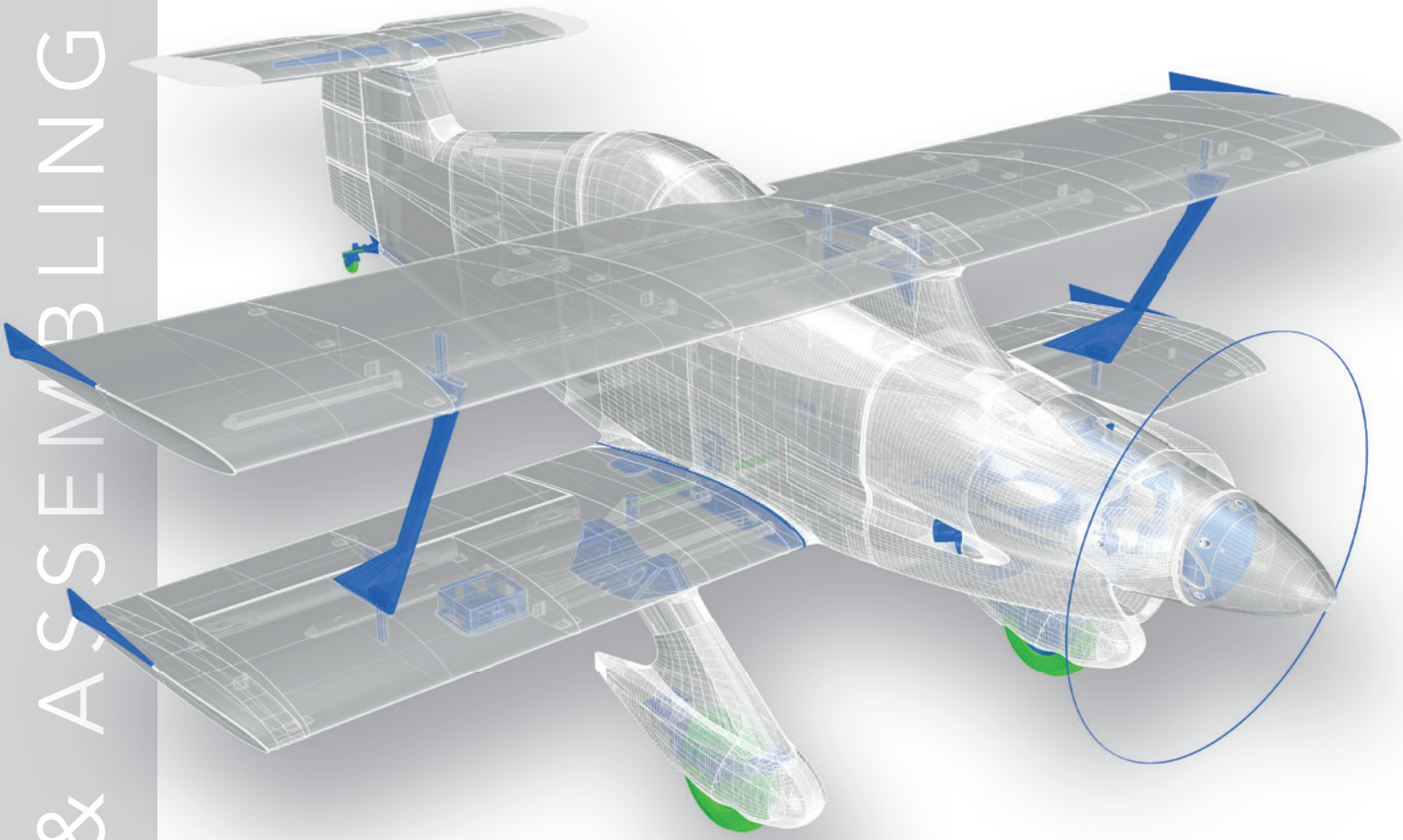
PRINTING & ASSEMBLING MANUAL

PLANE PRINT



PLANE PRINT 'WANNA PLAY II'

Reno Air race biplane

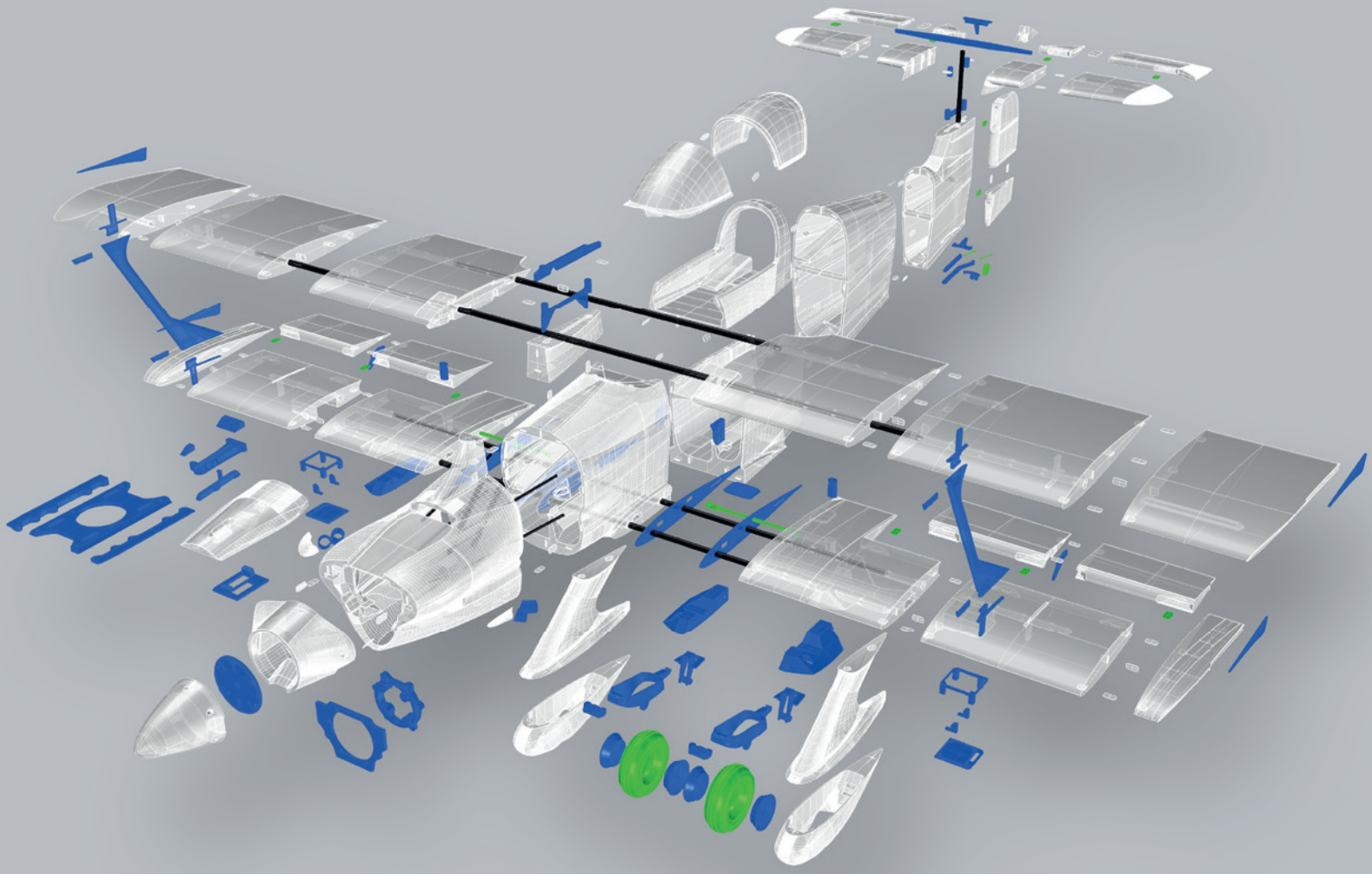
NOTE:
Slicing works best with CURA!

FAIR DATA USE

www.planeprint.com

the **ONLY** place where you can get original Planeprint STL files **legally!**

PLANE PRINT 'WANNA PLAY II'



LW-PLA PLA TPU CARBON

© PLANEPRINT

Required accessoires

Filament

- **LW-PLA (cannot be replaced by PLA!)**, ~1500 grams
- **PLA** oder better **Tough PLA**, ~320 grams
- **TPU A95**, ~20 grams
- **LW-TPU Colorfabb VarioShore** about 100 grams
  (strongly recommended for tires, but it also works with normal TPU)

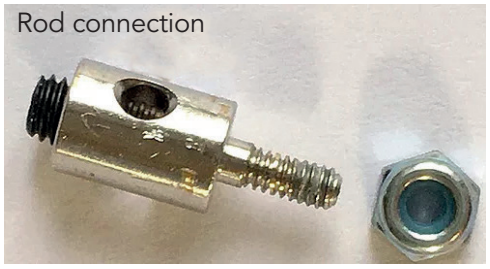
Materials

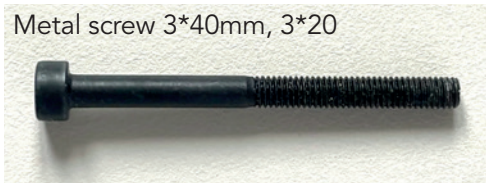
- some tapping screws
  (search for: M2 flat head tapping screw assortment)
- CA super glue (liquid and liquid medium)
- CA activator
- Metal screw 3*40mm with nuts (not self-locking!), 4 pieces
- Metal screw 3*20mm with self-locking nuts, 4 pieces
- Metal screw 3*30mm, 2 pieces
- Ball bearings 3x6x2,5mm, 4 pieces
- Carbon tube Ø8mm*1000mm (inside 6mm), 4 pieces*
- Carbon rod Ø3*1000mm, 1 piece*
- Steel wire Ø1*1000mm, 2 pieces
- Self-adhesive Velcro tape
- Velcro strap
- Servo cable extension 350mm, 2 pieces
- Rod connection, 4 pieces
- Neodym-Super-Magnet 5x5x5mm, 4 pieces
- some Hair gums
- some lead to correct the CG

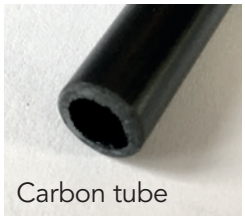
Tools

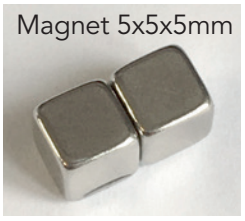
Cutter knife, small Philips screwdriver, Sandpaper,
Metal saw, Needle nose pliers.

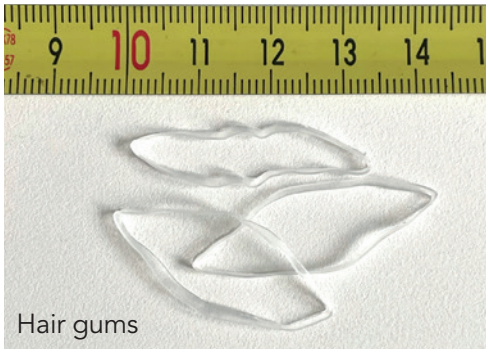
Tapping screws 2mm


Rod connection


Metal screw 3*40mm, 3*20

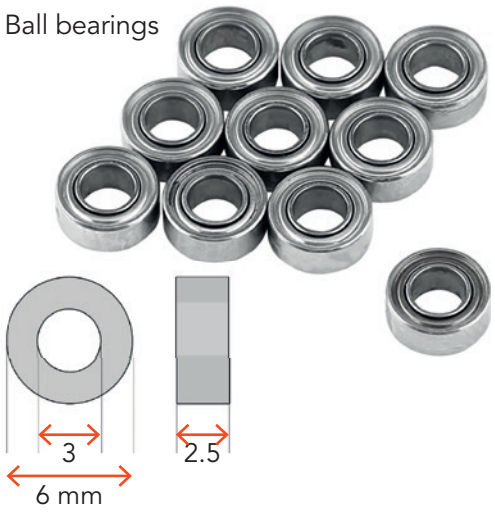

Carbon tube


Magnet 5x5x5mm



Hair gums

Ball bearings



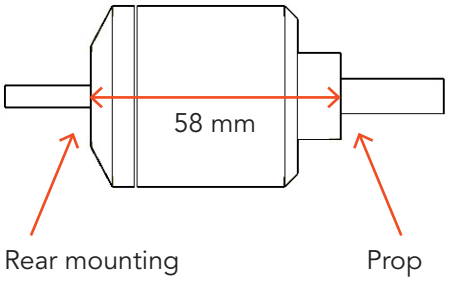
***Cut the 8mm tubes into the following parts:**
Tube 1 for the gear: 2x125, 2x158
Tube 2 for the wings: 2x500
Tube 3 for the wings and HS: 1x800, 1x120
Tube 4 for the wing: 1x1000 (do not cut)

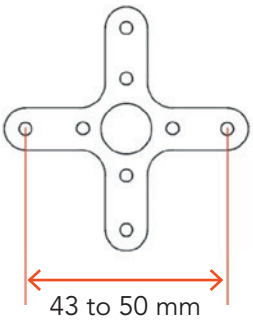
***Cut the 3mm rod into the following parts:**
Motormount: 4x200

RC Components

ENGINE PROPDRIVE V2 3548 900KV (HobbyKing) or comparable motors.
You can also use any other motor that fits a 14x7 propeller!

NOTE Tthis motorization is very powerful. The Wanna Play is not full throttle safe with it. Always be careful, it is up to your discretion and the quality of your printing and assembly as to what stresses the aircraft can withstand.





The optimal length of the motor is when the distance to the back of the prop is 58 mm. If the motor is shorter, you can use longer screws and washers. If the motor is longer, the motor cross can also be mounted behind the motor mount. In this case the diameter of the motor must not be more than 35 mm!

PROP 12x7 or 14x6

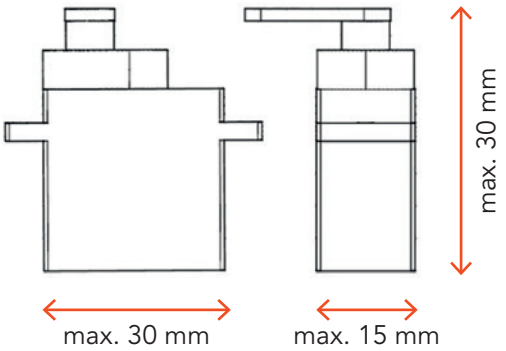
BEC-CONTROLLER 80 A (must fit the engine!)

RECEIVER 5 Channel

BATTERY 4S Lipo, 3500 – 5000 MaH
(The battery should have a weight of 400 to 450 grams)

SERVOS **4 pieces** like **Corona DS-238MG** or comparable

Dimensions (The optimal distance between screws is 35 mm):



Printing the parts – Printing profiles

This manual is constantly being improved and supplemented, we recommend downloading the **latest version** from our website **before building.**

For slicing all Planeprint models, these profiles have to be created in Cura:

PROFILE P1_Fullbody
PROFILE P2_Hollowbody
PROFILE P3_Surface (Not necessary for this plane)
PROFILE P4_Flex
PROFILE P5_Gyroid

You can find the description at www.planeprint.com/print

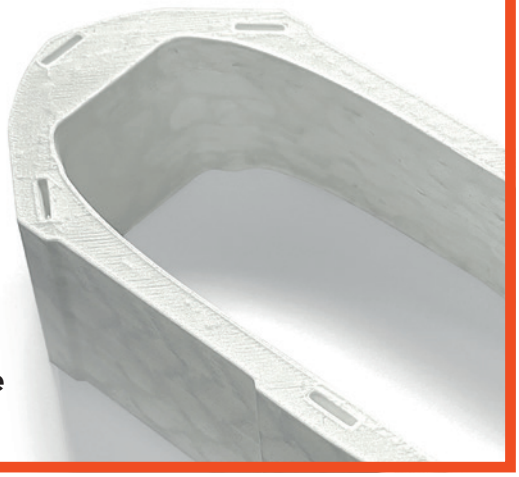
Important for the 1-wall-print (P3, P5)!

In order to print airfoils of the lowest possible weight with high stability, it is necessary to print with only one wall line (Nozzle 0.4 mm). Decisive here is the adhesion between the layers! To achieve this, you must print at a much higher temperature than normal. As a **guideline**, 230° C is a good starting point. The parts-cooling fan should be set to 0% or a maximum of 20%. Since not every printer works the same, it may be necessary to make small adjustments to these settings.

For the new PROFILE P5_Gyroid it is essential to use **Cura Version 5 or later**, It will work with older versions, but the weight of the parts will be higher and the printing time longer.

PROFILE P5_Gyroid

It is **essential for the necessary stability** of the **LW parts printed with PROFILE_5 are as stable as possible**. Please use a test part to check the strength by fracture tests. It must not break along the layer lines under any circumstances! Also note that the printing temperature for LW-PLA is as low as possible to obtain a wall thickness of 0.4 to 0.6 mm at a flow of 60 to 70 % (depending on brand).
Caution: at too high temperatures, LW-PLA becomes brittle and breaks more easily.



FAIR USE DATA ©

The development of a complex, airworthy RC flight model to express on any standard 3D printer is a very complex and extensive process. Therefore, we appeal to your fairness not to forward the STL data you have acquired to third parties.

Thank you for your understanding and have fun with your PLANEPRINT MODEL!

PROFILE P1_Fullbody PLA or Tough PLA

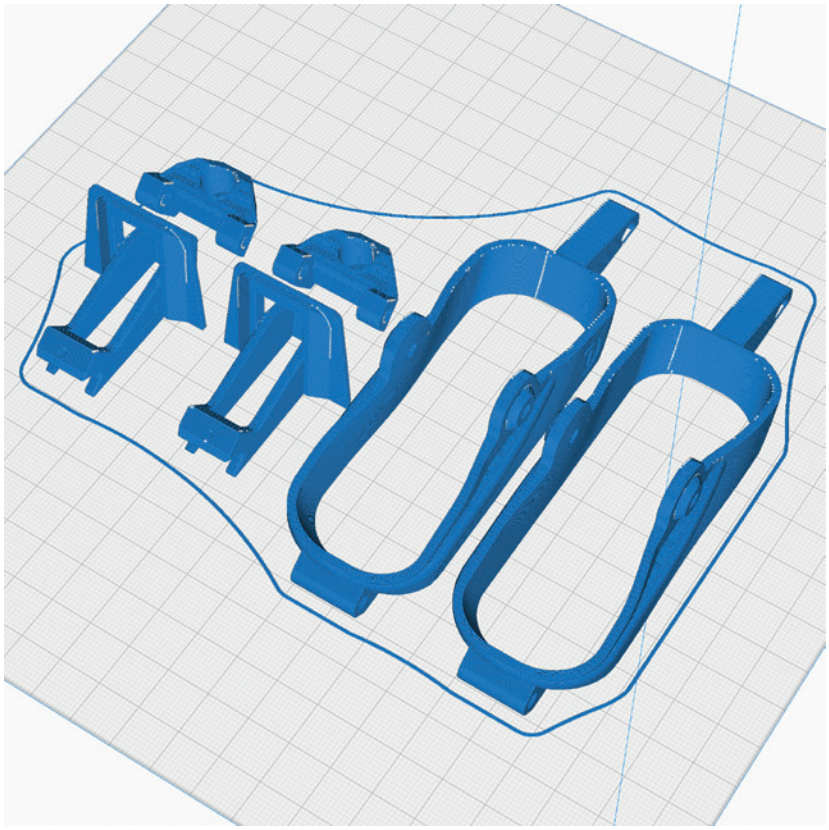
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Gear parts_wp.stl

MATERIAL PLA, Weight: ~ 45 g

ADDITIONAL SETTINGS

None required

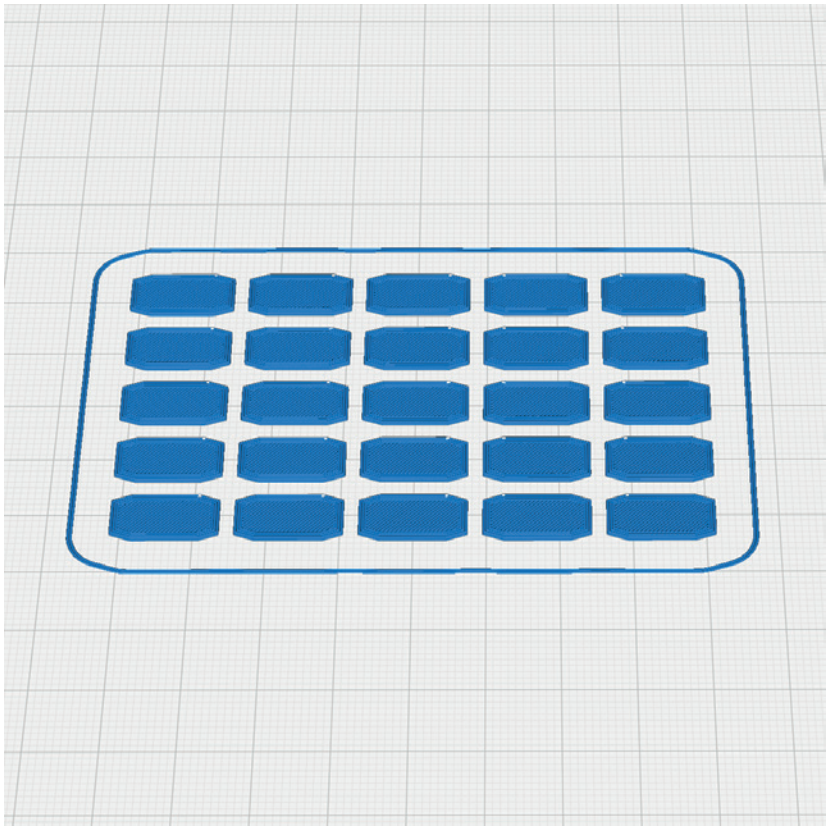


P1_Interconnects_wp.stl

MATERIAL PLA, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody PLA or Tough PLA

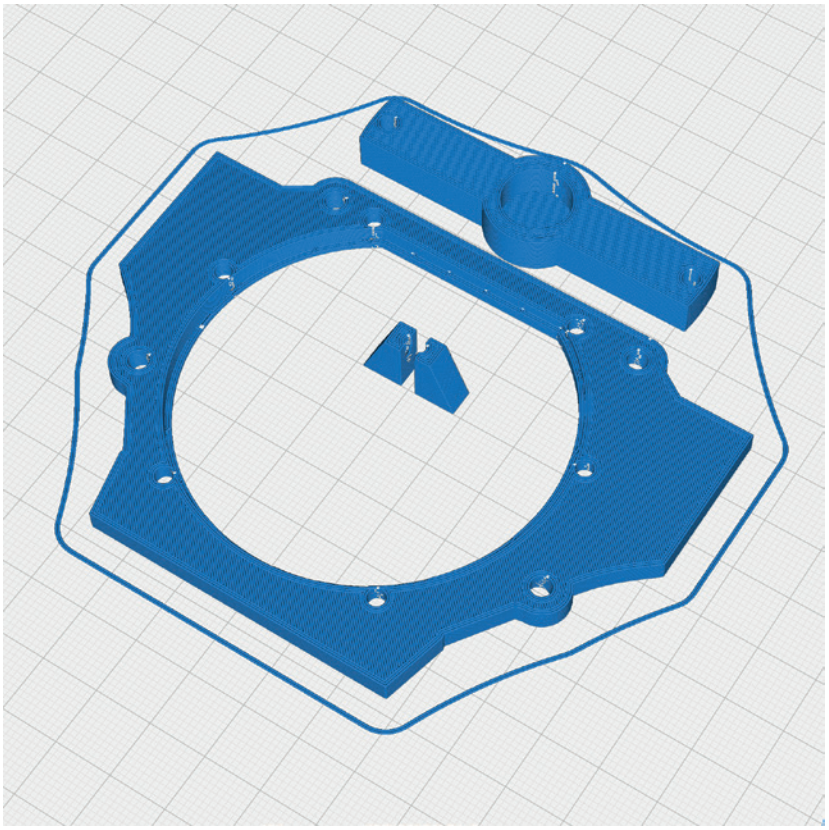
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Motormount base_wp.stl

MATERIAL PLA, Weight: ~ 21 g

ADDITIONAL SETTINGS

None required

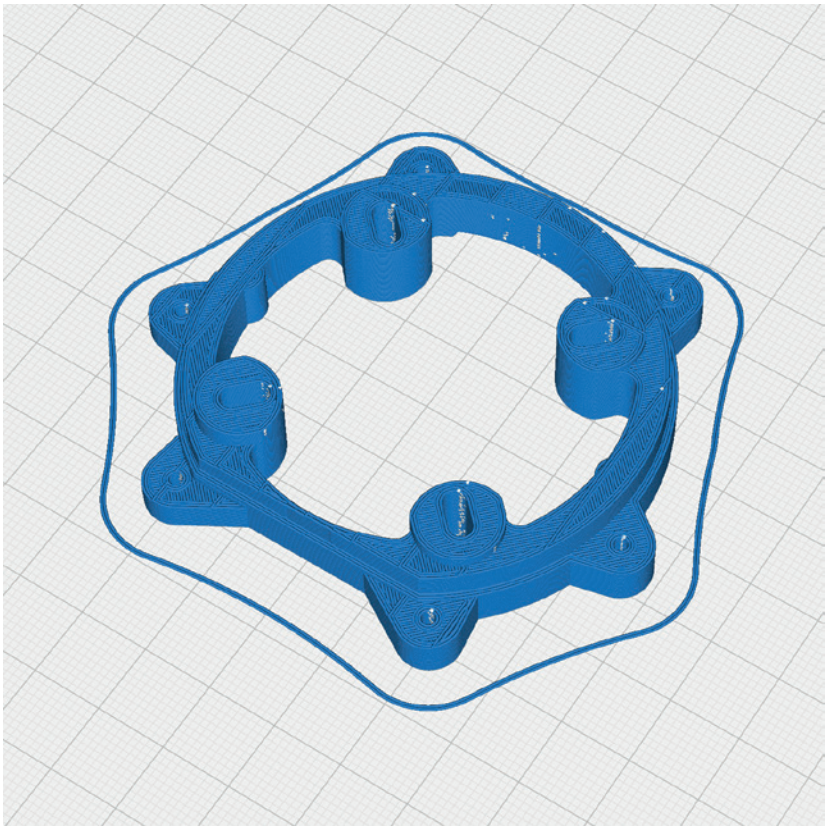


P1_Motormount_wp.stl

MATERIAL PLA, Weight: ~ 18 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody PLA or Tough PLA

