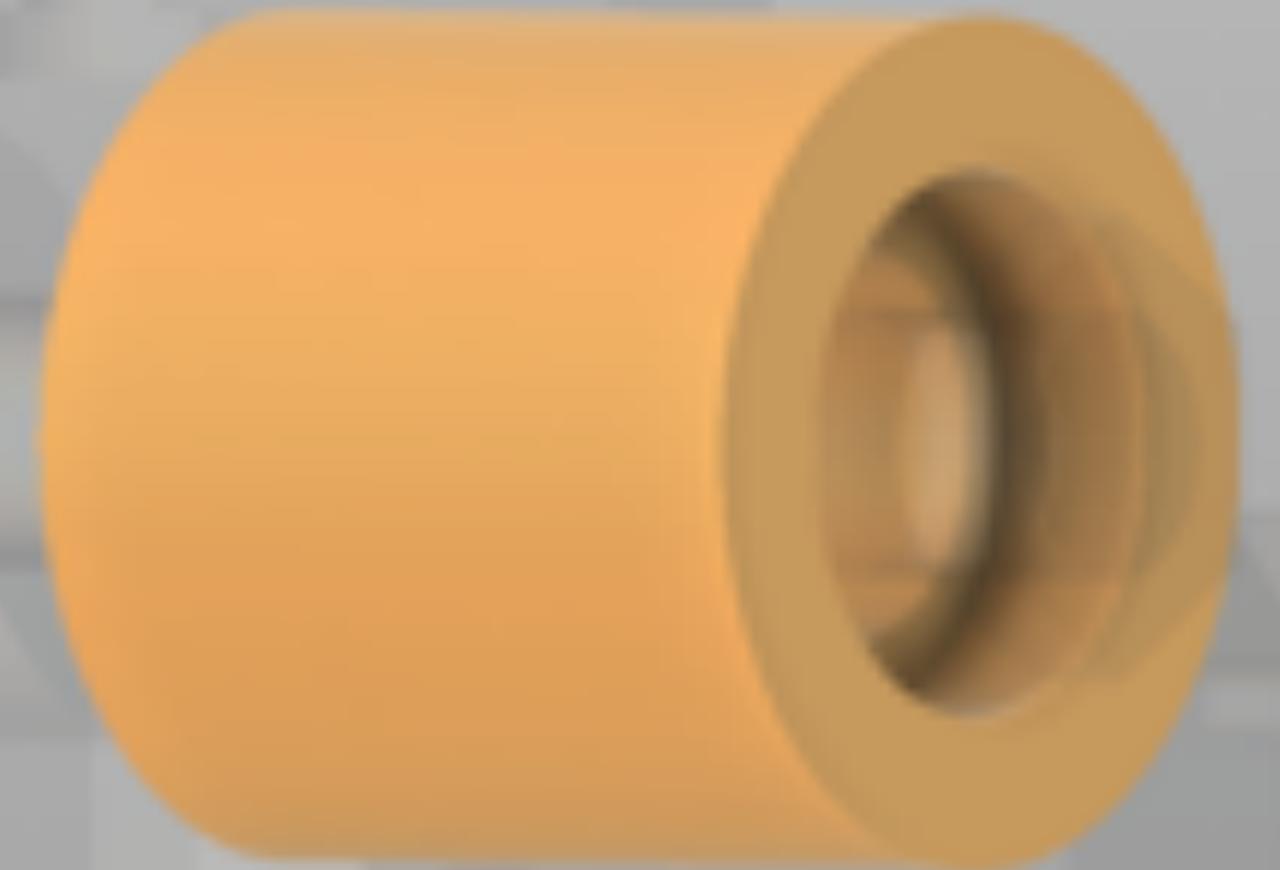
Group: Pressure Cylinder

HI  
LO

HI  
LO

## Group: Trailing Wheel

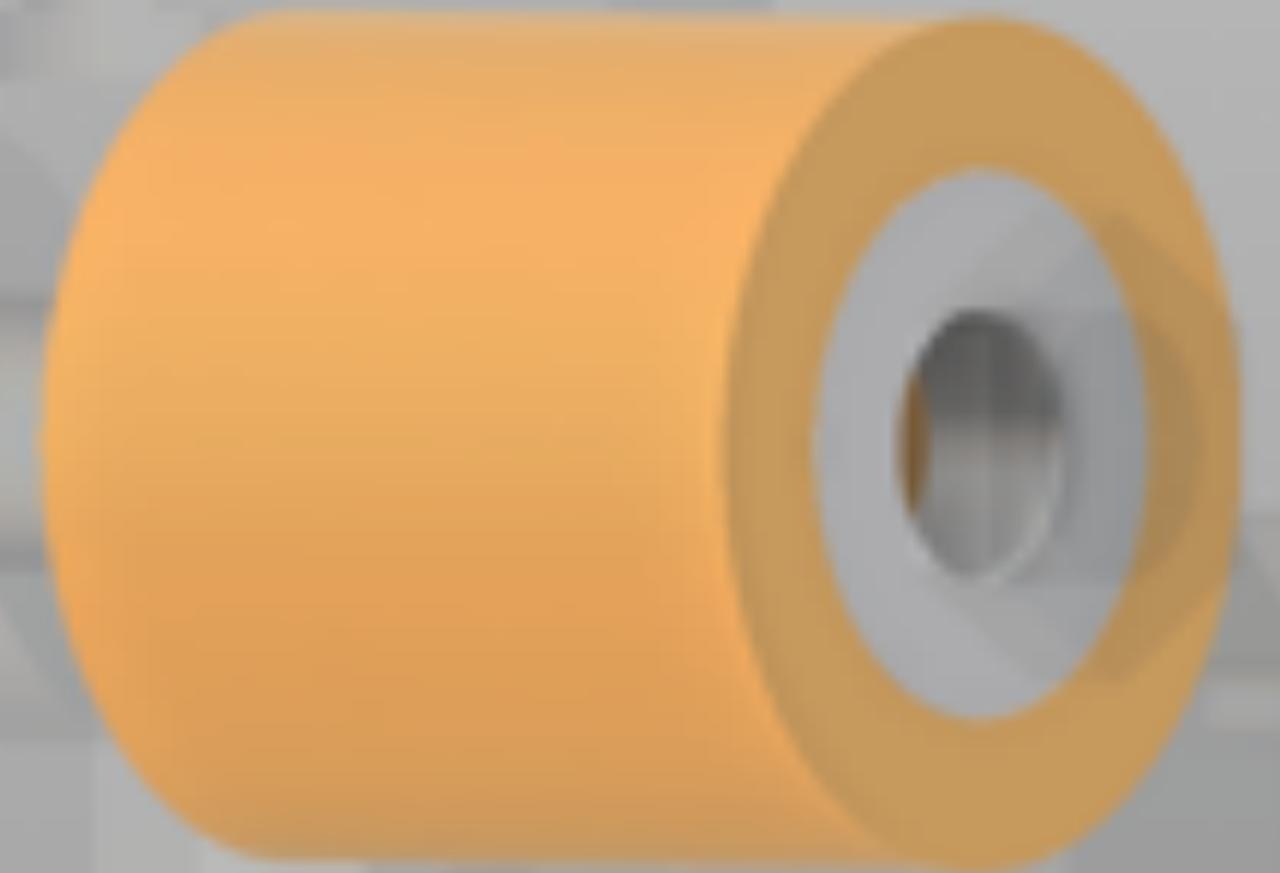
1 x 3D Trailing Wheel



HI  
LO

## Group: Trailing Wheel

1 x Bearing



HI  
LO

## Group: Trailing Wheel

1 x Bearing



HI  
LO

## Group: Trailing Wheel

1 x 3D Printed Axle Holder Trailing Wheel



HI  
LO

Group: Trailing Wheel

1 x Hex Screws M8 x 80

2 x Spacer Sleeve 5 mm

HI  
LO

Group: Trailing Wheel

1 x Hex Screws M8 x 80

Lock Nut M8

HI  
LO

**Group: Trailing Wheel**

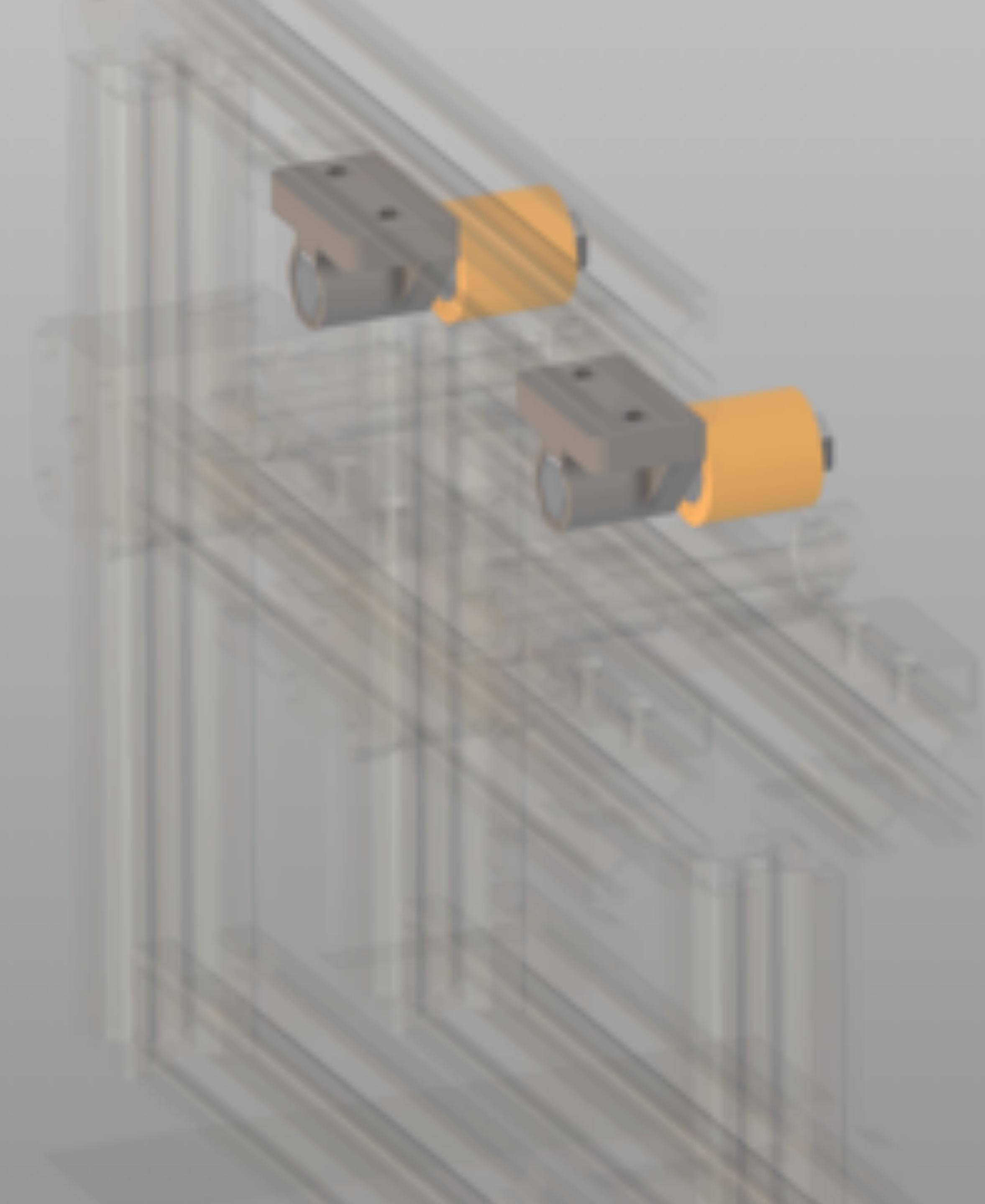
1 x Hex Screws M8 x 80

2x T-Nut Hammer Head Nut M4  
2 x M4 x 14

HI  
LO

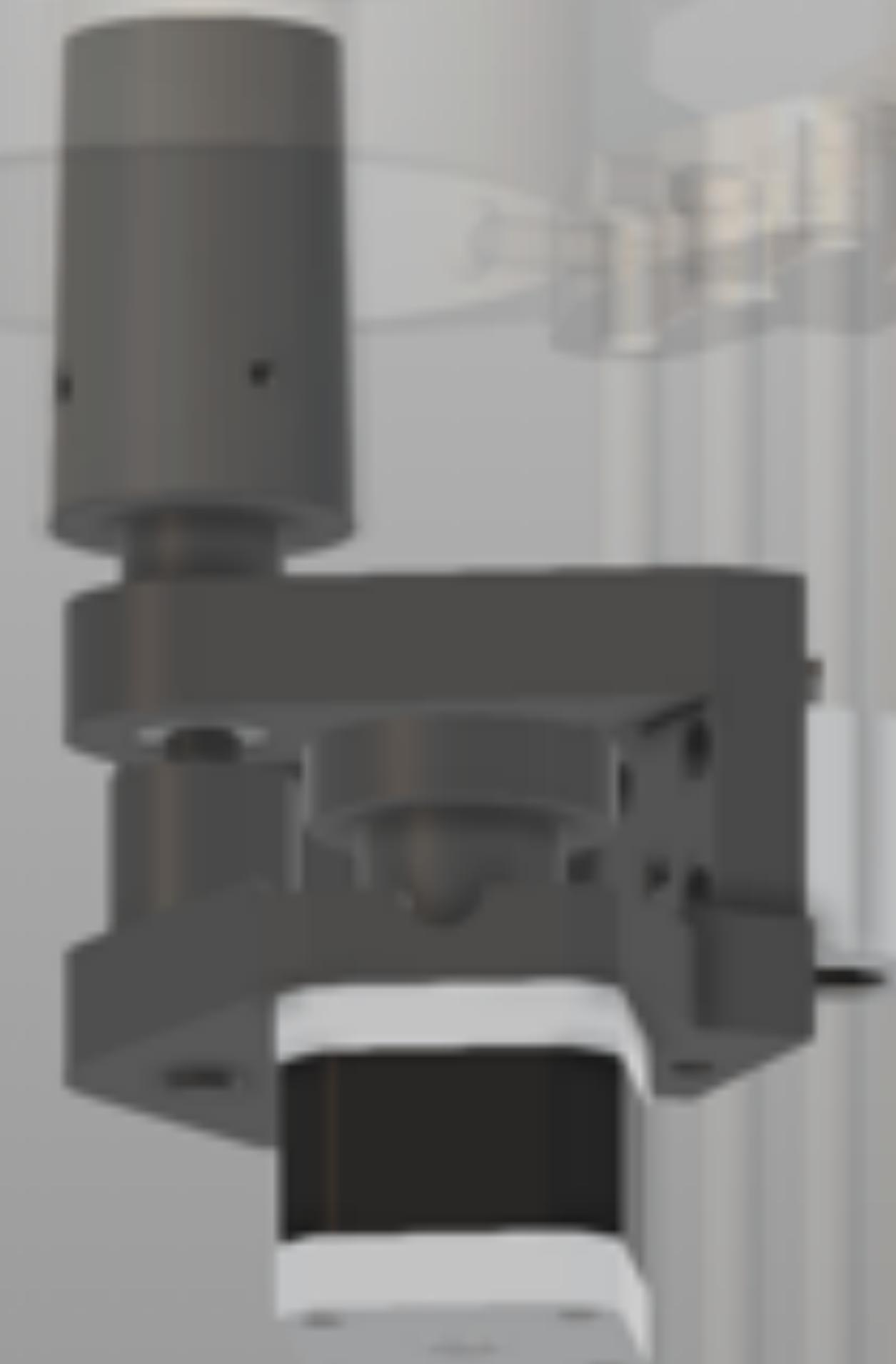
## Group: Trailing Wheel

2x Trailing Wheel



