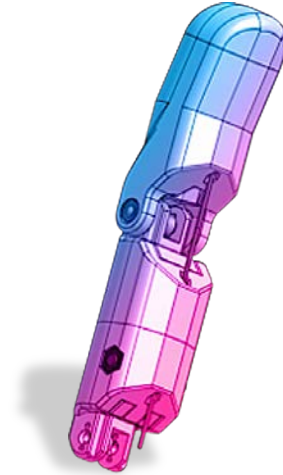# How to build your robot

www.pib.rocks/build

assembly instructions for:
FINGER

v2024

PRINT
BUILD
DEVELOP
YOUR OWN ROBOT

Printable parts

Pib´s finger consists of **5 printable parts** and is assembled in **4 steps.** For one hand, you should build 5 identical fingers, so print each part 5 times.

Please note: For better readability we use the abbreviations in the tutorial: D05 instead of D05-Finger_proximal_lower.

Printable parts
D05-Finger_proximal_lower
D06-Finger_proximal_bracket
D07-Finger_proximal_upper
D08-Finger_distal
D09-Finger_tip

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.

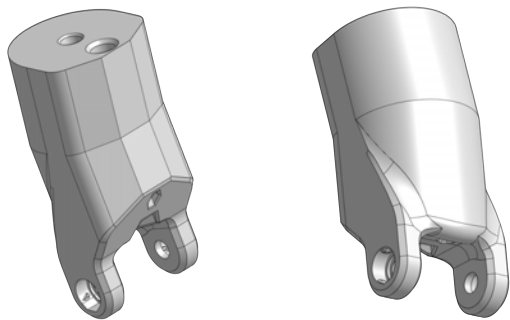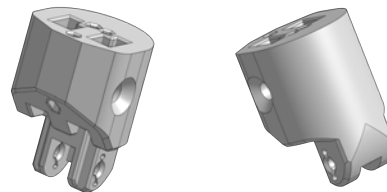| Non-printable parts |
| --- |
| 2x **S01** M3 nuts |
| 1 x **S06** M3 16 mm screws |
| 1 x **S08** M3 20 mm screws |
| 1 x **M08** 20 mm metal rods |
| 2 x **M01** Ballbearing_2x5x2,3 |
| 2 x **M10** Spring_TOR410L |
| 90 cm **Fluorocarbon string** |
| Please note: the table shows the amount of non-printable parts for just one finger! |

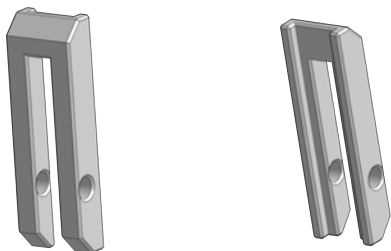# Printable parts - Overview

D08-Finger_distal
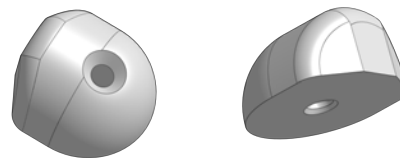

D06-Finger_ proximal_bracket

D05-Finger_proximal_lower

D07-Finger_proximal_upper
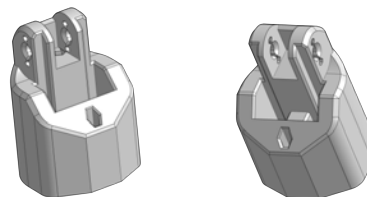
D09-Finger_tip

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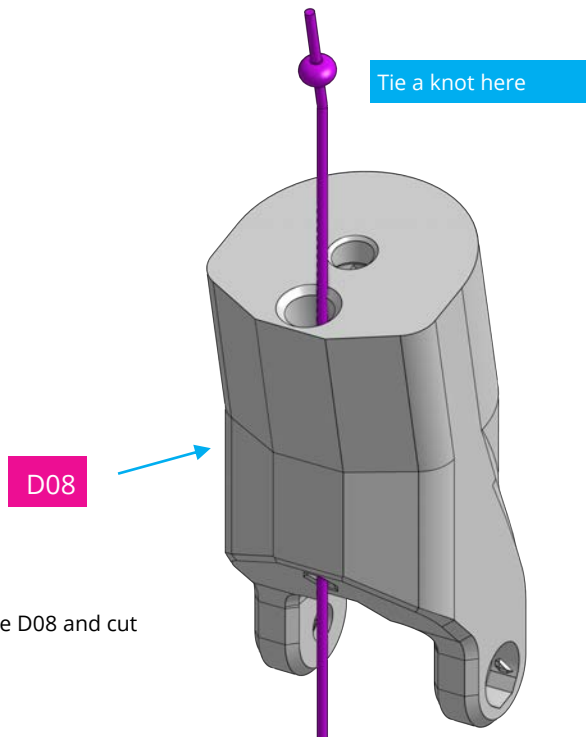
We also show you which **non-printable parts** you need for each step