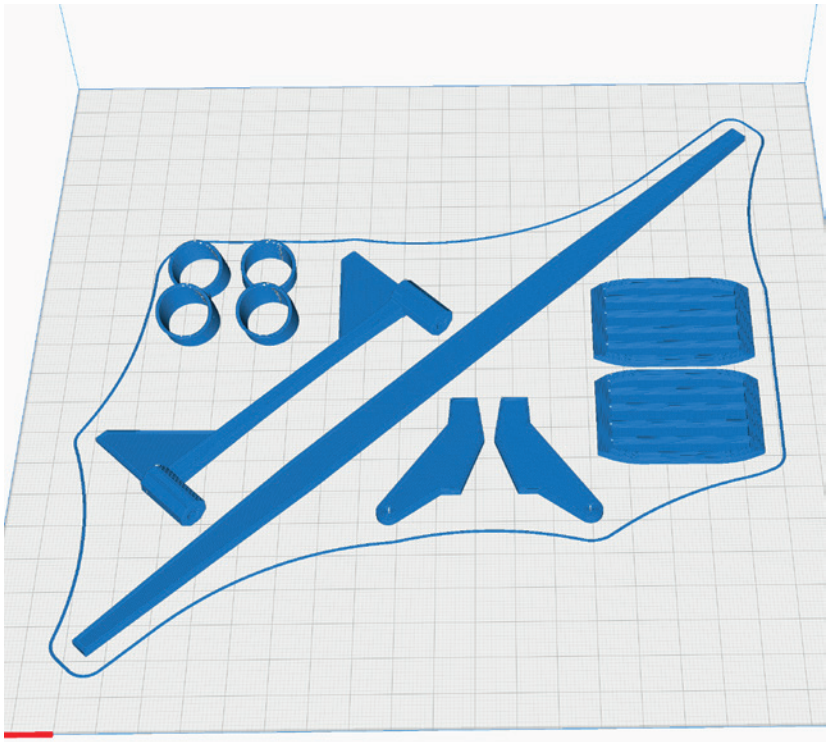
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Parts_wp.stl

MATERIAL PLA, Weight: ~ 19 g

ADDITIONAL SETTINGS

None required

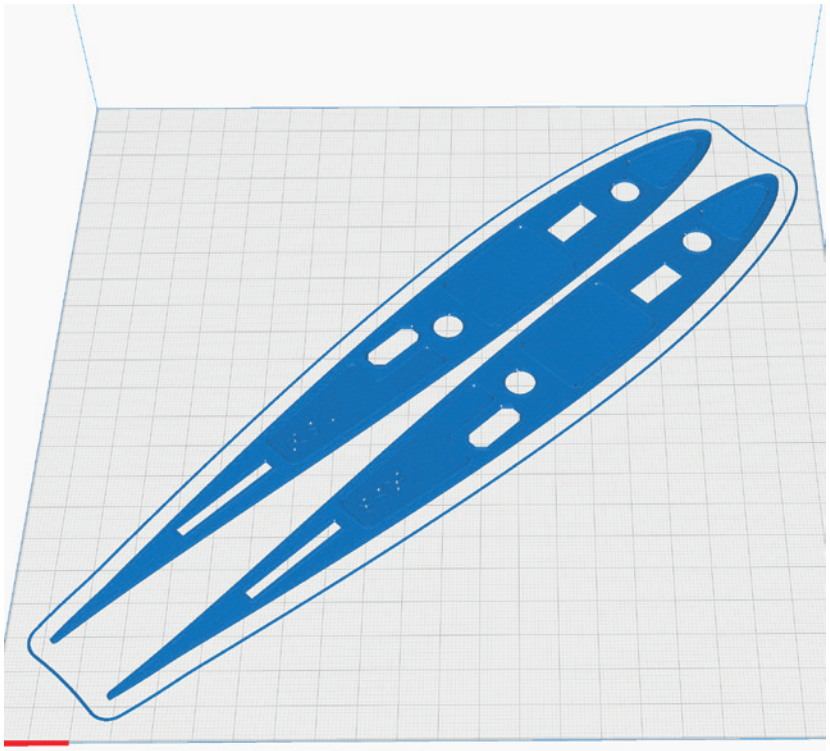


P1_Protectors FUS_wp.stl

MATERIAL PLA, Weight: ~ 11 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody PLA or Tough PLA

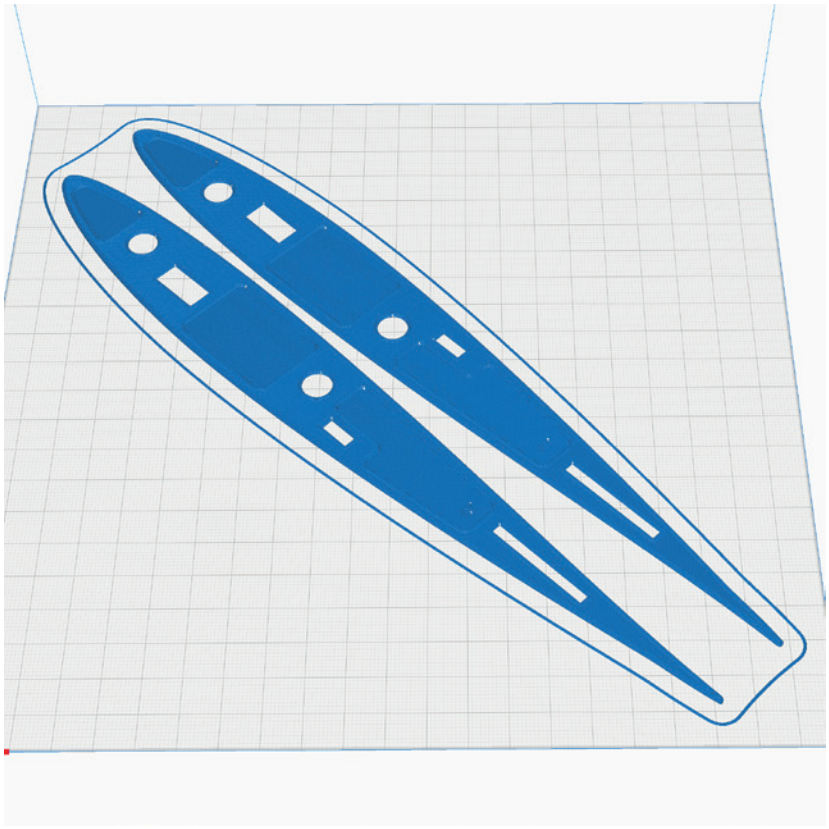
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Protectors WING_wp.stl

MATERIAL PLA, Weight: ~ 11 g

ADDITIONAL SETTINGS

None required

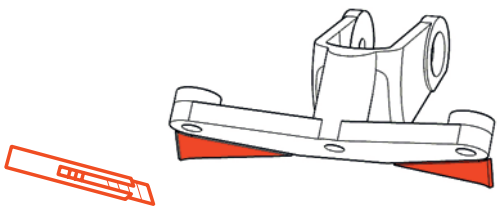


P1_Parts rear_wp.stl

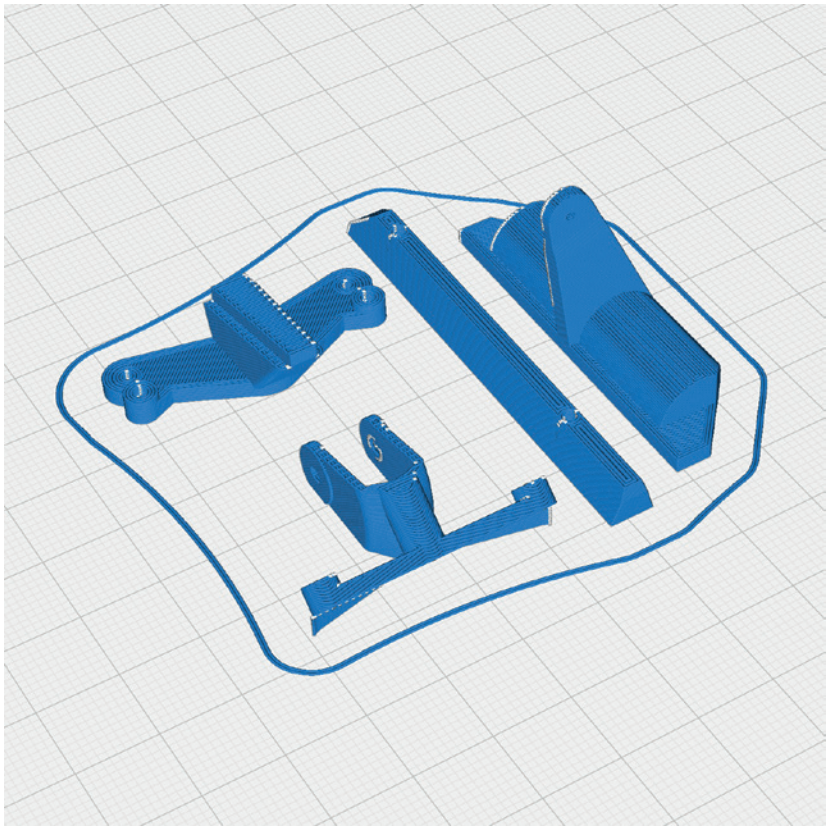
MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

None required



Remove support.
Please be careful with the knife!



PROFILE P1_Fullbody PLA or Tough PLA

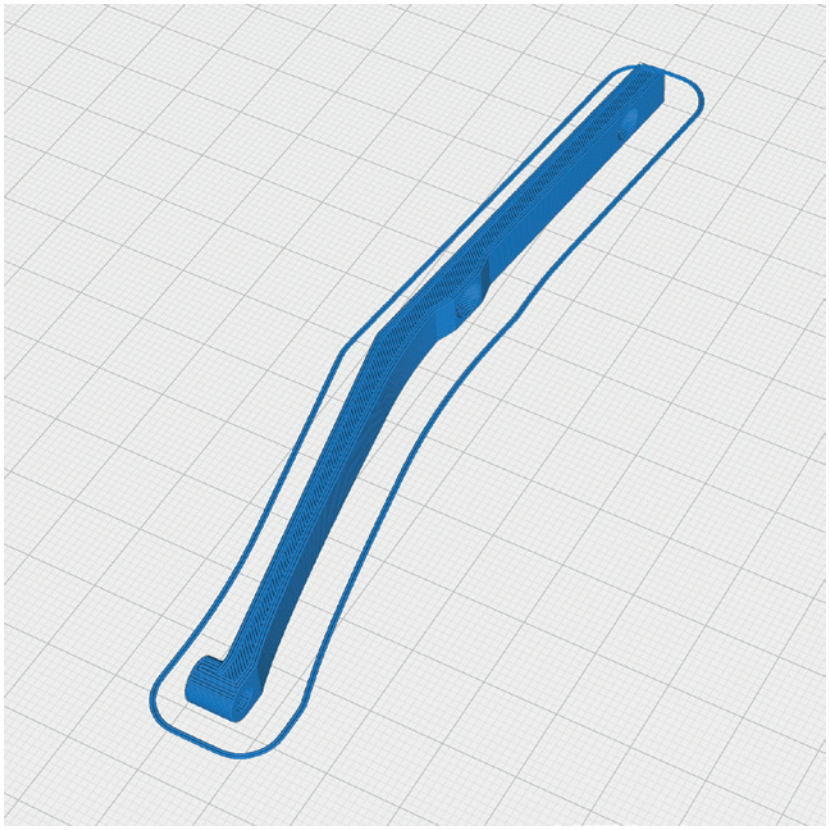
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Rear gear_wp.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

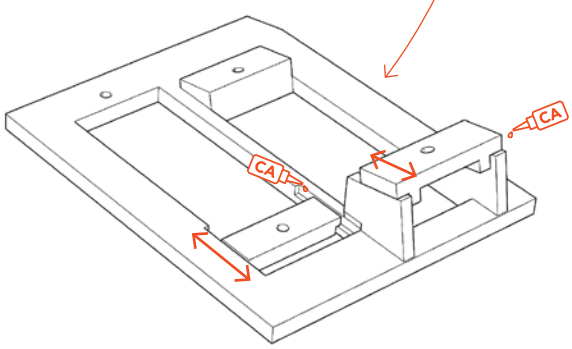


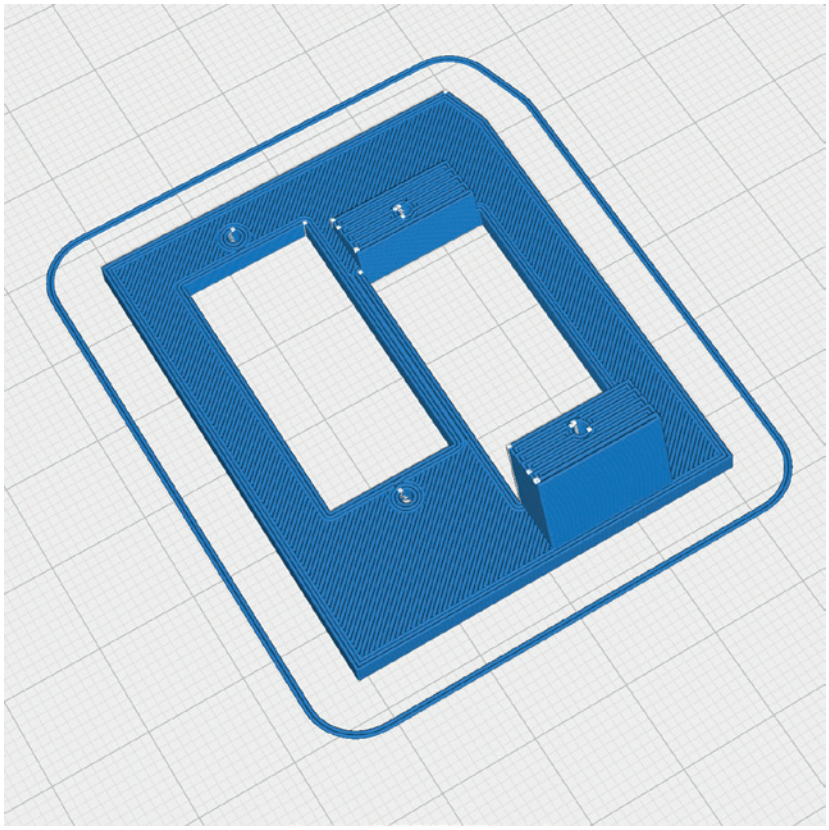
P1_Servo board 35mm_wp.stl or P1_Servo board customizable_wp.stl

MATERIAL PLA, Weight: ~ 5 g

ADDITIONAL SETTINGS

None required





PROFILE P1_Fullbody PLA or Tough PLA

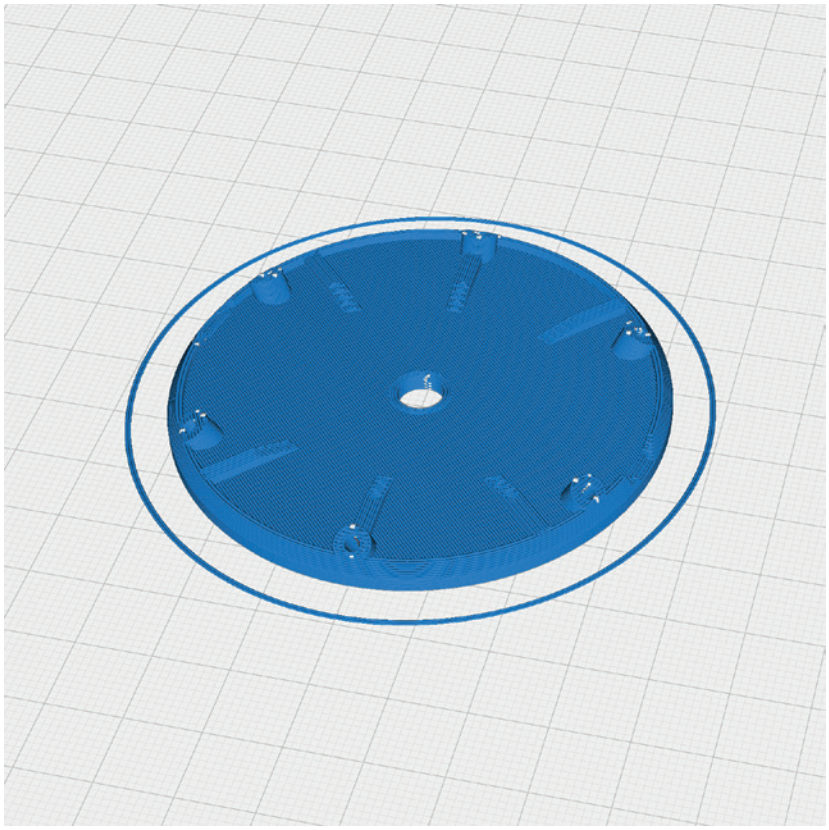
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Spinner plate 6_wp.stl

MATERIAL PLA, Weight: ~ 12 g

ADDITIONAL SETTINGS

None required

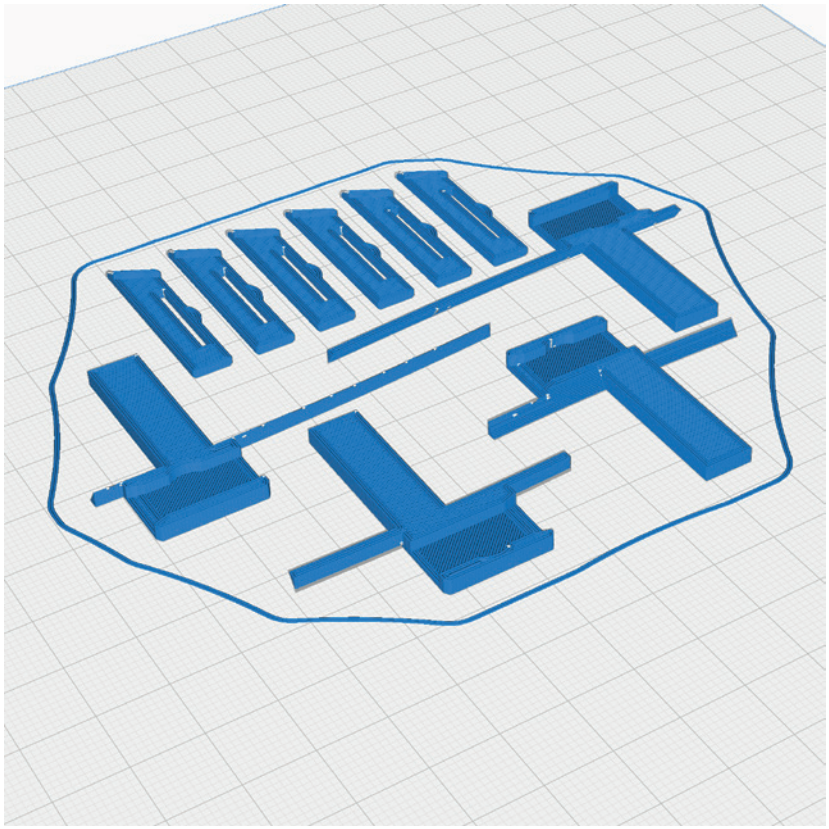


P1_Strut parts_wp.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody PLA or Tough PLA

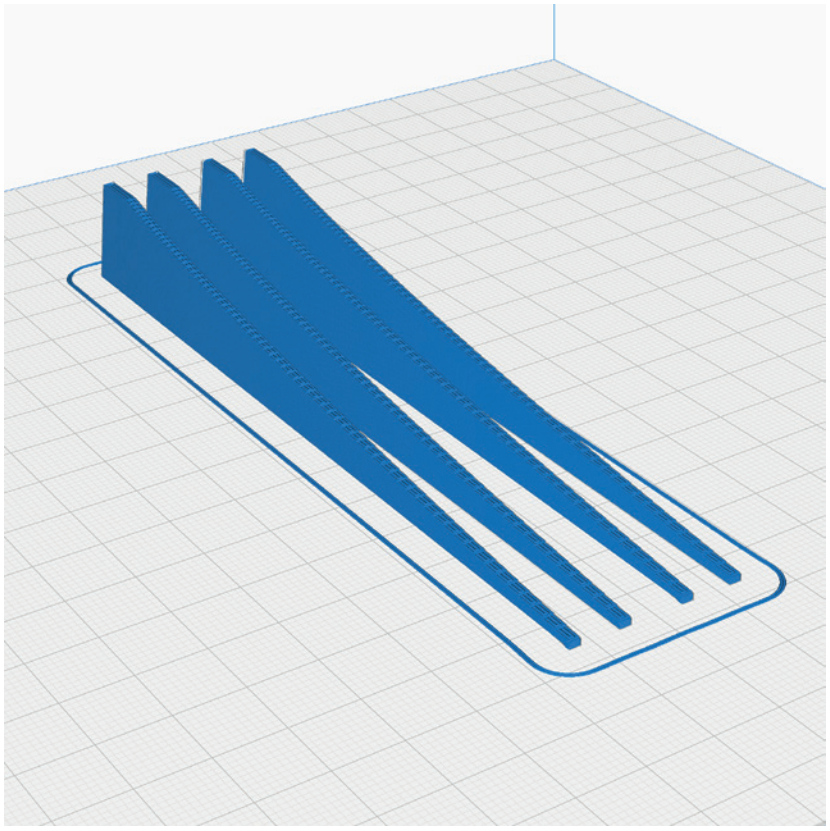
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Winglets_wp.stl

MATERIAL PLA, Weight: ~ 11 g

ADDITIONAL SETTINGS

None required

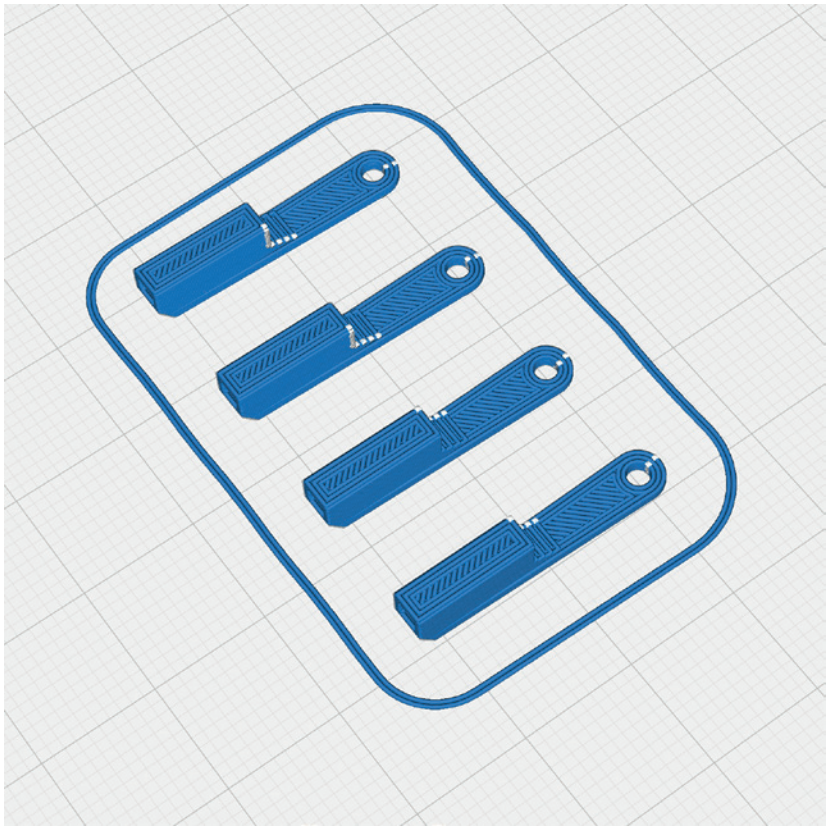


P1_Clips 1mm wire.stl

MATERIAL PLA, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody PLA or Tough PLA

The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

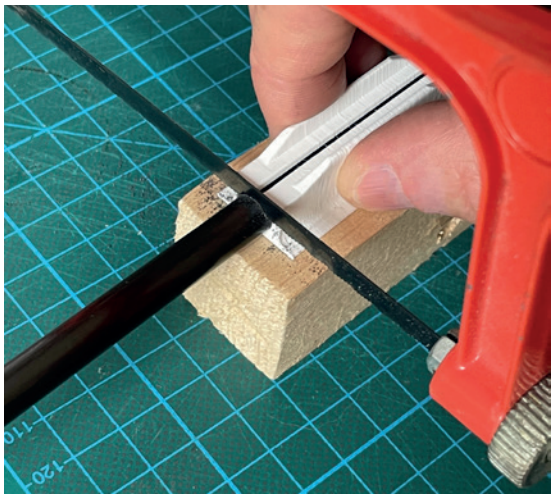
Carbon tool 8mm.stl

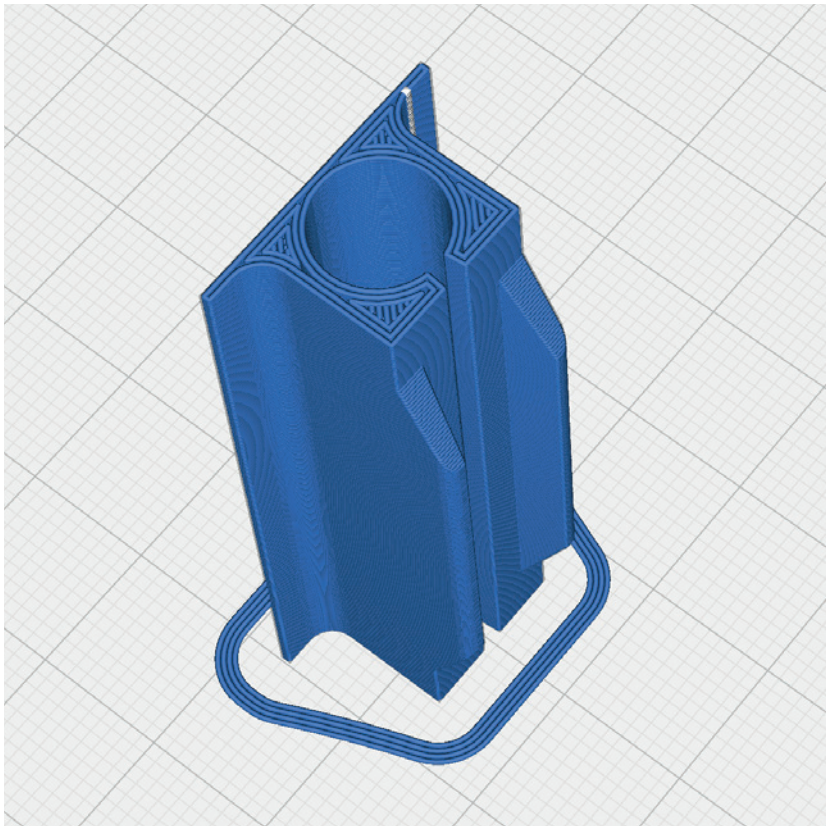
MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

None required

Use this tool to cut the 8mm carbon tubes.