HI  
LO

Group: Spindel Plattform

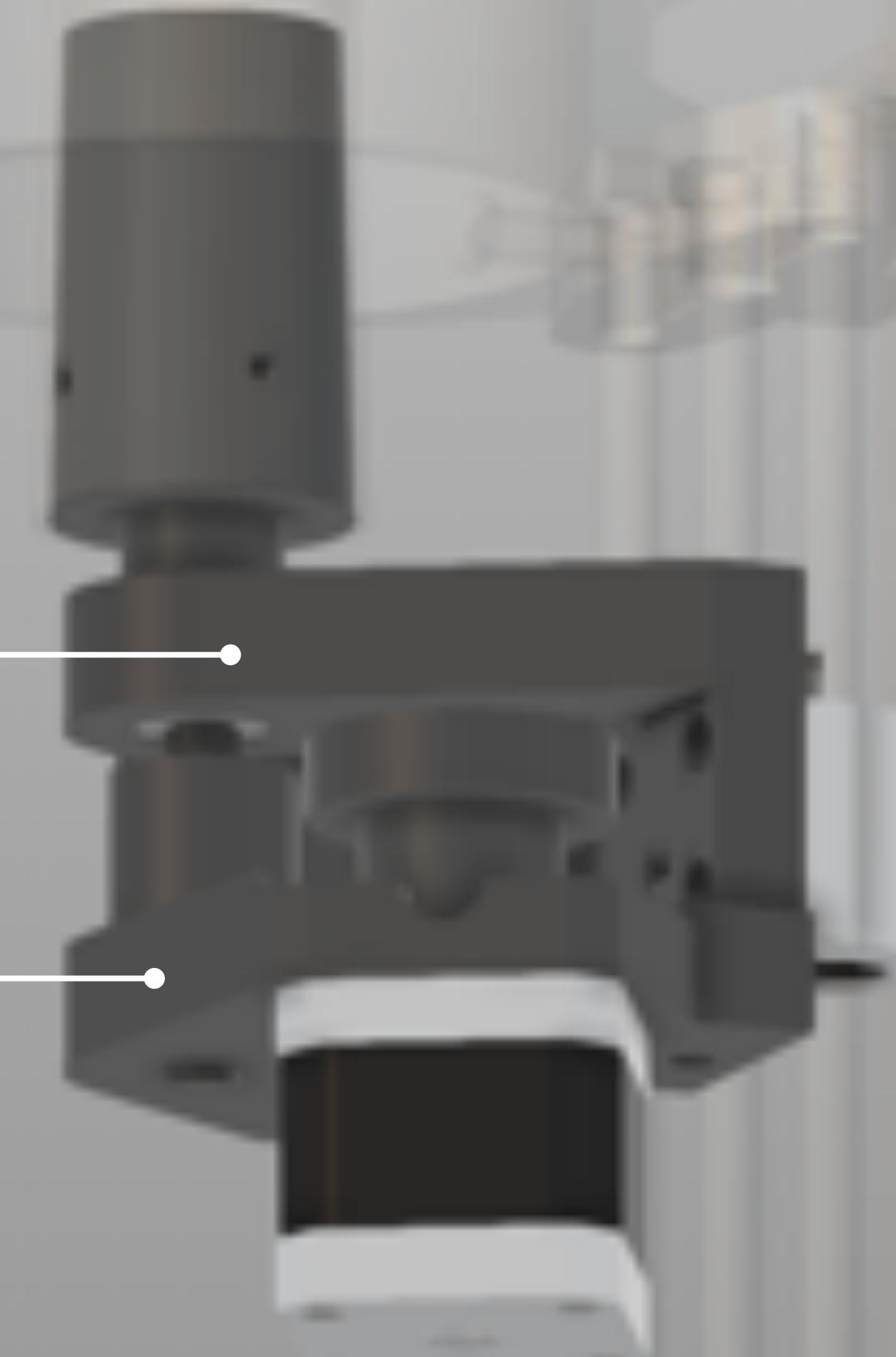


HI  
LO

Group: Spindel Plattform

A

B



## Group: Spindel Plattform

### Components

1 x 3D Spindel Plattform A

1 x 3D Spindel Plattform B

1 x 3D Spindel Carrier

1 x Nema 17 Stepper Motor

1 x Belt Pulley

1 x GT2 Pulley 40 Teeth

1 x GT2 Pulley 20 Teeth

1 x Round Metal Bar; D: 8 mm, L: 90 mm

2 x Spacer Sleeve 5 mm

2 x Bearing

2 x Linear Bearing

1 x Trapezoidal Screw Nut T8

16 x M3 x 30

16 x M3 Nut

4 x M3 x 12

1 x M3 x 10



Group: Spindel Plattform A

1 x 3D Printed Plattform A



HI  
LO

## Group: Spindel Plattform A

2 x Linear bearing

4 x M3 x 30  
4 x M3 Nut

HI  
LO

Group: Platform A

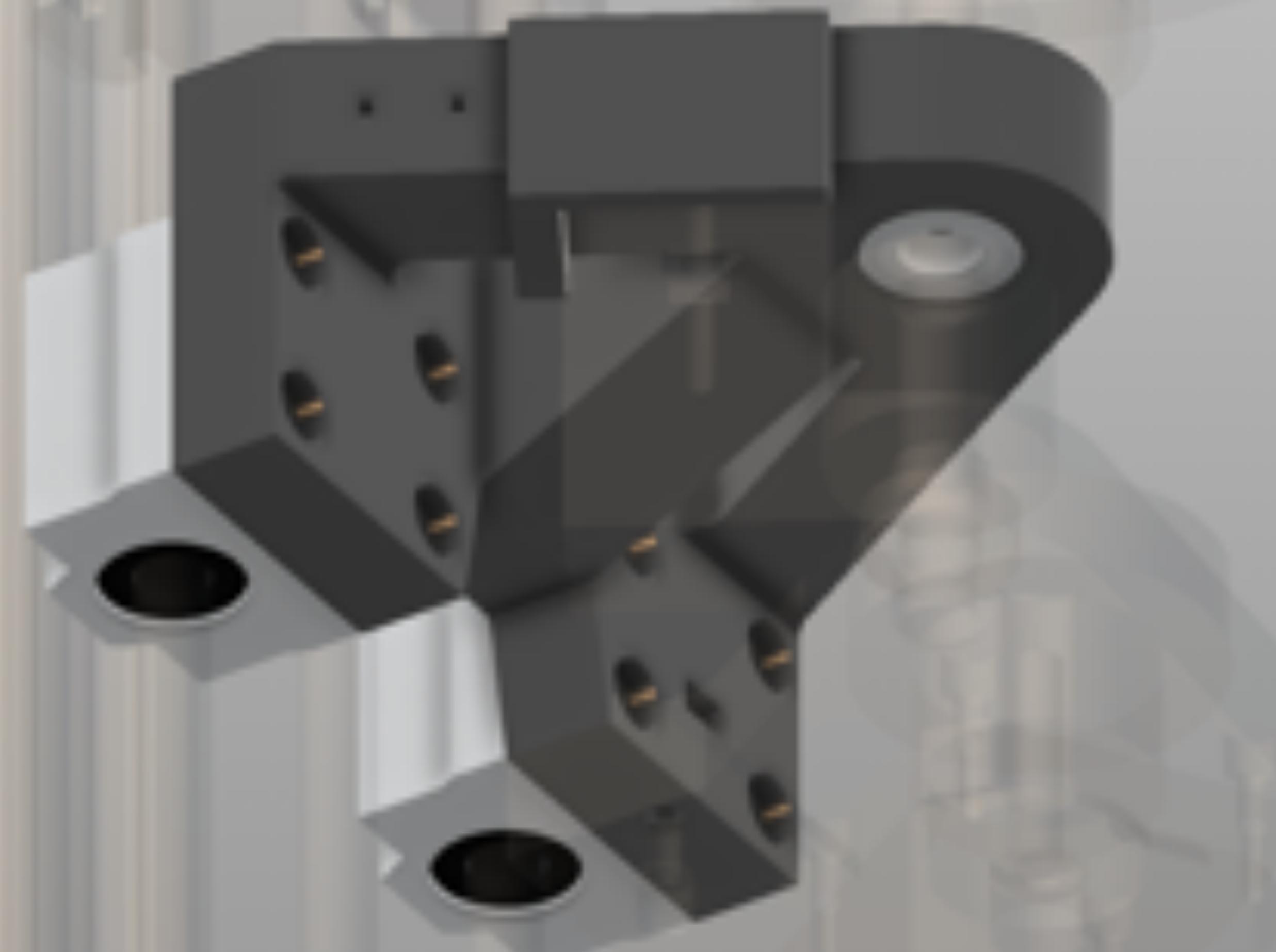