Step 1

1 | ✂ | 90 cm

Cut a piece of **90 cm** length of the **fluorocarbon string** and insert it into **D08** as shown in the picture.
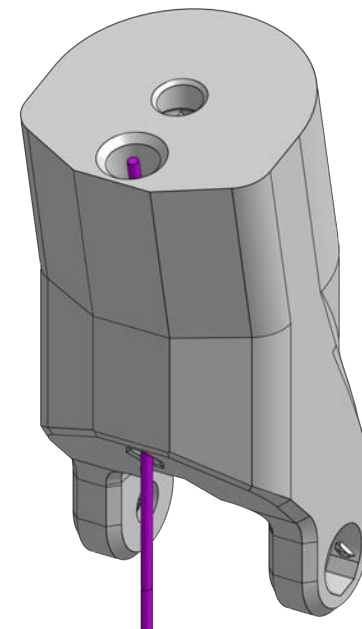
Tie a knot here

D08

Tie a simple knot at the end. Pull the wire to be inside D08 and cut off remaining wire above the knot.

Pull gently on the string to tighten the knot further.

Step 2a

3 · 1x

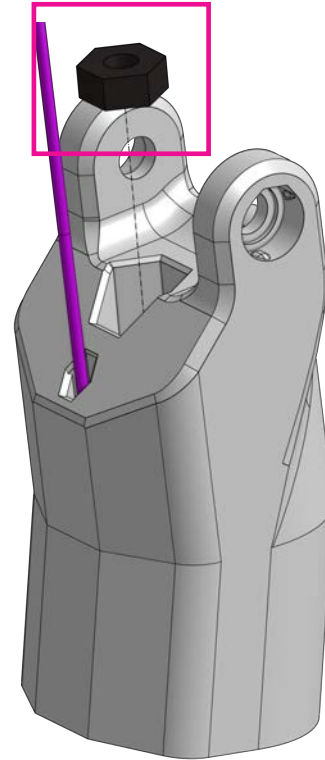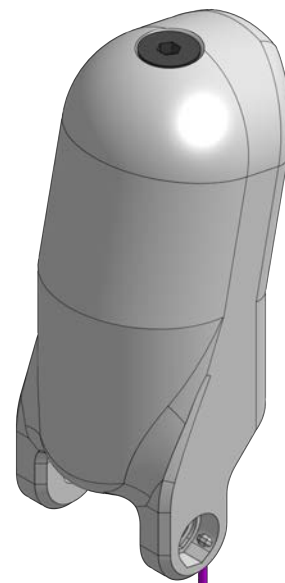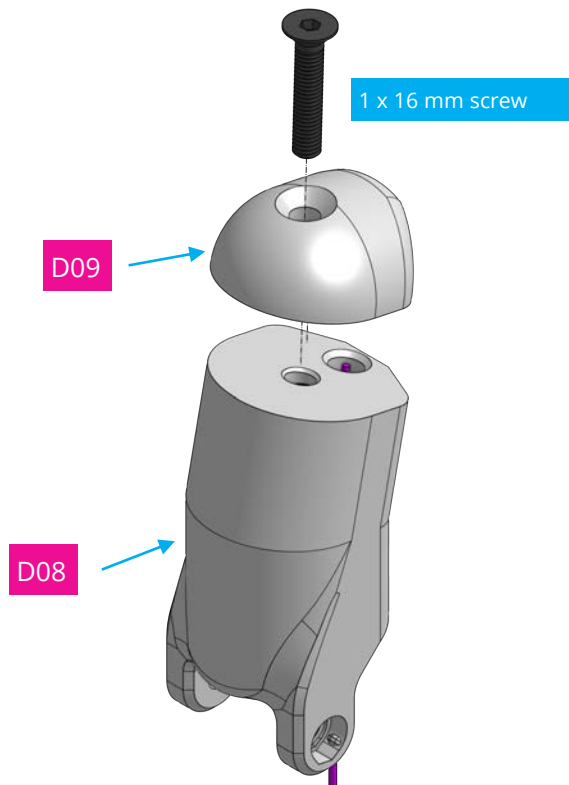Insert **1x nut** through the shown hole in **D08** (all the way till the end).

