# Parametric Compound Cycloidal Reducer

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Reducer version 2.00
Documentation version 1.00
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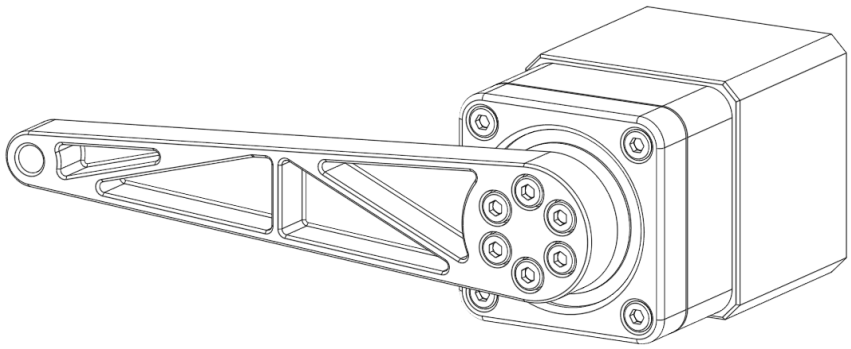
You can find the main project page on GitHub:
https://github.com/OrnithopterX/Parametric-compound-cycloid-reducer

STLs can be found on Printables and Thingiverse.



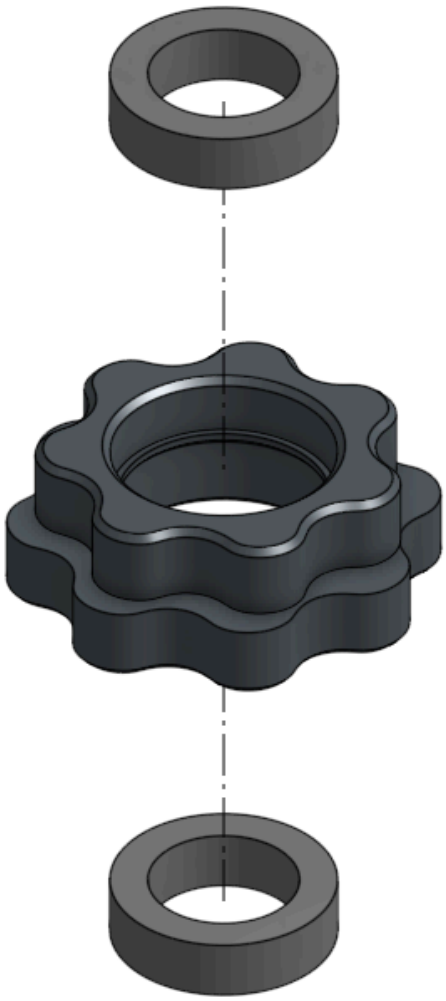
Required hardware:

| Hardware type | Quantity | Value |
|---|---|---|
| Bearing | 1x | 25x37x7mm |
| Bearing | 2x | 10x15x4mm |
| Socket head bolt | 4x | M3x25mm |
| Socket head bolt | 6x | M3x18mm (for mounting test arm) |
| Locknut | 6x | M3 |
| Stepper motor | 1x | NEMA 17, 5mm D shaft |

## Step 1.

Parts required:

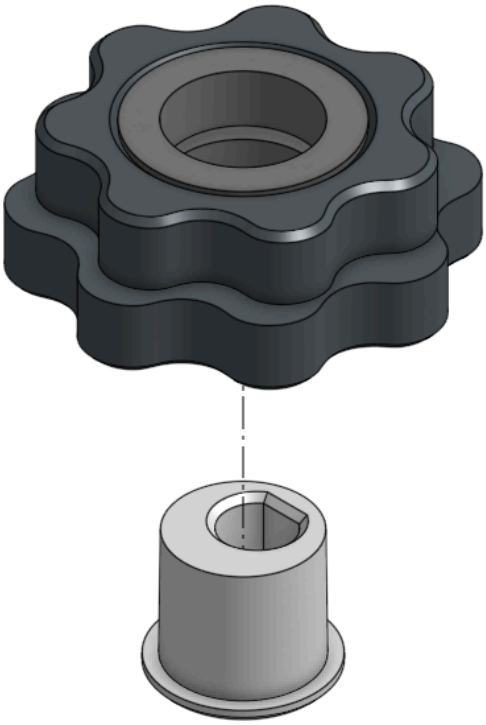
- 2x, 10x15x4mm bearings
- cycloidal disk.stl