2 x Linear bearing

4 x M3 x 30  
4 x M3 Nut

HI  
LO

Group: Platform A

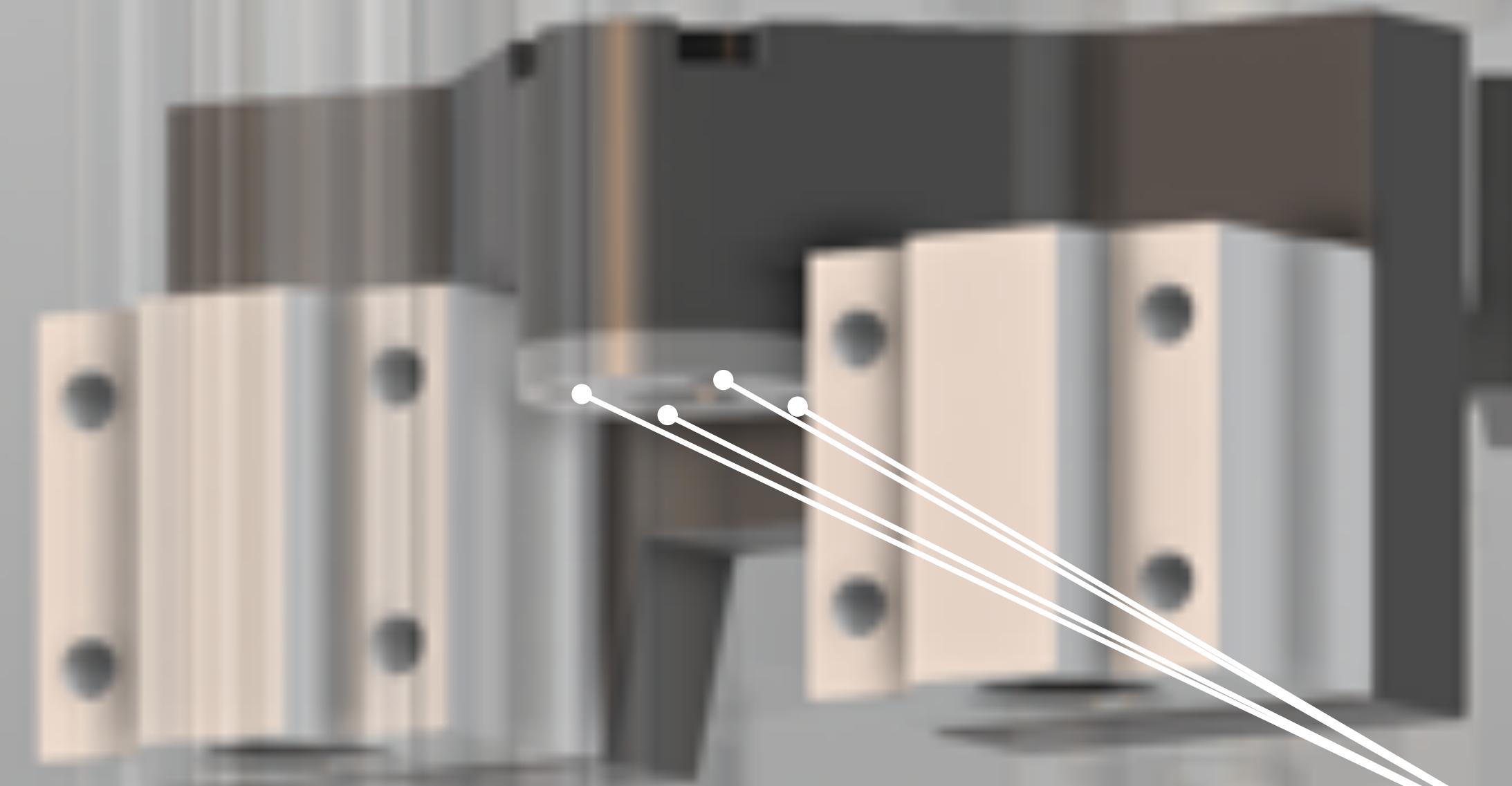
1 x Bearing



HI  
LO

## Group: Platform A

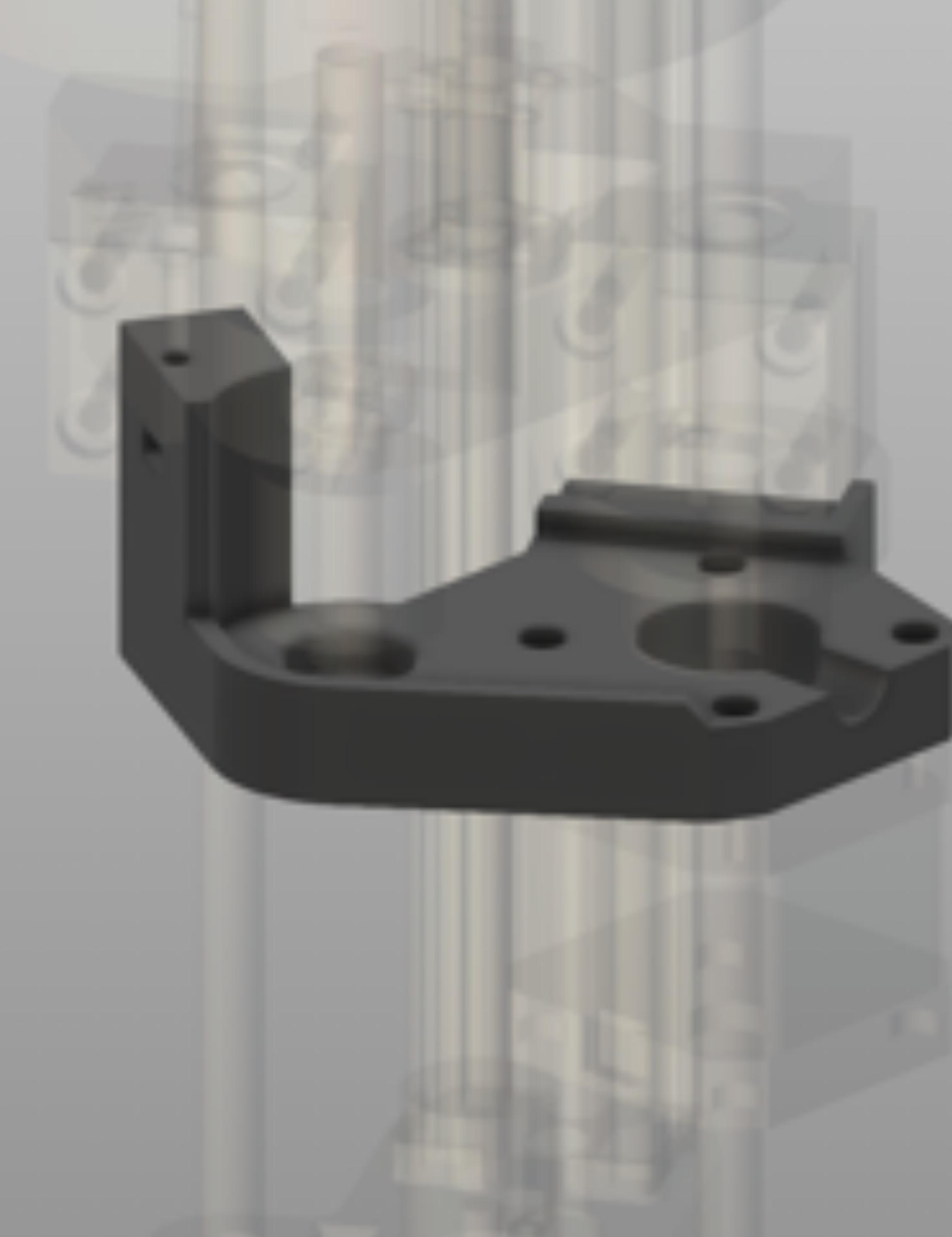
1 x Trapezoidal Screw Nut T8



4 x M3 x 30  
4 x M3 Nut

Group: Plattform B

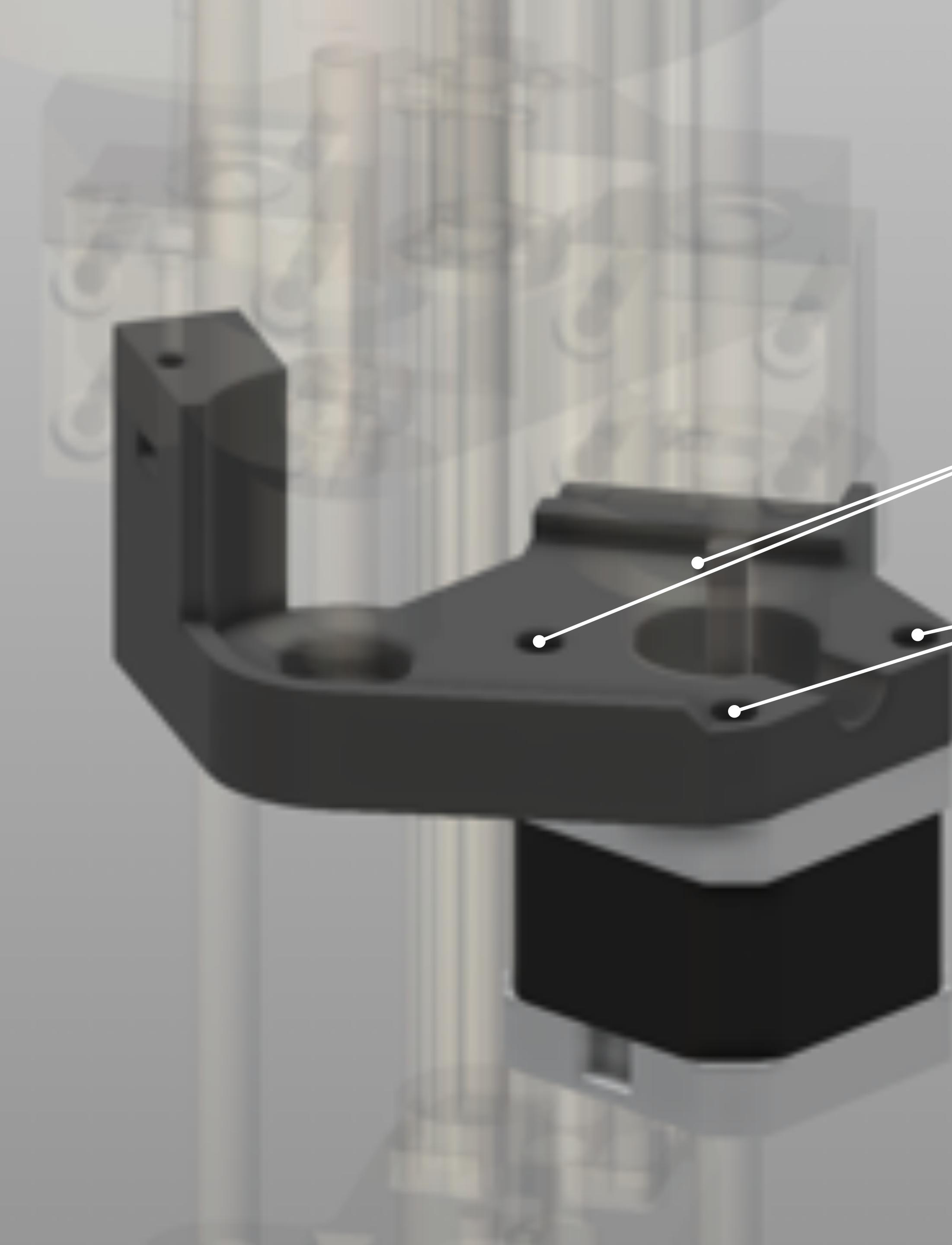
1 x 3D Printed Plattform B



HI  
LO

## Group: Plattform B

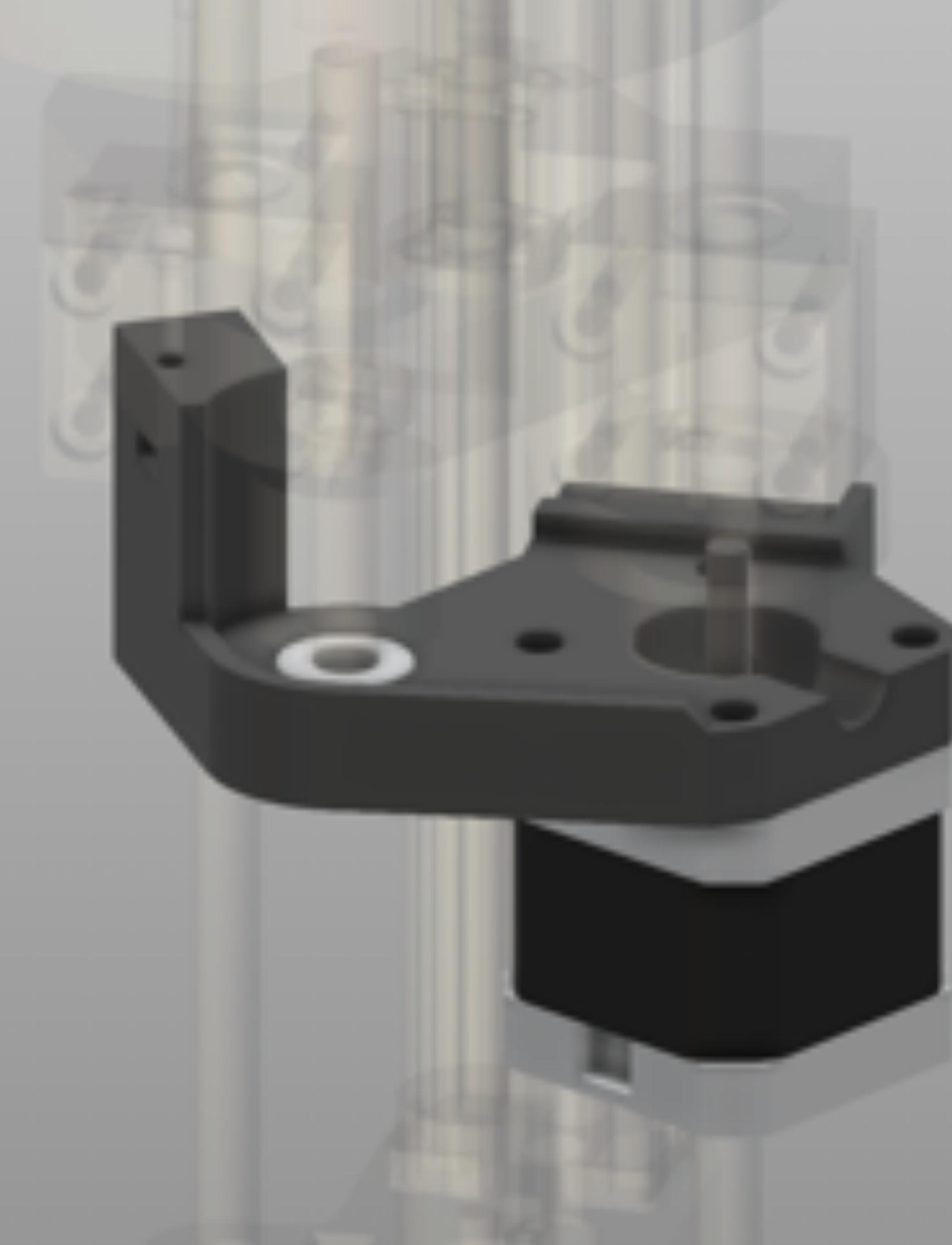
1 x Nema 17 Stepper Motor



HI  
LO

Group: Plattform B

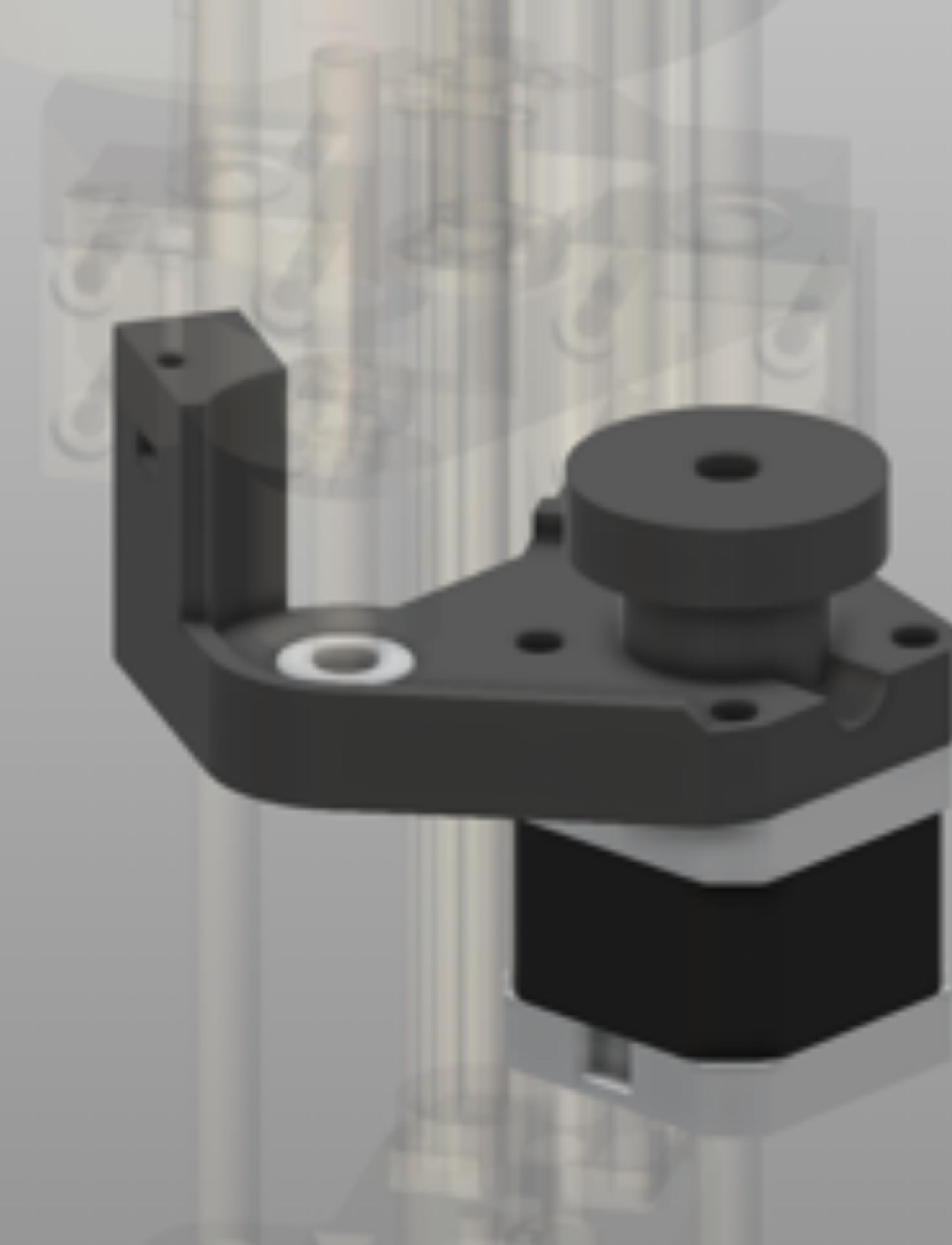
1 x Bearing



HI  
LO

Group: Platform B

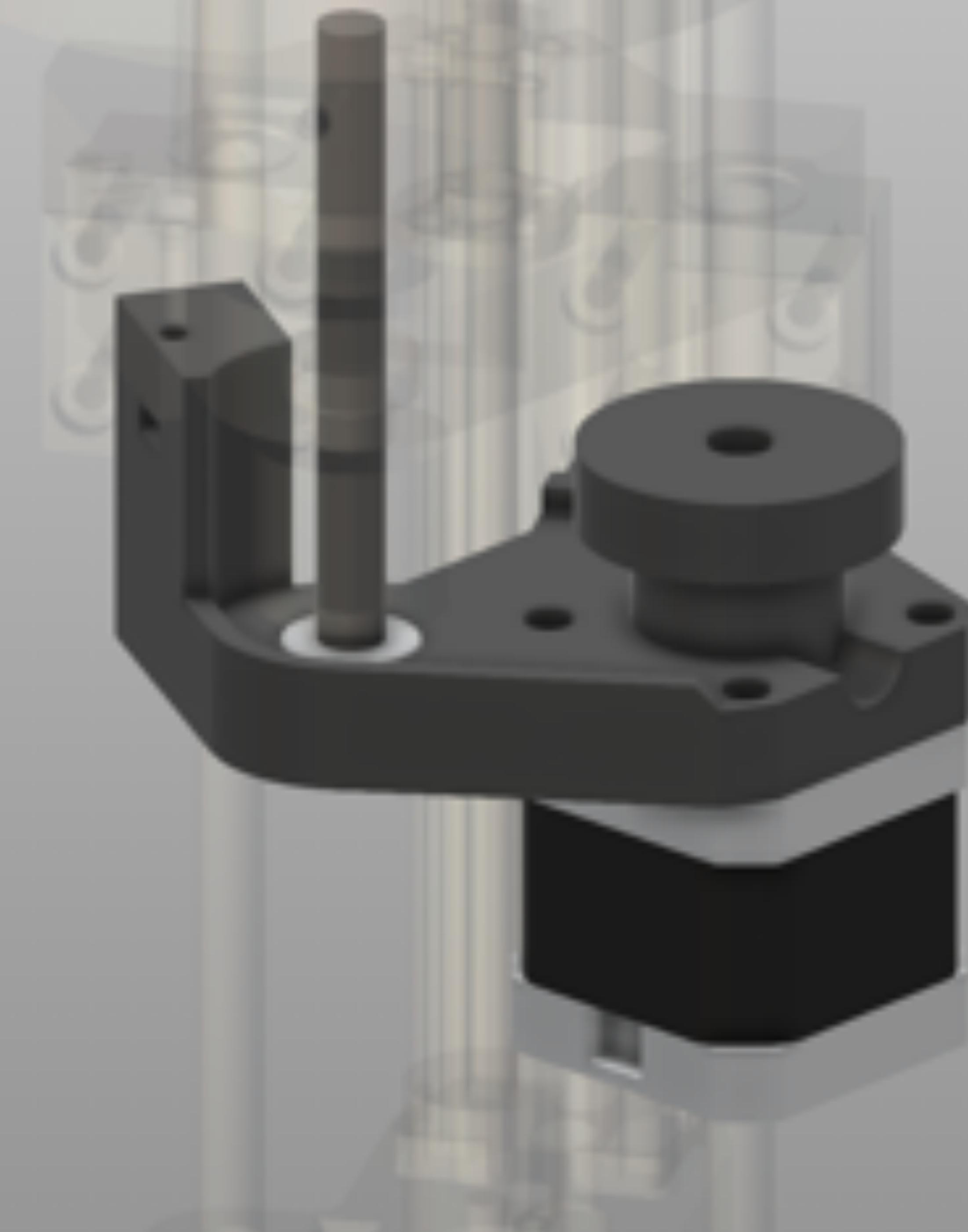
1 x GT2 pulley 40 Teeth



HI  
LO

## Group: Plattform B

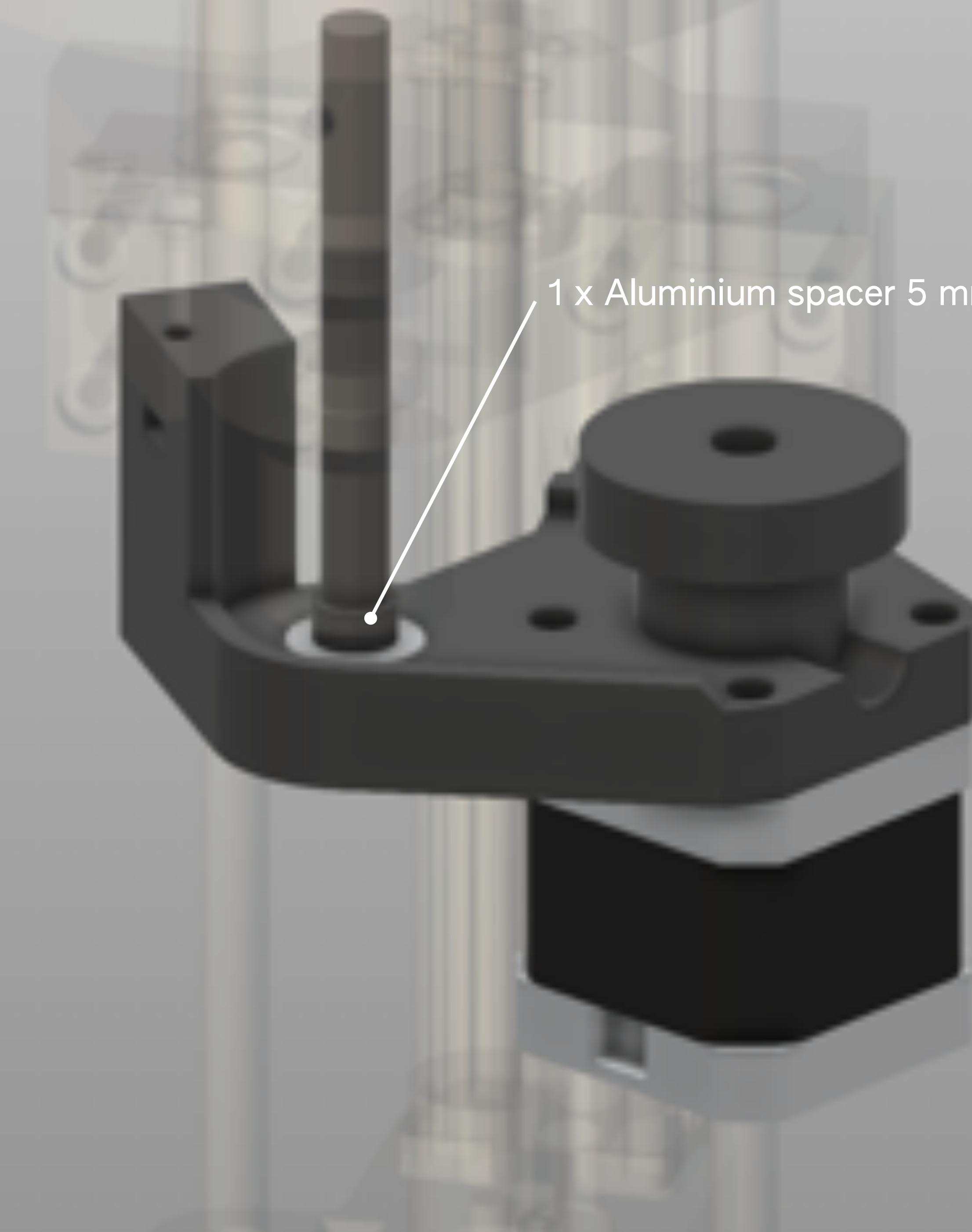
1 x Round metal bar  
D: 8 mm, L: 90 mm