D08

Use a small screw driver and insert the nut through
the hole, then push the nut till the end of D08.
This step can be a little tricky.

Step 2b

1

1x

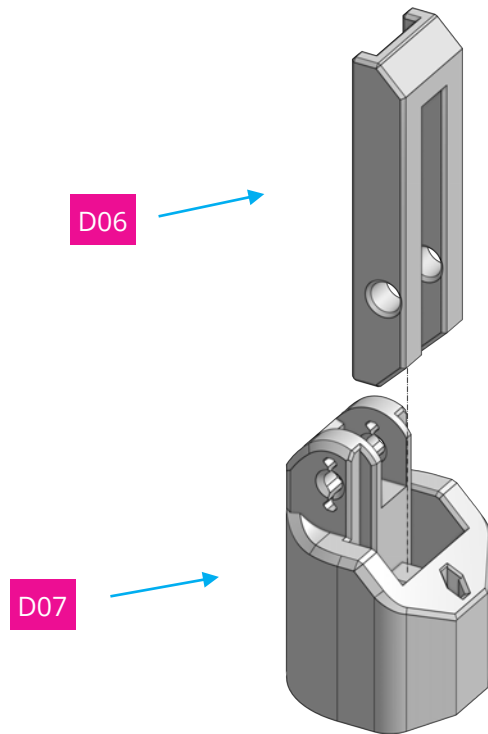Connect **D09** to **D08** using **1x 16mm screw**.