PROFILE P2_Hollowbody PLA or Tough PLA

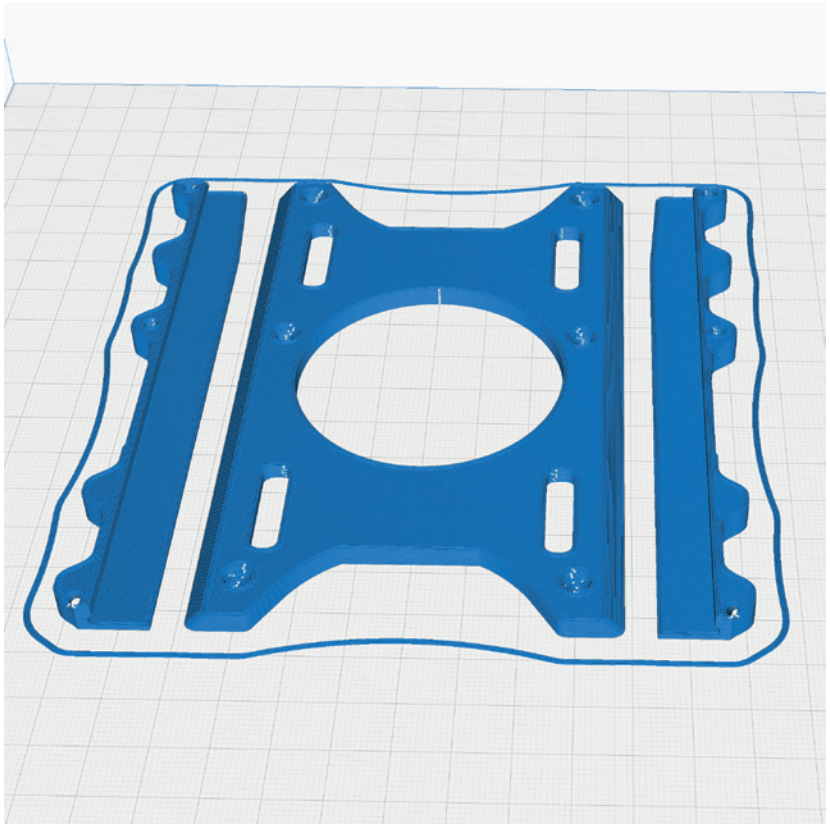
The following parts must be sliced with the PROFILE P2_Hollowbody.
Please note the additional settings for the individual parts!

P2_Battery mount_wp.stl

MATERIAL PLA, Weight: ~ 20 g

ADDITIONAL SETTINGS

None required

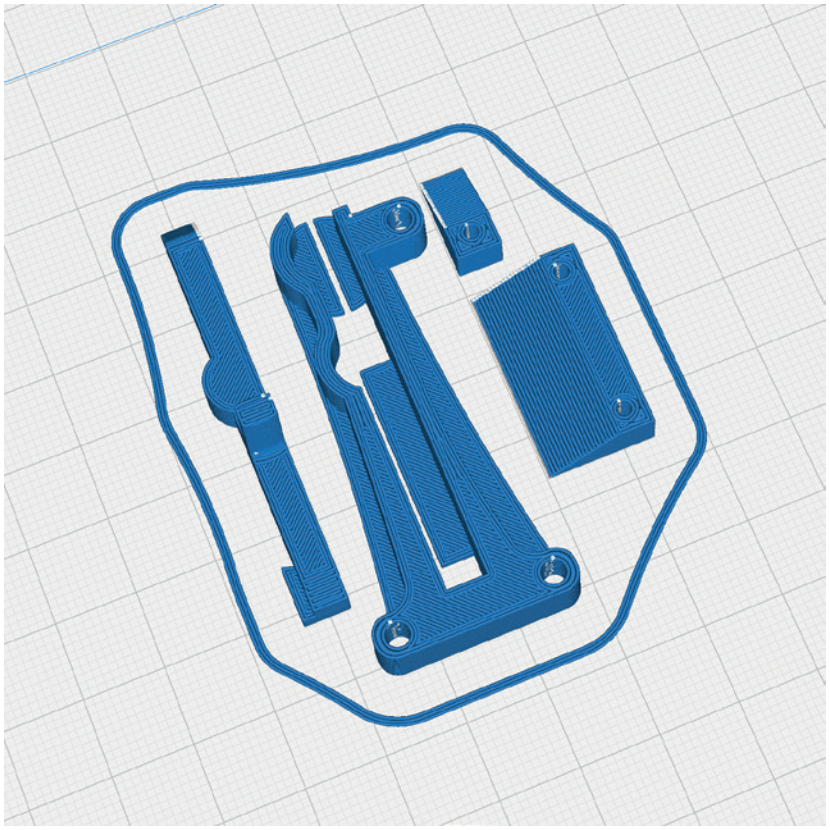


P2_Cowling lock_wp.stl

MATERIAL PLA, Weight: ~ 5 g

ADDITIONAL SETTINGS

None required



PROFILE P2_Hollowbody PLA or Tough PLA

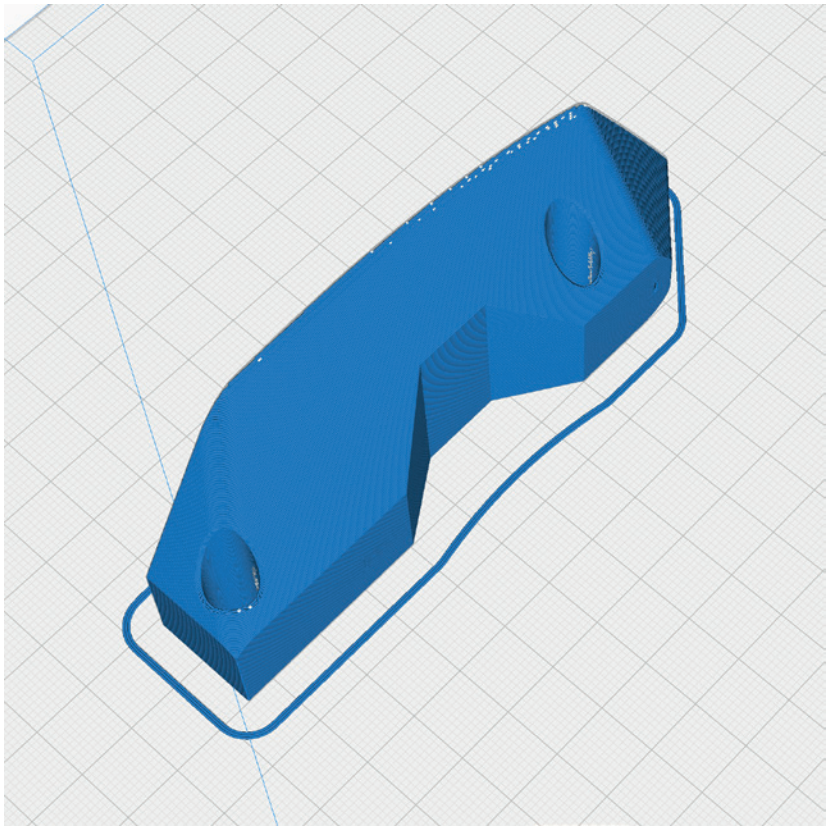
The following parts must be sliced with the PROFILE P2_Hollowbody.
Please note the additional settings for the individual parts!

P2_Gearbase L_wp.stl and **P2_Gearbase R_wp.stl**

MATERIAL PLA, Weight: ~ 20 g

ADDITIONAL SETTINGS

- Infill Pattern: Gyroid

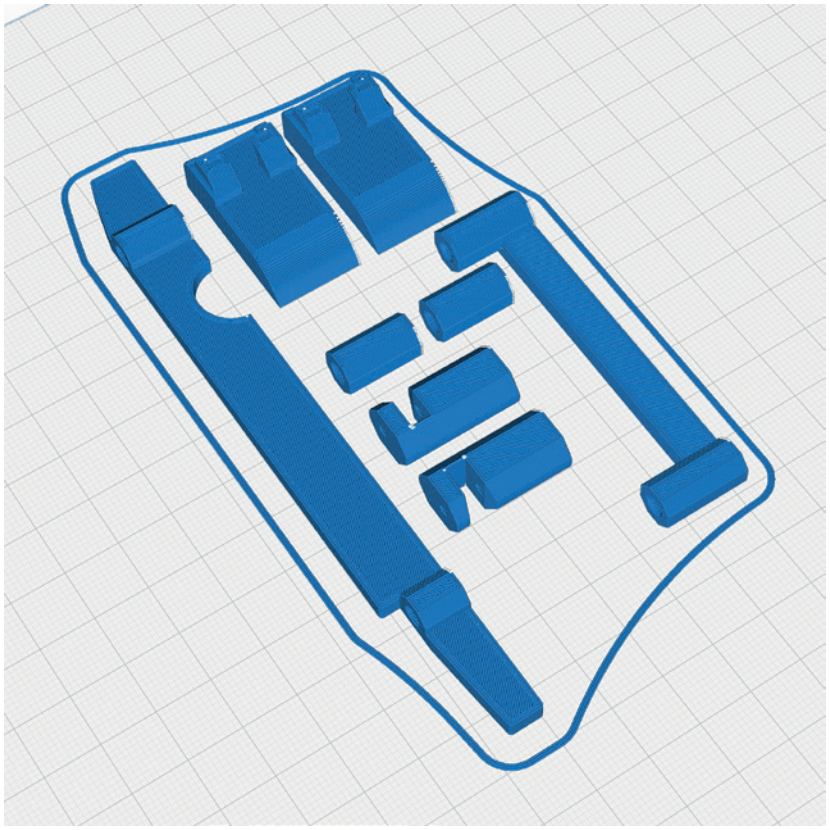


P2_Parts_wp.stl

MATERIAL PLA, Weight: ~ 13 g

ADDITIONAL SETTINGS

None required



PROFILE P2_Hollowbody PLA or Tough PLA

The following parts must be sliced with the PROFILE P2_Hollowbody.
Please note the additional settings for the individual parts!

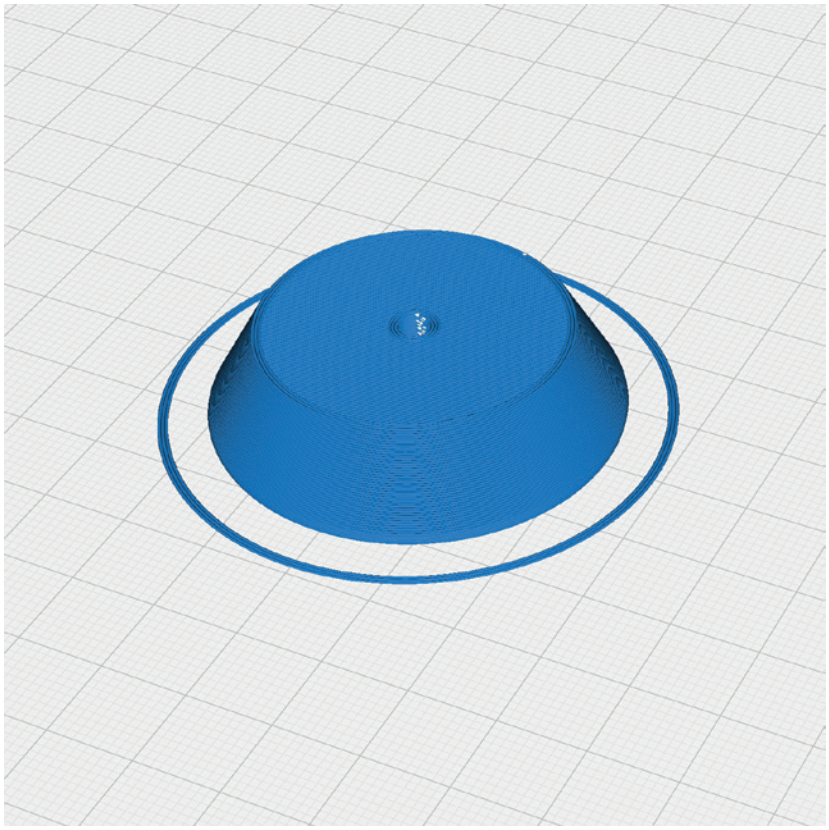
P2_Rim bearings_wp.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

- Wall Line Count: 3

There is also a rim version STL without ball bearing, but we recommend the variant with ball bearing!

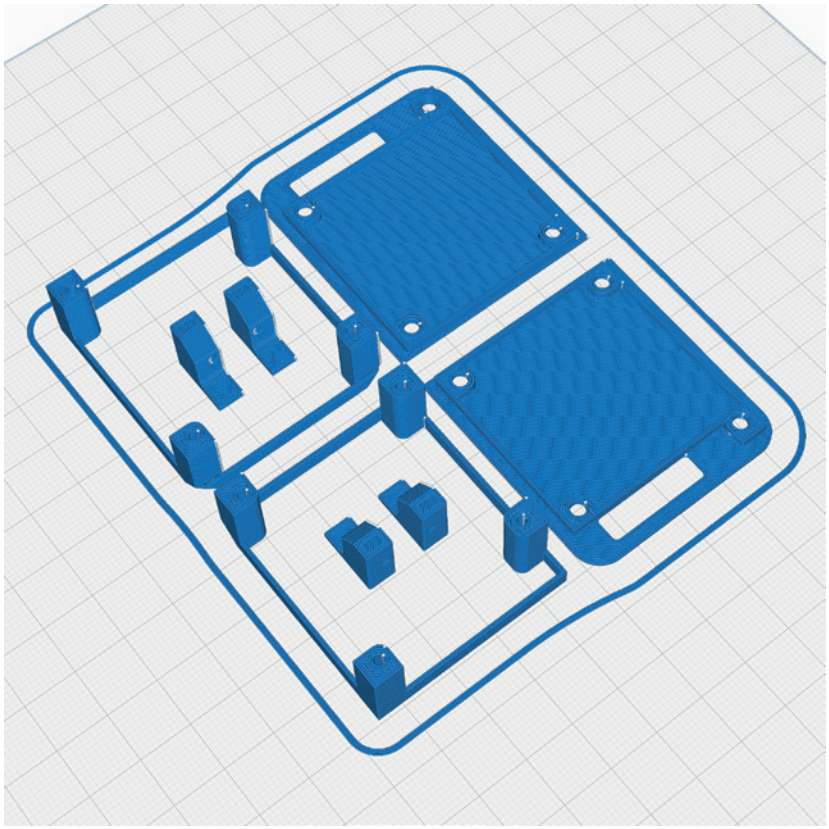


P2_Servocovers_wp.stl

MATERIAL PLA, Weight: ~ 11 g

ADDITIONAL SETTINGS

None required



PROFILE P2_Hollowbody PLA or Tough PLA

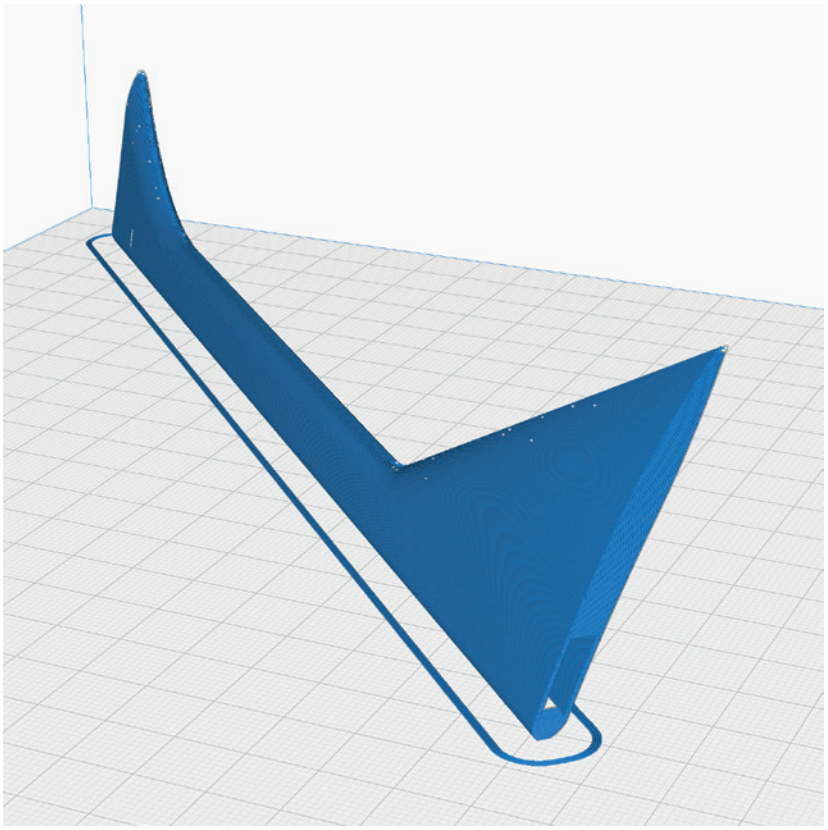
The following parts must be sliced with the PROFILE P2_Hollowbody.
Please note the additional settings for the individual parts!

P2_Strut_wp.stl

MATERIAL PLA, Weight: ~ 12 g

ADDITIONAL SETTINGS

- Infill Density: 6 %
- Print twice



PROFILE P4_Flex

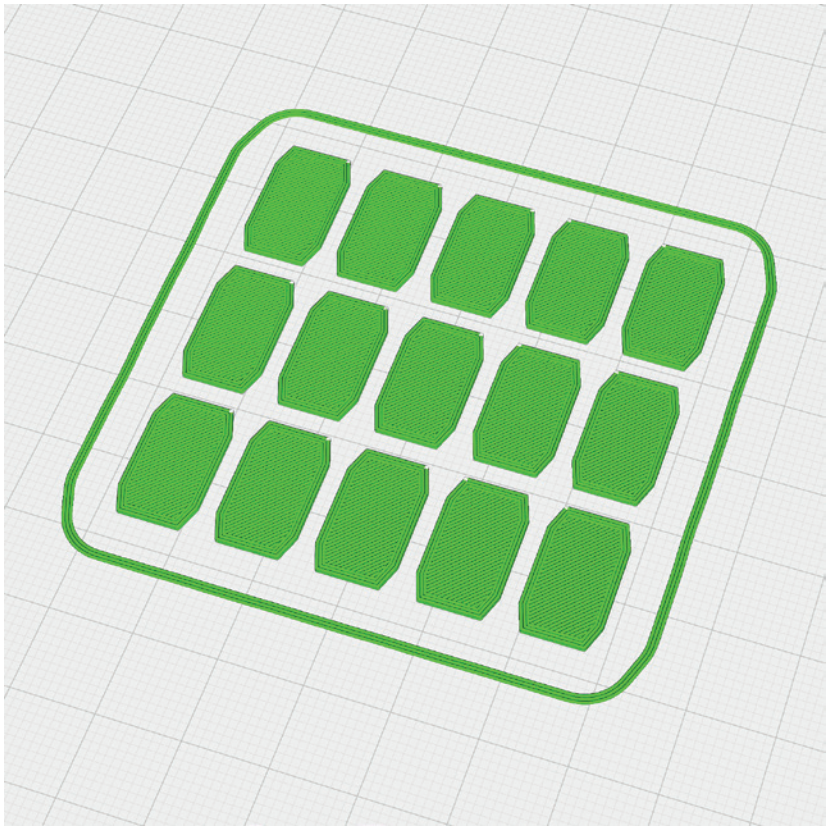
The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

P4_Hinges_wp.stl

MATERIAL TPU A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required



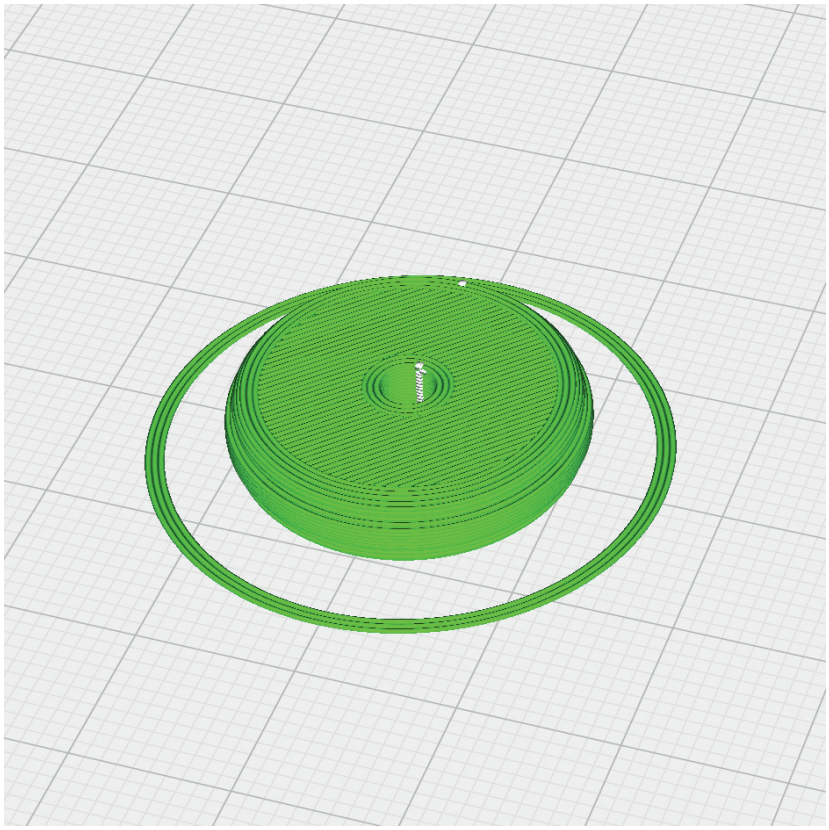
P4_Rear wheel_wp.stl

MATERIAL TPU A95 **or better** VarioShore, Weight: ~ 2 g

ADDITIONAL SETTINGS

VarioShore with Flow 70 %:
• Infill Density: 100 %

TPU A95:
• Infill Density: 100 %



PROFILE P4_Flex

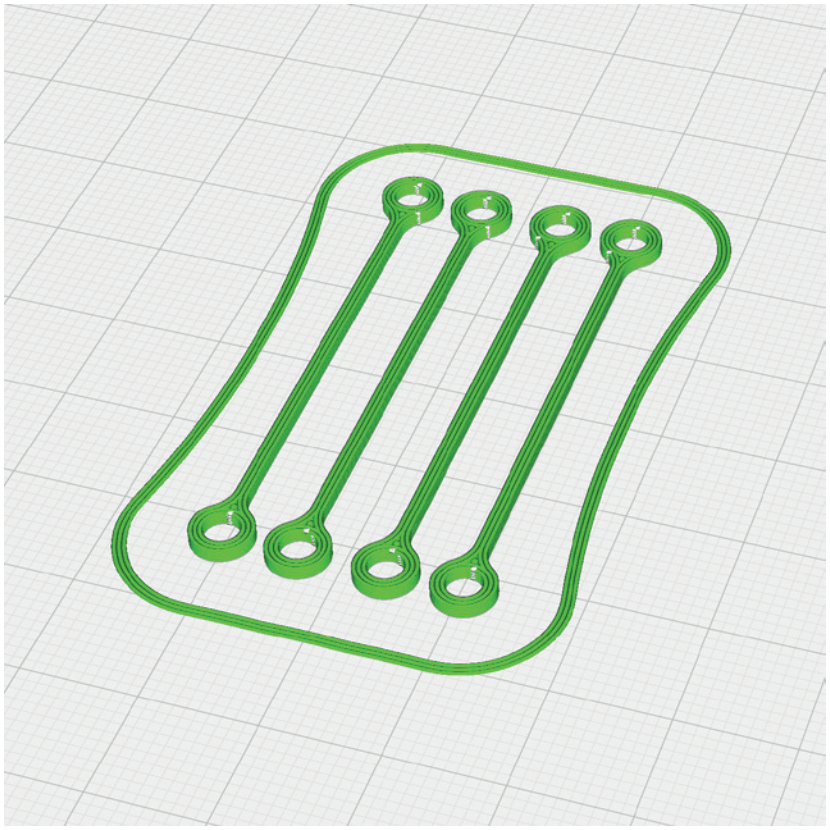
The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