Group: Plattform B

1 x Round metal bar  
D: 8 mm, L: 90 mm

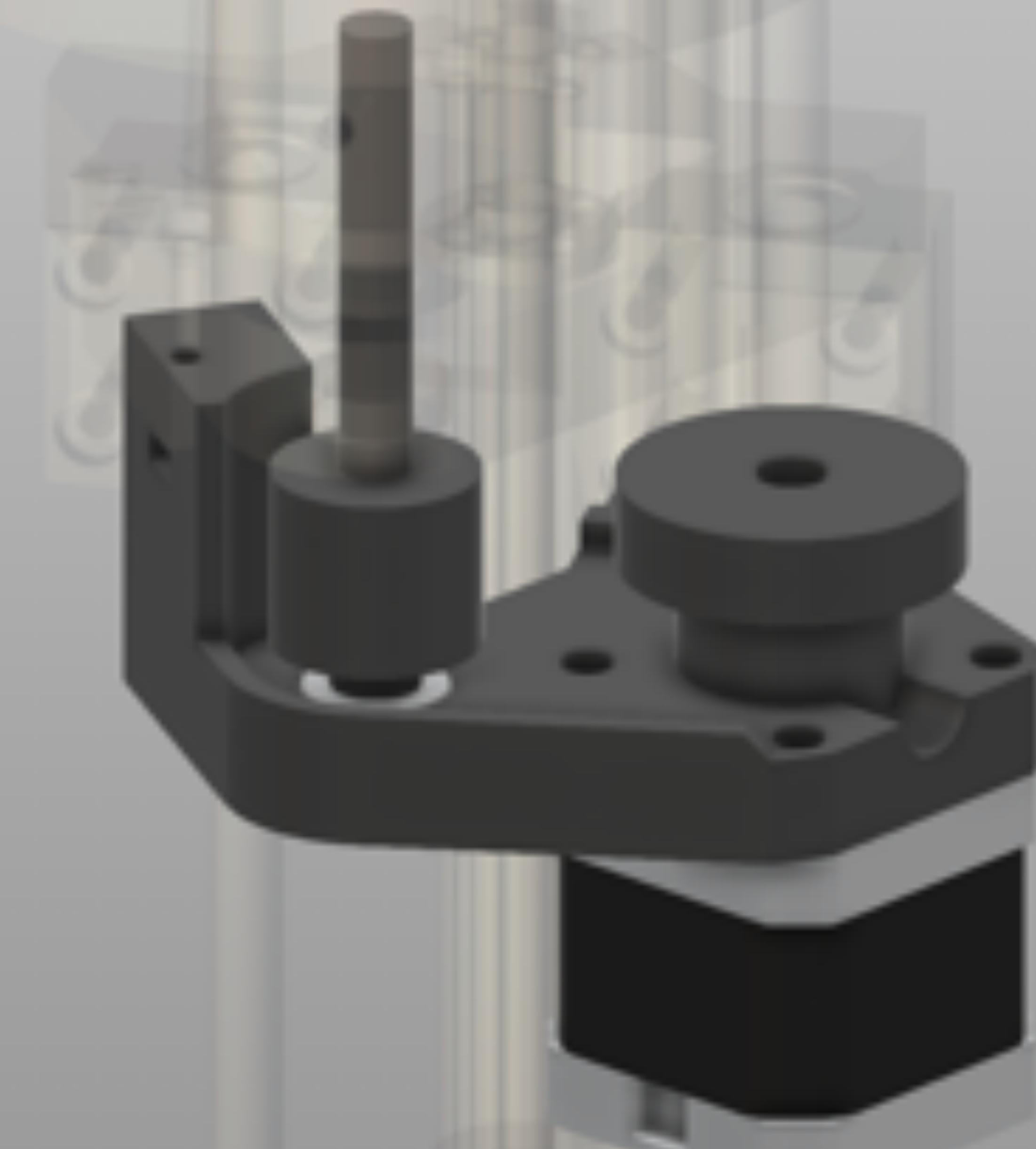
1 x Aluminium spacer 5 mm



HI  
LO

Group: Platform B

1 x GT2 pulley 20 Teeth

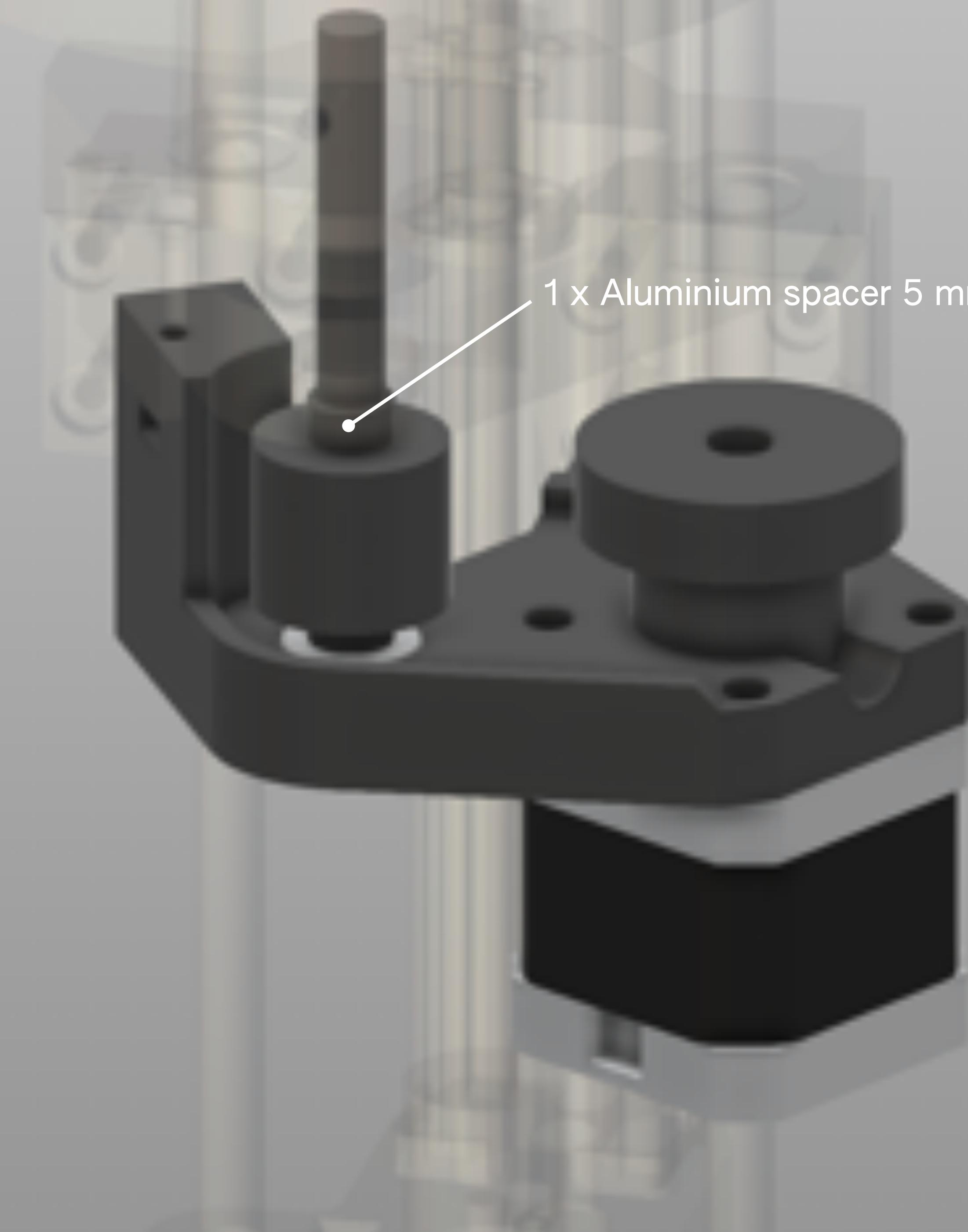


HI  
LO

Group: Plattform B

1 x GT2 pulley 20 Teeth

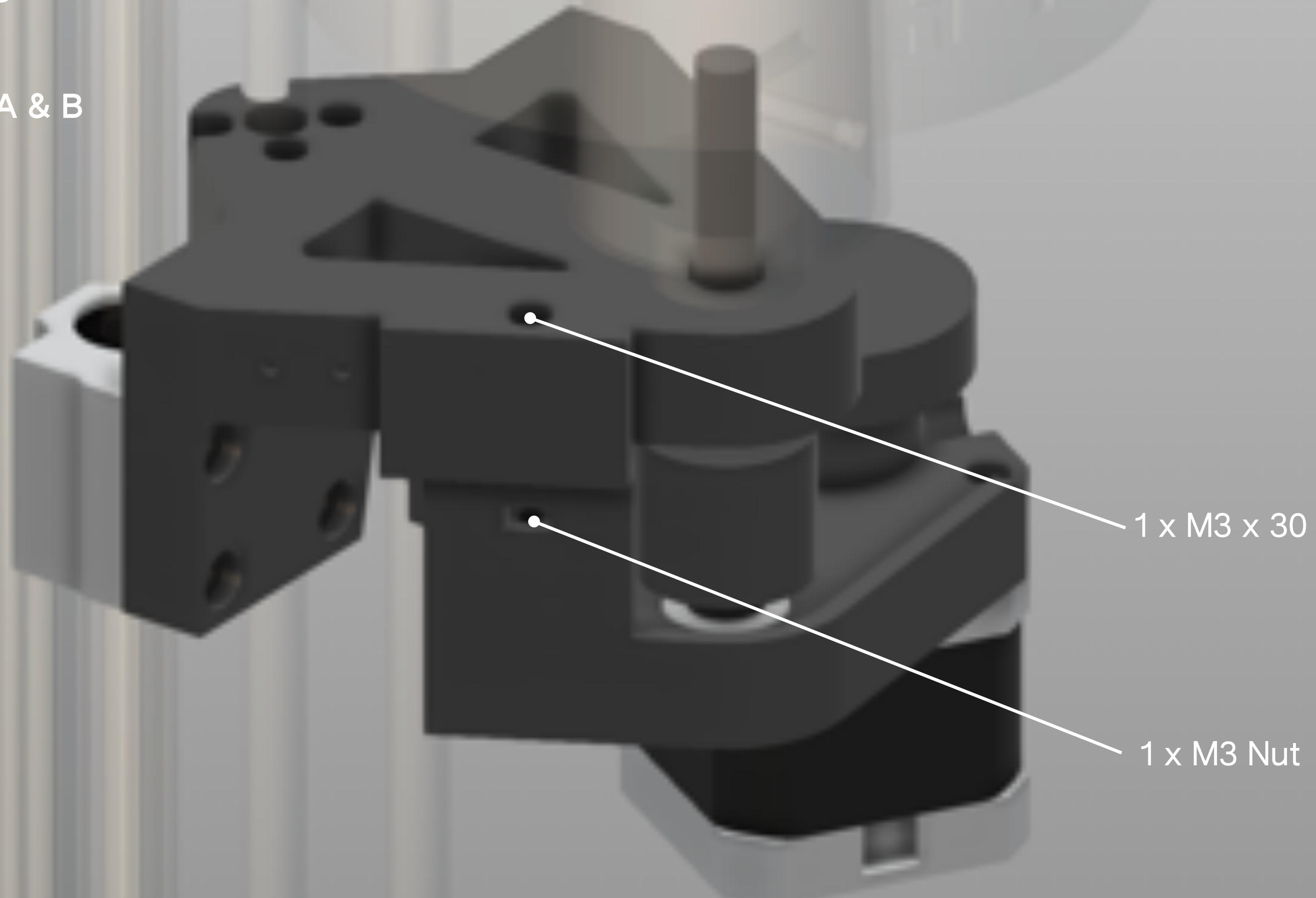
1 x Aluminium spacer 5 mm



HI  
LO

Group: Platform A+B

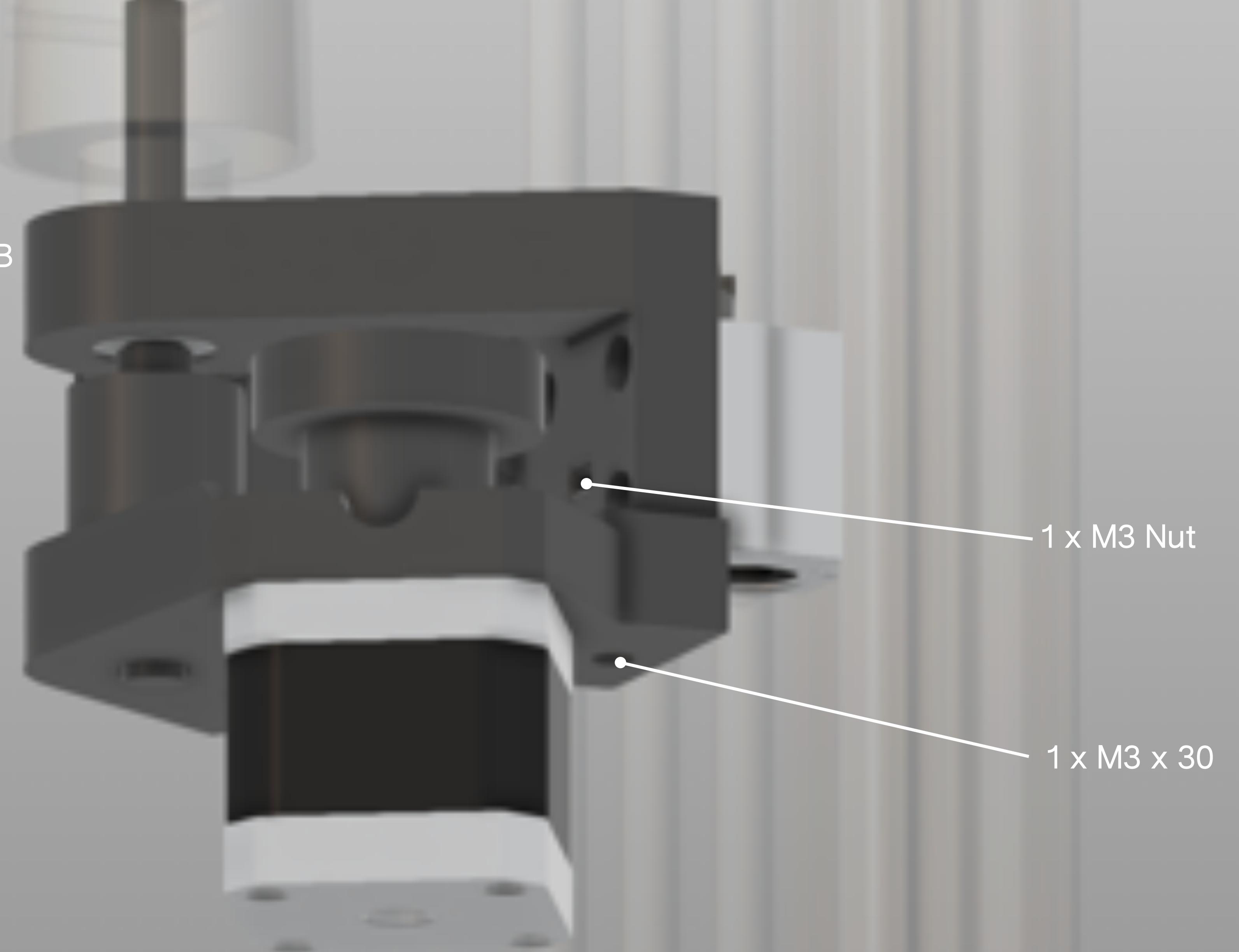
Connection of Platform A & B



HI  
LO

Group: Platform A+B

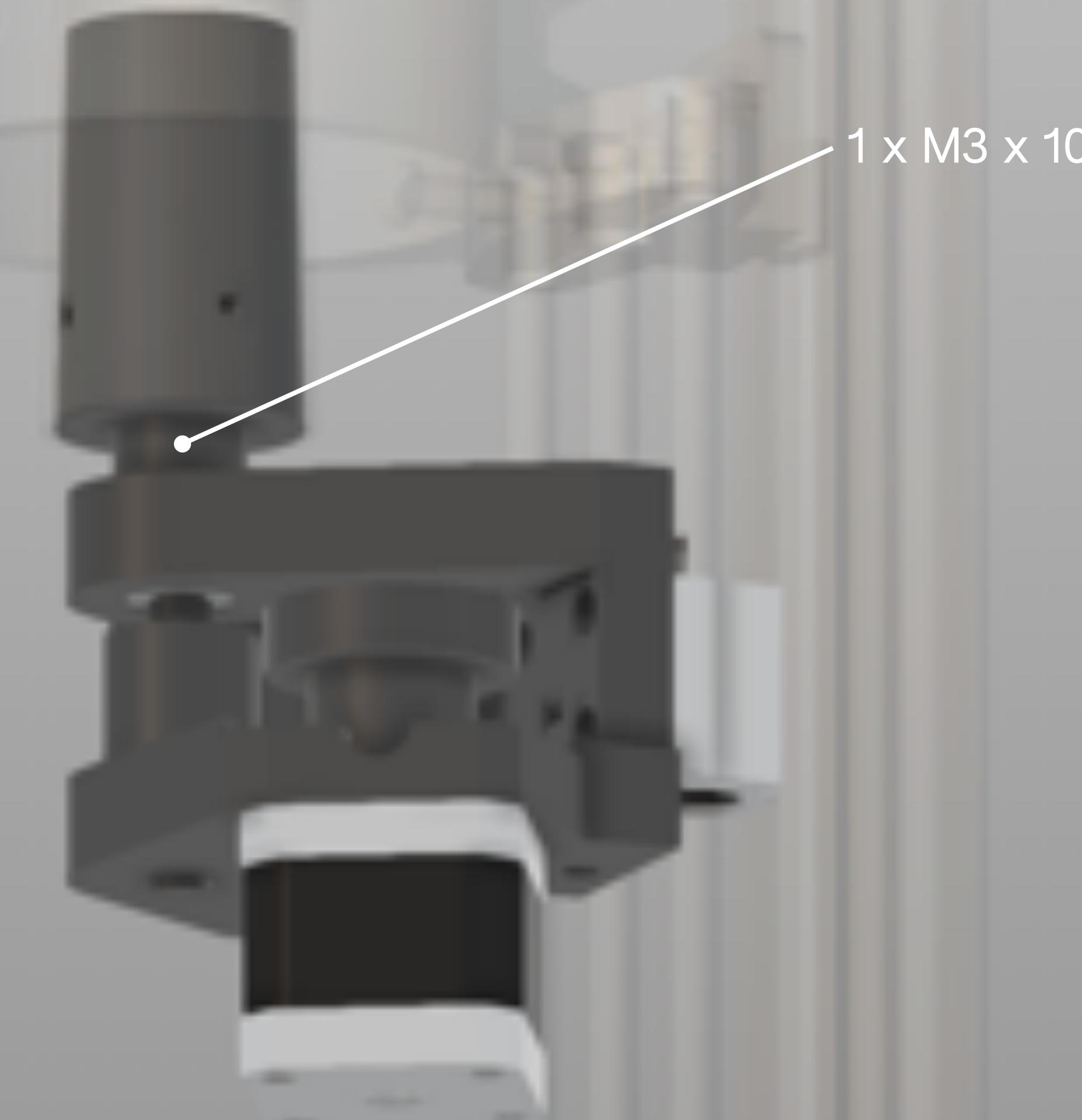
Connection of Platform A & B



HI  
LO

## Group: Plattform A+B

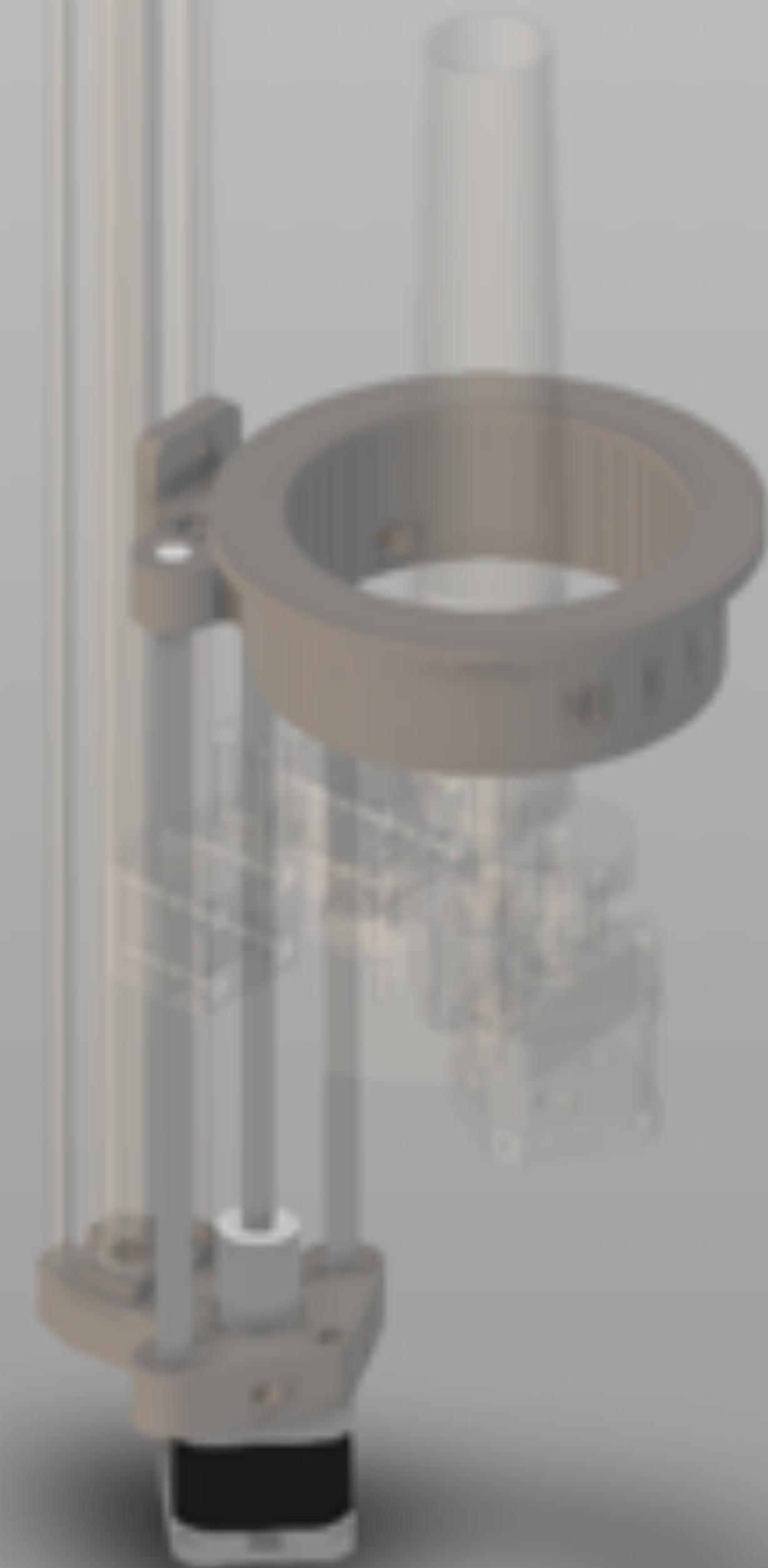
1 x 3D Printed Spindle holder



1 x M3 x 10

HI  
LO

Group: Elevator