1 x 16 mm screw

D09

D08

Please note: it may happen that the fingertip can still be turned slightly after assembly.
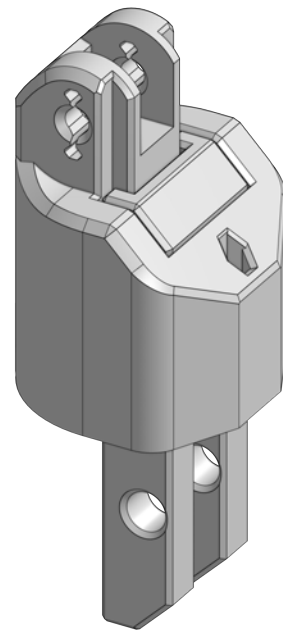
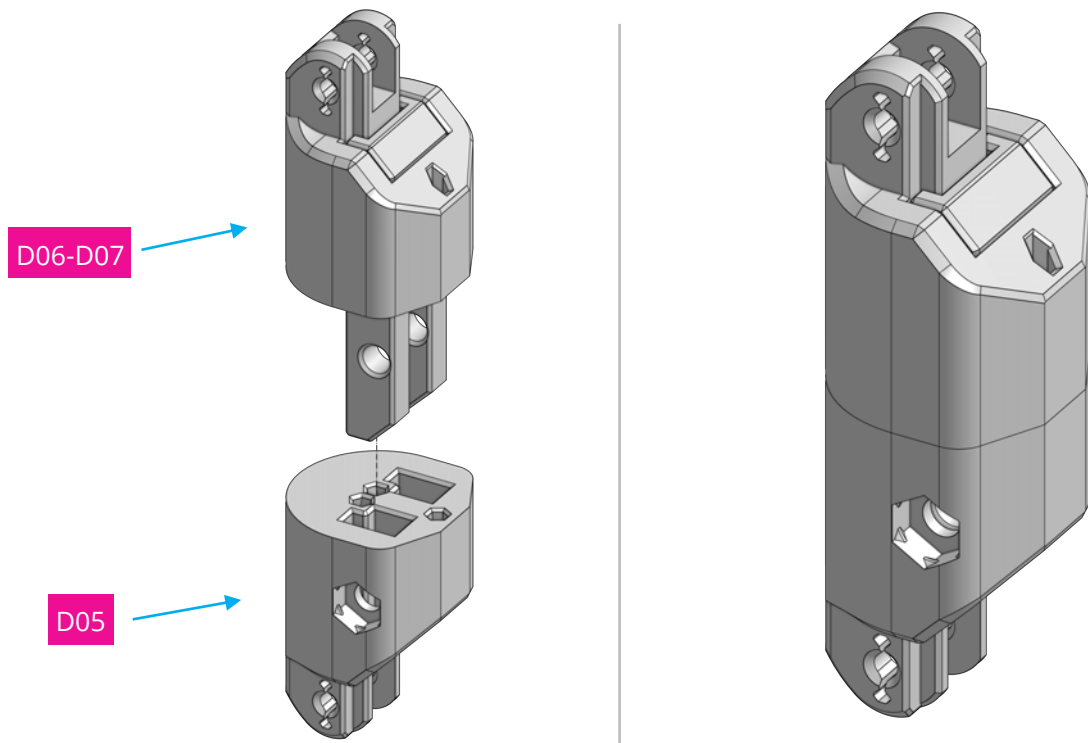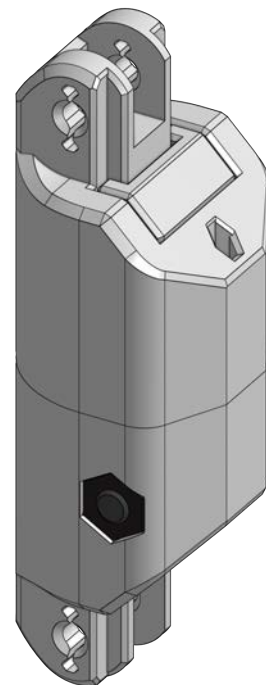## Step 3a

Insert **D06** through the shown spot in **D07**.
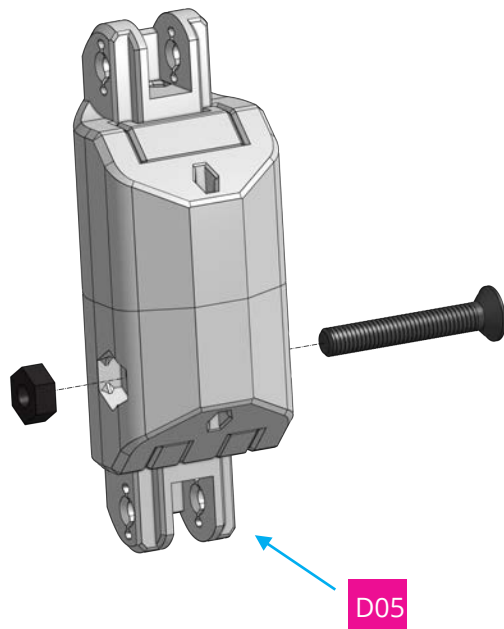
D06

D07

Step 3b

Insert the assembly from step 3a to **D05**.

D06-D07

D05

Step 3c

Place **1 x nut** through the shown spot in **D05** and fasten the parts using **1 x 20mm screw**.
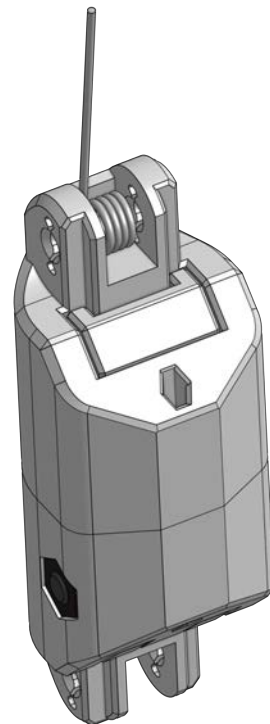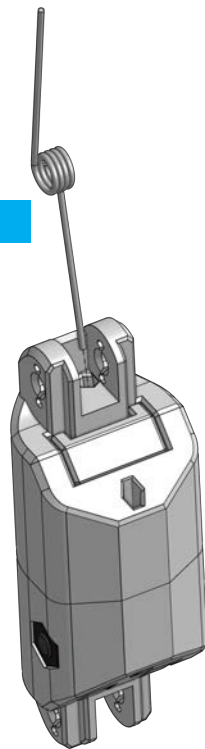
1   1x   1x

