How to build your robot

www.pib.rocks/ build

assembly instructions for:
Shoulder vertical
pib#4 advanced

Printable and pre-assembled parts

Pib´s shoulder consists of **6 printable parts** and is assembled in **7 steps.**

In order to construct the shoulder vertical, you will need to print the parts as seen in the table.

Please note: For better readability we use the abbreviations in the tutorial: C08 instead of C08-Central_rotator_bracket.

Printable parts
C60s-Flange_Inner_Shoulder
C61s-Motor_Bracker_Inner_Shoulder
C62s-Ringflange_Inner_Shoulder
C63s-Motor_Axis_Inner_Shoulder
C64s-Motor_Axis_Cap_Inner_Shoulder
C76s-Motor_holder_inner_shoulder

Non-printable parts

You will also need the following non-printable parts from our pib.Box Master.

If you do not have it yet, you can buy in our shop https//shop.pib.rocks.

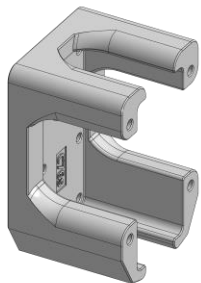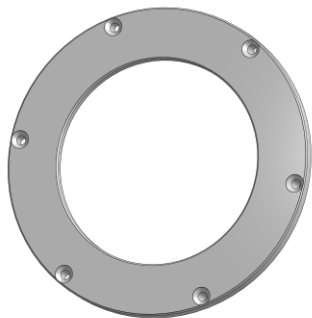| Non-printable parts |
| --- |
| 15 x **S01** M3 nuts |
| 30 x **S13** M3 40mm screws |
| 1 x **E18 STS32095** Servo |
| 6 x **M2.5 10mm** screws |
| 1 x **M04** Big sized ballbearings **(**60 x 78 x 10mm) |

Printable parts - Overview
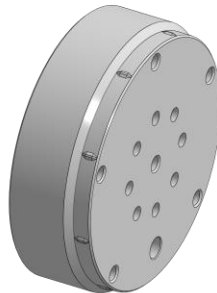
C76s-Flange_Inner_Shoulder
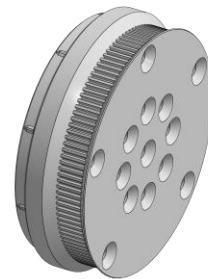

C61s-Motor_Bracker_Inner_Shoulder

C62-Ringflange_Inner_Shoulder

C63s-Motor_Axis_Inner_Shoulder

C64s-Motor_Axis_Cap_Inner_Shoulder

Build it better: our suggestion for assembling pib

We recommend **tools** for each step. These are a suggestion, you can of course also use other tools.

1-5

We have categorized each step according to its **difficulty** - from **1-5** (1 being the easiest, 5 the hardest)