P4_Rubber bands_wp.stl

MATERIAL TPU A95, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required

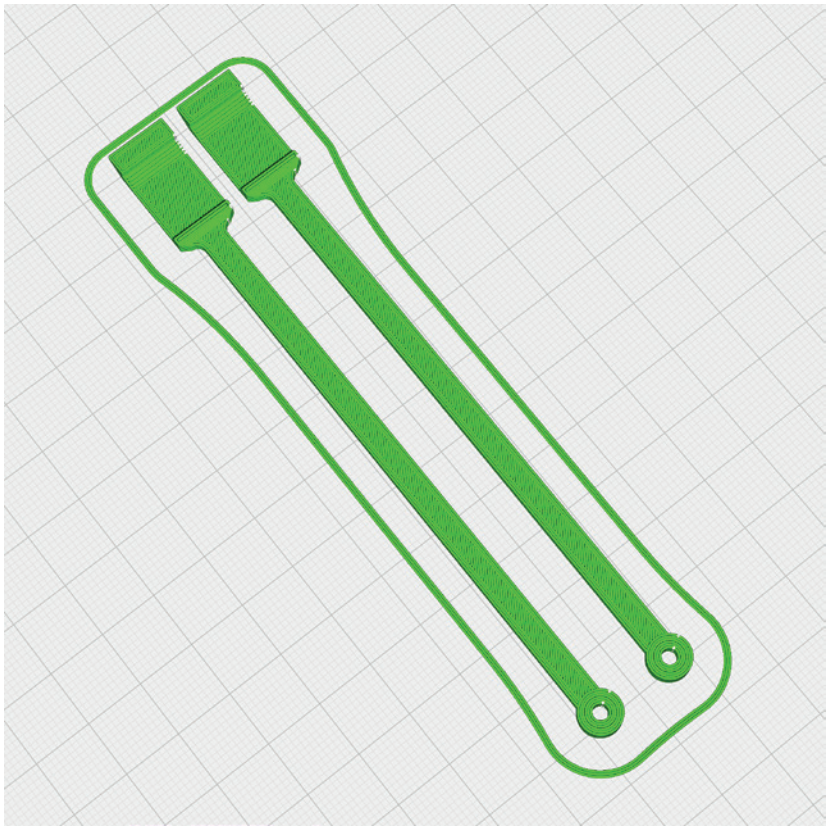


P4_Tension belts 125_wp.stl

MATERIAL TPU A95, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required



PROFILE P4_Flex

The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

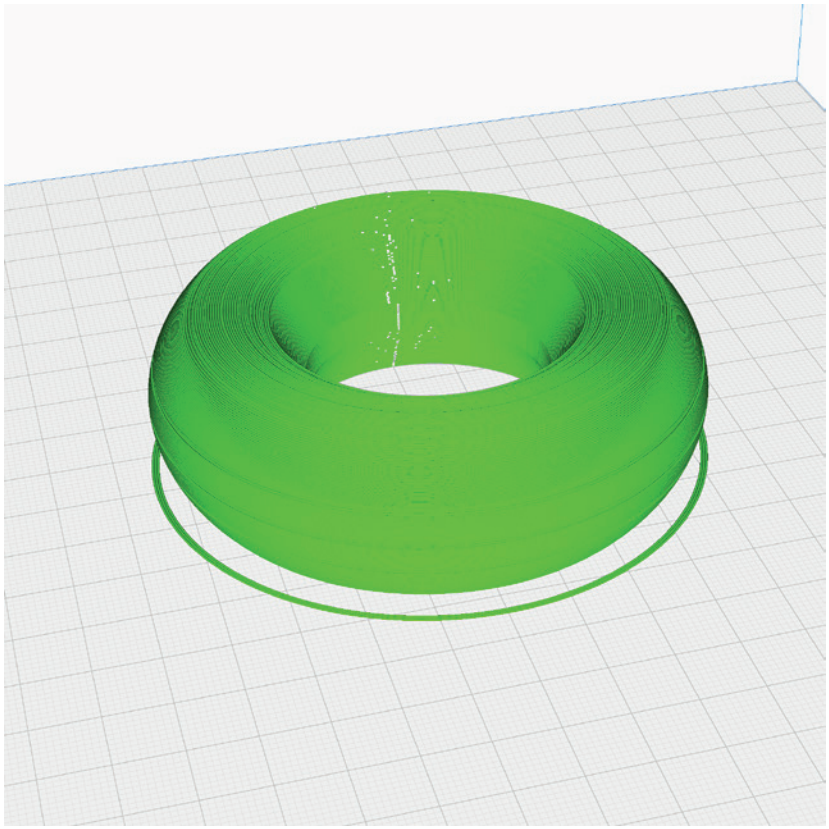
P4_Tire_wp.stl

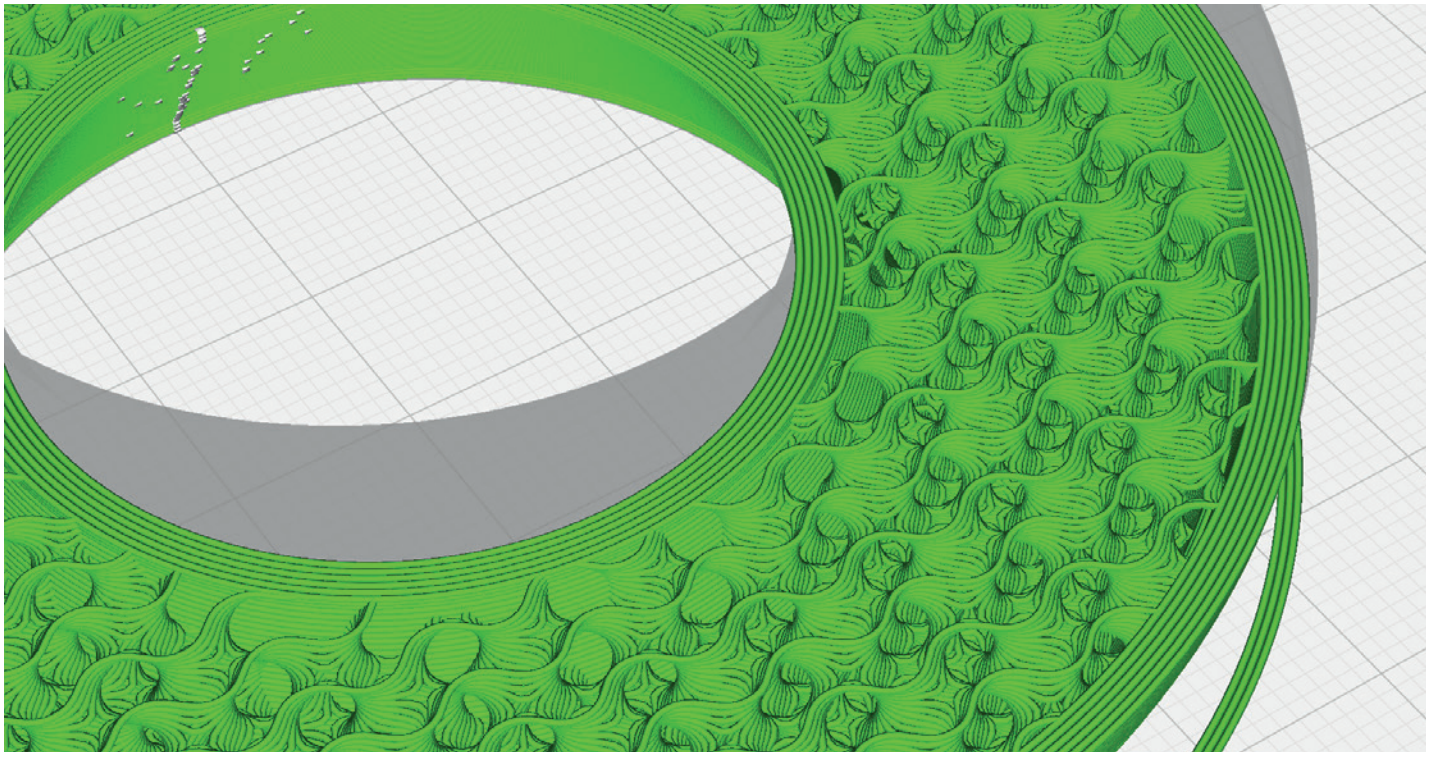
MATERIAL TPU A95 **or better** VarioShore,
Weight: ~ 55 g

ADDITIONAL SETTINGS

VarioShore with Flow 70 %:
- Wall Line Count: 6
- Top Layers: 6
- Bottom Layers: 6
- Infill Density: 15 %
- Infill Pattern: Gyroid
- print this part twice

TPU A95:
- Wall Line Count: 3
- Top Layers: 3
- Infill Pattern: Gyroid





PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

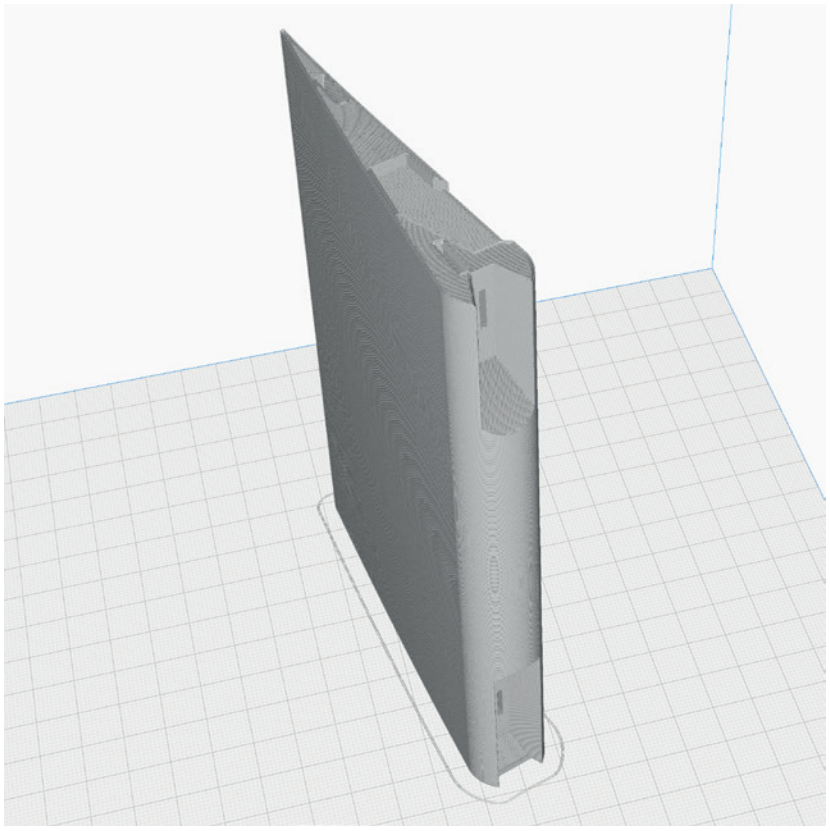
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_AIL 1 L_wp.stl and P5_AIL 1 R_wp.stl

MATERIAL **LW-PLA**, ~ 17 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

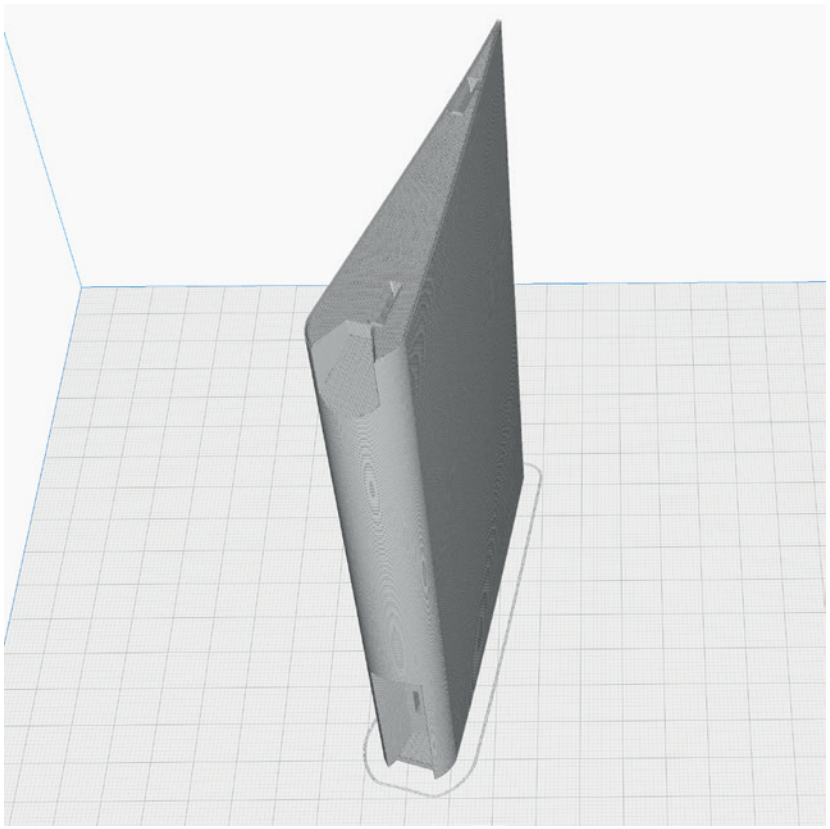


P5_AIL 2 L_wp.stl and P5_AIL 2 R_wp.stl

MATERIAL **LW-PLA**, ~ 15 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

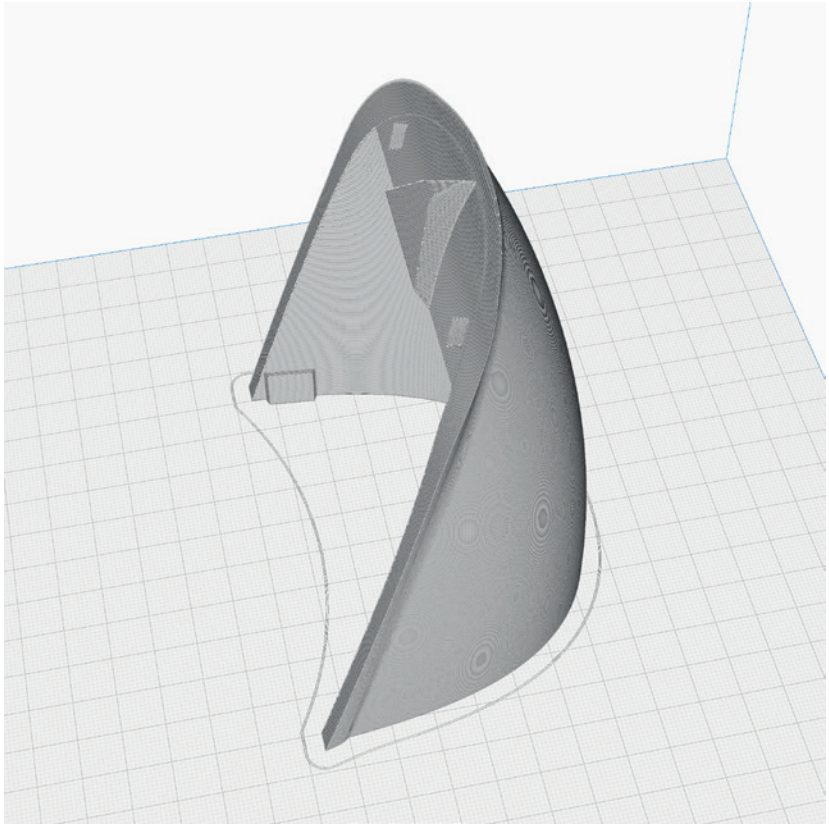
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Canopy1_wp.stl

MATERIAL **LW-PLA**, ~ 13 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

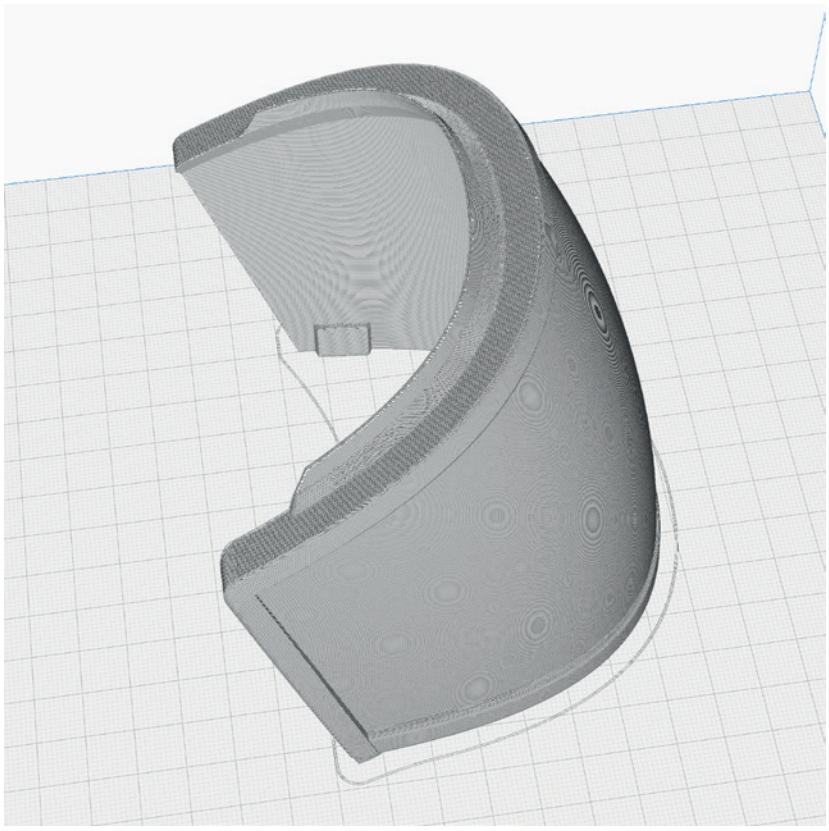


P5_Canopy2_wp.stl

MATERIAL **LW-PLA**, ~ 17 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts!** **It is essential to print these parts with LW-PLA!**

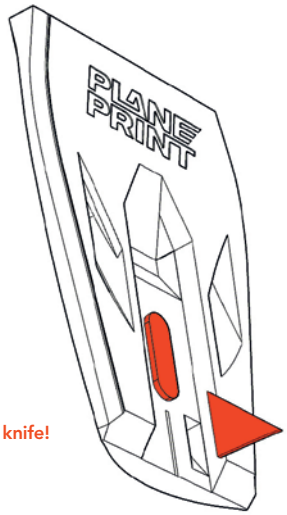
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Cownling_wp.stl

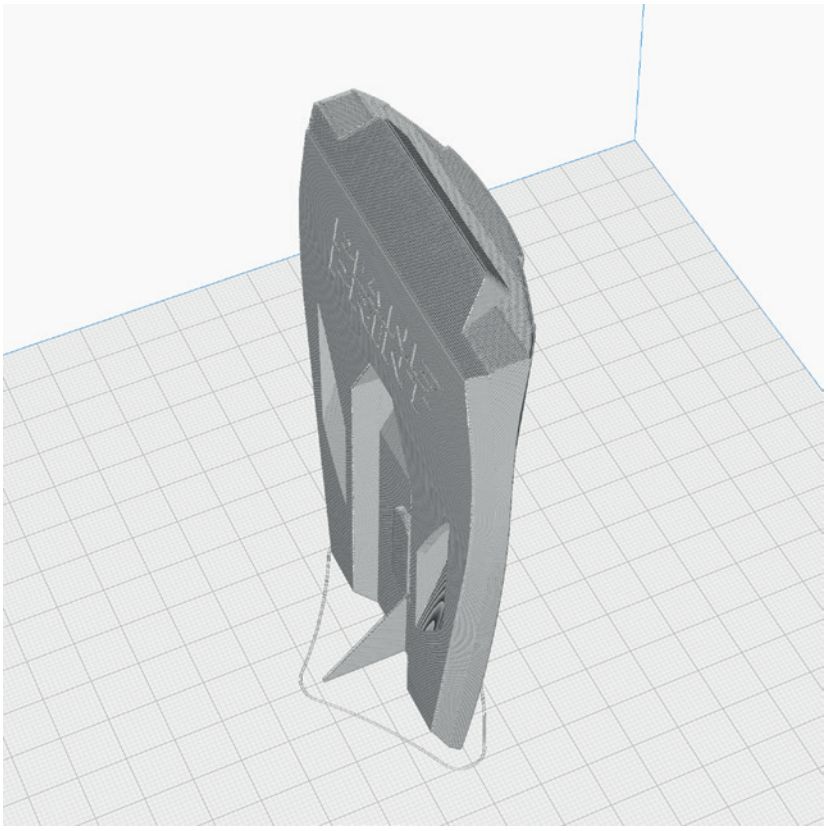
MATERIAL **LW-PLA**, ~ 11 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



Remove support.
Please be careful with the knife!

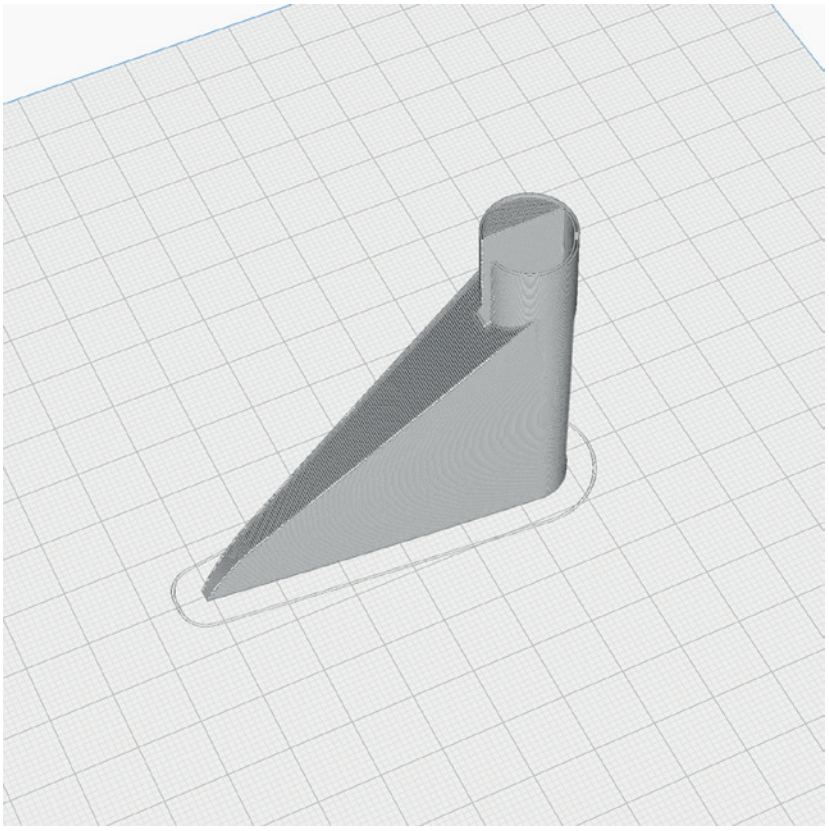


P5_Elevator 1 L_wp.stl and P5_Elevator 1 R_wp.stl

MATERIAL **LW-PLA**, ~ 3 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

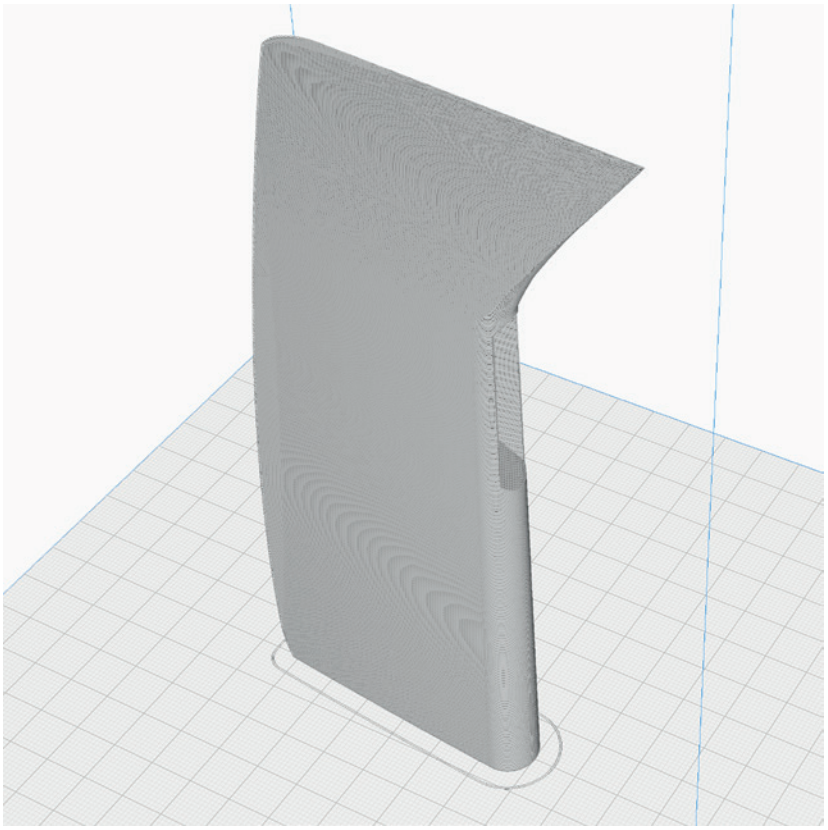
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Elevator 2 L_wp.stl and P5_Elevator 2 R_wp.stl

MATERIAL **LW-PLA**, ~ 7 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

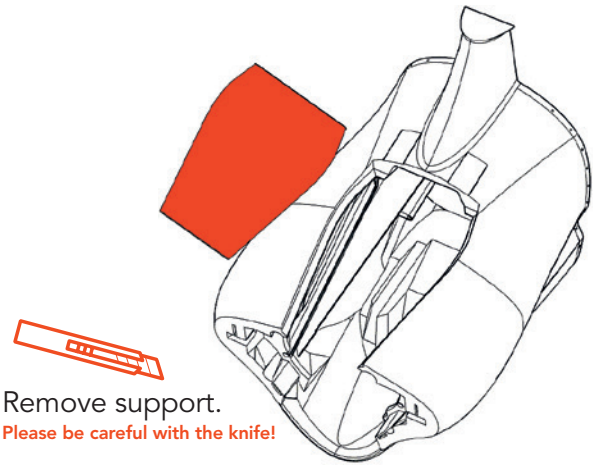


P5_FUS 1_wp.stl

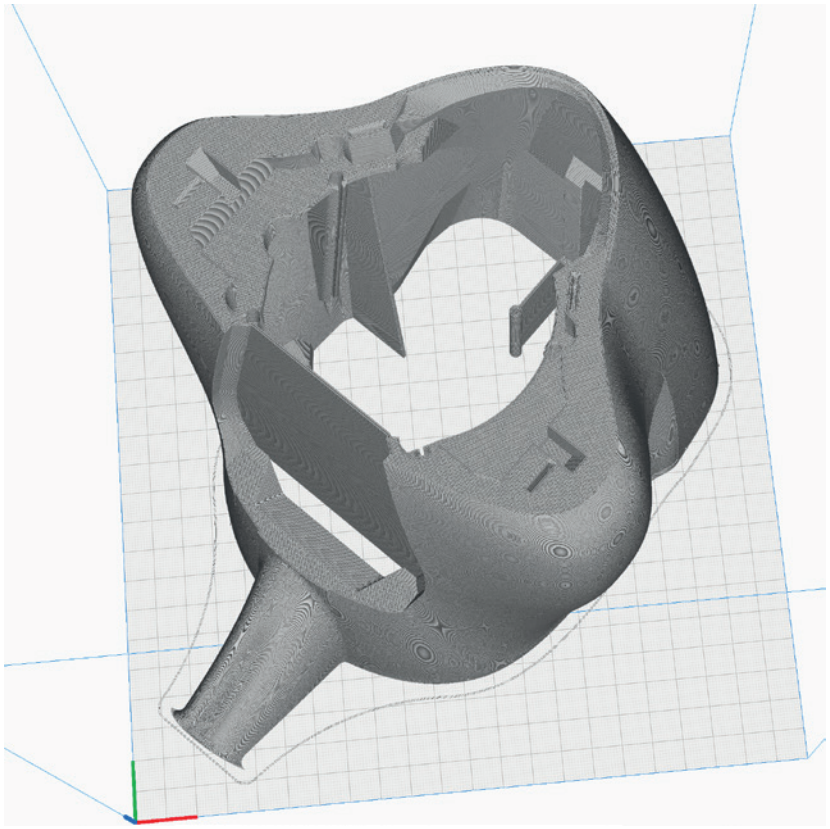
MATERIAL **LW-PLA**, ~ 95 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Right



Remove support.
Please be careful with the knife!



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

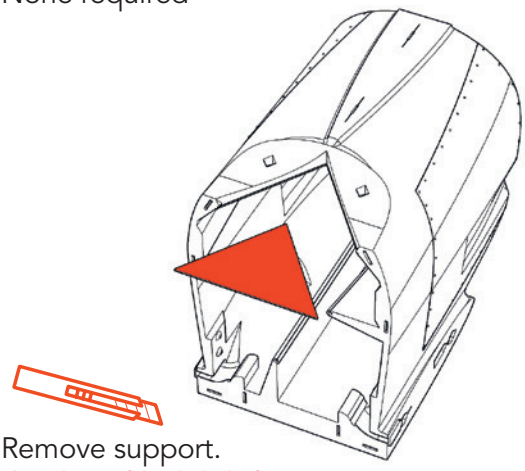
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_FUS 2_wp.stl

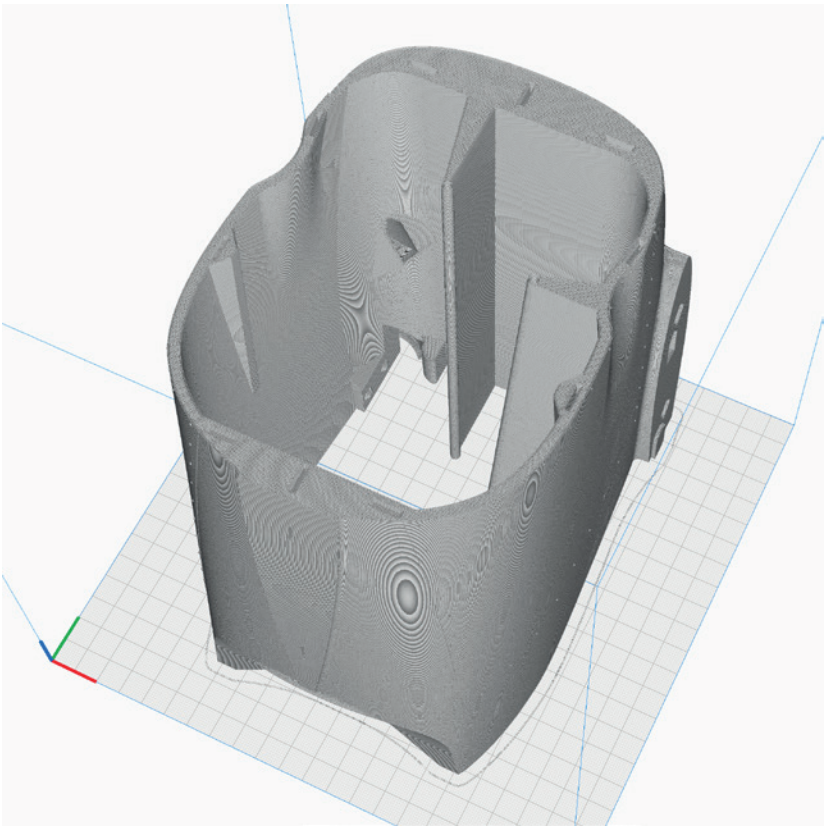
MATERIAL **LW-PLA**, ~ 114 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



Remove support.
Please be careful with the knife!