D05

Step 4a

1   1x

Place **1 x M10 spring** through the shown spot in previous assembly from step 3c.
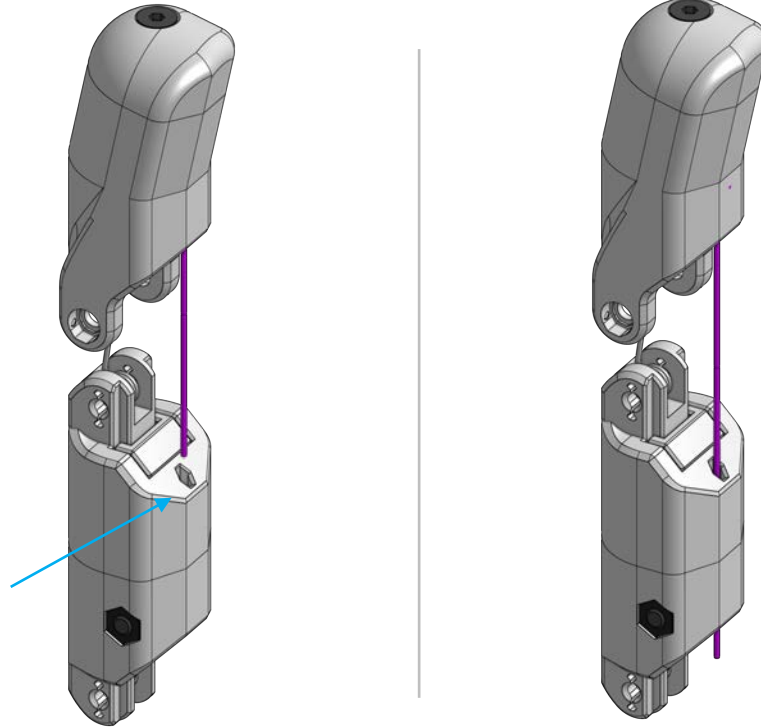
1 x M10 spring

Step 4b

Insert the fluorcarbon string coming out of **D08** through the shown hole in assembly from step 3c.
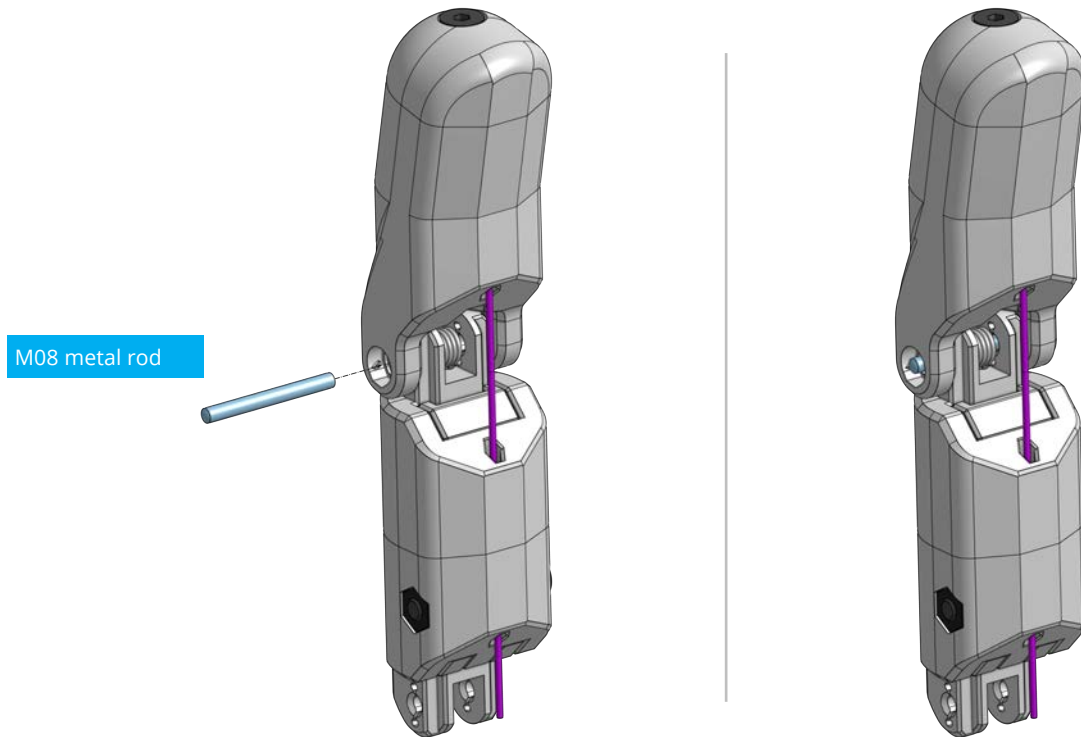
Insert wire here

