# Checkliste MONA

## Required tools (depend on screw heads)

* Allen key size 2.5
* Allen key size 3
* Allen key size 5
* Cable pliers

## Required workpieces

### Not 3D printed

* Screws:
  + 11x M3x12mm
  + 3x M3x16mm
  + 3x M3x20mm
  + 2x M4x14mm
  + 5x M4x20mm
  + 1x M4x30mm
  + 2x M6x25mm (up to 42mm)
* Nuts
  + 17x M3
  + 9x M4
  + 2x M6
* M4x120mm threaded rod
* 2x 2,5mm cable ties **(per test person)**
* 1x 20cm long cable (max. diameter: 4mm)
* 1x 10cm long cable loom (max. diameter: 4mm)
* 1x 606zz ball bearing

### 3D printed

* BP\_1, BP\_2, BP\_3 (pre-assembled to BP\_123 - requires 5x M3x10mm screws and 5x M3 nuts)
* 1x TL\_M4\_Hole
* 1x TL\_MR\_Rest
* 1x TR\_Screw\_Block
* 1x TR\_M6\_Corner
* 7x Cable\_Clip
* 1x TM\_Attachement
* 1x BL\_Block
* 1x BL\_Block\_Top
* 2x BR\_Column
* 1x BR\_Connector
* 2x M4\_Attachment\_Cylinder
* 2x M4\_Attachment\_Square
* 3x Top\_Clip

## Assembly

Before printing, make sure to test the [3D printers accuracy](https://teachingtechyt.github.io/calibration.html/" \l "flow), as this ensures an easier assembly. After printing, redrill all screw holes in the printed object to ensure enough space for the screws to go through.

Now, the base station needs to be assembled with the help of the *pre\_evaluation\_assembly.png* image in the downloaded image folder and five M3 nuts and screws.

After that, use said image to melt M3 and M4 nuts for the assembly process into the underside of the base plate with the help of a soldering iron. Finally, use the paper-based work instruction or create a new work instruction using the provided images and 3D models to show a modified assembly process.