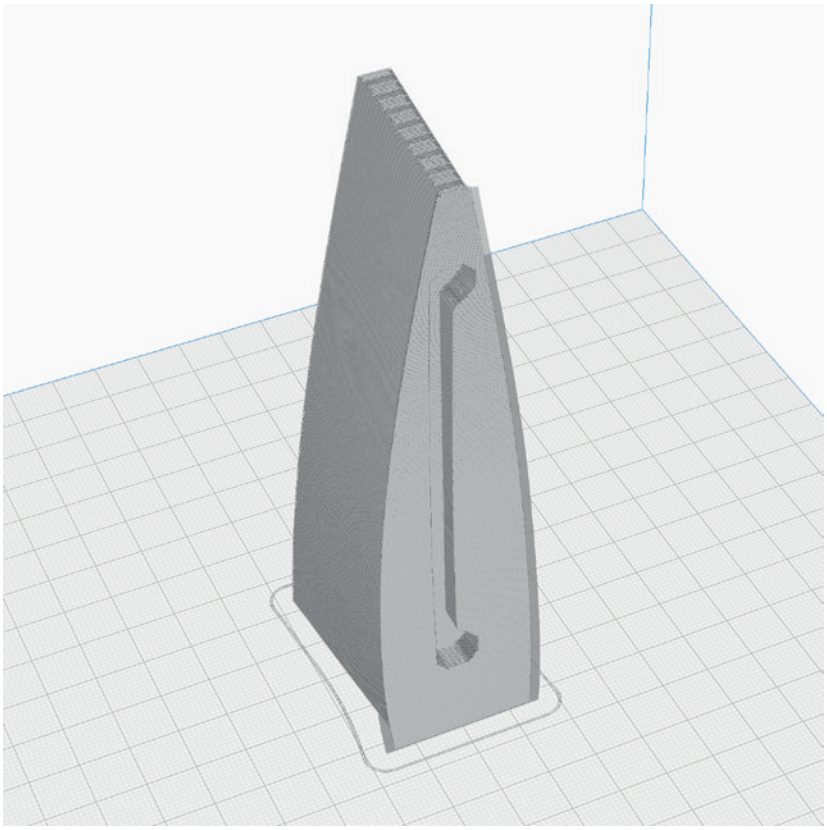


P5_FUS 2B_wp.stl

MATERIAL **LW-PLA**, ~ 10 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts!** **It is essential to print these parts with LW-PLA!**

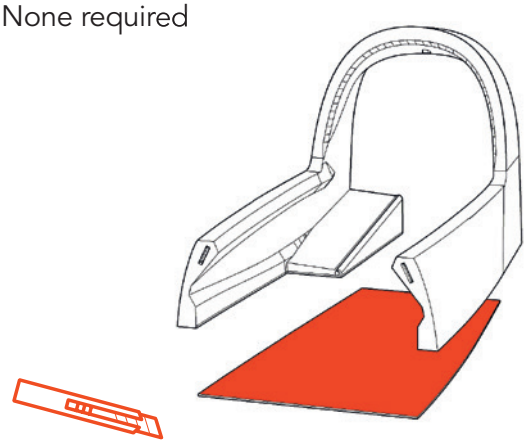
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_FUS 3A_wp.stl

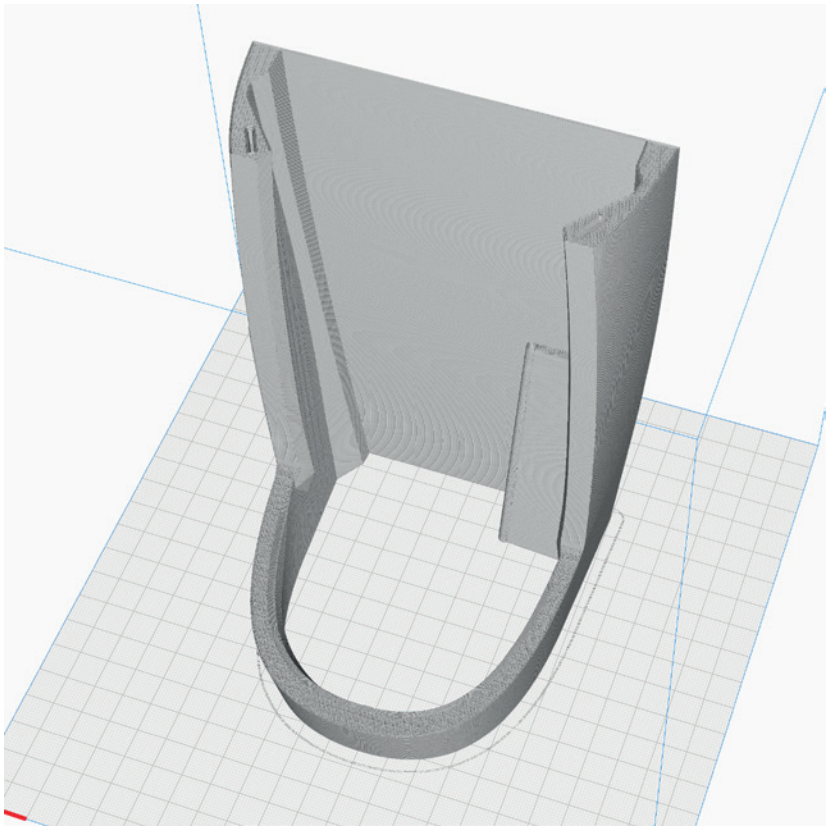
MATERIAL **LW-PLA**, ~ 39 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



Remove support.
Please be careful with the knife!

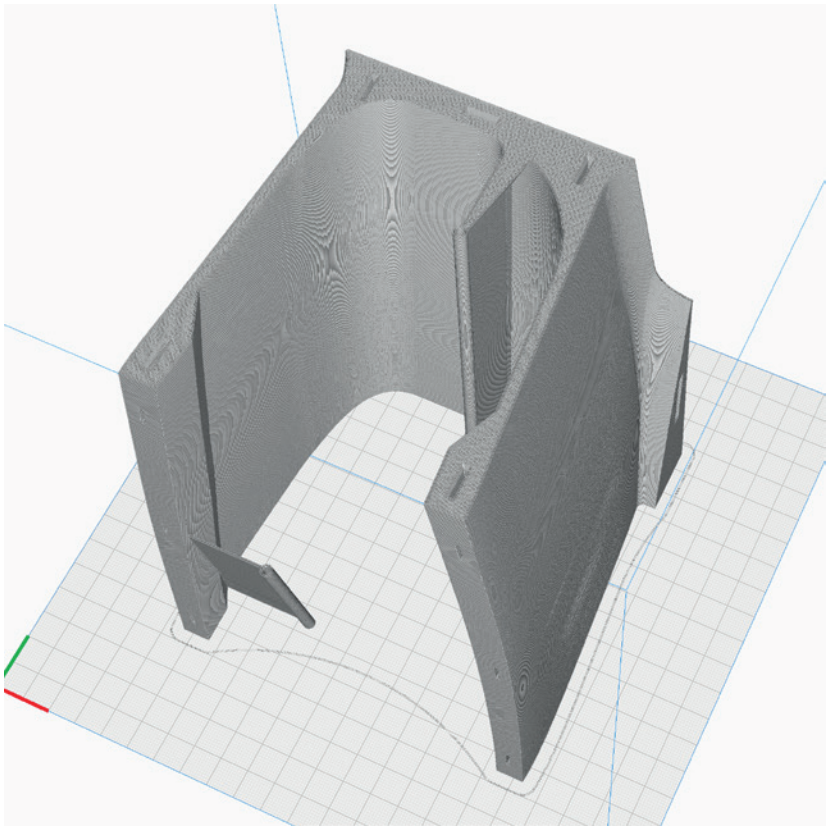


P5_FUS 3B_wp.stl

MATERIAL **LW-PLA**, ~ 79 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

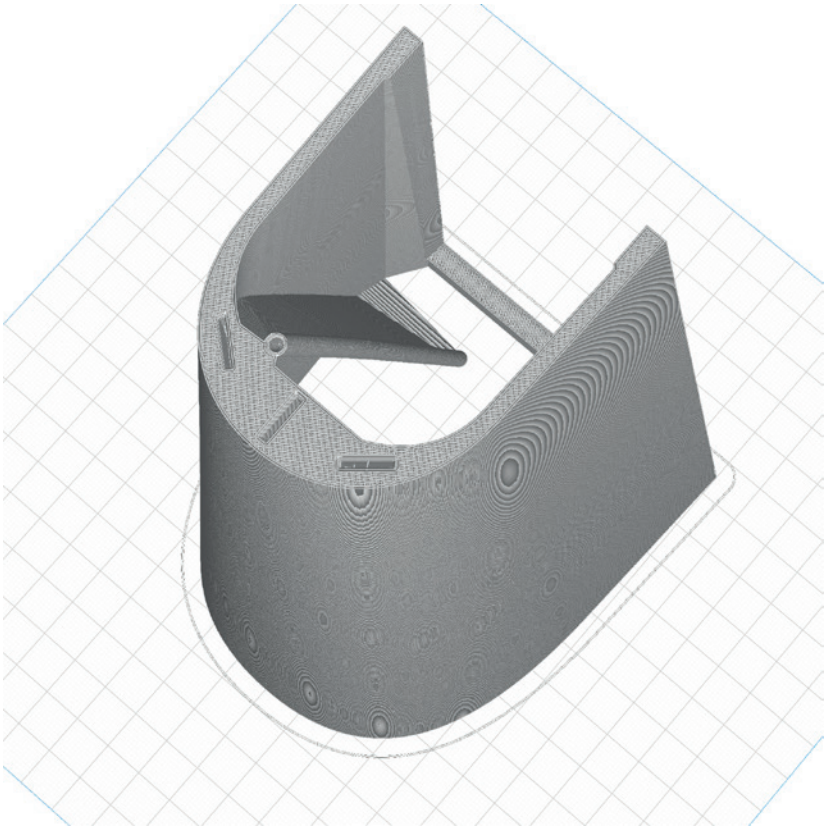
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_FUS 4A_wp.stl

MATERIAL **LW-PLA**, ~ 40 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

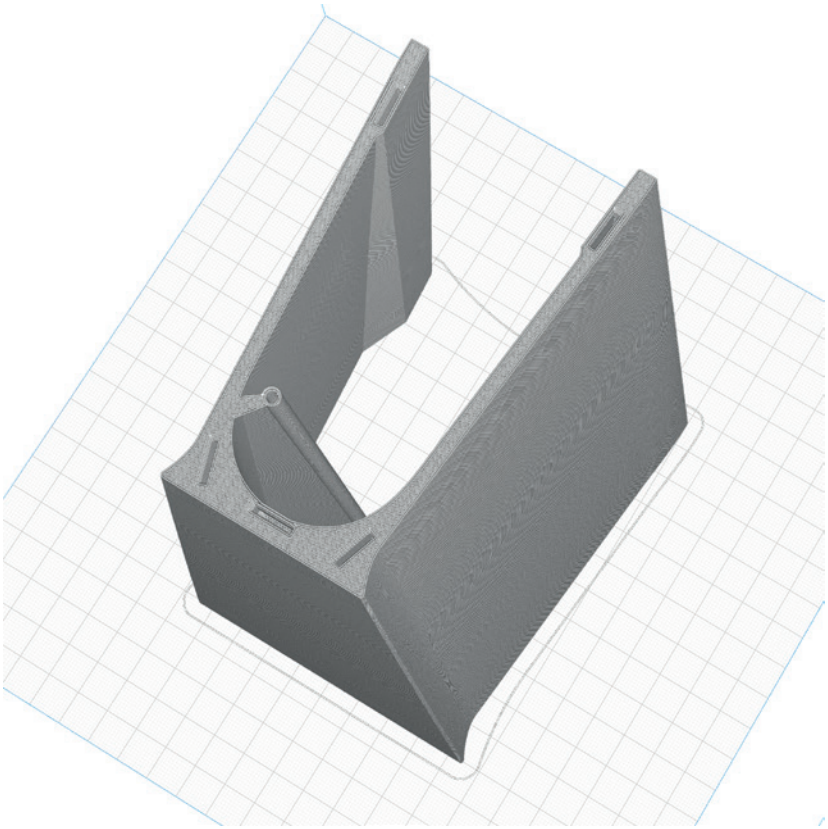


P5_FUS 4B_wp.stl

MATERIAL **LW-PLA**, ~ 49 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

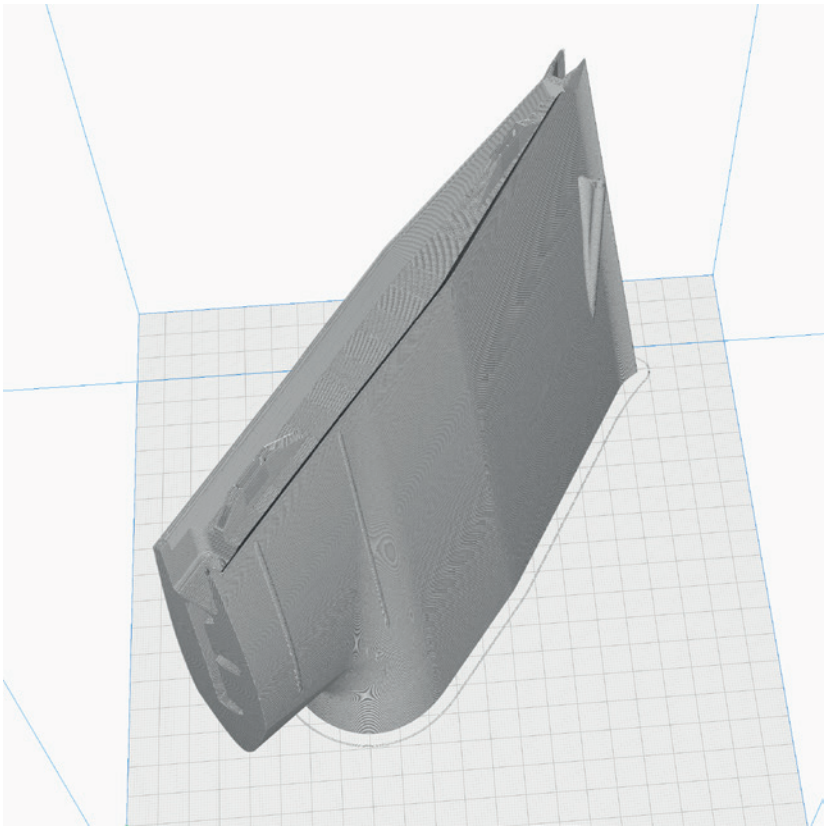
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_FUS 5_wp.stl

MATERIAL **LW-PLA**, ~ 55 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Right

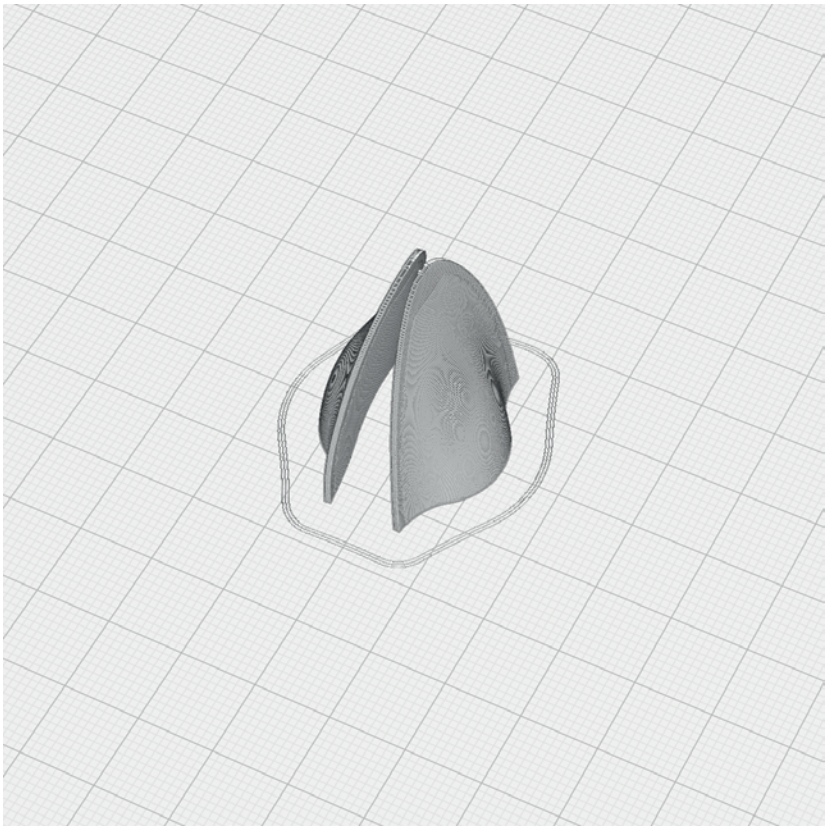


P5_FUS1 detail_wp.stl

MATERIAL **LW-PLA**, ~ 2 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

Stringing occurs here, please simply remove with the knife.



© PLANEPRINT

PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

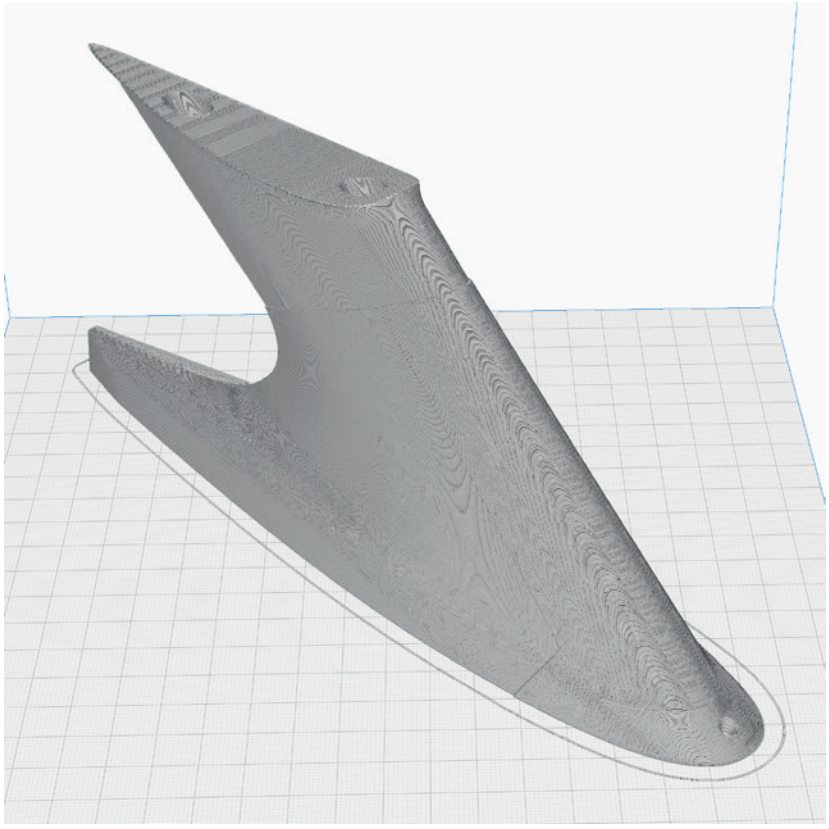
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Gear A L_wp.stl and **P5_Gear A R_wp.stl**

MATERIAL **LW-PLA**, ~ 25 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left

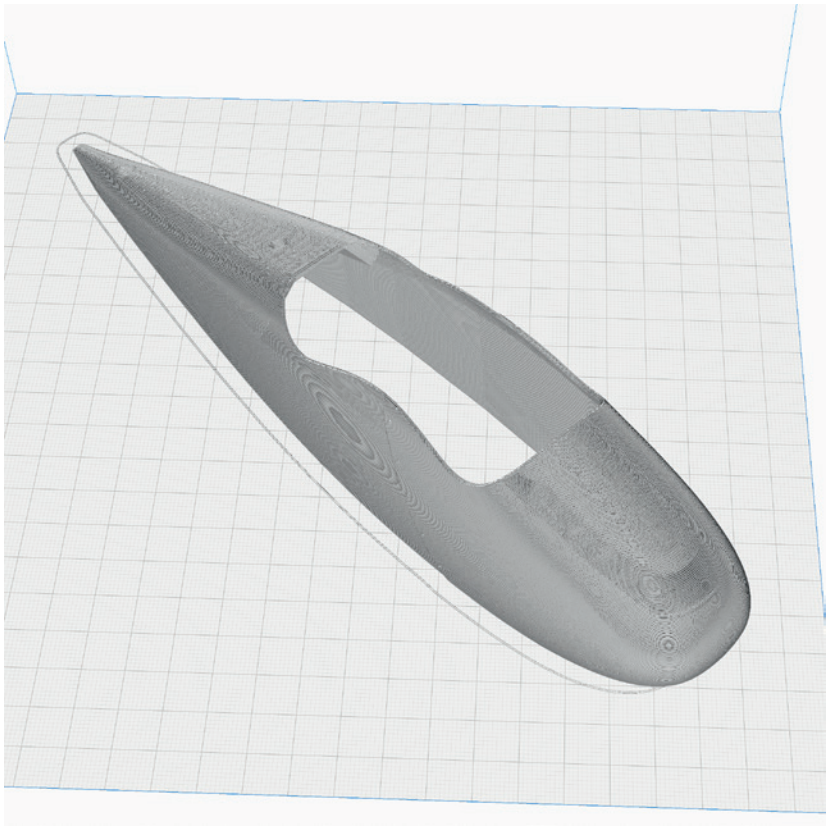


P5_Gear B L_wp.stl and **P5_Gear B R_wp.stl**

MATERIAL **LW-PLA**, ~ 15 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

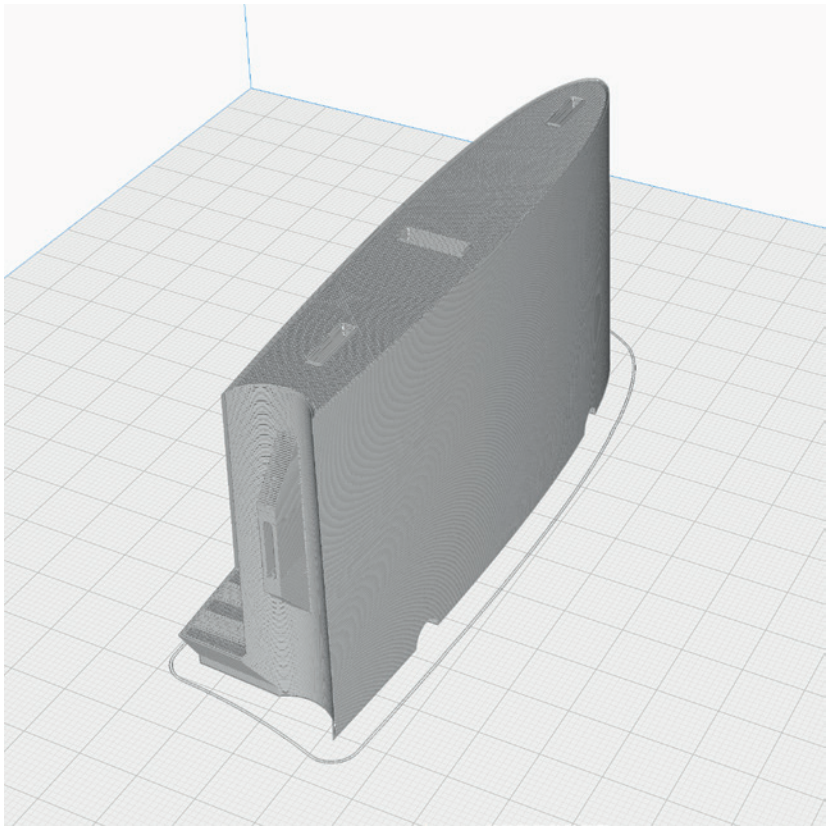
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_HS 1 L_wp.stl and P5_HS 1 R_wp.stl