Now we can start to connect both assemblies.

Step 4c

1   1x

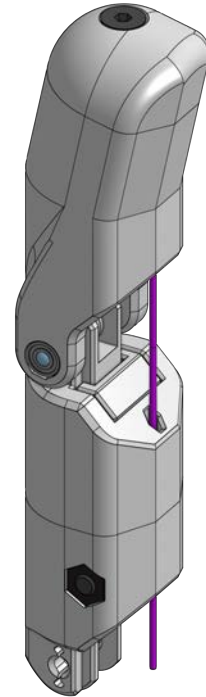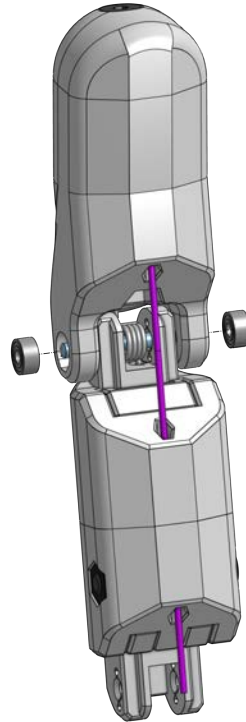Use **1 x M08 metal rod** to connect both assemblies.

M08 metal rod

Step 4d

1   2x

Insert **2 x M01 ball bearings** through the shown spots in **D08.**
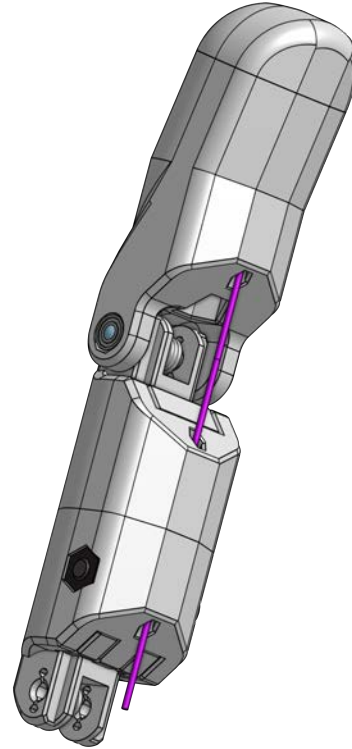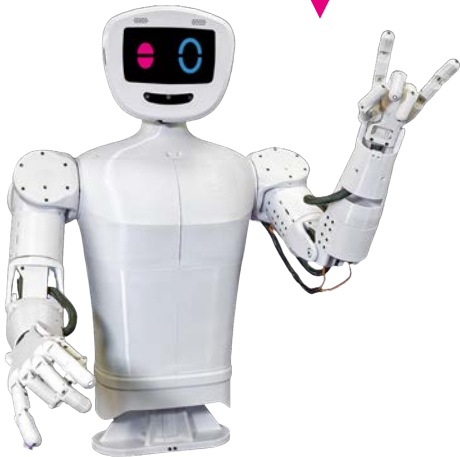
2 x M01 ballbearing

Use a small hammer to push the ballbearings
onto the ends of the metal rod.

Congratulations

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

Repeat this tutorial 4 times and you will have all five finger of pib´s hand.

Well done!

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.