## Step 2.

Parts required:

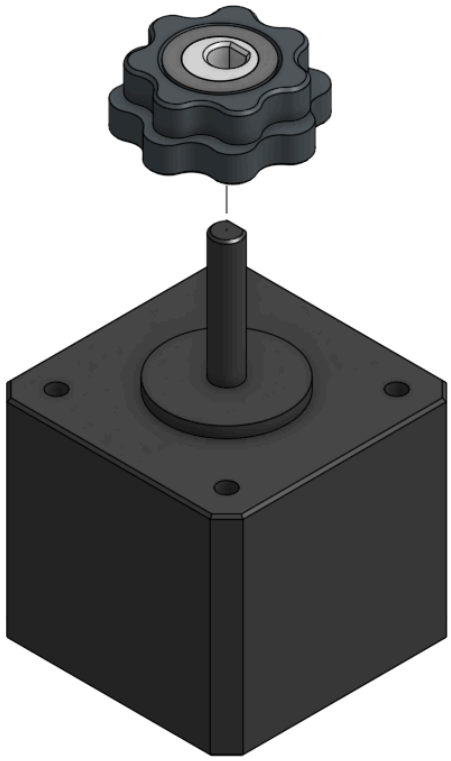
- eccentric shaft.stl



## Step 3.

Parts required:

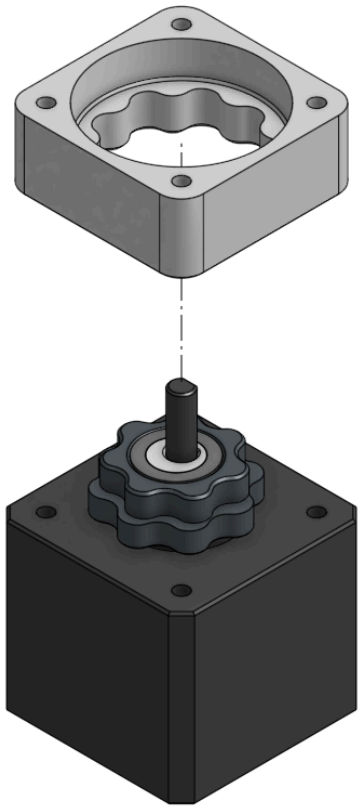
- Stepper motor



## Step 4.

Parts required:

- base.stl

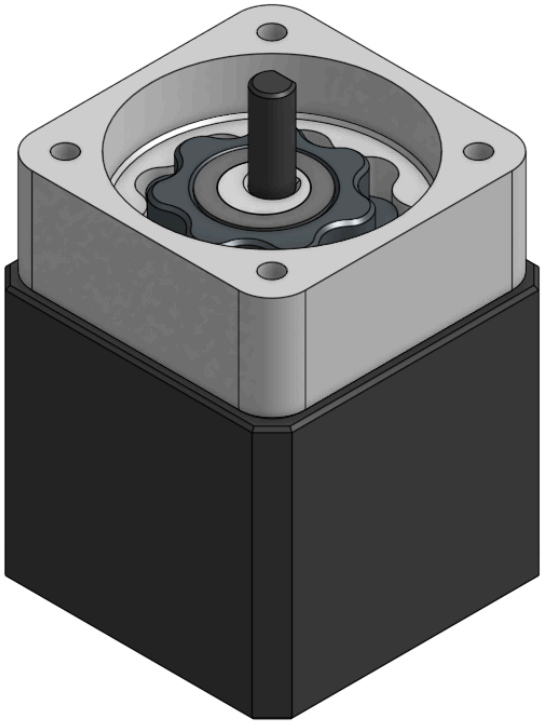


## Step 5.

Parts required:

- None

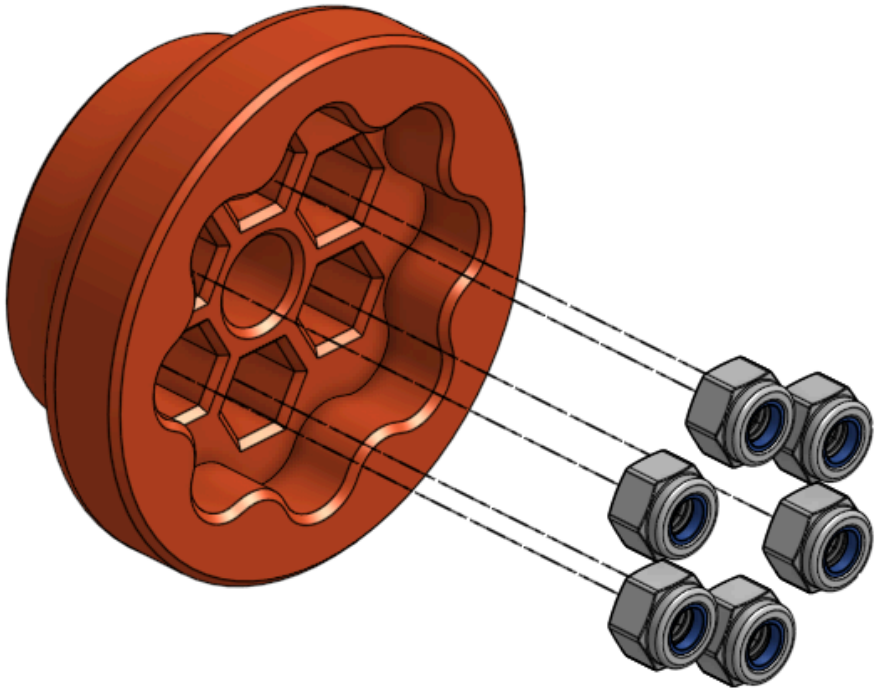
The lower half of your Actuator is now complete! Set it aside for now.



## Step 6.

Parts required:

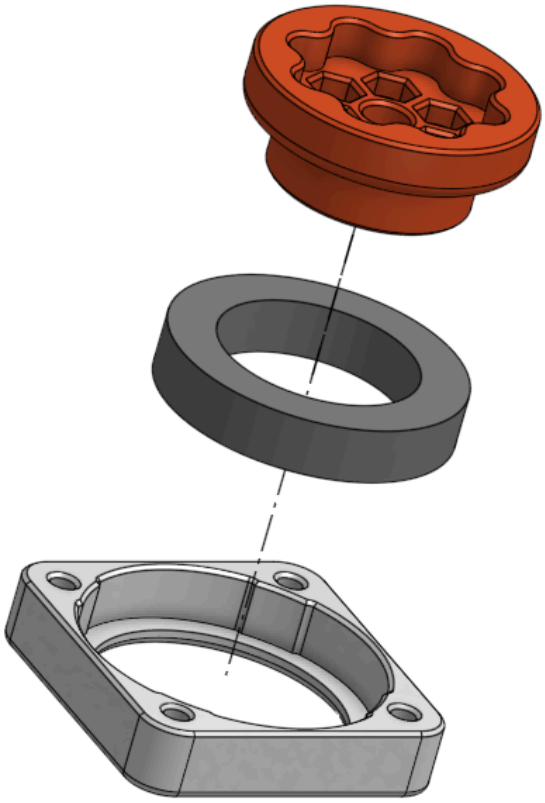
- 6x, M3 lock nuts
- output shaft.stl



## Step 7.

Parts required:

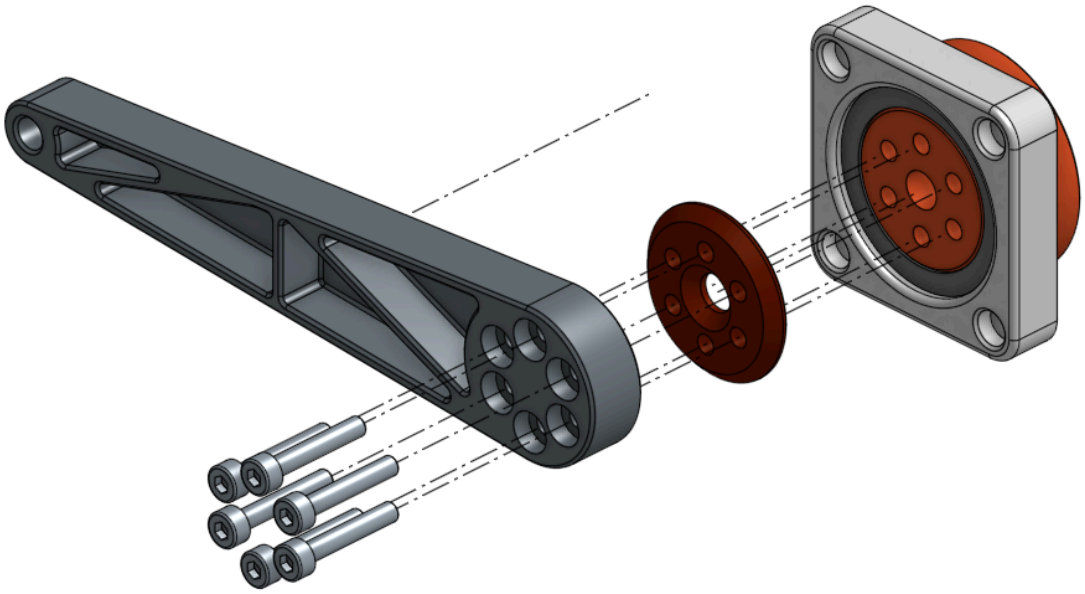
- 1x, 25x37x7mm bearing
- top mount.stl



## Step 8.

Parts required:

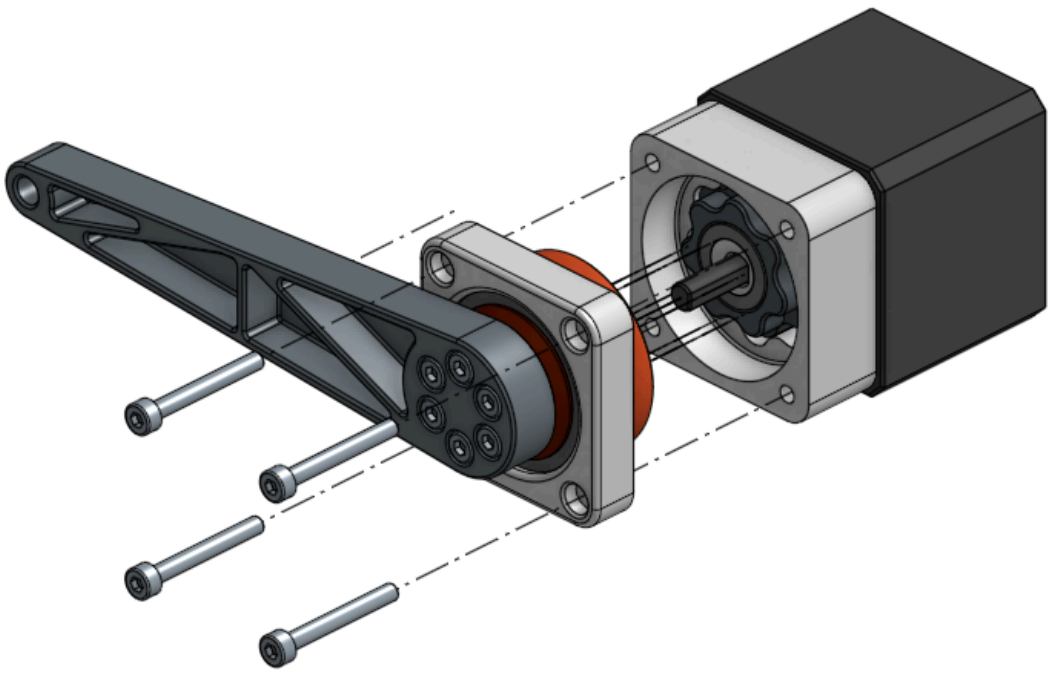
- 6x, M3x18mm bolts
- test arm.stl
- output shaft lock.stl



## Step 9.

Parts required:

- Lower half
- 4x, M3x25mm bolts



## Step 10.

The Actuator is now finished!