MATERIAL **LW-PLA**, ~ 11 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

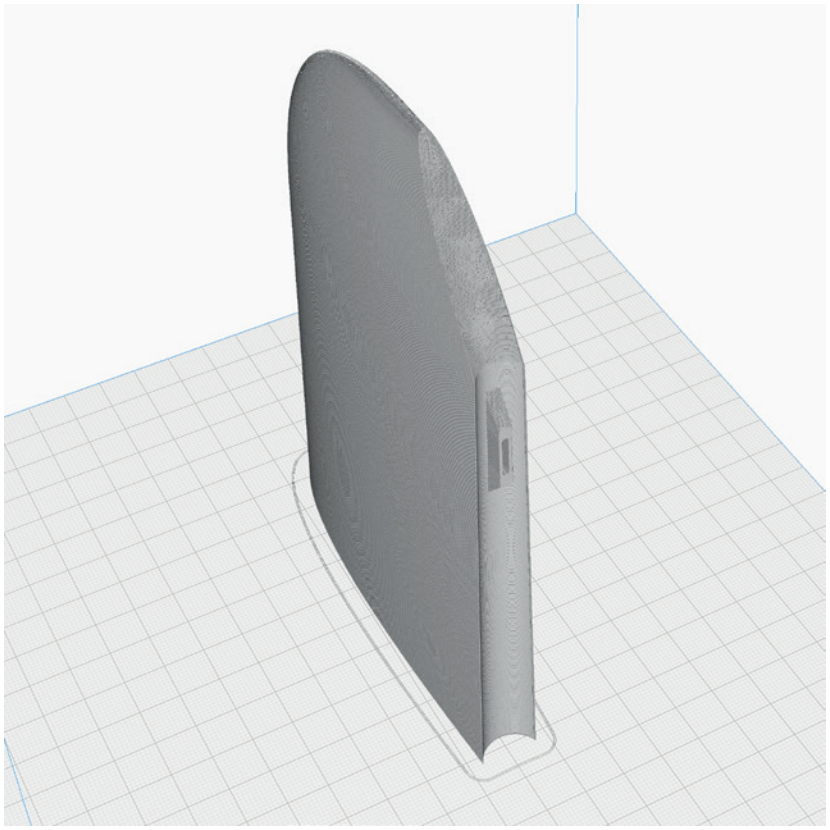


P5_HS 2 L_wp.stl and P5_HS 2 R_wp.stl

MATERIAL **LW-PLA**, ~ 18 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

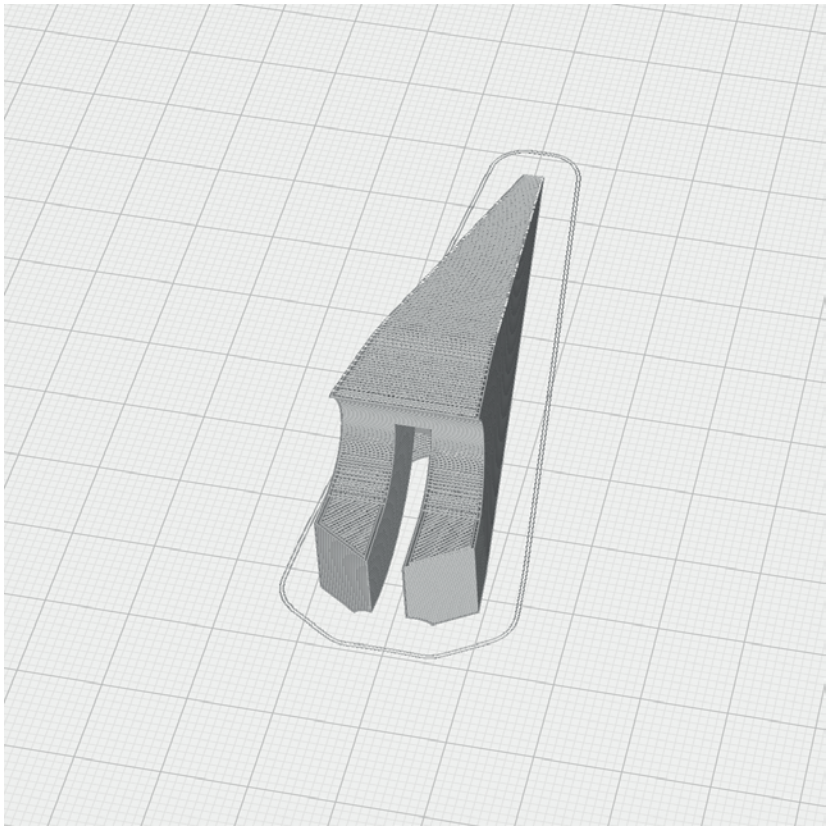
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_HS 3_wp.stl

MATERIAL **LW-PLA**, ~ 2 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

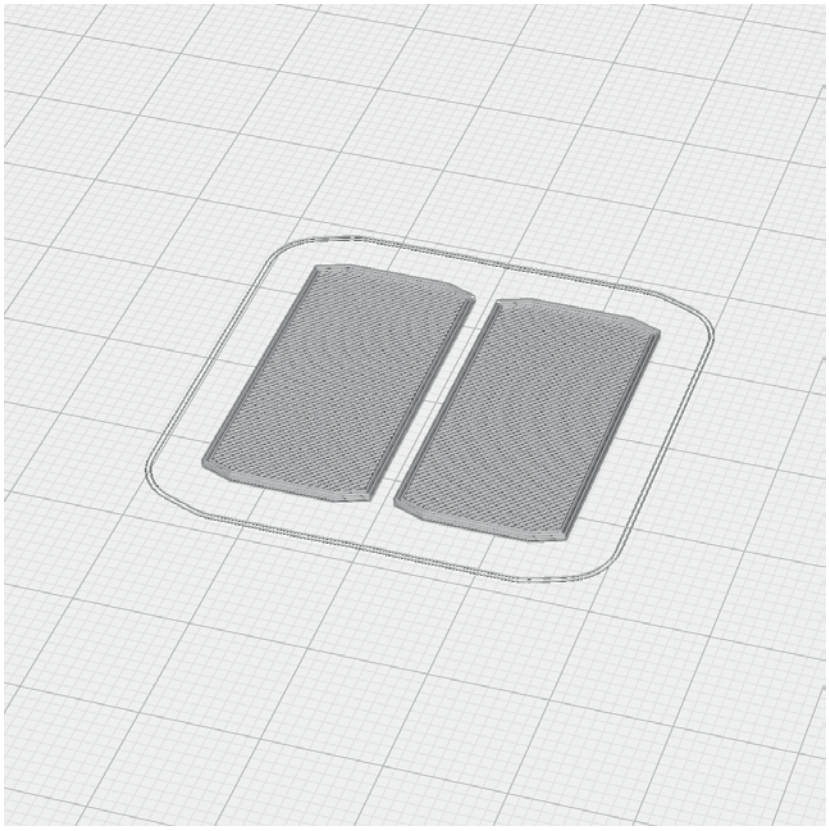


P5_Interconnects Elevator_wp.stl

MATERIAL **LW-PLA**, ~ 1 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

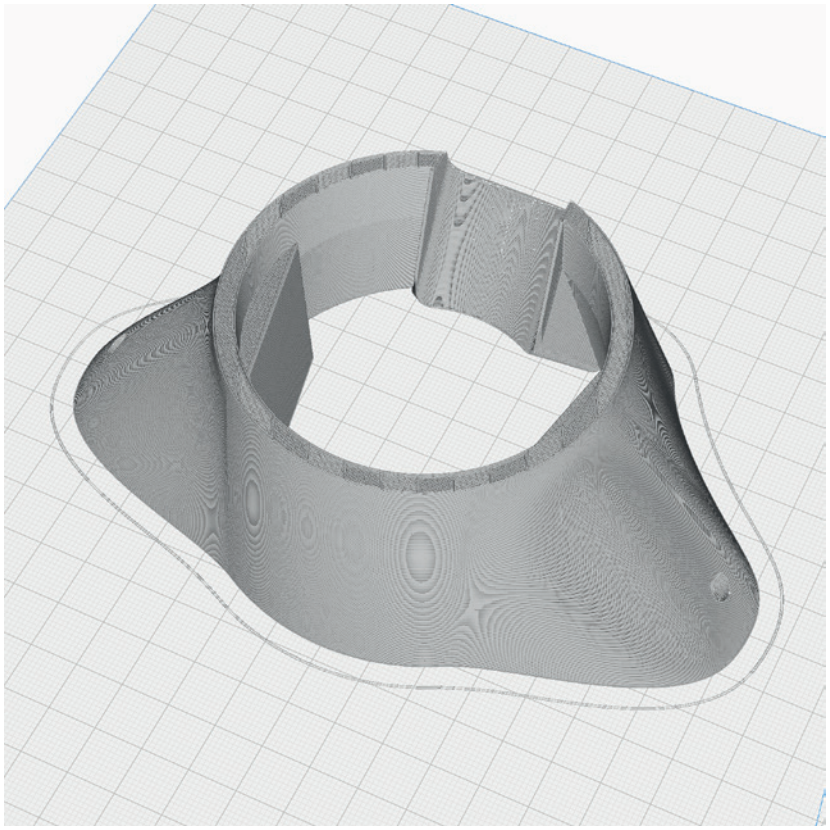
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Nose_wp.stl

MATERIAL **LW-PLA**, ~ 18 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

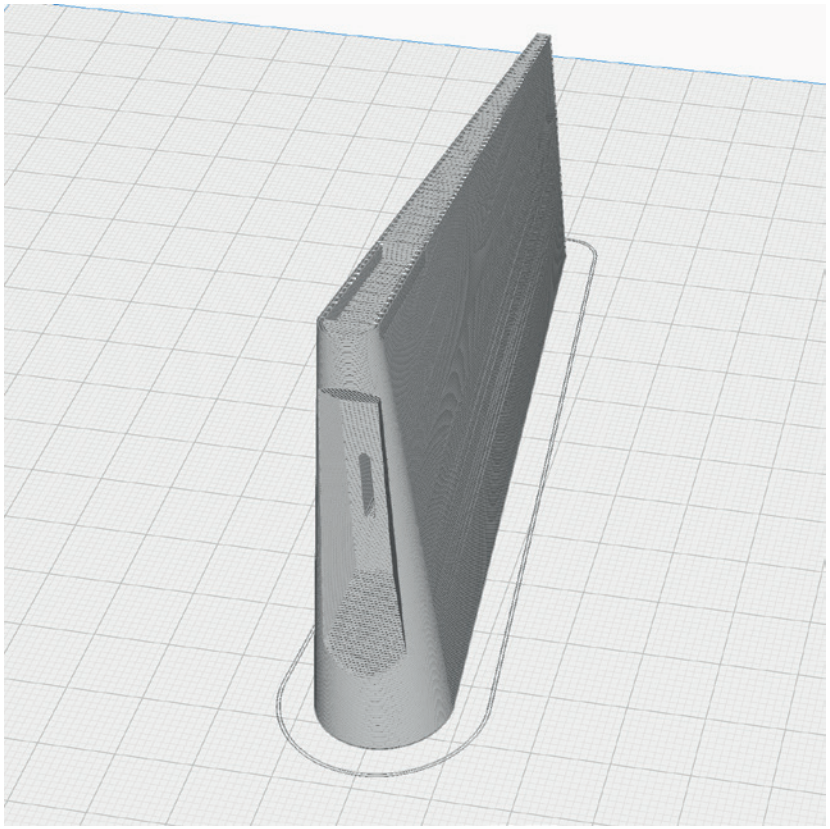


P5_Rudder 1_wp.stl

MATERIAL **LW-PLA**, ~ 6 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

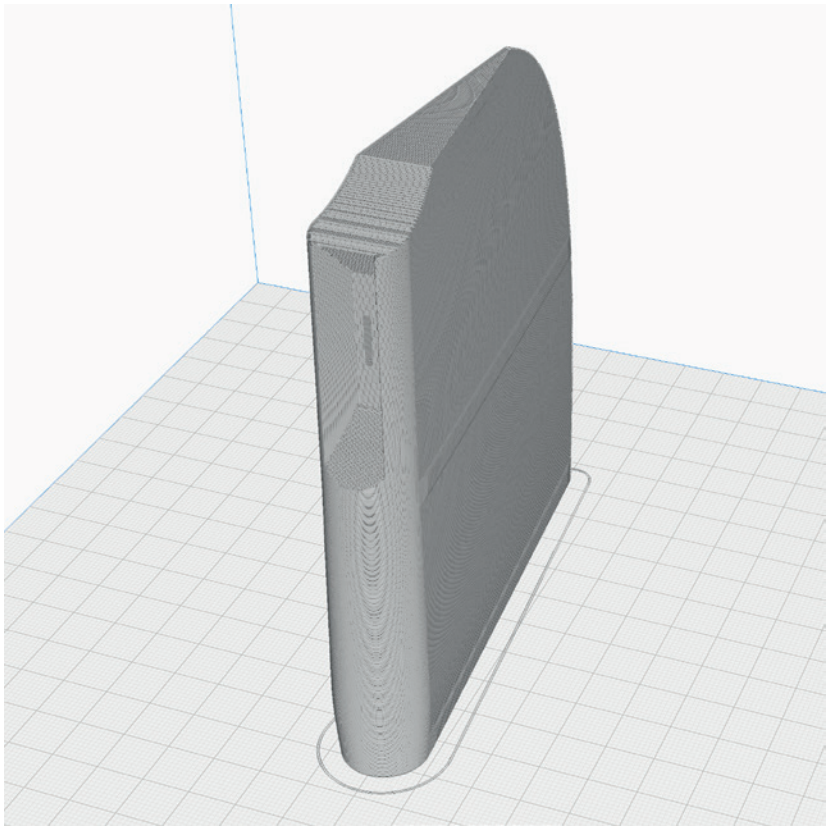
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_Rudder 2_wp.stl

MATERIAL **LW-PLA**, ~ 13 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

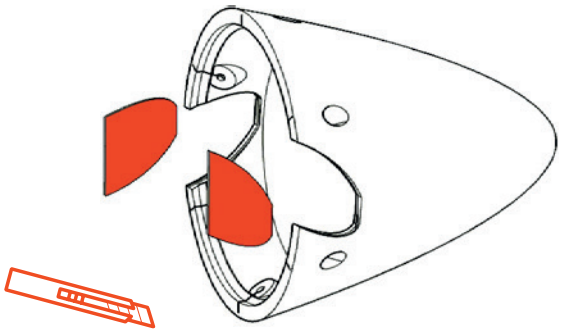


P5_Spinner_wp.stl

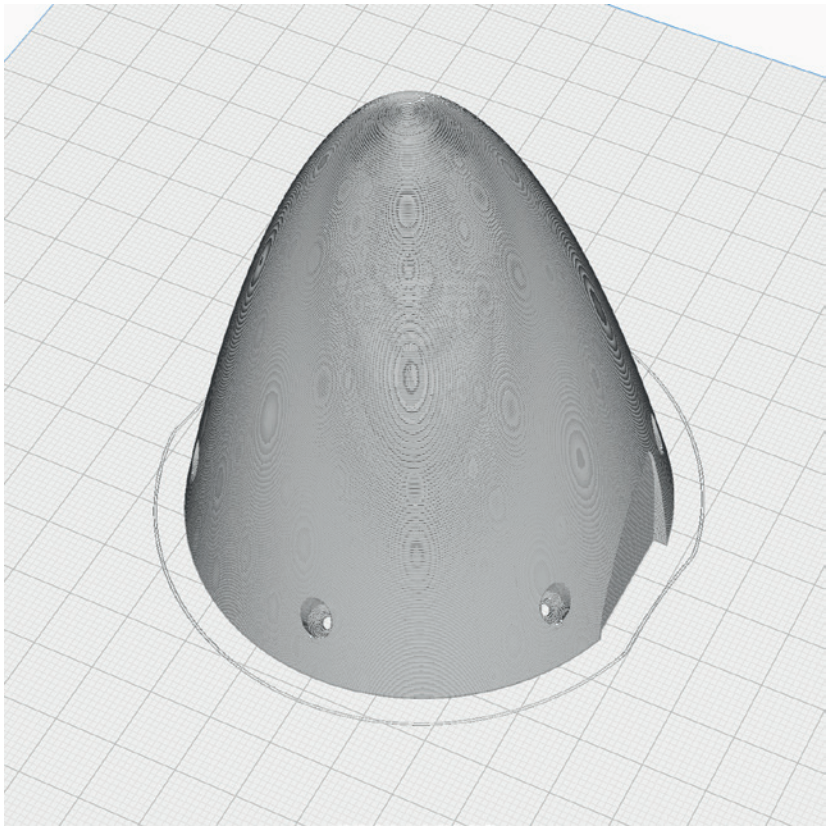
MATERIAL **LW-PLA**, ~ 11 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Infill Density: 8 %



Remove support.
Please be careful with the knife!



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

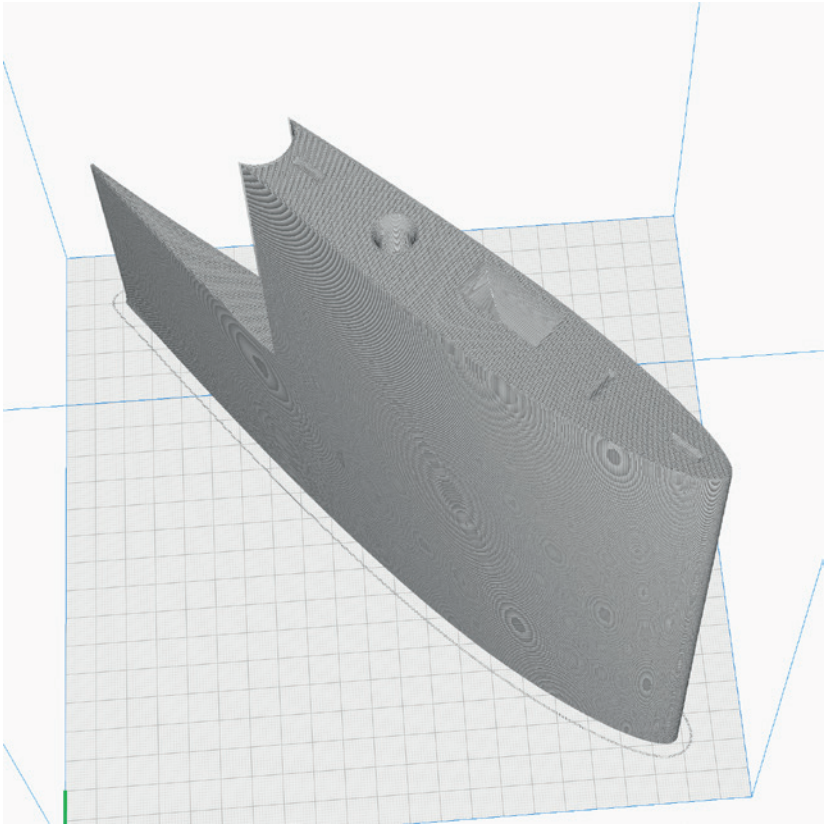
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_WING down 1 L_wp.stl and P5_WING down 1 R_wp.stl

MATERIAL **LW-PLA**, ~ 70 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left

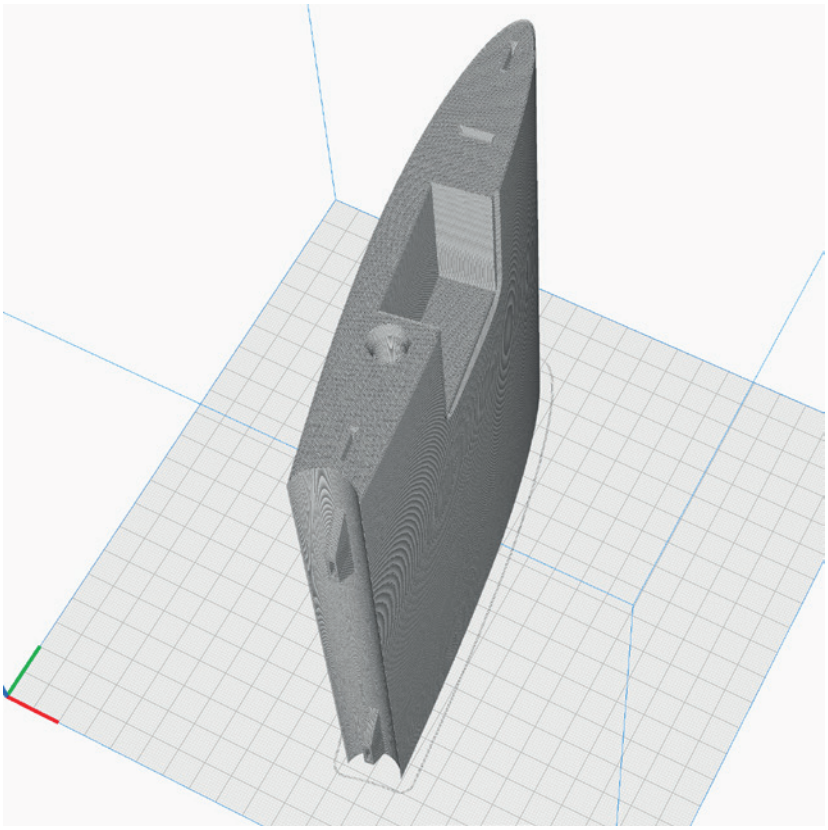


P5_WING down 2 L_wp.stl and P5_WING down 2 R_wp.stl

MATERIAL **LW-PLA**, ~ 50 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

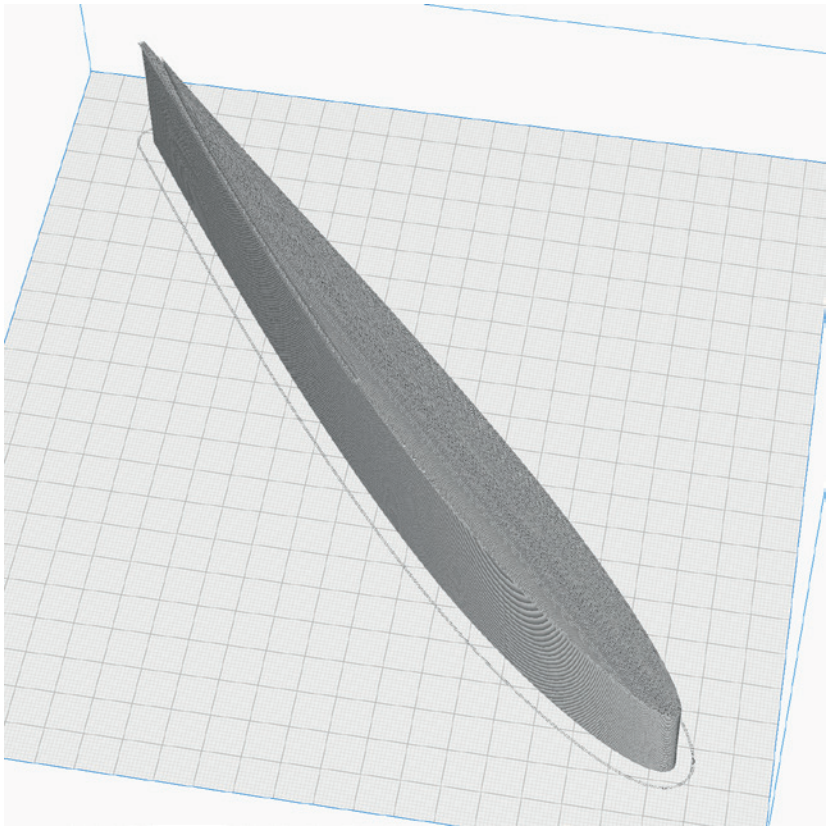
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_WING down 3 L_wp.stl and P5_WING down 3 R_wp.stl

MATERIAL **LW-PLA**, ~ 16 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left

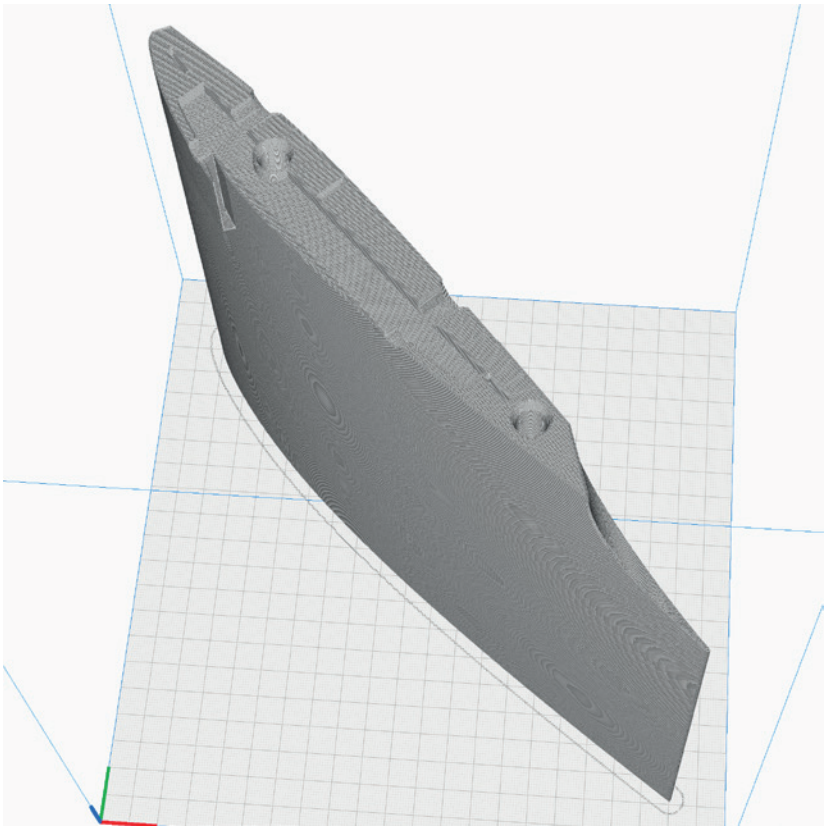


P5_WING top 1 L_wp.stl and P5_WING top 1 R_wp.stl

MATERIAL **LW-PLA**, ~ 66 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left



PROFILE P5_Gyroid Light-Weight LW-PLA!

The following parts must be sliced with the PROFILE P5_Gyroid. **Please note the additional settings for the individual parts! It is essential to print these parts with LW-PLA!**

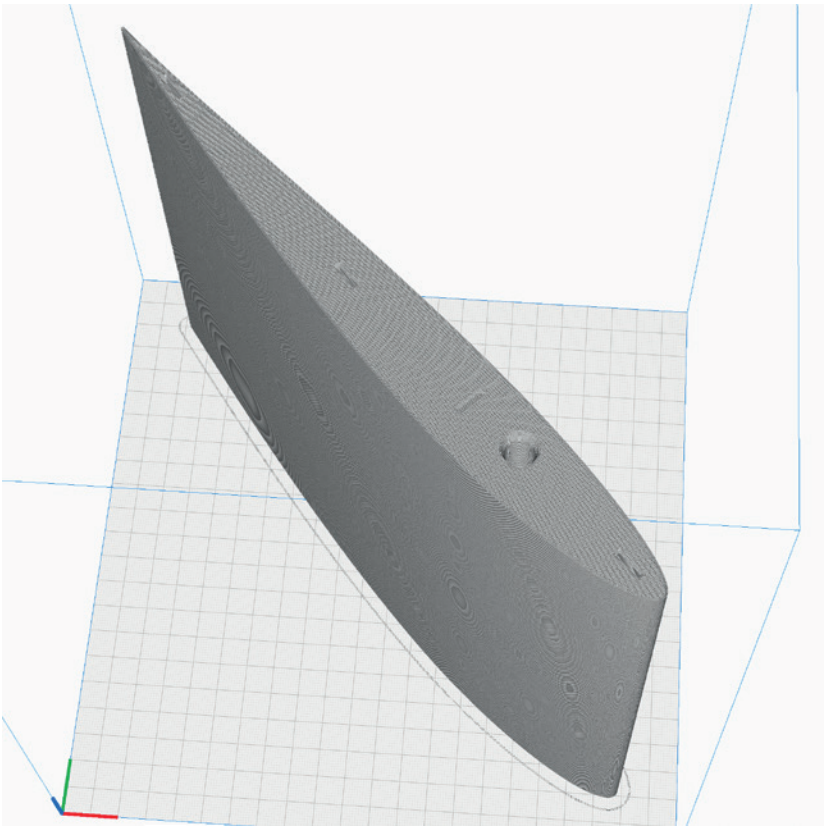
Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment!