## Group: Elevator

### Components

1 x 3D Spinning Ring

1 x 3D Elevator Lower Part

1 x Nema 17 Stepper Motor

1 x Motor Coupling

2 x Guide Rod

1 x Spindel

1 x Bearing

1 x Cylindrical screw M8x20

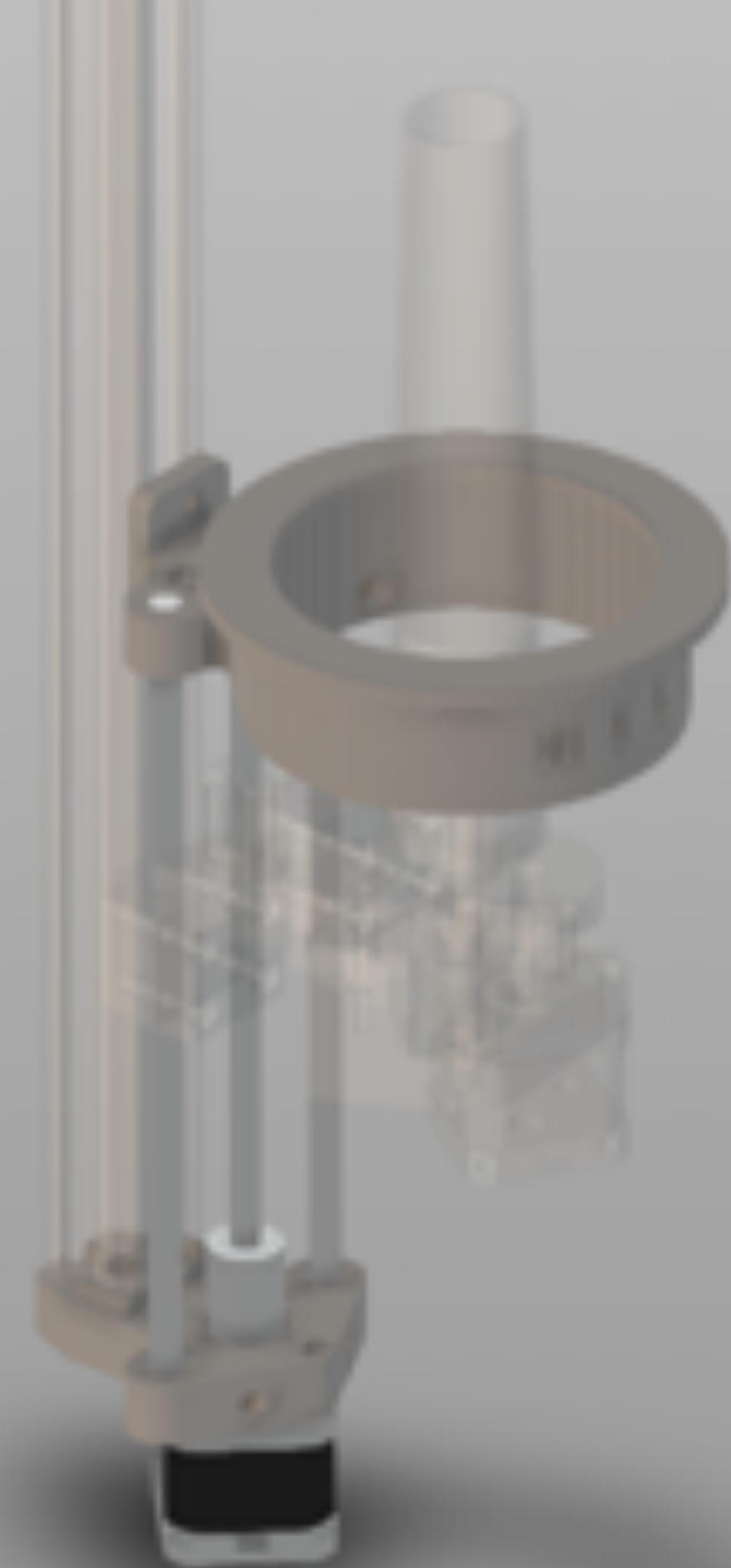
1 x T-Nut Hammer Head Nut M4

1 x M4 x 14

4 x M3 x 30

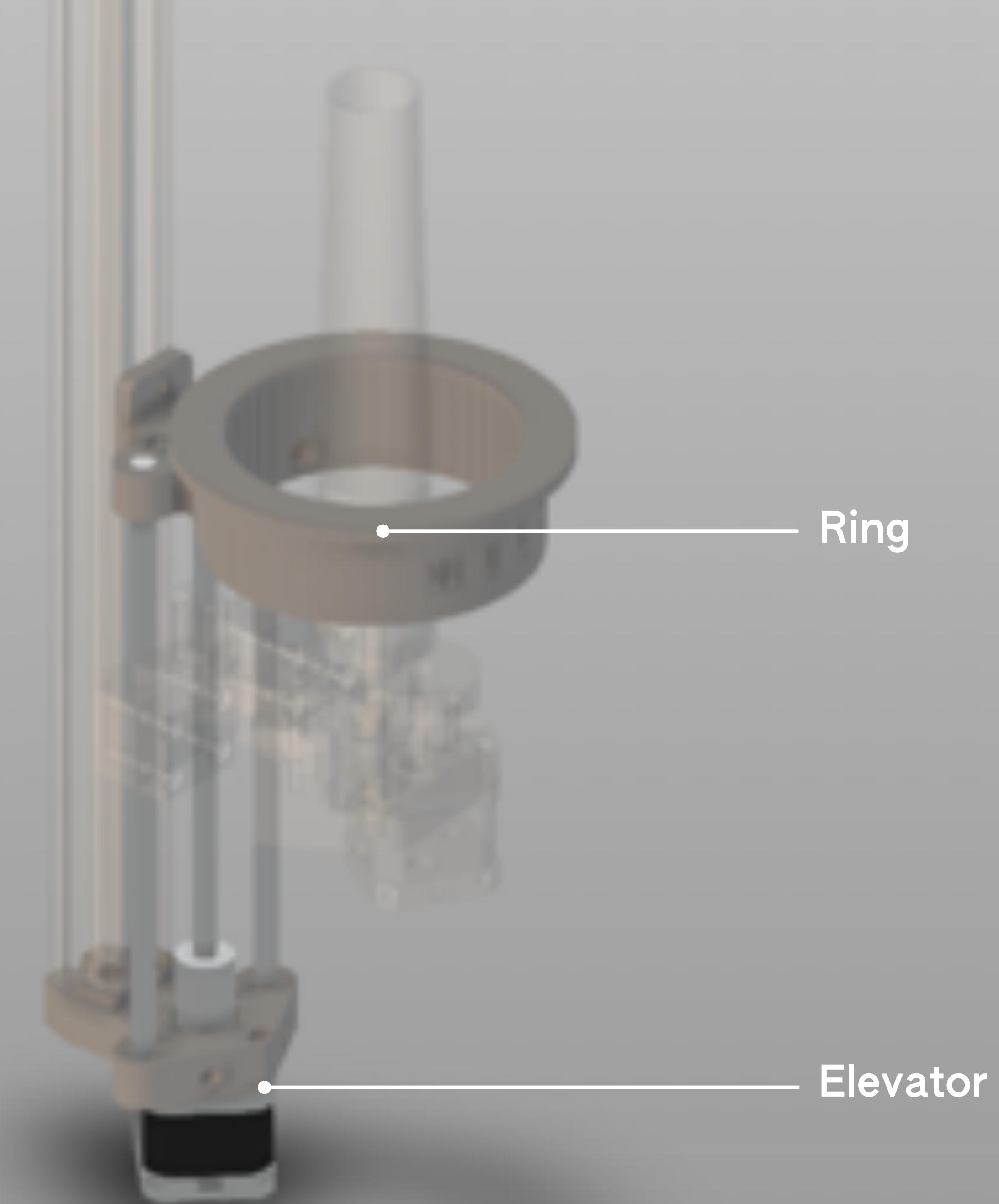
4 x M3 Nut

2 x M3 x 12



HI  
LO

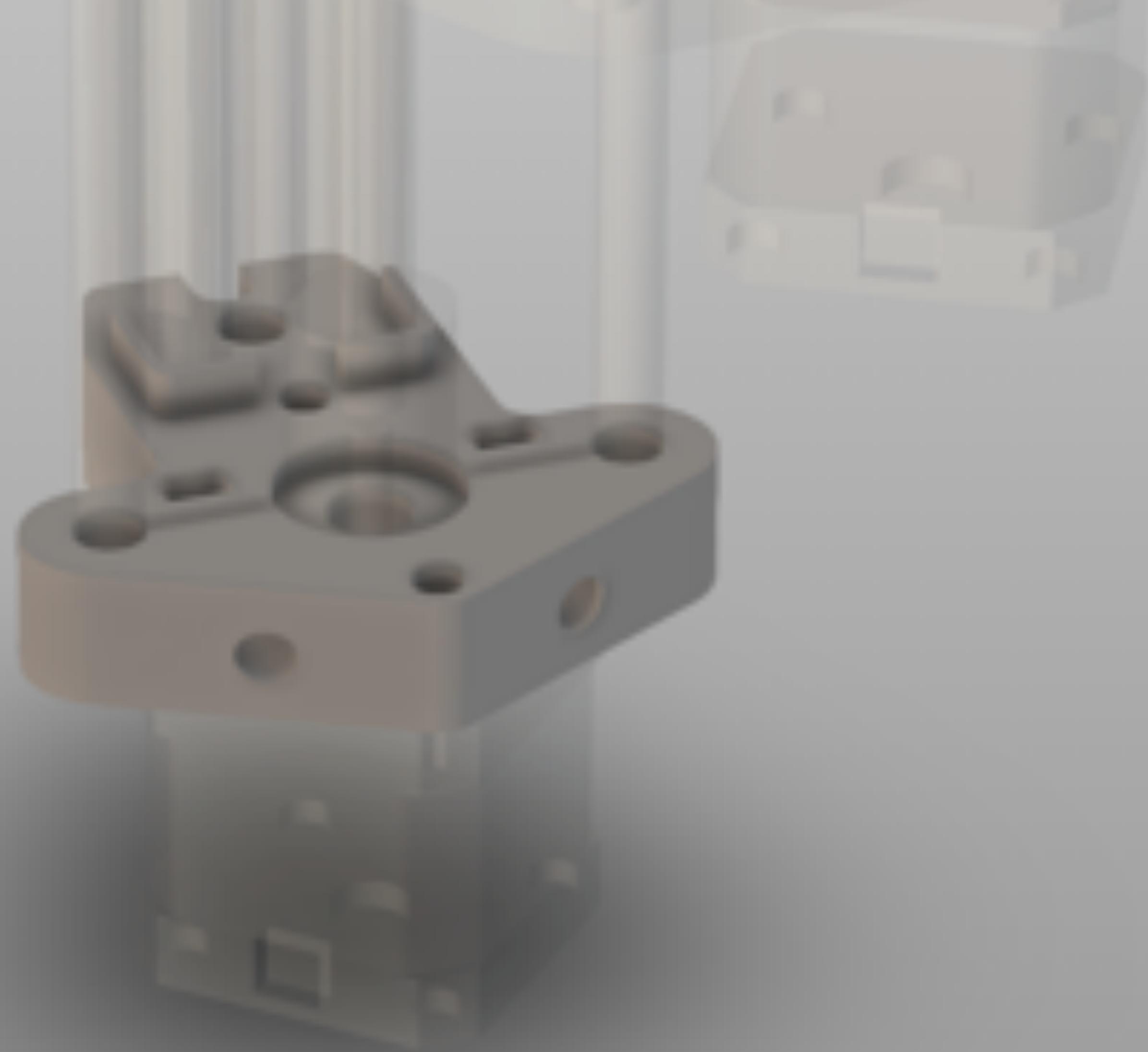
Group: Elevator



HI  
LO

Group: Elevator

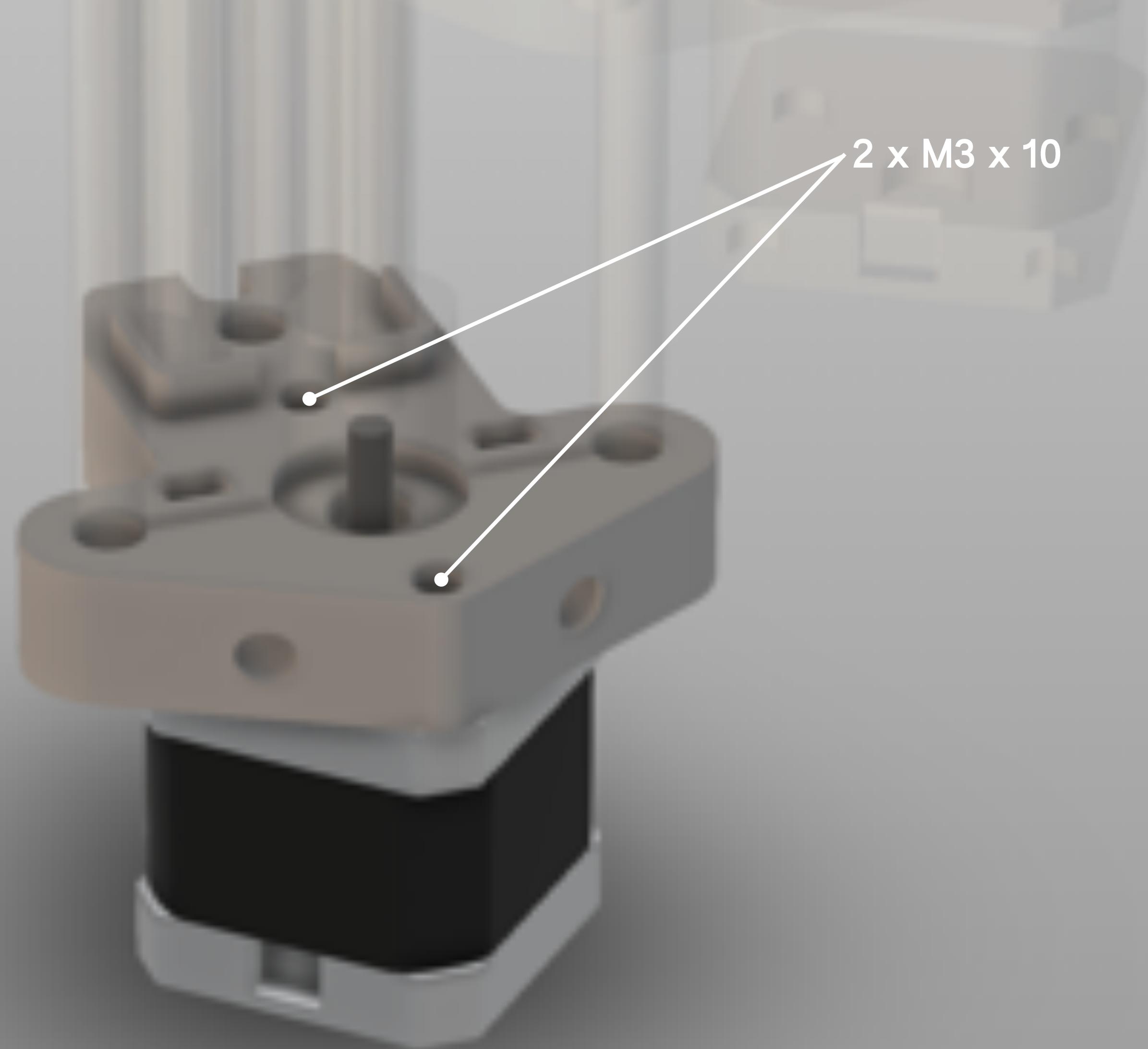
1 x 3D Elevator Lower Part



HI  
LO

## Group: Elevator

1 x 3D Elevator Lower Part  
1 x Nema 17 Stepper Motor

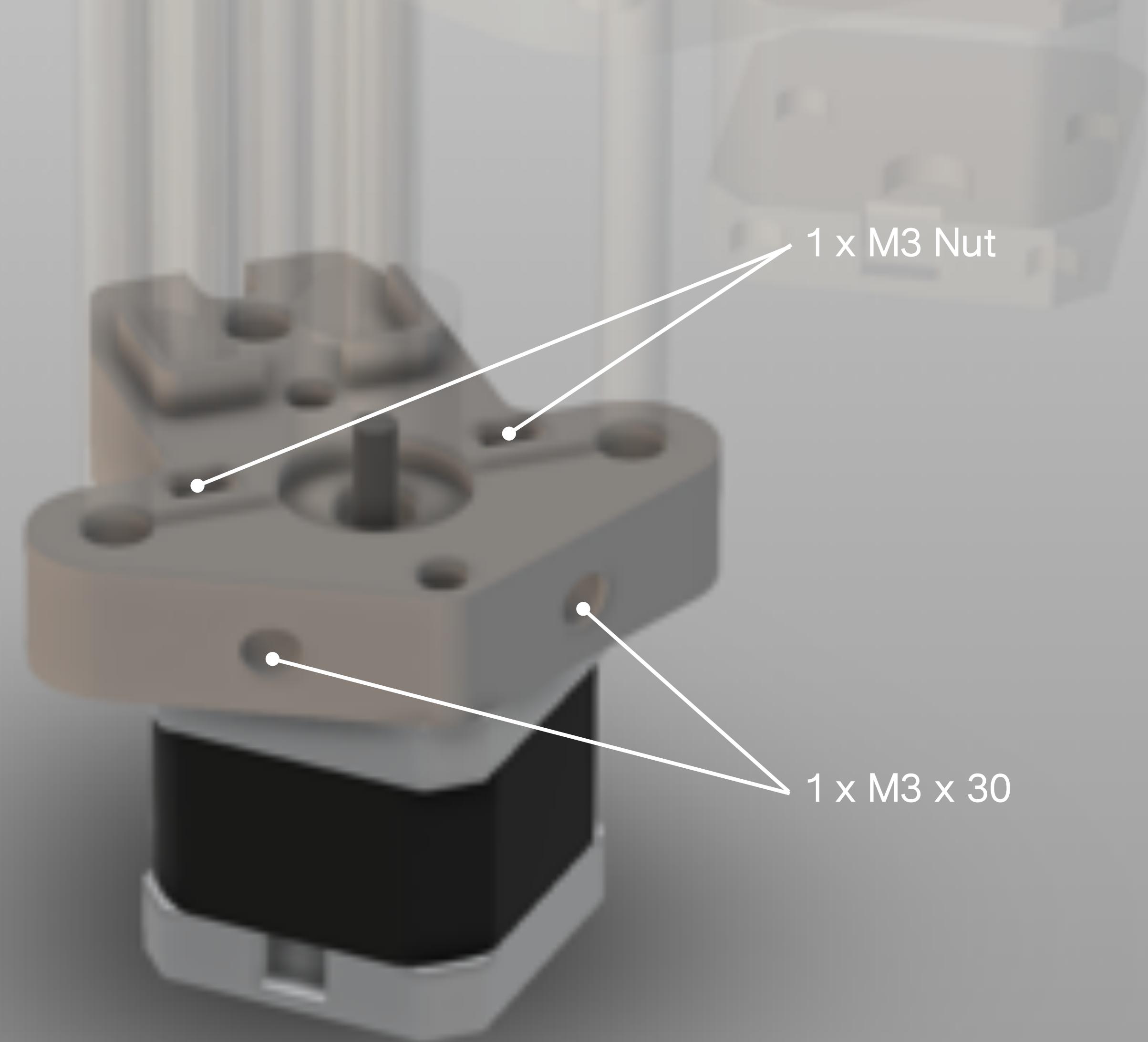


2 x M3 x 10

HI  
LO

## Group: Elevator

1 x 3D Elevator Lower Part  
1 x Nema 17 Stepper Motor