We also show you which **non-printable parts** you need for each step
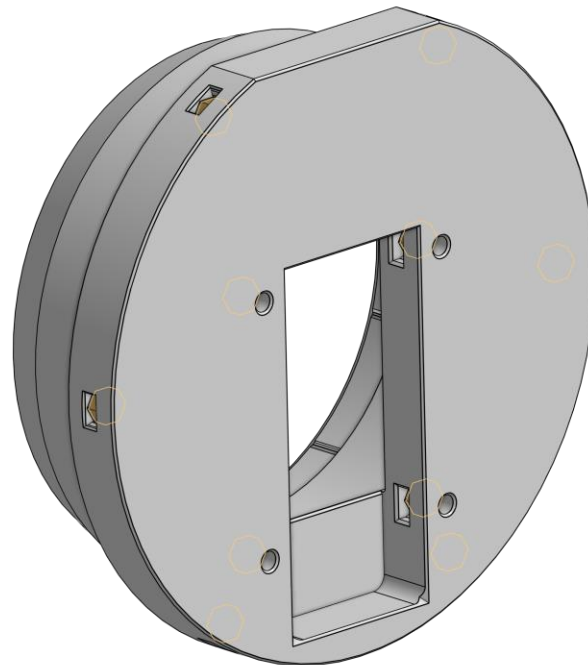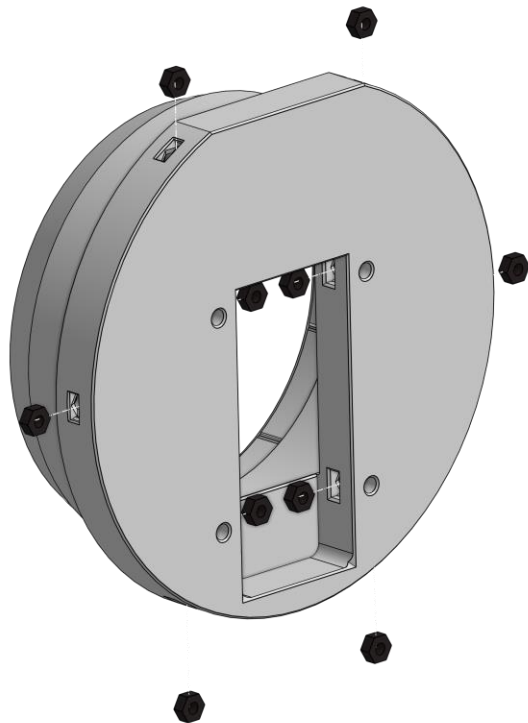
Step 1

2 | 10x

Insert 10 x **M3** nuts in **C61s.**

Step 2

2 5x
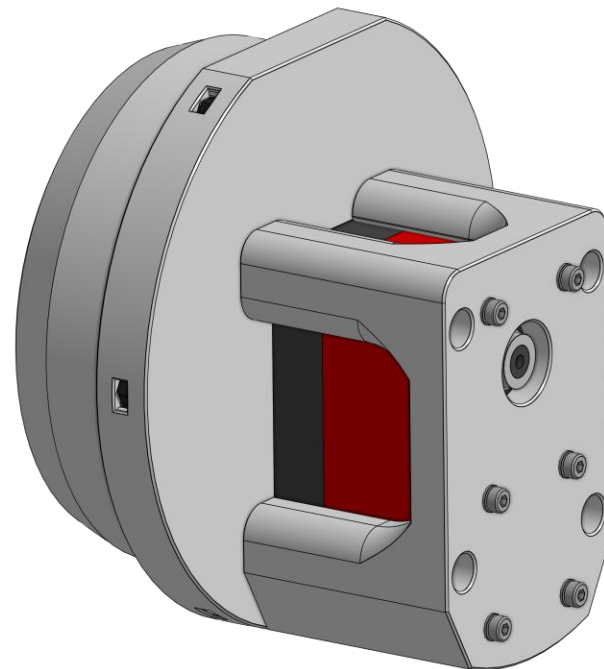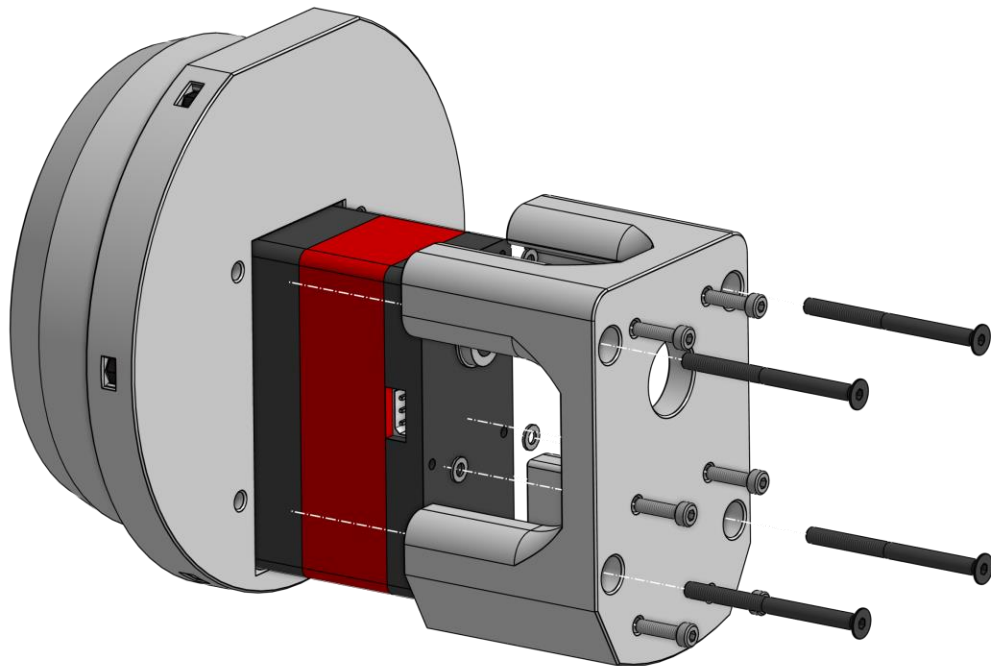
Insert **5 x M3 nuts** in **C63s.**