P5_WING top 2 L_wp.stl and P5_WING top 2 R_wp.stl

MATERIAL **LW-PLA**, ~ 70 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left

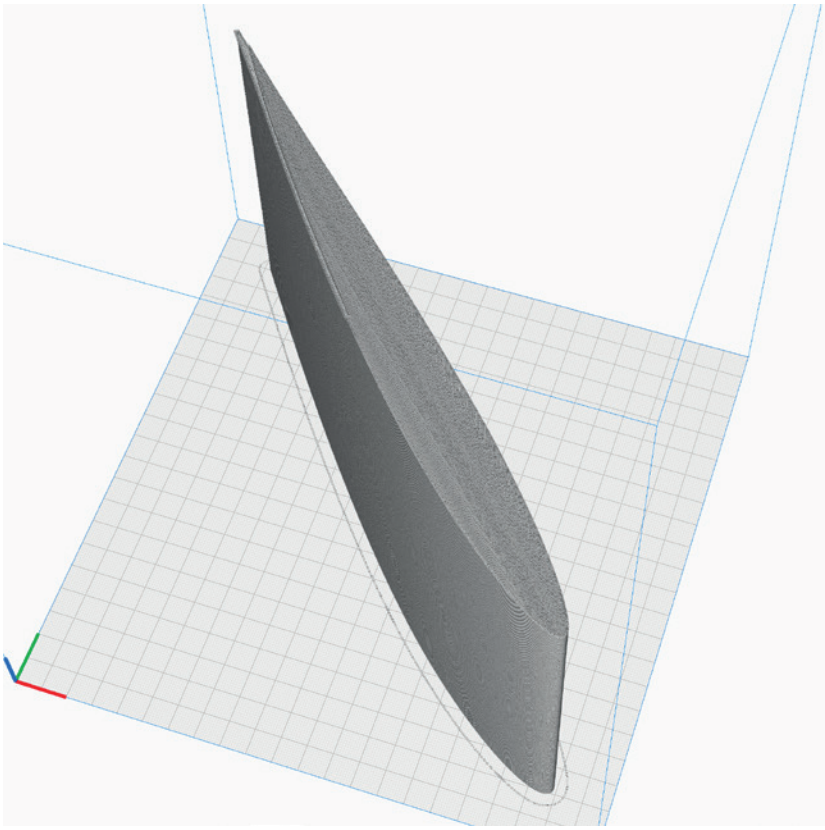


P5_WING top 3 L_wp.stl and P5_WING top 3 R_wp.stl

MATERIAL **LW-PLA**, ~ 50 g*
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position: Back Left



Basic Information:

Gluing the parts printed with PROFILE P5

STEP 1 As a first step, it is important to **roughen and smooth the adhesive surfaces** with sandpaper.

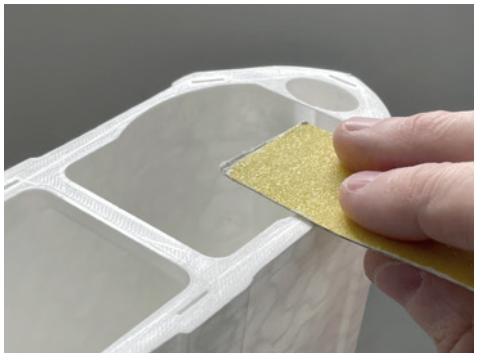
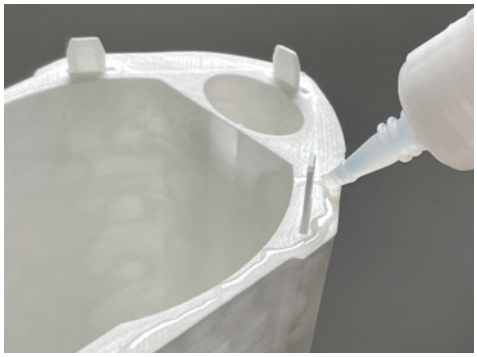
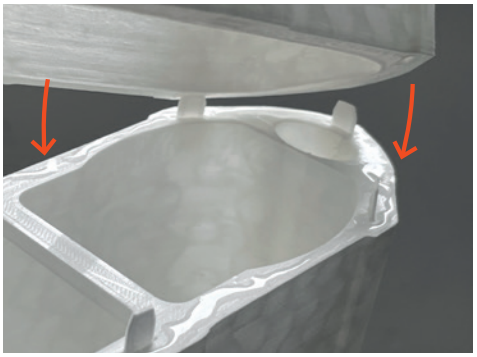
STEP 2 Insert the **interconnects into the slots** provided on one side.

STEP 3 Apply **a lot of glue** to the side with the interconnects. It is important that there is glue everywhere, especially on the outside and inside of the wall surfaces, in order to achieve a perfect connection. The interconnects only serve to align the parts to each other. It is better **not** to apply glue here, otherwise it can happen that the glue suddenly hardens while the parts are being put together and stops the process.

Use medium viscosity CA glue, thinner glue would run down the parts too easily.

After assembly, **align the two parts exactly** and wipe off the excess CA glue from the surface with a cloth. Now spray with activator spray along the gluing surface and carefully press the parts together.

STEP 4 Clean the glued areas slightly with a **sharp-bladed** cutter.

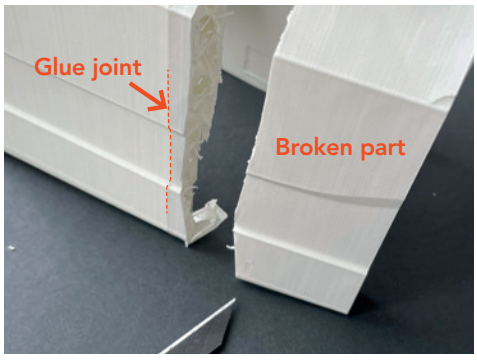




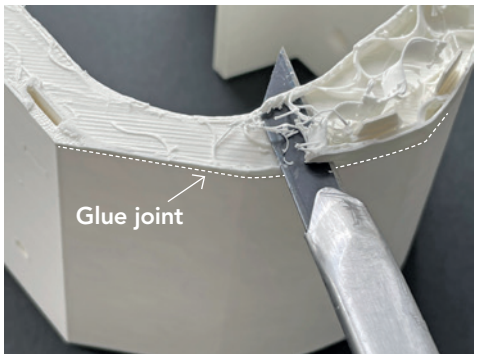
PROFILES 5 parts are easy to repair

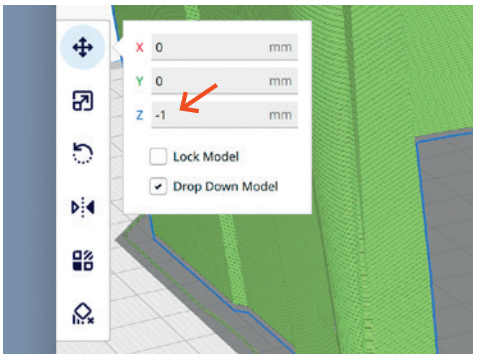
STEP 1 Using the knife, carefully remove the damaged part about 3 mm from the glue joint between two parts.

STEP 2 Cut wall and infill and clean the surface with sandpaper. **The top surface of the damaged part remains!**

STEP 3 The remaining top surface is about 1 mm thick. To compensate for this, you can move the new part to be printed down the Z axis in Cura by 1 mm.

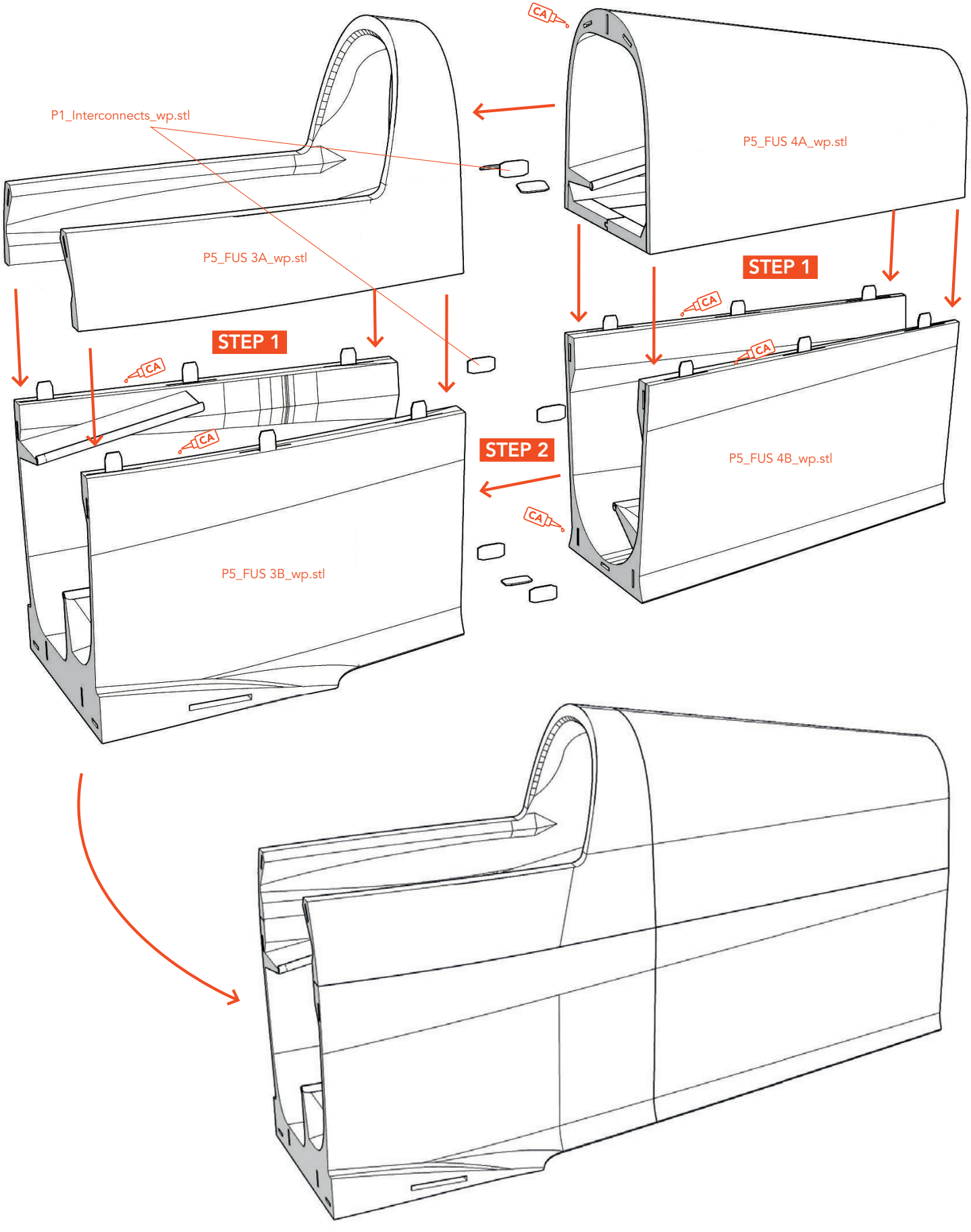






Fuselage assembly

CA
medium liquid

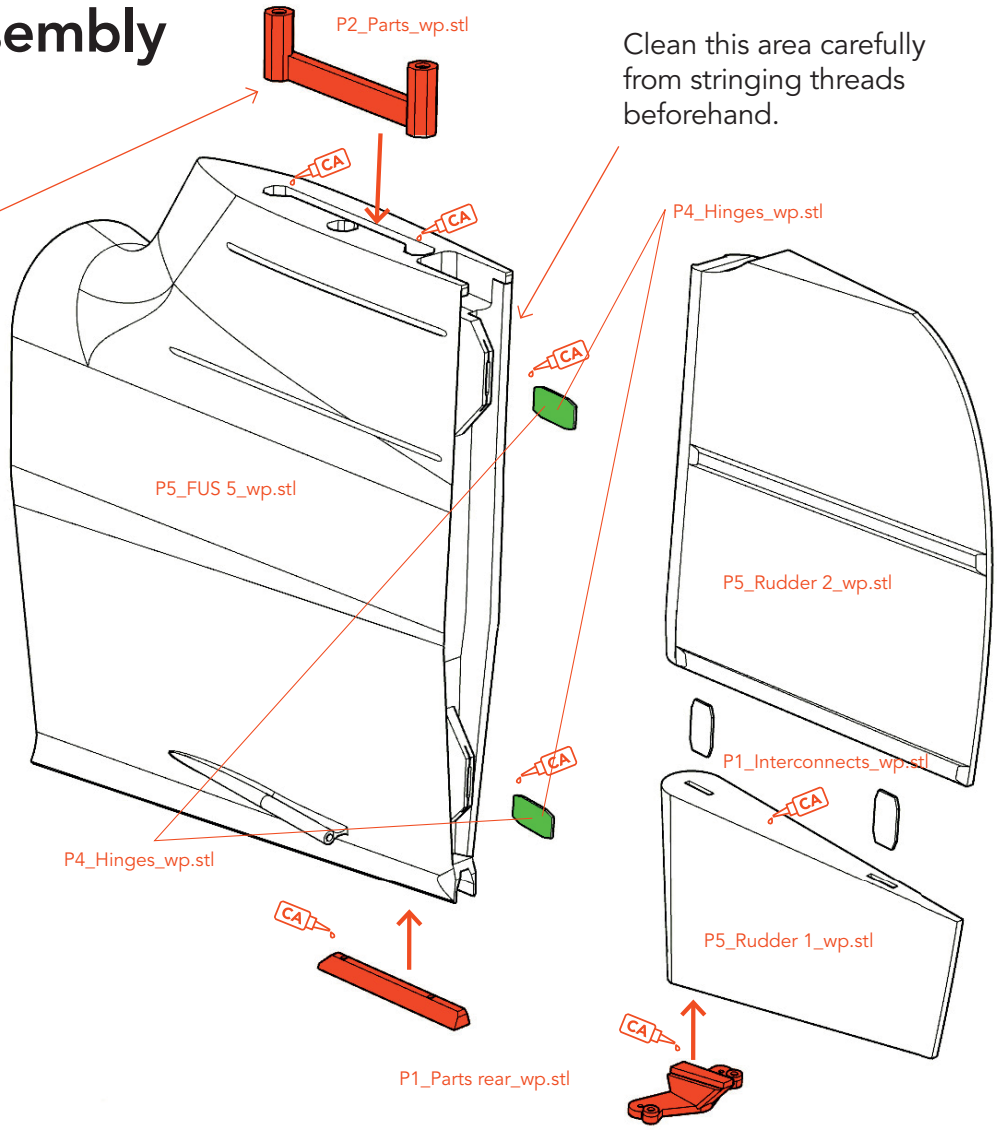


Fuselage assembly

CA medium liquid

CA thin liquid

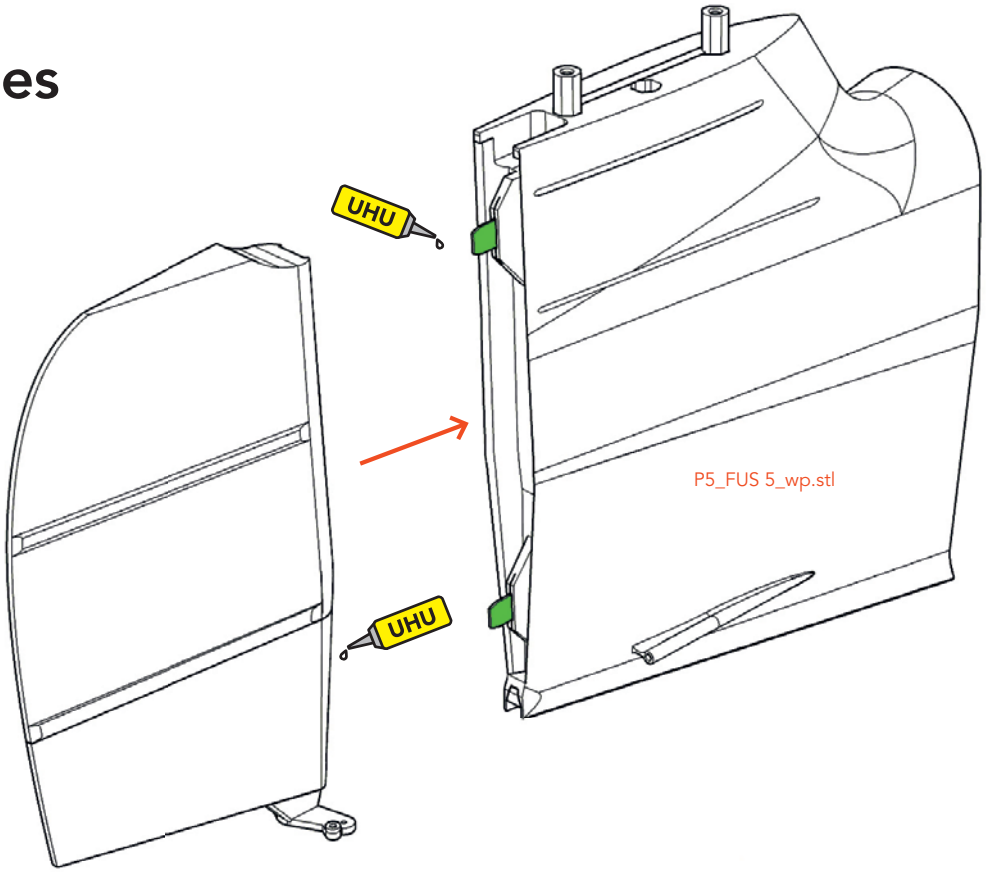
To test this part, screw the 3mm metal screws all the way in before gluing and check that they hold well. They must not be too loose. If this is the case, put some thin CA glue and activator spray in the holes and test again. **These screws must hold the horizontal stabilizer reliably!** This part must be well connected to the fuselage. Let thin CA glue run into the gaps.



Installing the hinges

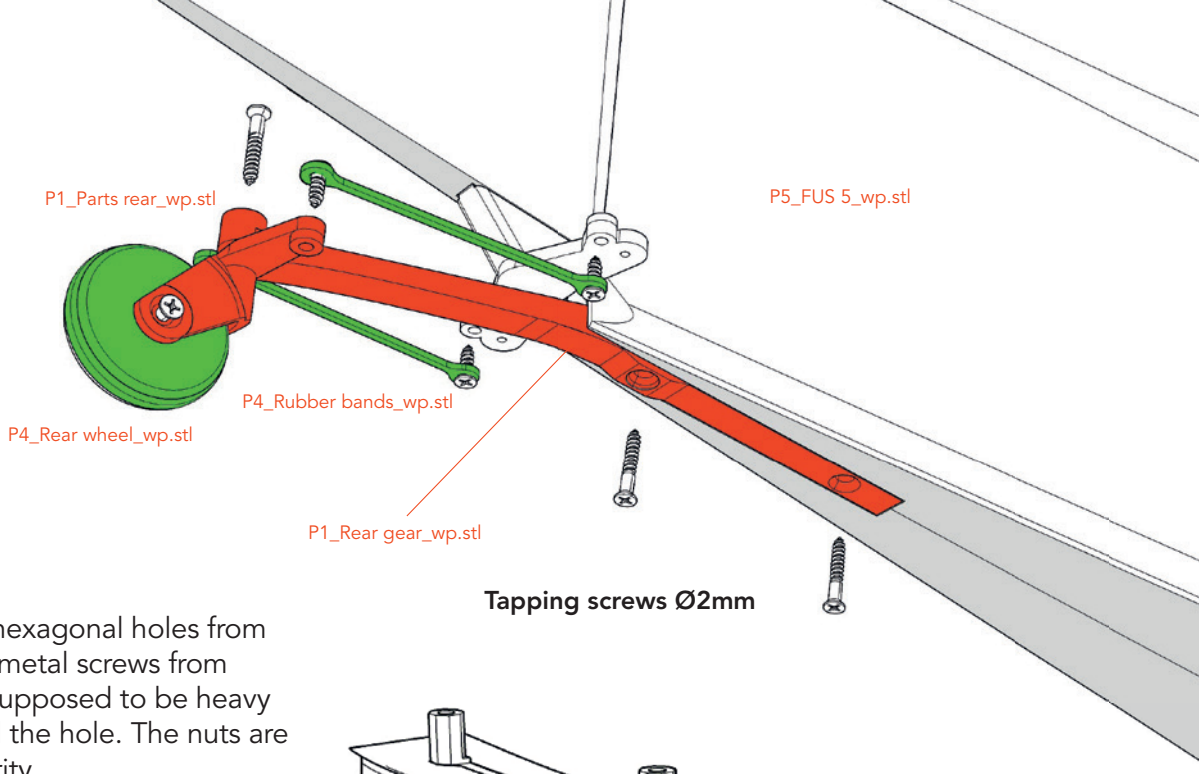
First glue the hinges into the fuselage with **thin CA glue**. **Make sure that there is no glue on the exposed hinge to maintain flexibility.** To bond the rudder to the fuselage, use an adhesive that cures **slowly**, such as **UHU All Purpose Adhesive**. **Wet the hinges with a little glue,** and put glue in the gaps in the rudder, so that the movable part of the hinge between the fuselage and the rudder remains free of glue. Then push the rudder all the way to the fuselage and wait until the glue is dry.

Before the first flight, test whether the connection is firm.



Rear gear

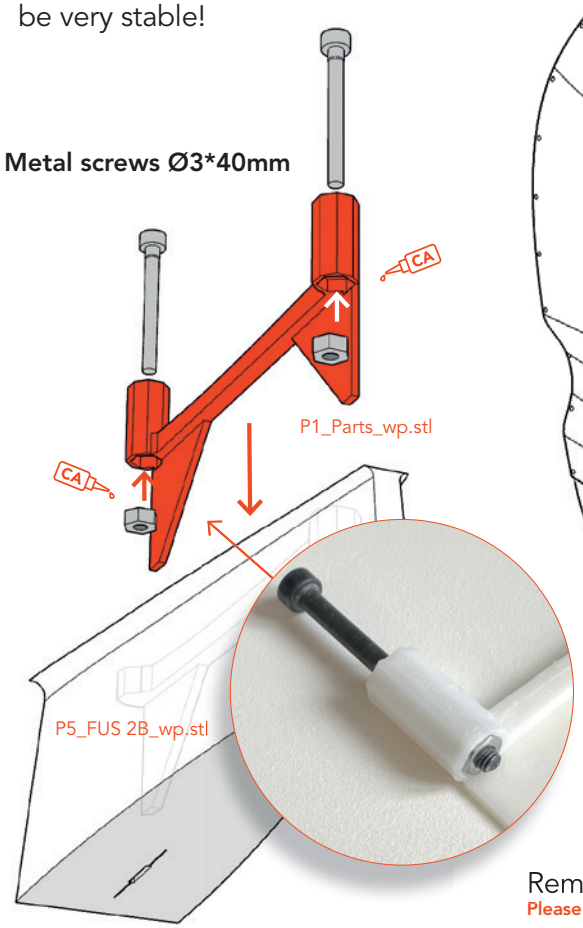
Tighten the tapping screws just enough so that everything can be moved easily.



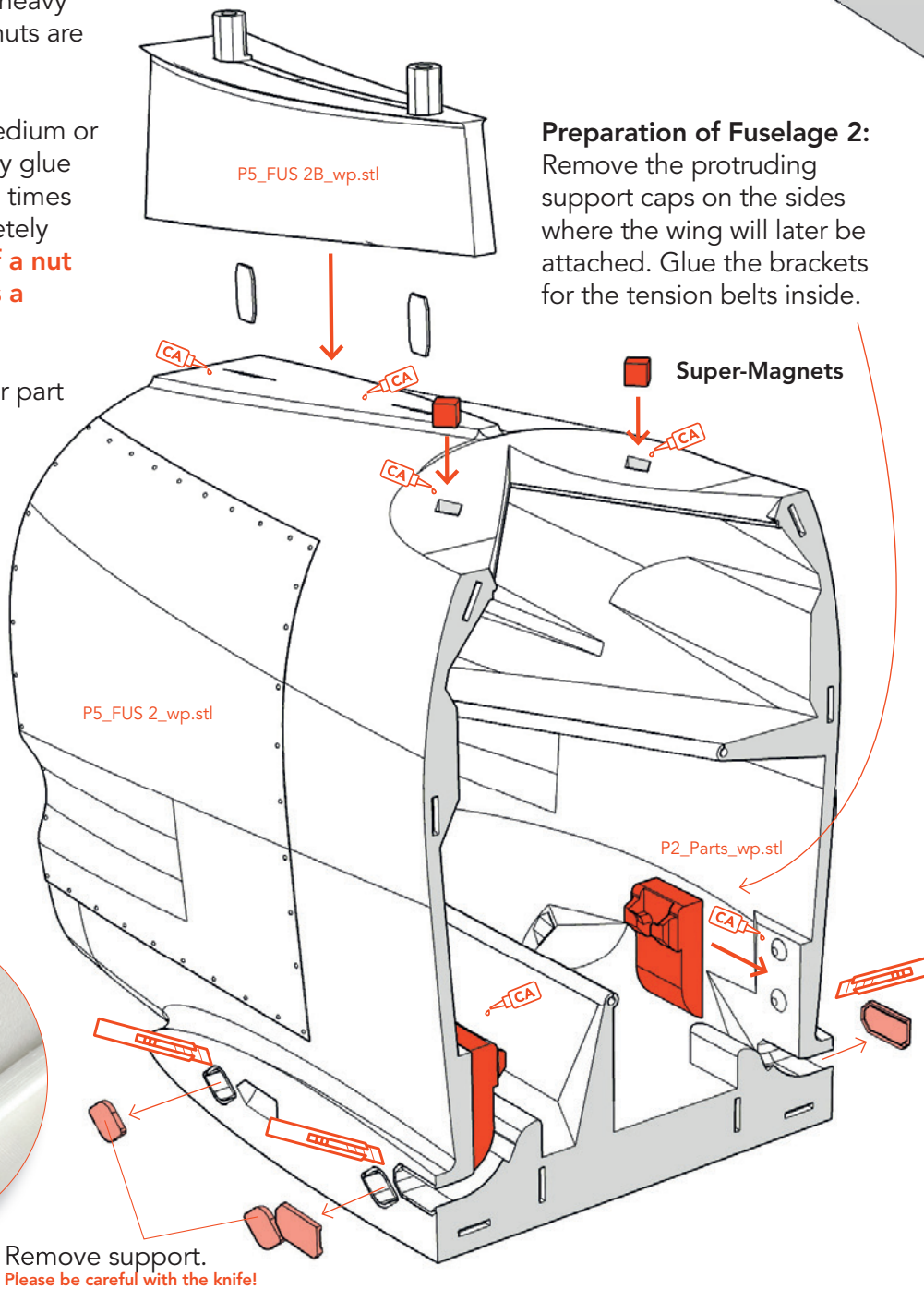
Upper wing fastening:
Insert the nuts into the hexagonal holes from below and screw in the metal screws from above. The screws are supposed to be heavy in the PLA, do NOT drill the hole. The nuts are only for additional security.