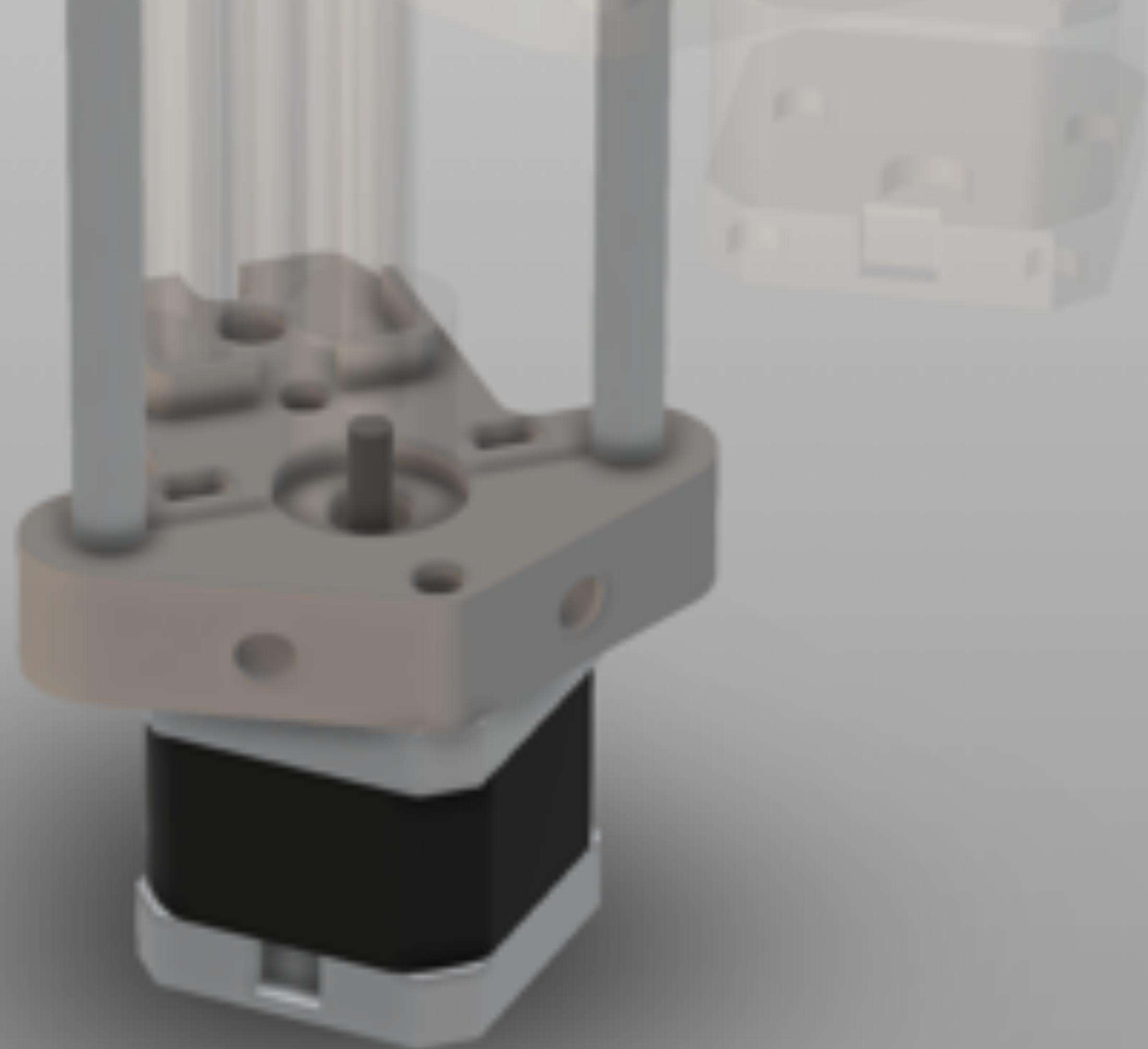
1 x M3 Nut

1 x M3 x 30

HI  
LO

Group: Elevator

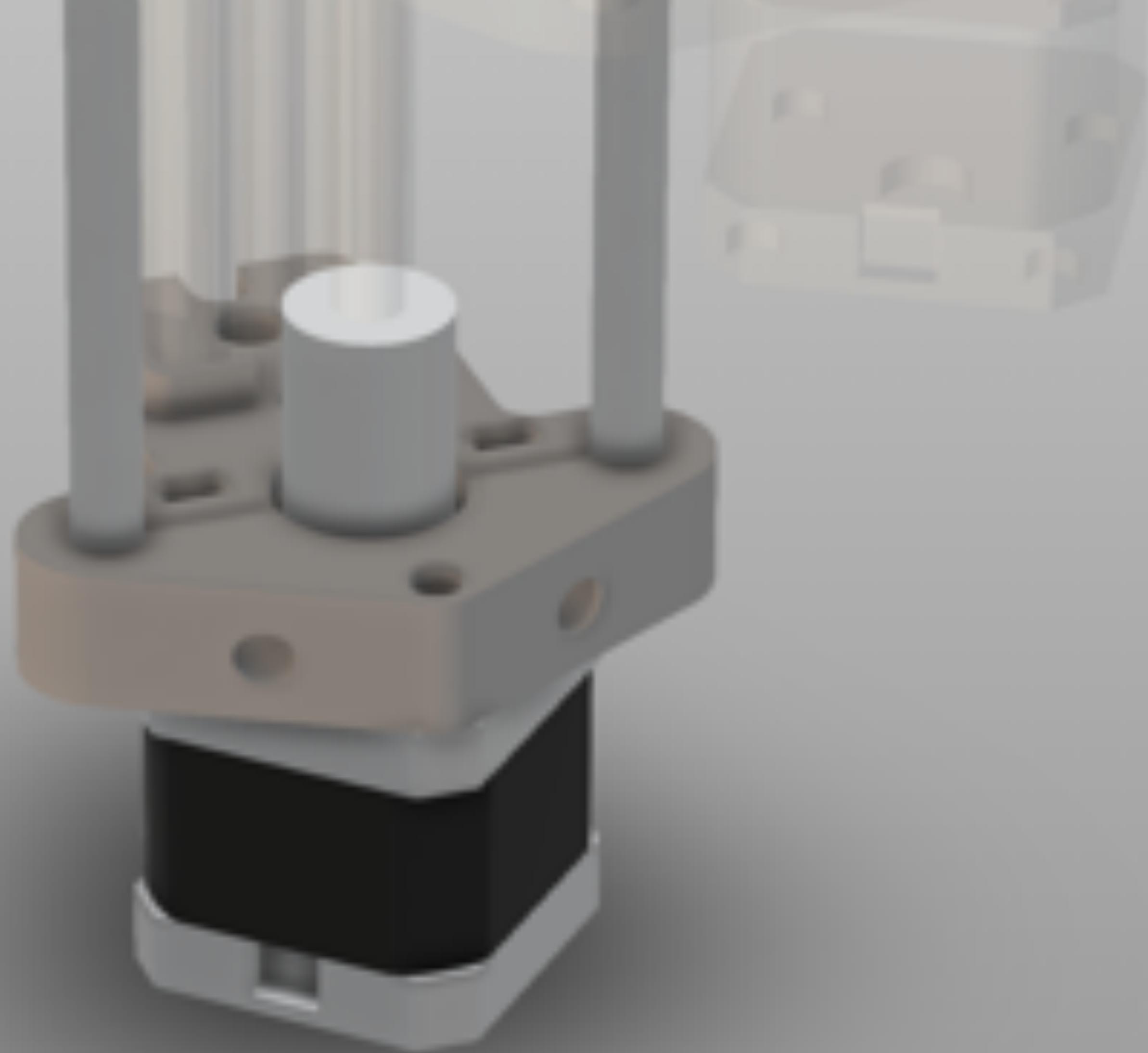
2 x Guide Rod



HI  
LO

Group: Elevator

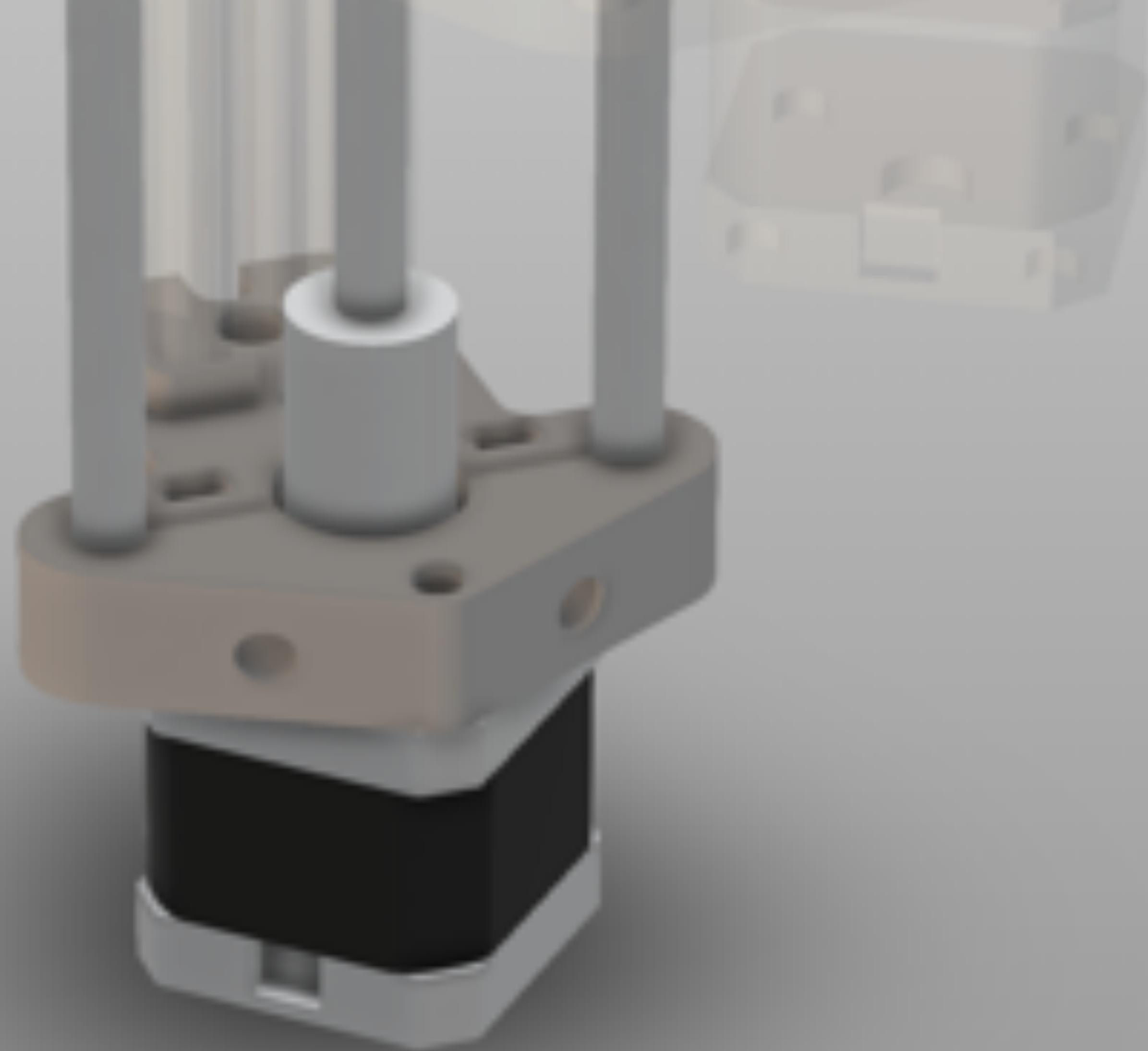
1 x Motor Coupling



HI  
LO

Group: Elevator

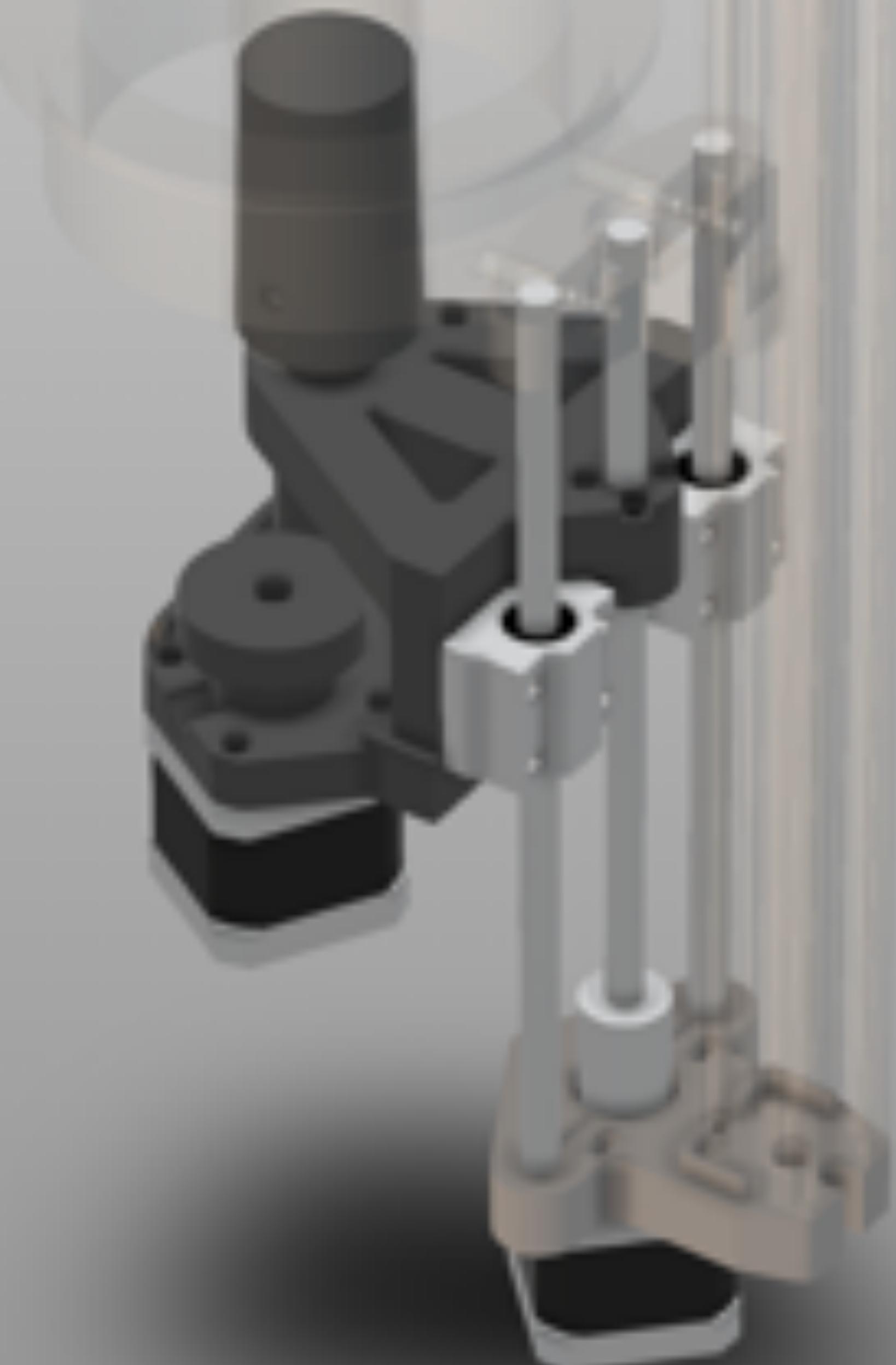
1 x Spindel



HI  
LO

Group: Elevator

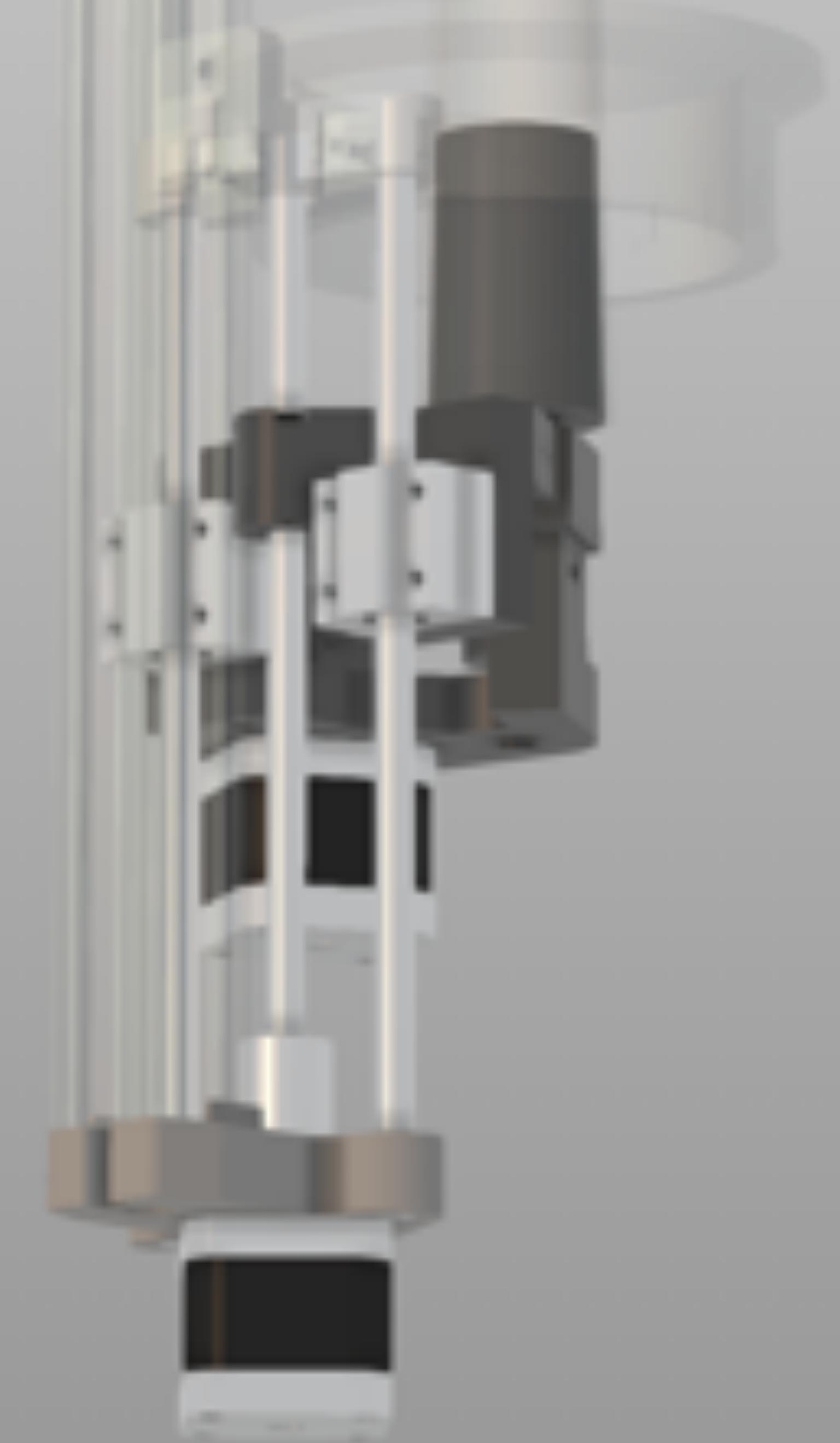
1 x Spindel Plattform



HI  
LO

Group: Elevator

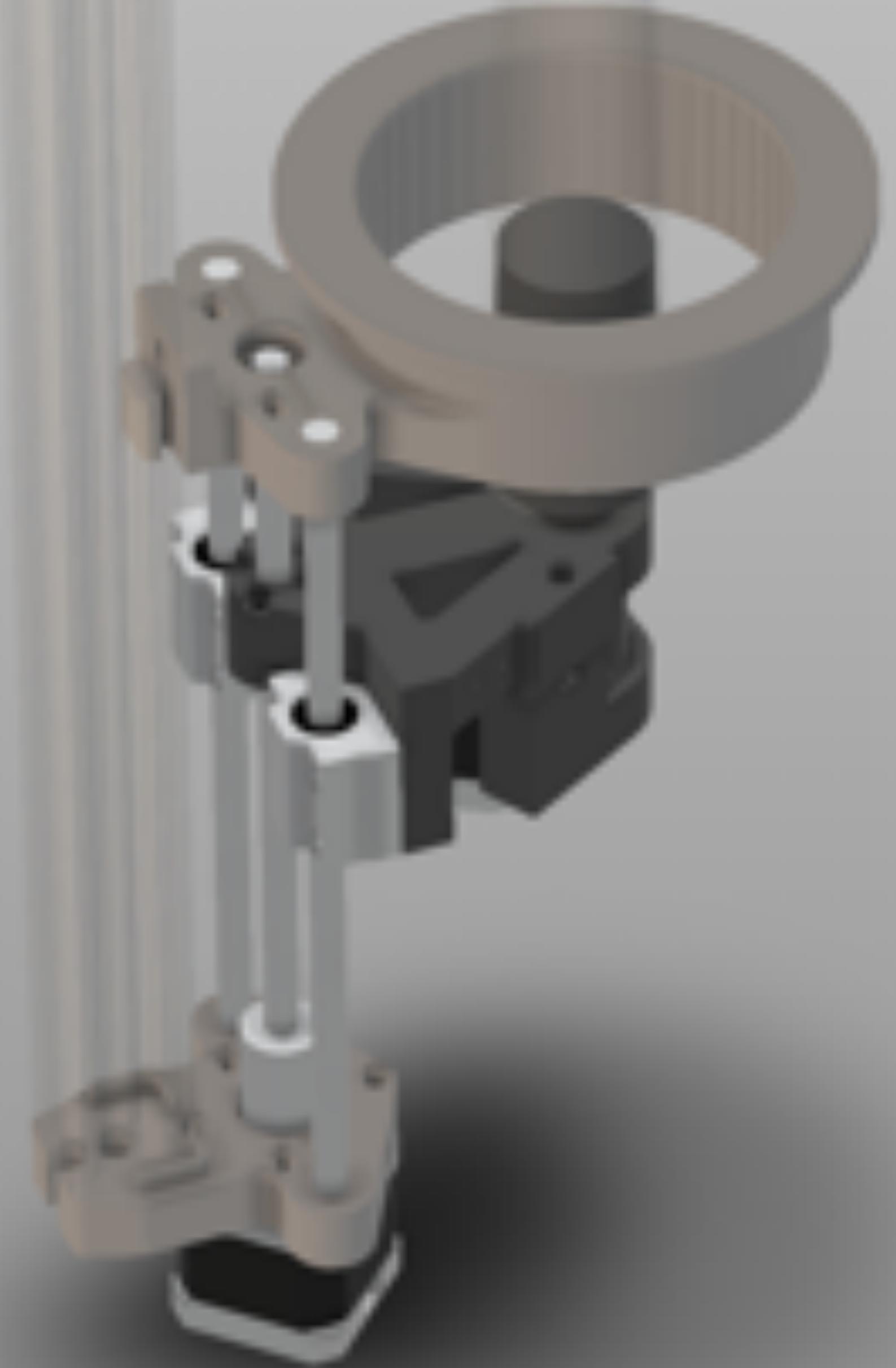
1 x Spindel Plattform



HI  
LO

Group: Elevator

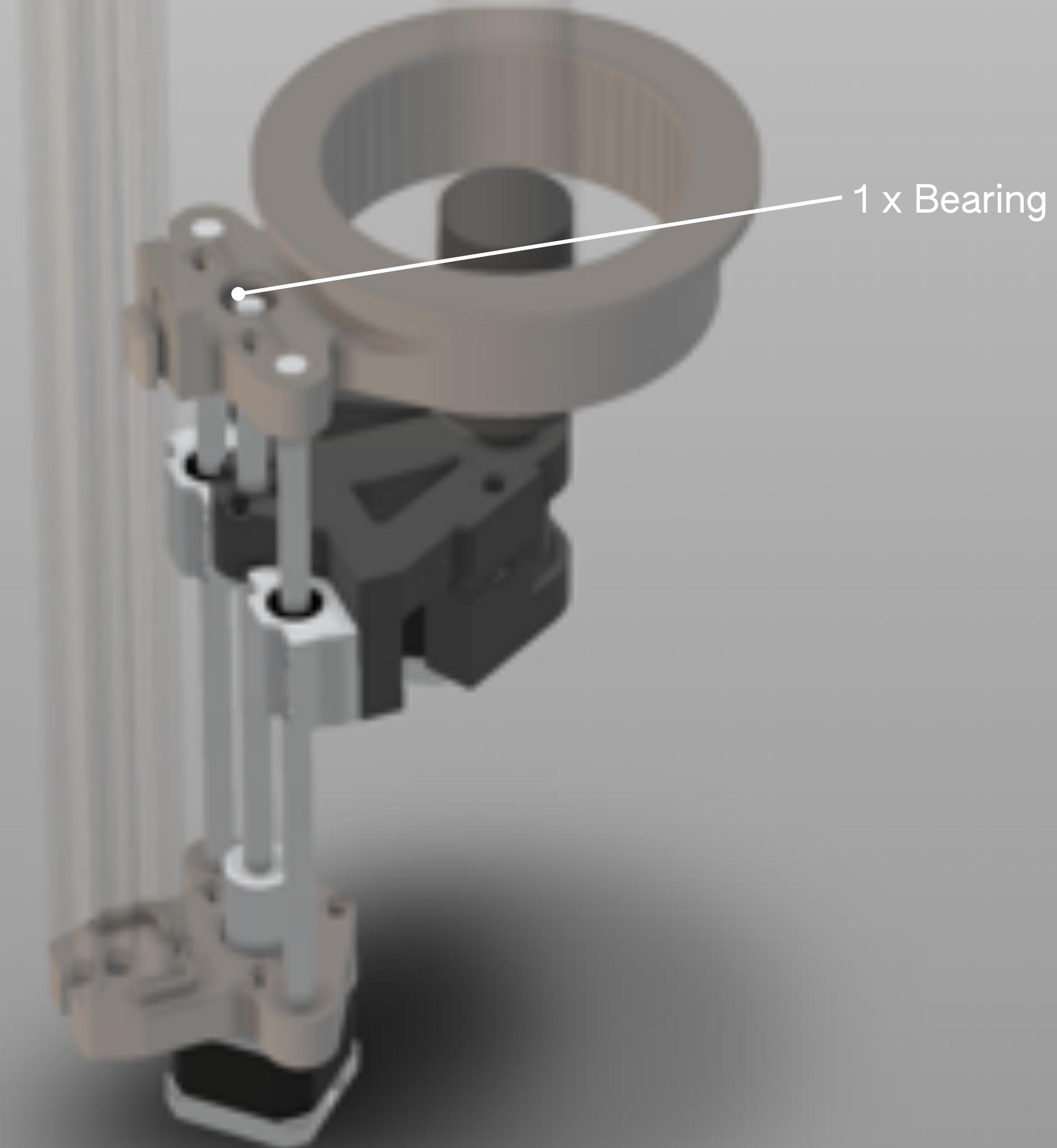
1 x 3D Spinning Ring



HI  
LO

## Group: Elevator

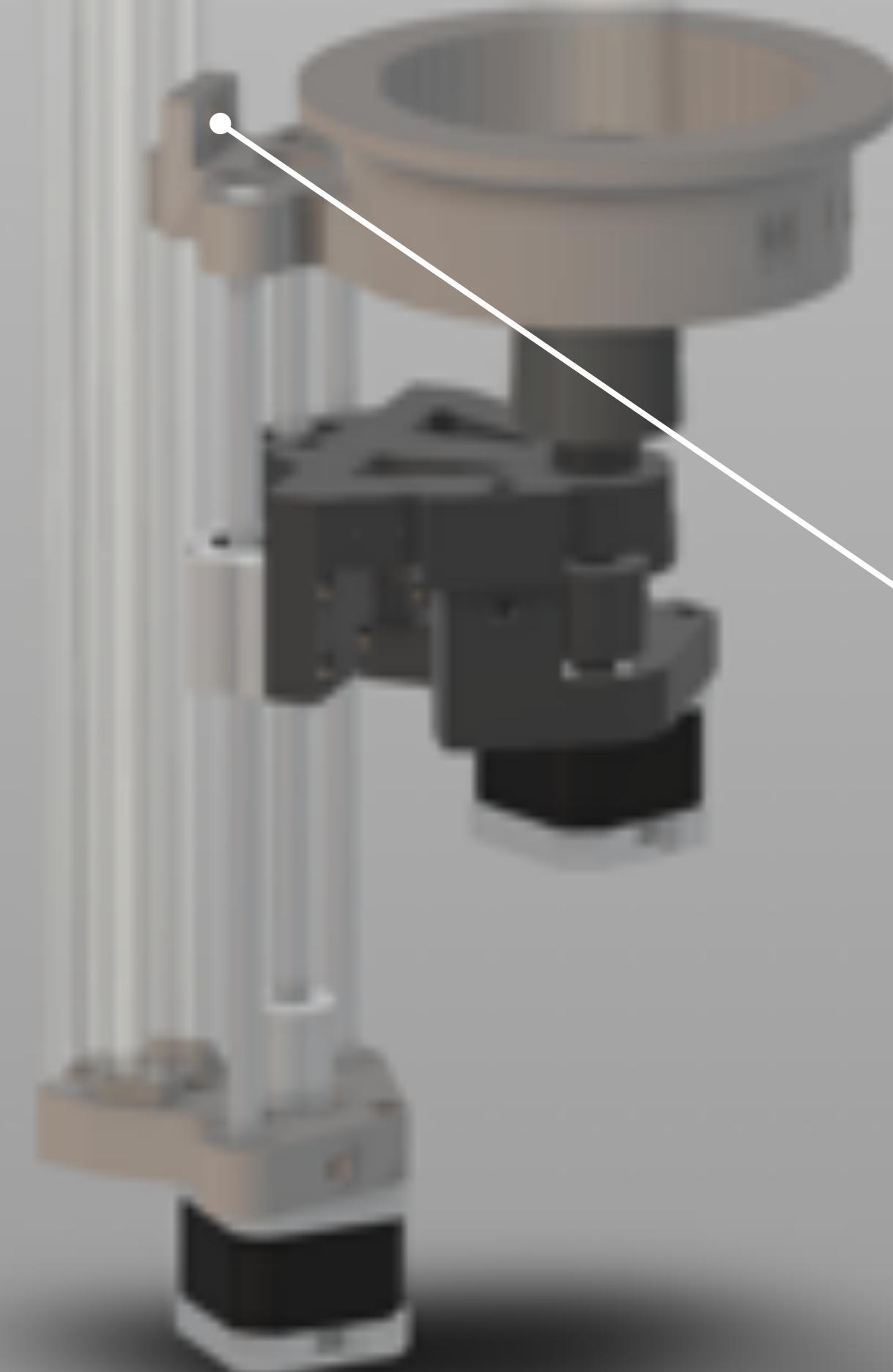
1 x 3D Spinning Ring



HI  
LO

## Group: Elevator

1 x 3D Spinning Ring