Step 3

2   4x

Attach **E18** to **C61s** using **C76s** and **4 x M3 20mm** screws and **6 M2.5 10mm** screws.
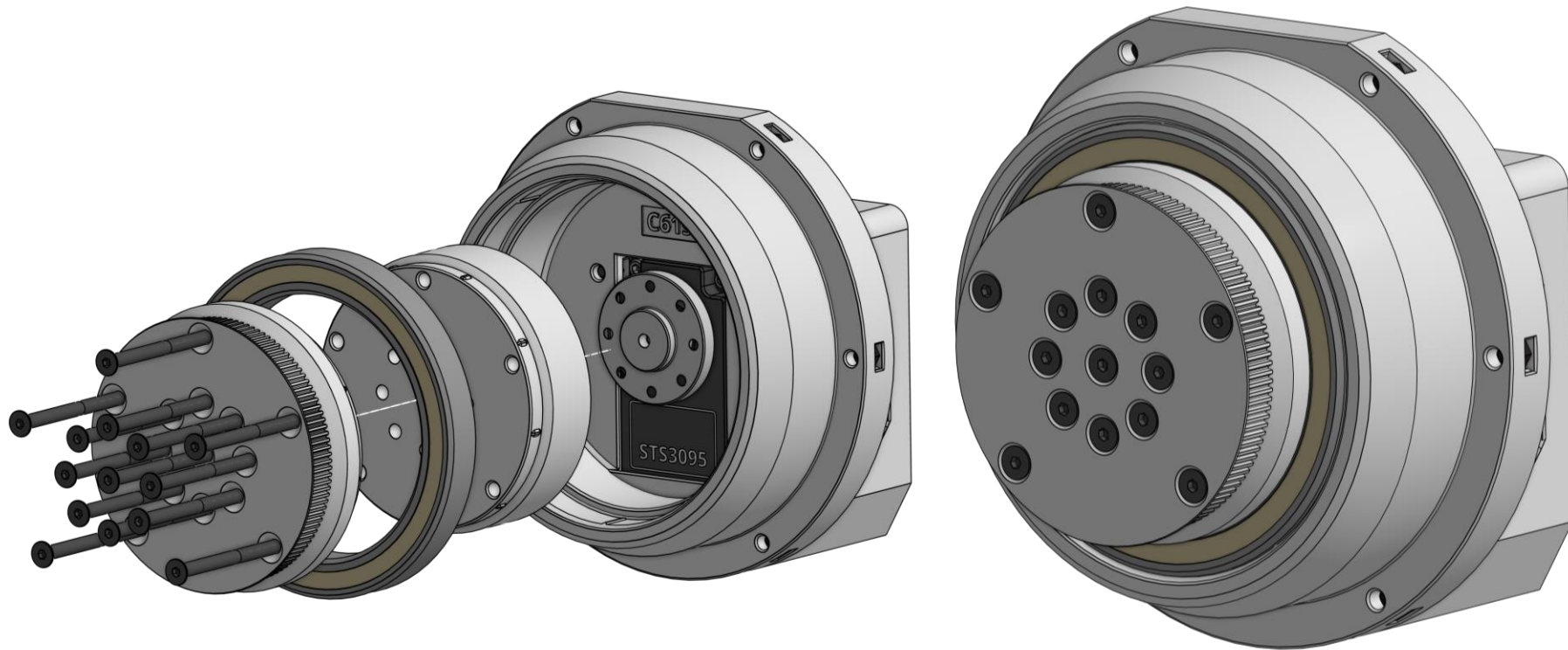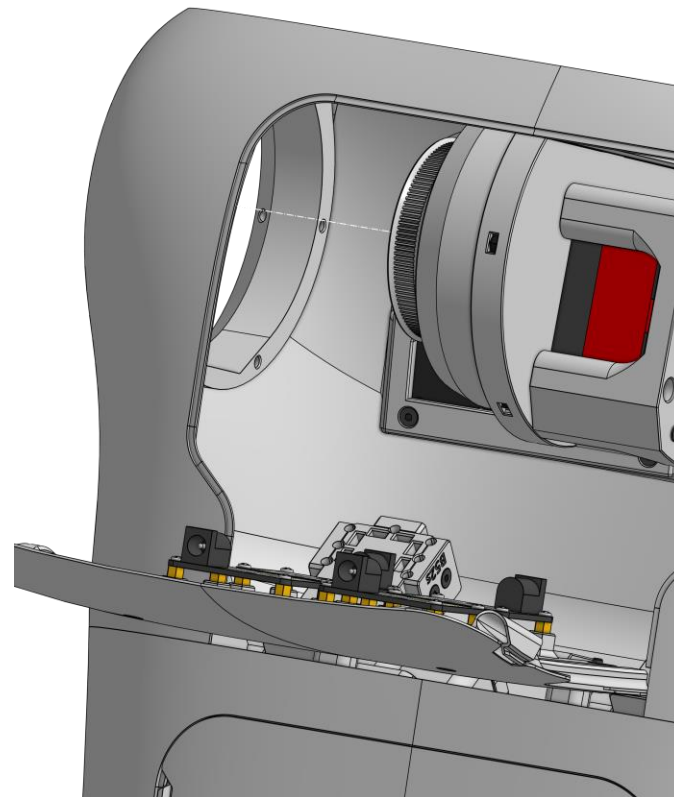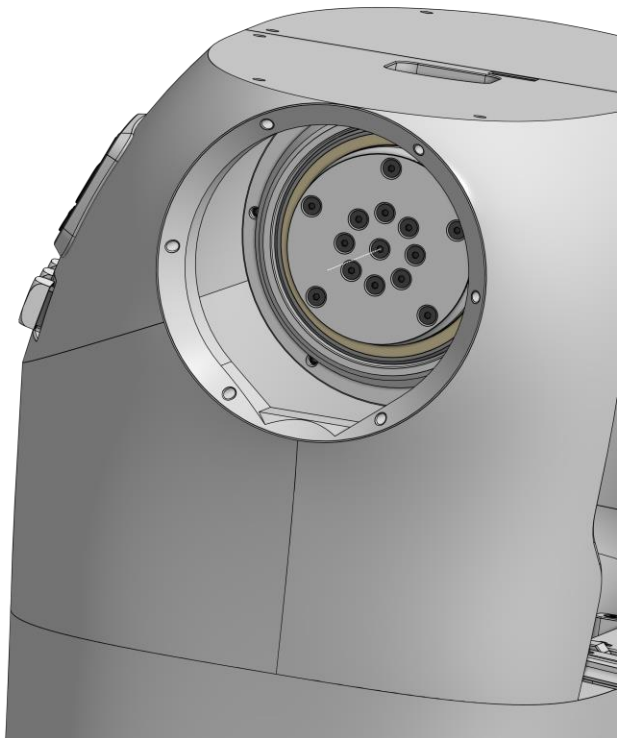
Step 4

2 14x

Attach **C63s** and **C64s** to assembly using **14 x M3 40mm** screws and place **1 x M04** ballbearing in between.