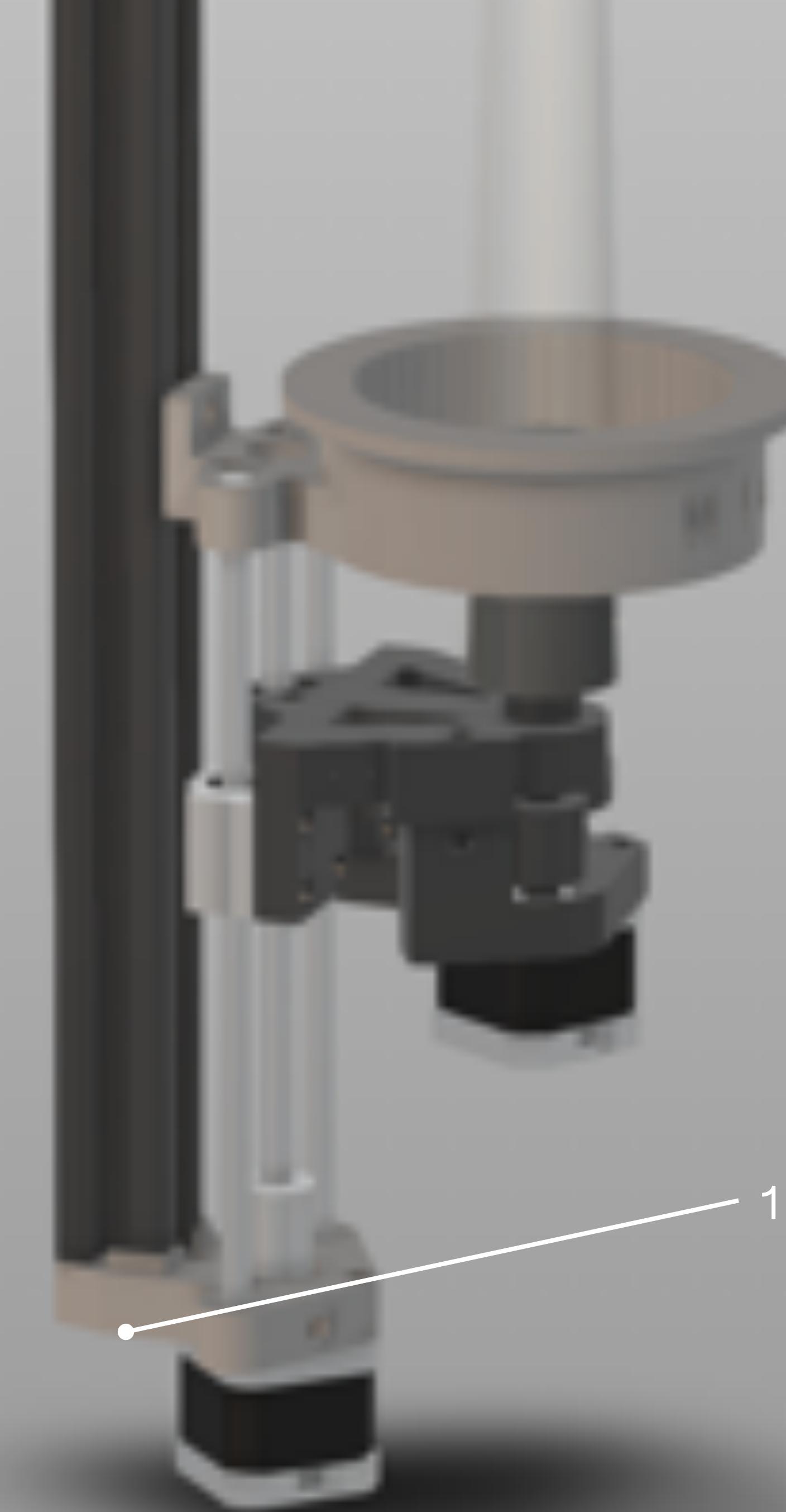


1 x T-Nut Hammer Head Nut M4  
1 x M4 x 14

HI  
LO

## Group: Elevator

1 x 3D Spinning Ring

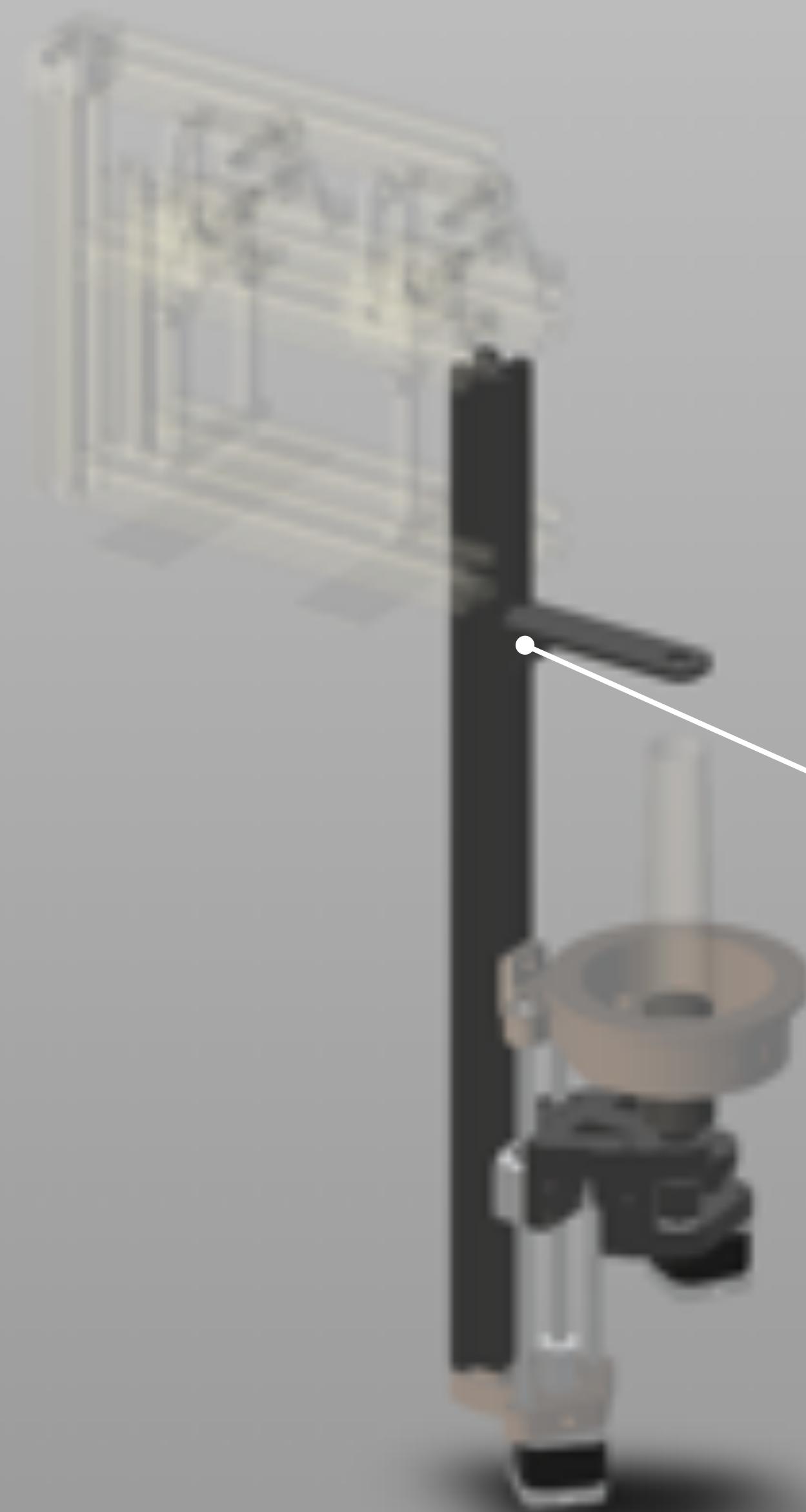


1 x Cylindrical screw M8x20

HI  
LO

## Final Assembly

1 x 3D Yarn Outlet



1 x T-Nut Hammer Head Nut M4  
1 x M4 x 14

HI  
LO

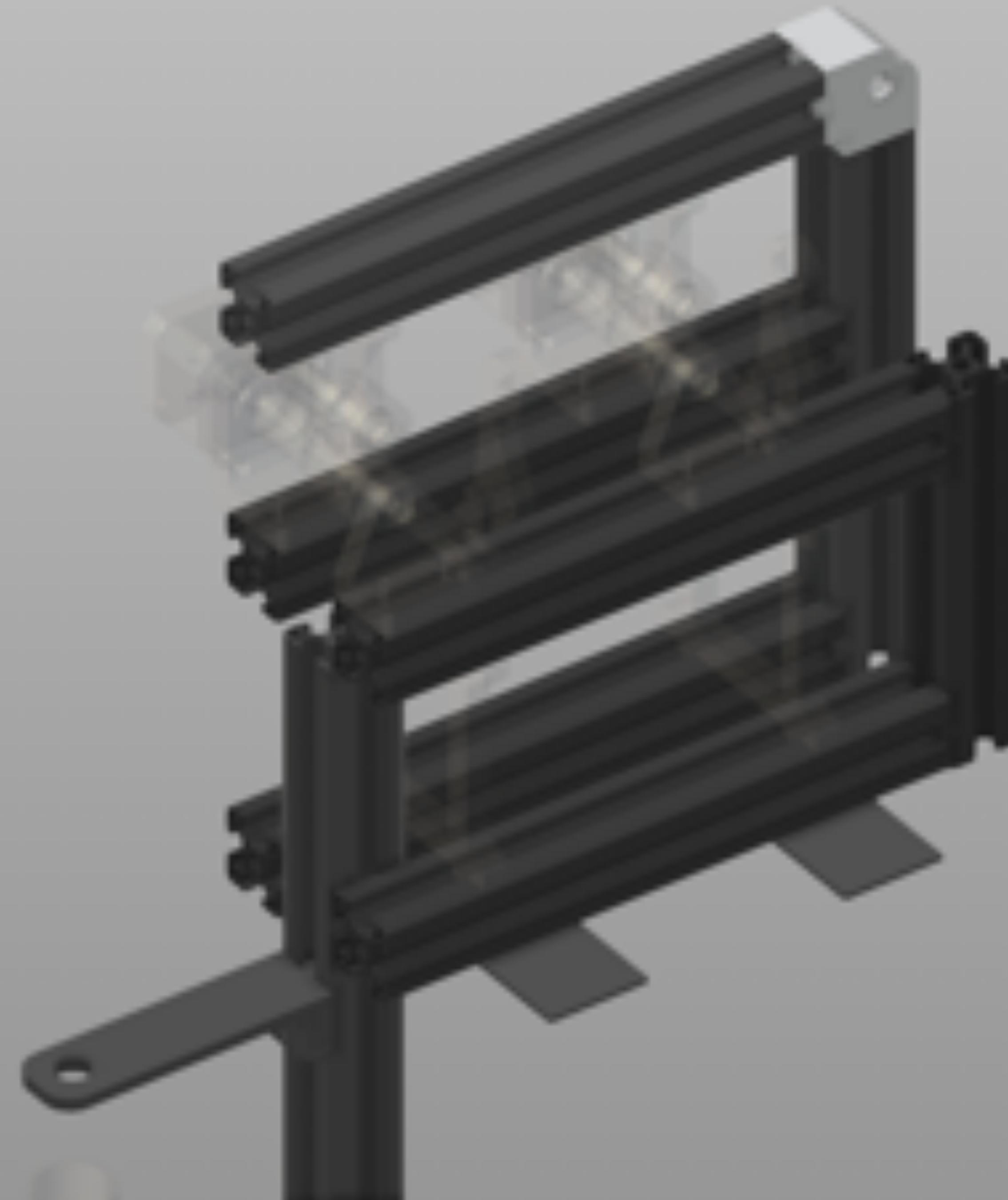
# Final Assembly

Group: Structure



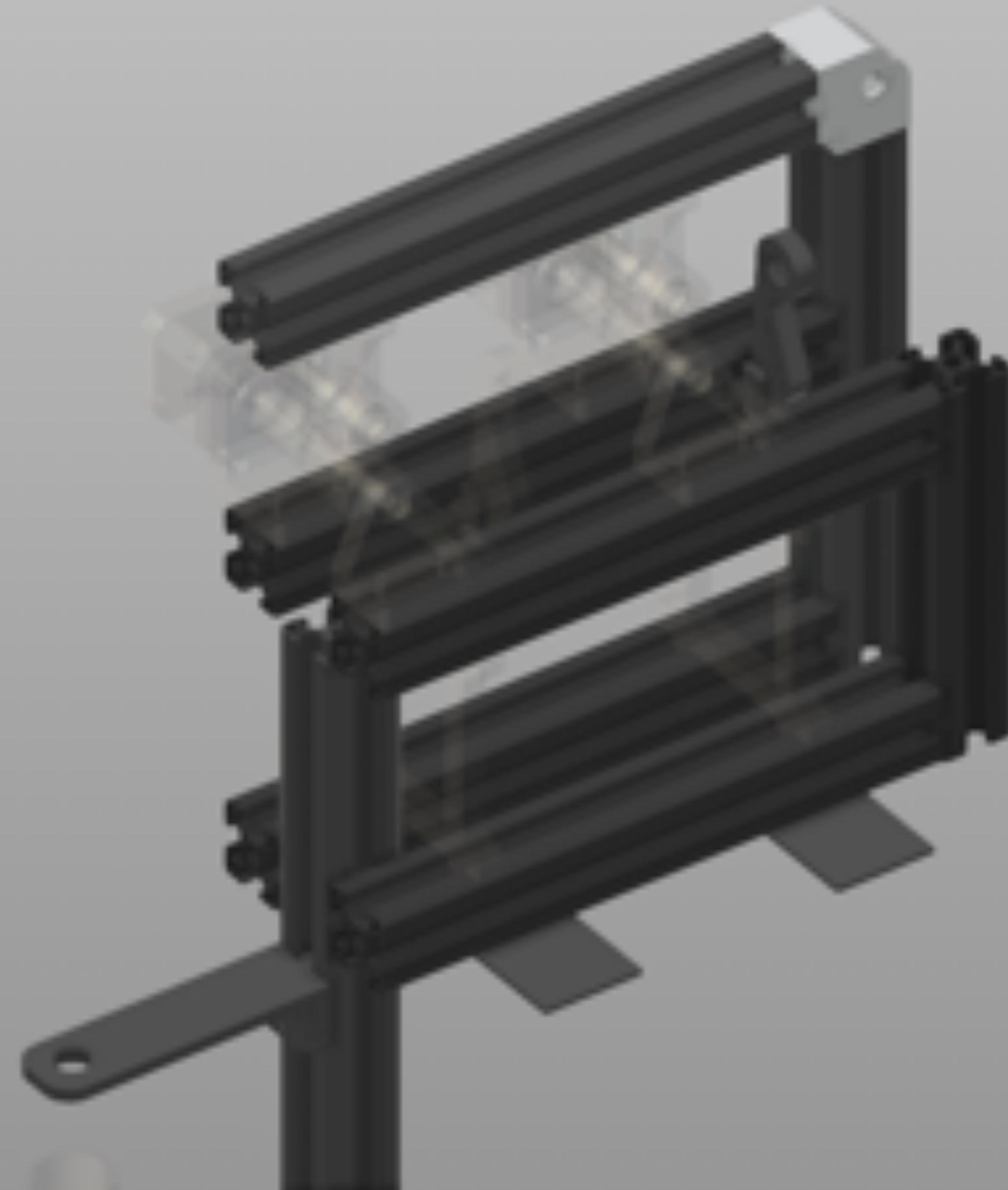
# Final Assembly

Group: Structure



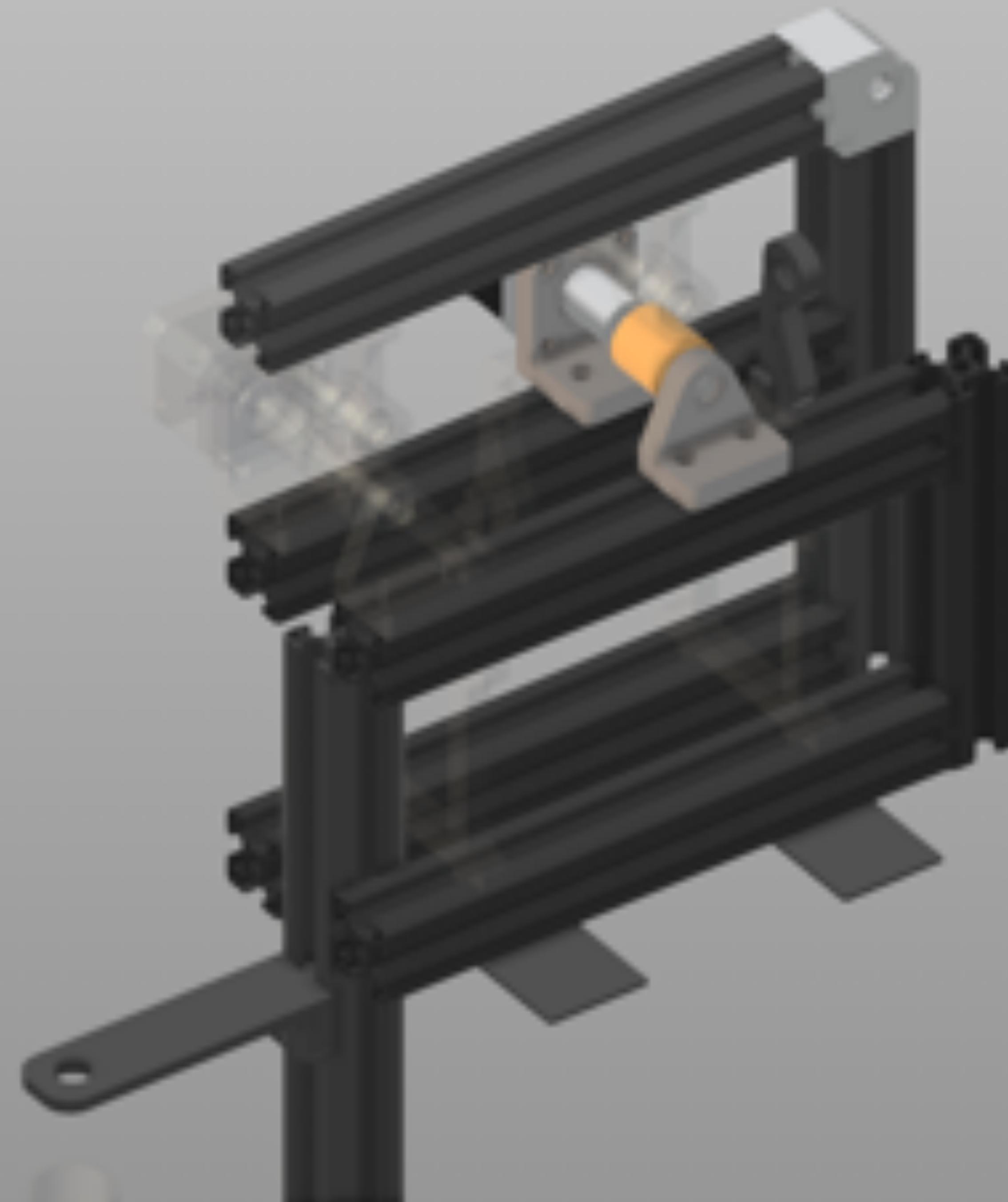
## Final Assembly

1 x 3D Yarn Guide Back



# Final Assembly

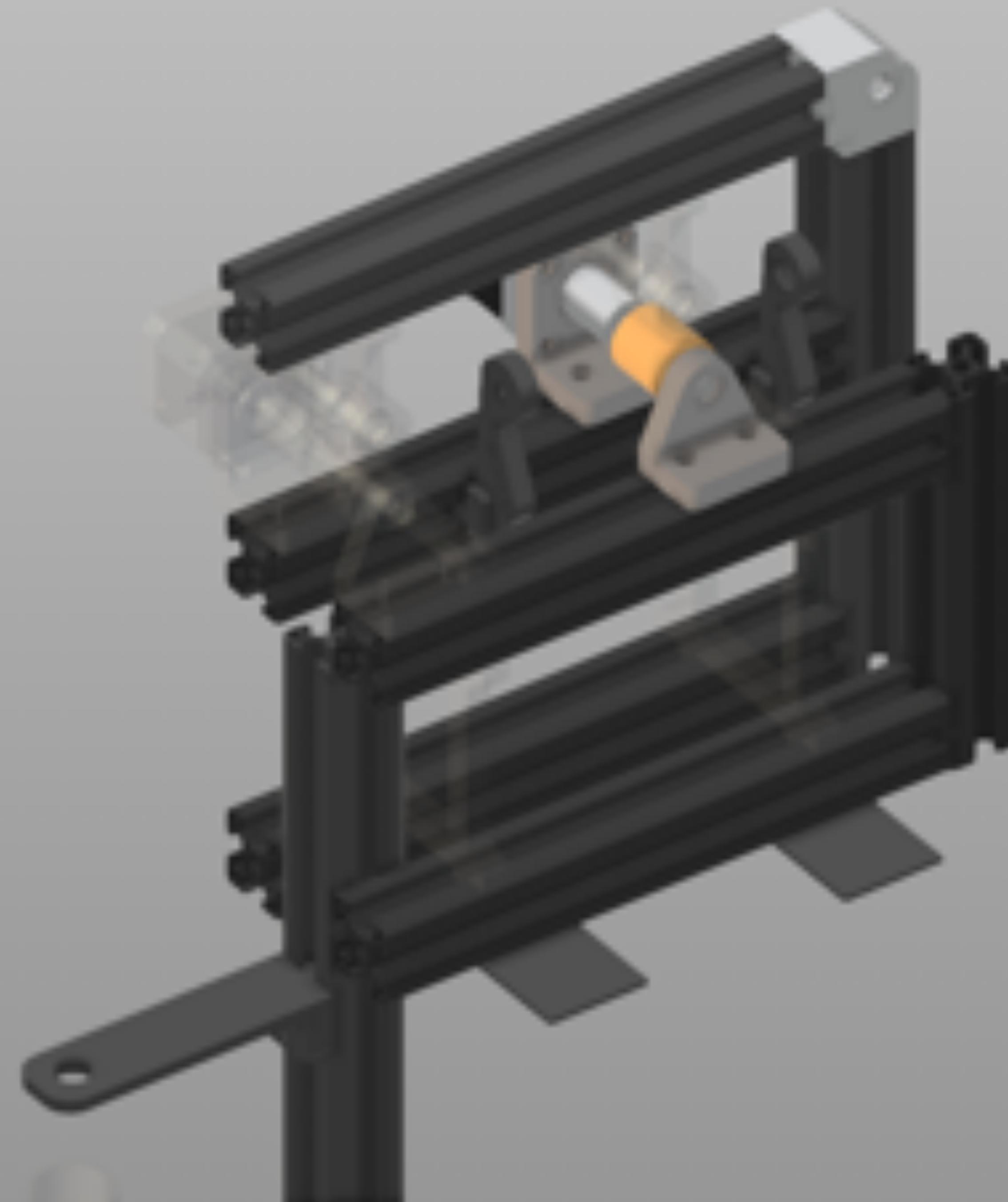
Group: Drive Wheel 1



HI  
LO

## Final Assembly

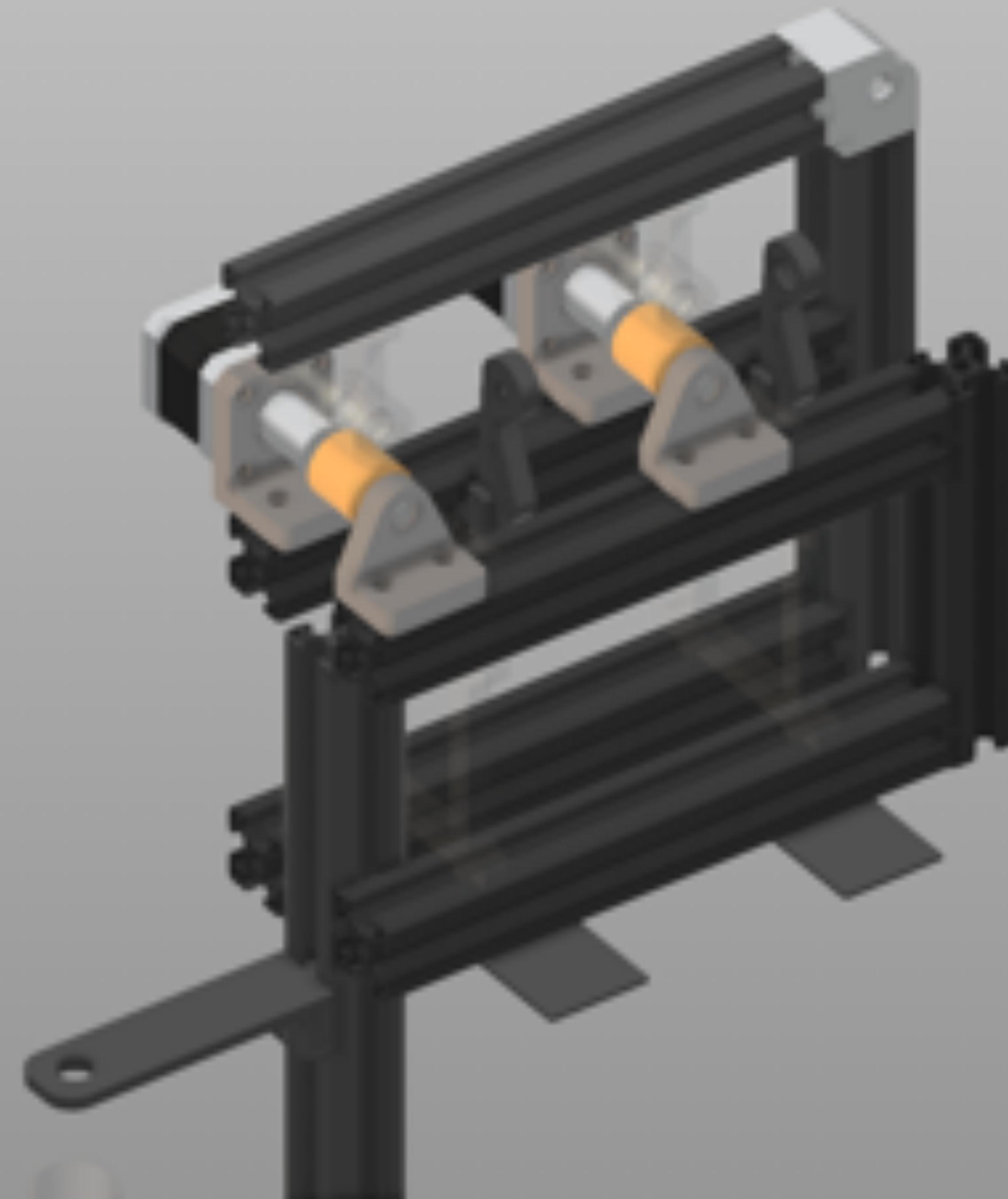
1 x 3D Yarn Guide front



HI  
LO