Step 6

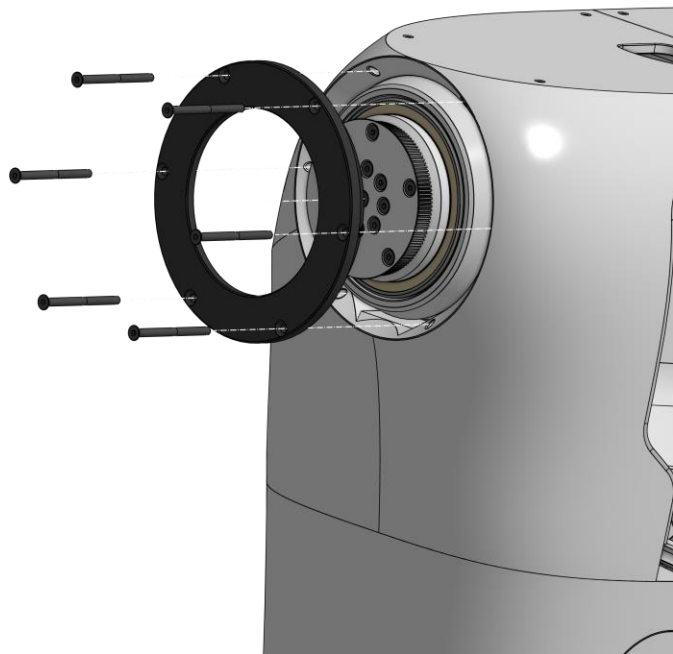Place assembly into clavicles like shown in the pictures.

Step 7

2 11x

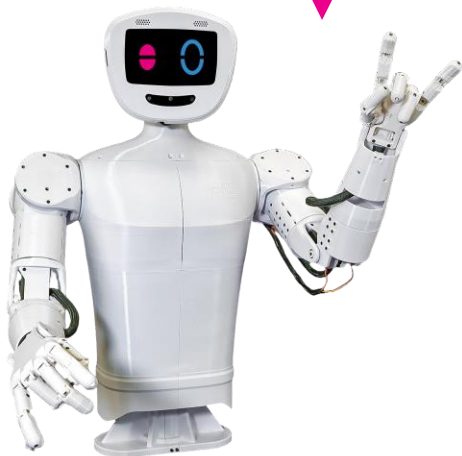Fix the shoulder using **C62** and **C64** with **6 x M3 40mm** screws and **5 x M3 40mm** screws.

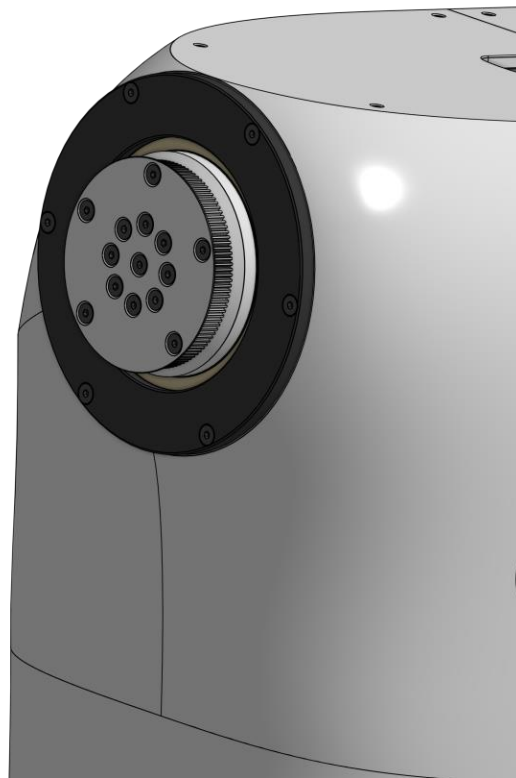## Congratulations

You did a great job, pib´s shoulder is assembled!

Do you need support?

Or do you need our pib.Box with all non-printable parts?

Or maybe you have some new ideas and improvements?

Please contact us.

team@pib.rocks
Send us an email.

discord.com/invite/GRdpyeDu7P
Join us on Discord.

shop.pib.rocks
Order non-printable parts for pib.