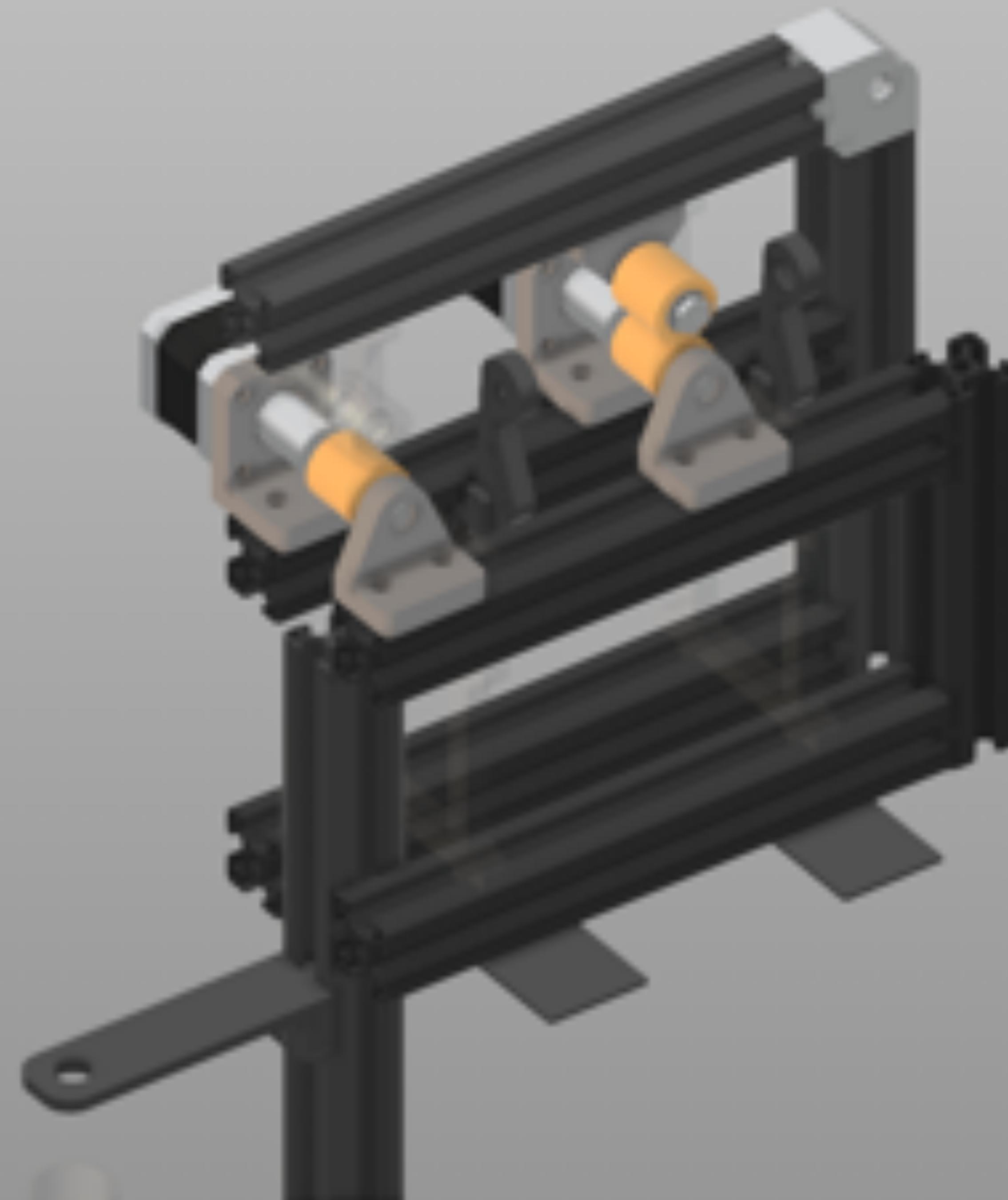
## Final Assembly

Group: Drive Wheel 2



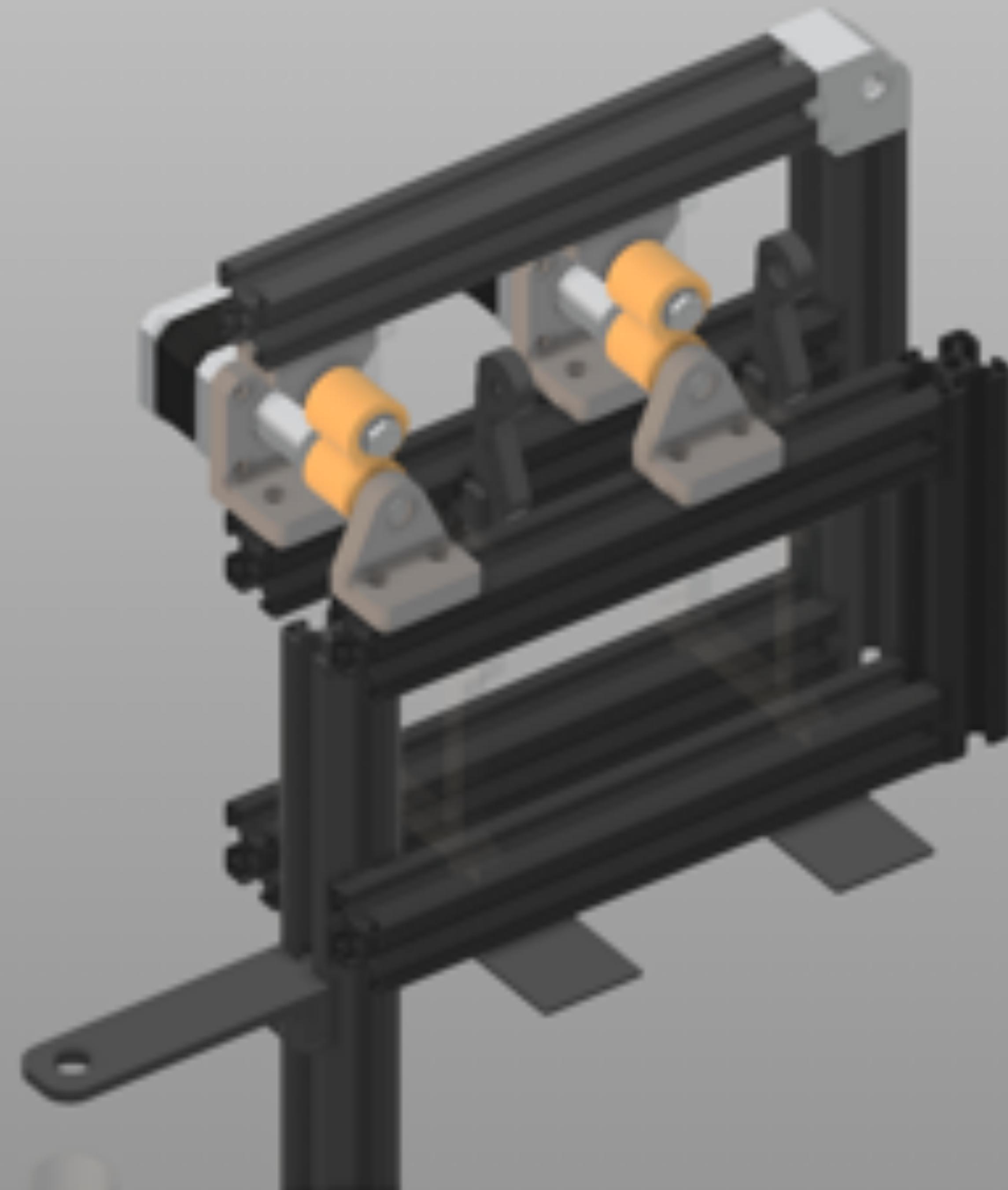
# Final Assembly

Group: Trailing Wheel 1



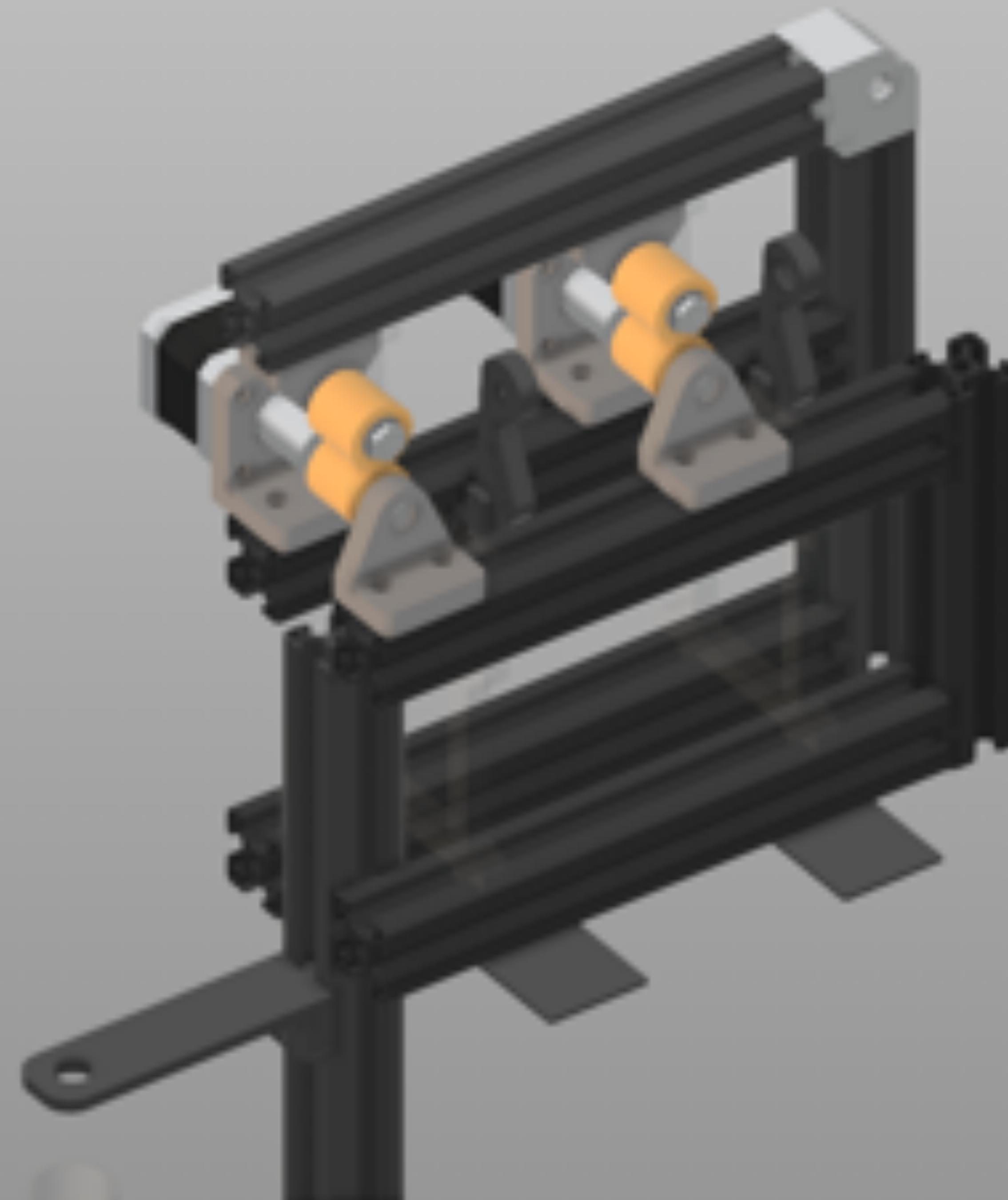
# Final Assembly

Group: Trailing Wheel 1



# Final Assembly

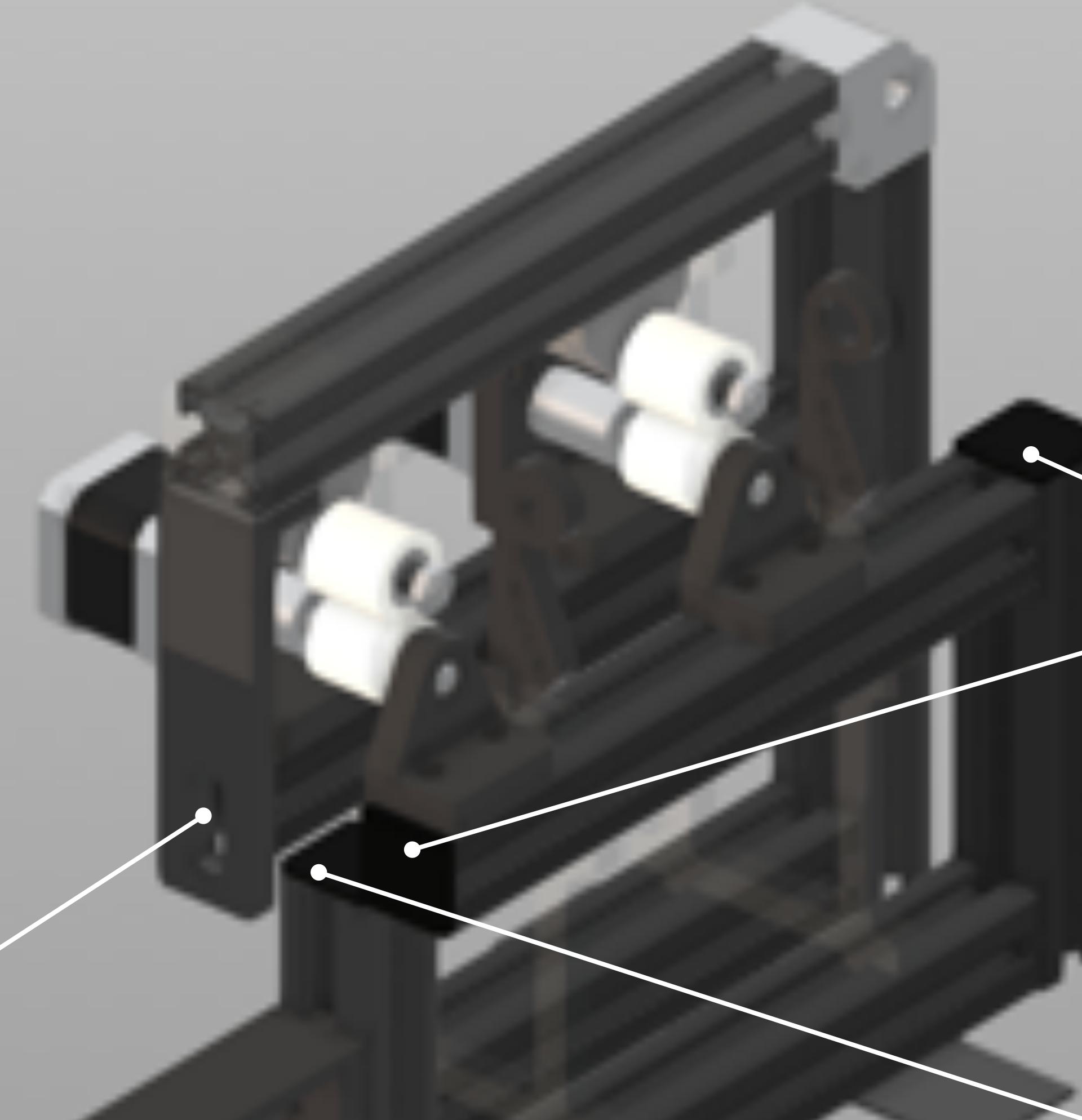
Group: Trailing Wheel 1



HI  
LO

## Final Assembly

1 x 3D Hinge Stop



1 x Cylindrical screw M8x20

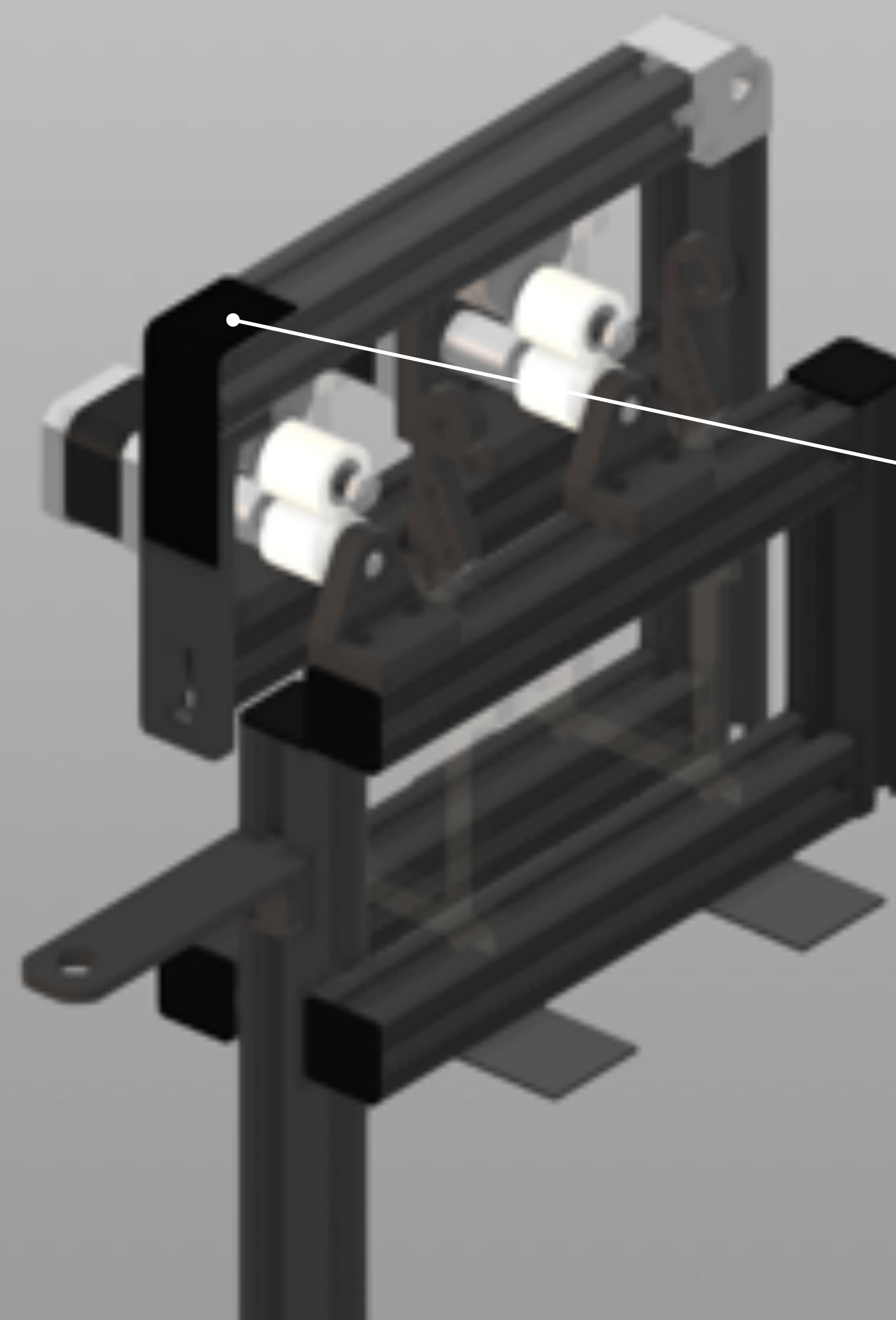
2 x Slot Cover

3 x Slot Cover

HI  
LO

## Final Assembly

1 x Velcro Fastener



2x T-Nut Hammer Head Nut M4  
2 x M4 x 14

HI  
LO

## Final Assembly



HI  
LO

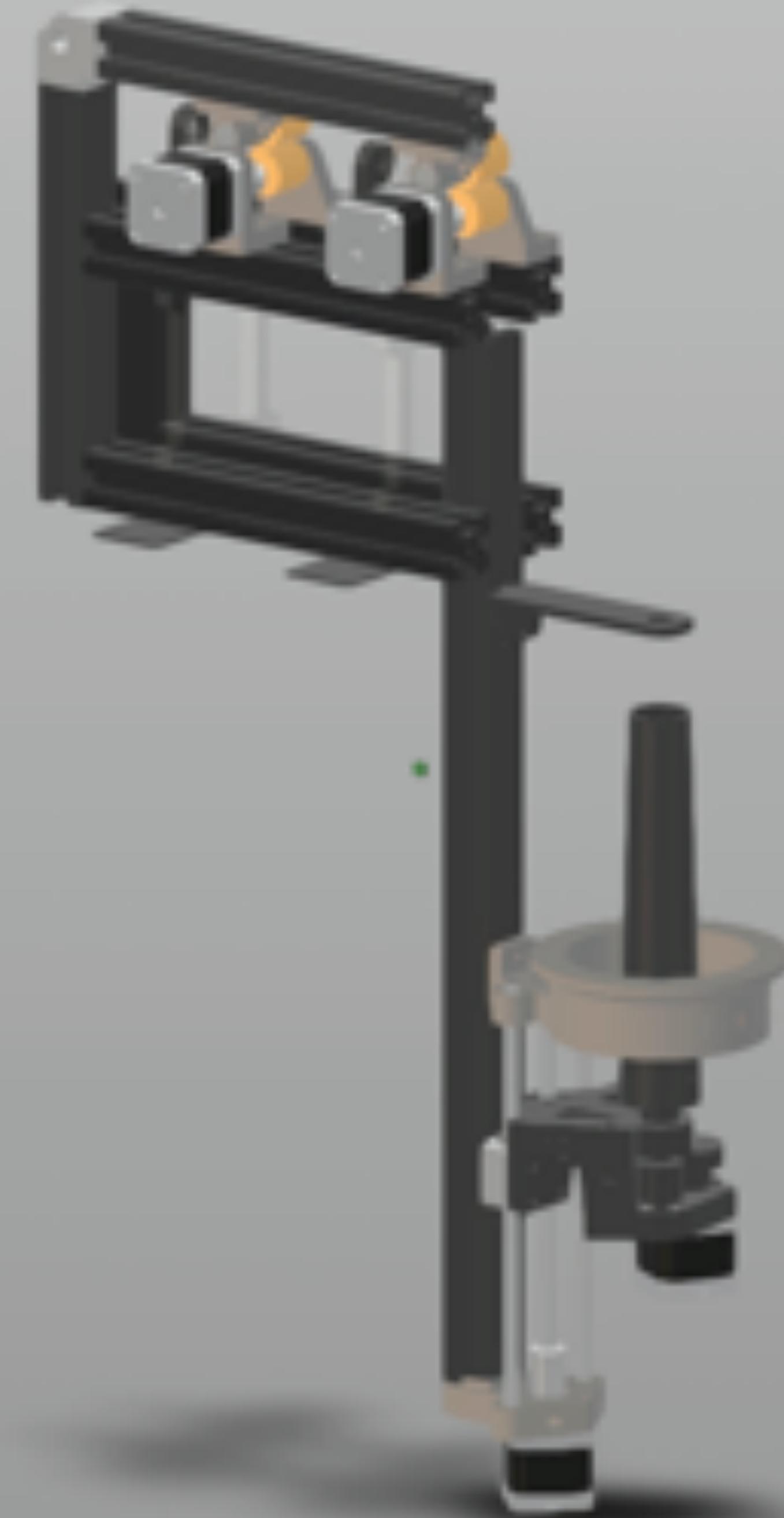
## Final Assembly

1 x 3D Spindel



# HILO SPINNING MACHINE

3.0



HI  
Lo