Then glue the nuts down WELL with medium or thick CA glue, taking care not to get any glue on the screw. Then test the nuts several times to make sure they are secure by completely unscrewing and reinserting the screw. **If a nut comes loose later and can turn, that's a problem.**

Then glue the whole part into the upper part of the fuselage 2. This connection must be very stable!



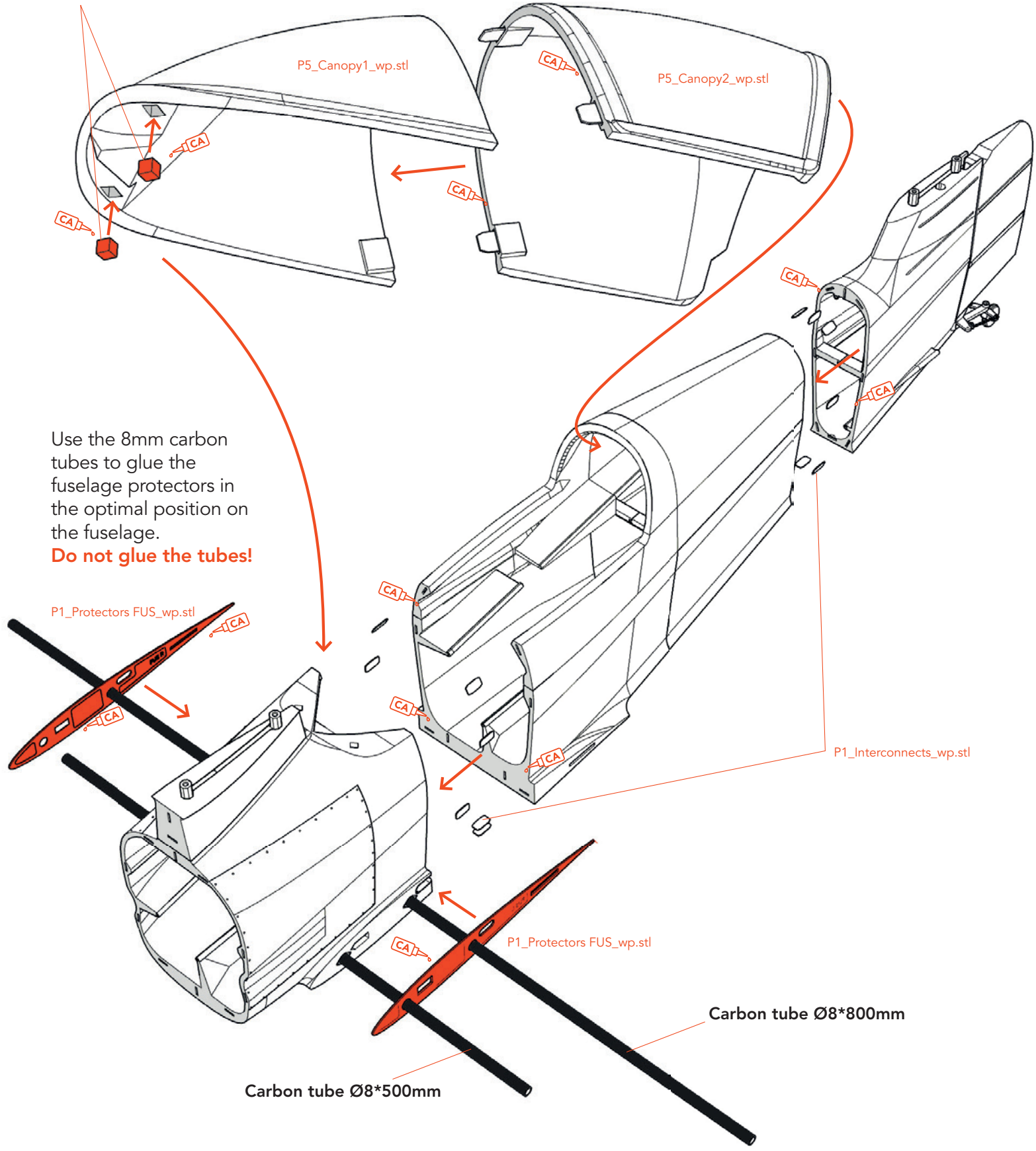
Preparation of Fuselage 2:
Remove the protruding support caps on the sides where the wing will later be attached. Glue the brackets for the tension belts inside.



Fuselage assembly

CA
medium liquid

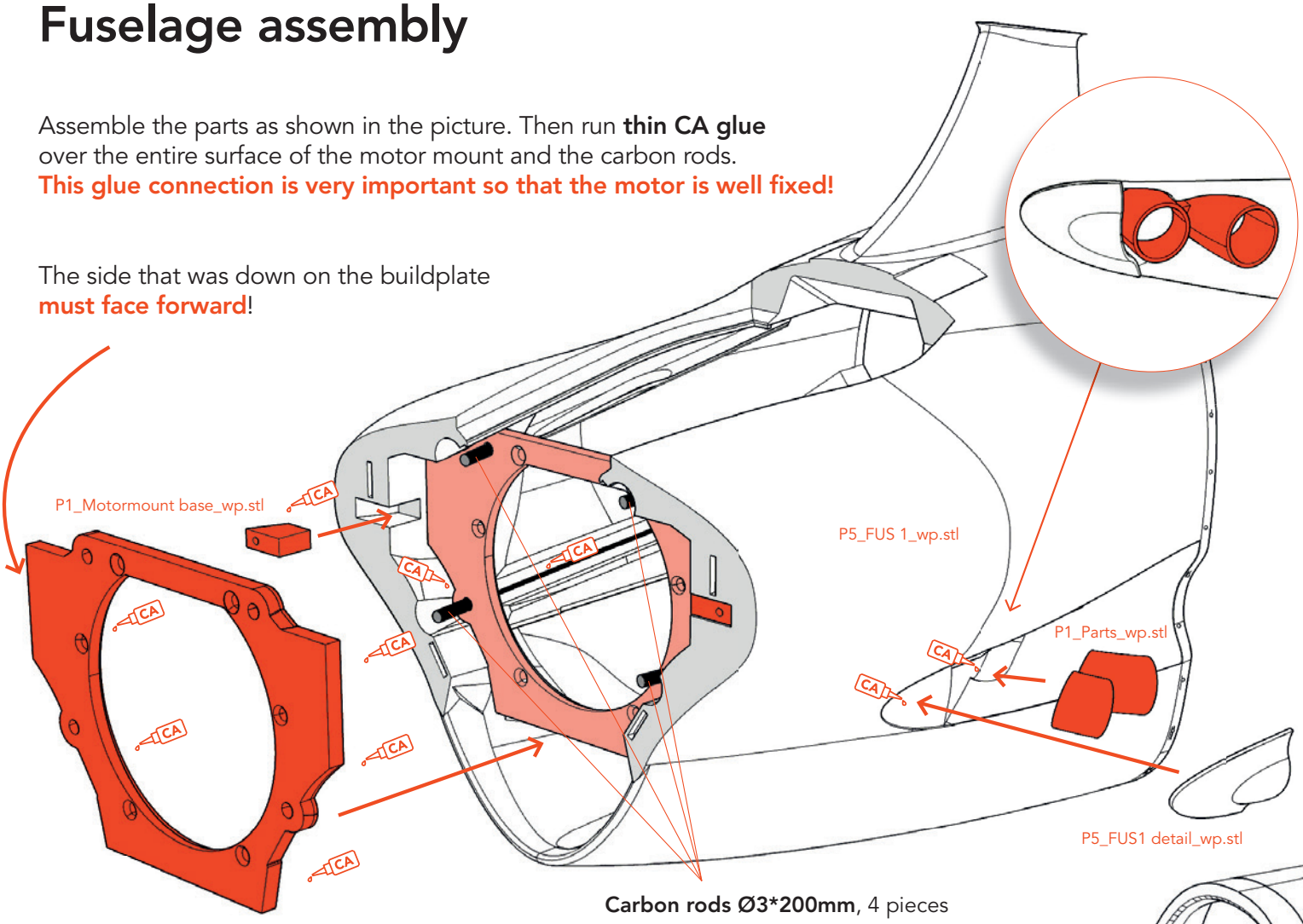
Super-Magnets – ensure correct alignment!



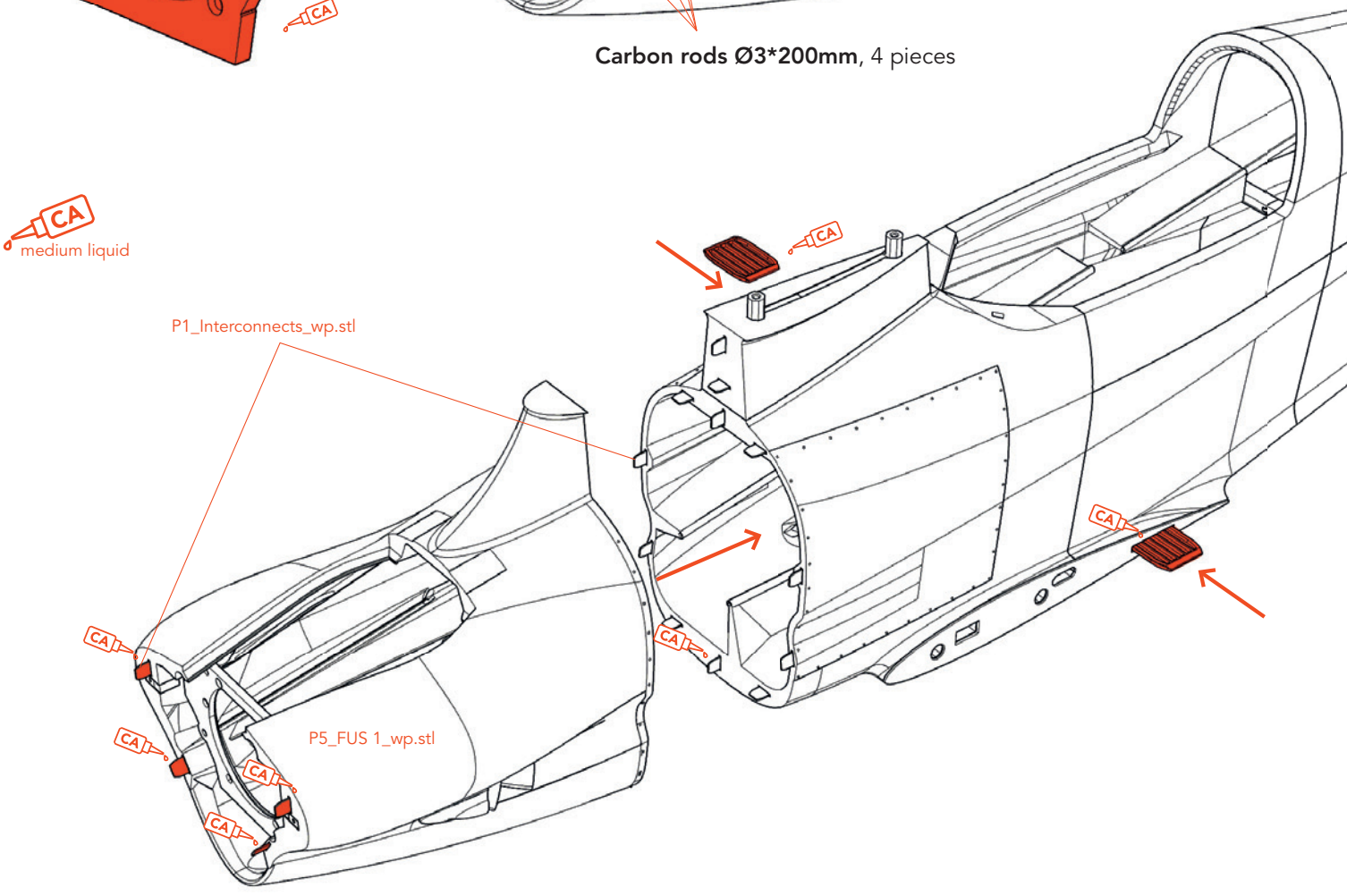
Fuselage assembly

Assemble the parts as shown in the picture. Then run **thin CA glue** over the entire surface of the motor mount and the carbon rods.
This glue connection is very important so that the motor is well fixed!

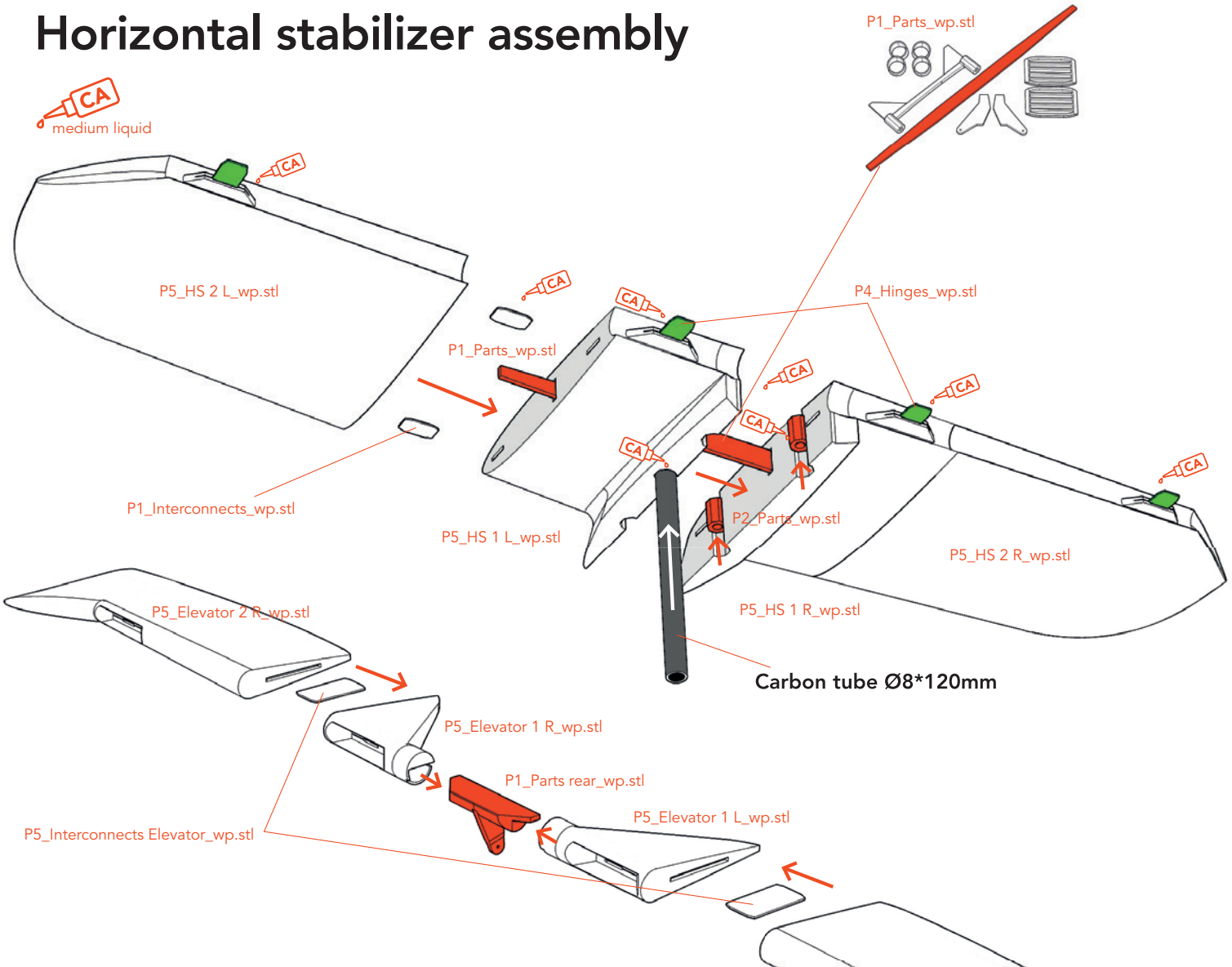
The side that was down on the buildplate **must face forward**!



Carbon rods Ø3*200mm, 4 pieces



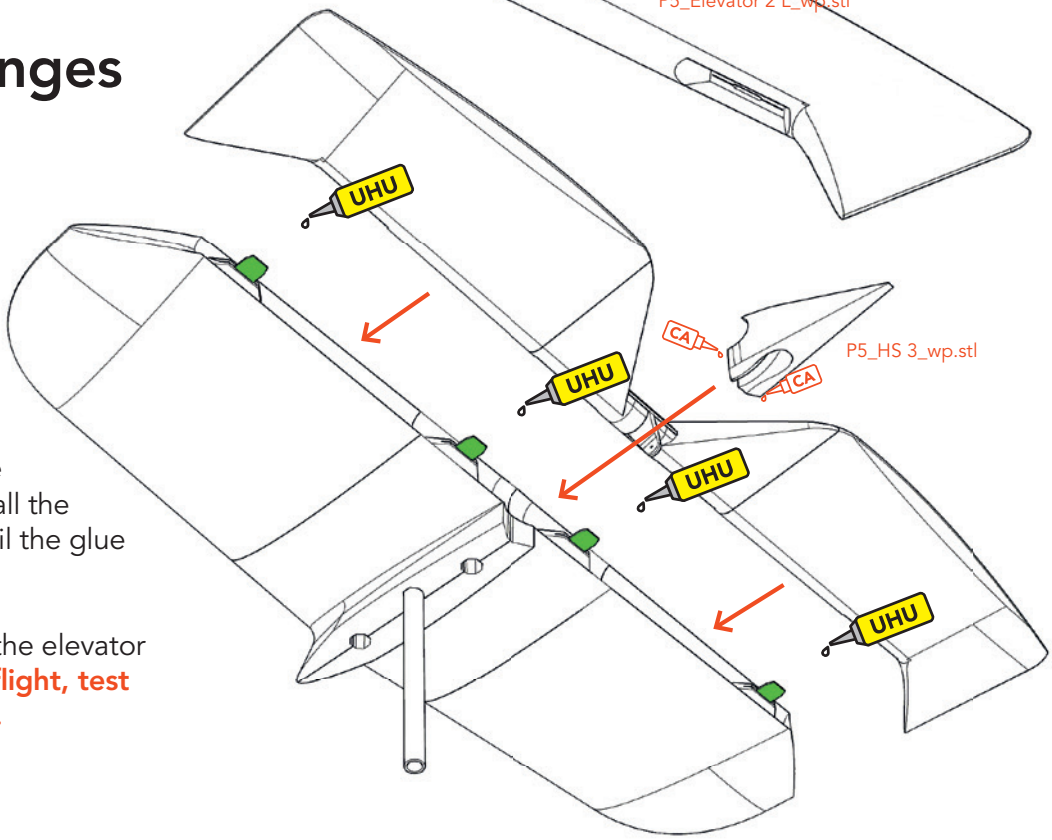
Horizontal stabilizer assembly



Installing the hinges

To bond the elevator to the HS, use an adhesive glue that cures **slowly**, such as **UHU All Purpose Adhesive**. **Wet the hinges with a little glue,** and put glue in the gaps in the elevator, so that the movable part of the hinge between the HS and the elevator remains free of glue. Then push the elevator all the way to the fuselage and wait until the glue is dry.

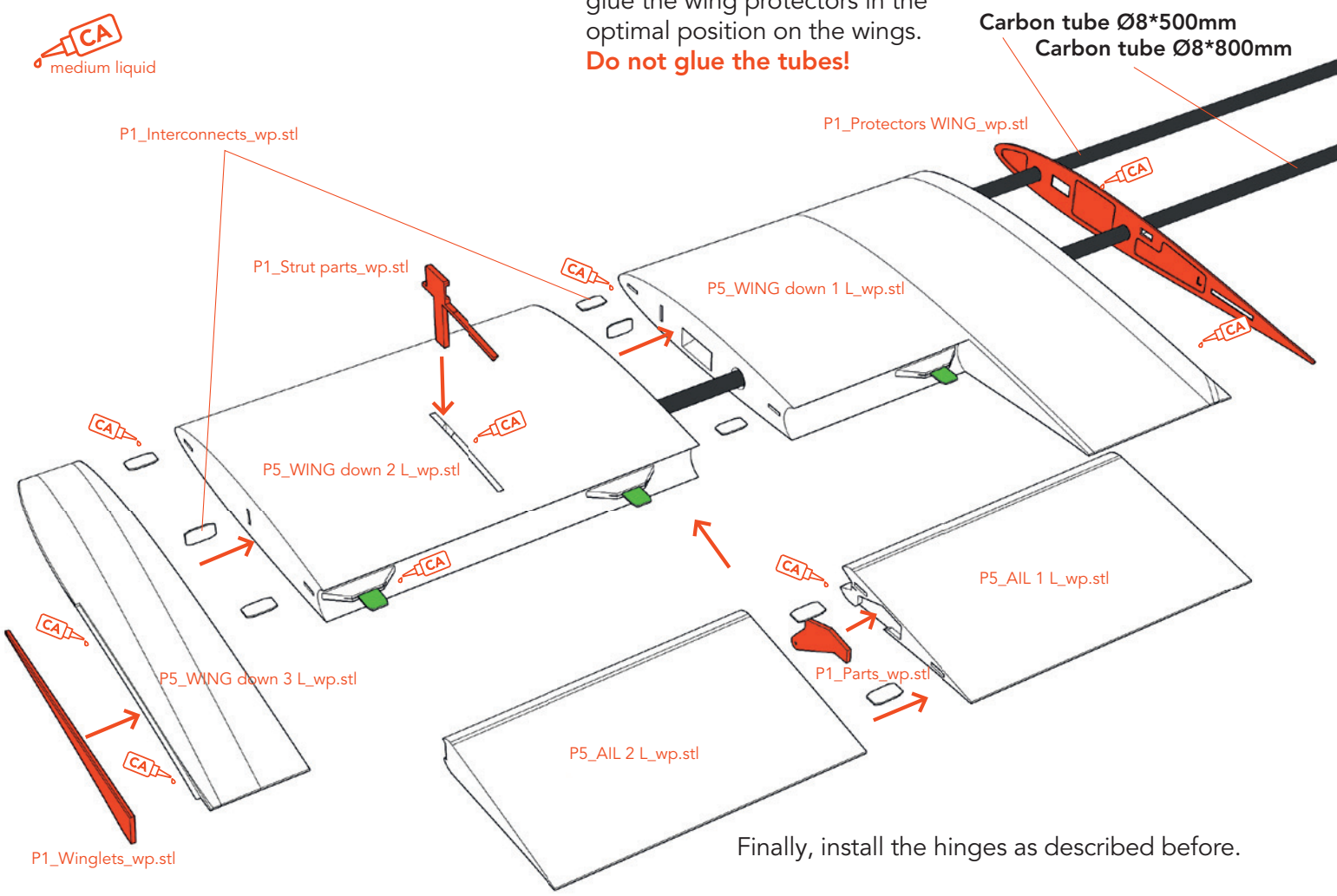
Then glue the part HS 3 so that the elevator is not blocked. **Before the first flight, test whether the connection is firm.**



Lower wing assembly

CA medium liquid

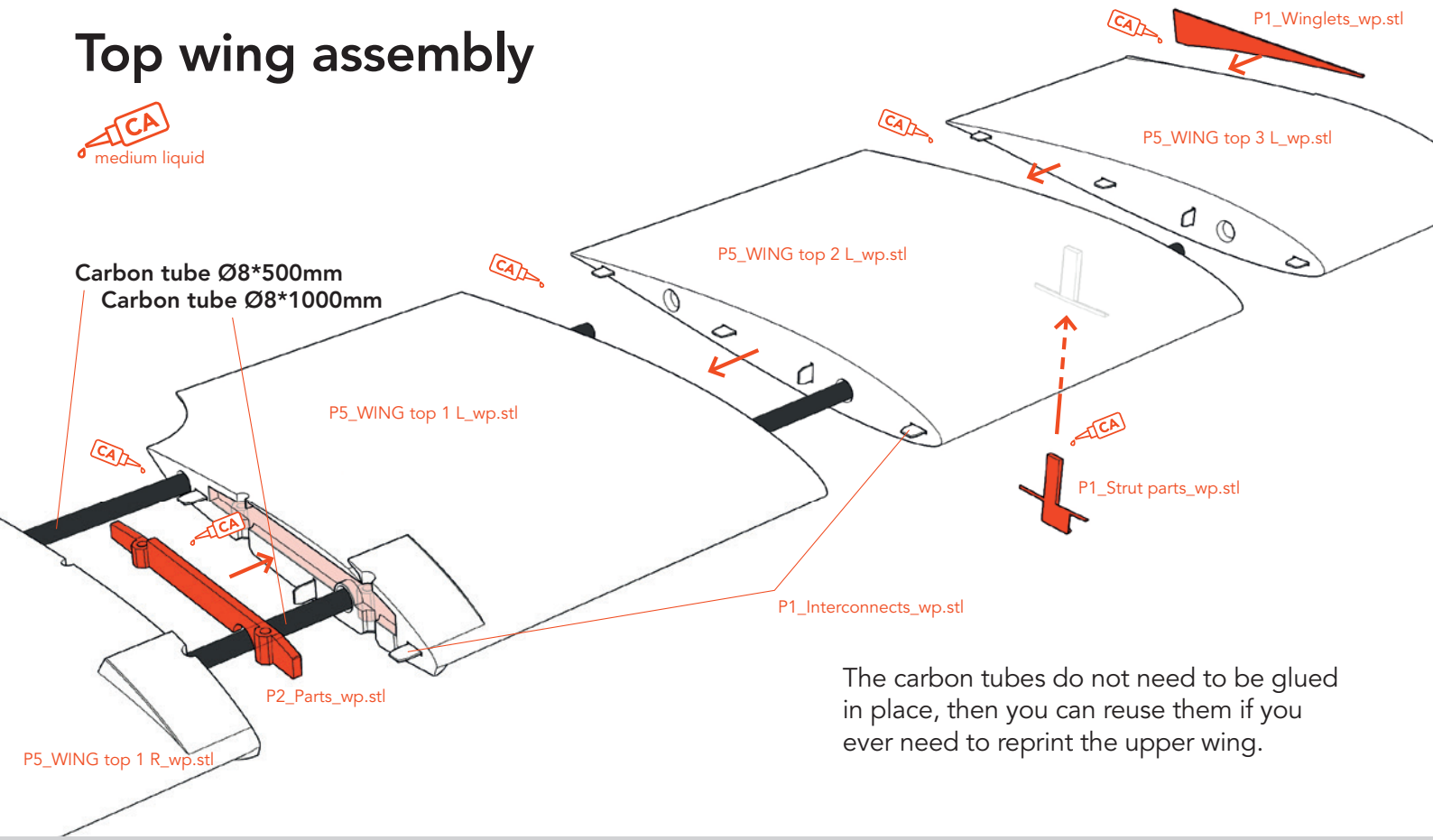
Use the 8mm carbon tubes to glue the wing protectors in the optimal position on the wings.
Do not glue the tubes!



Finally, install the hinges as described before.

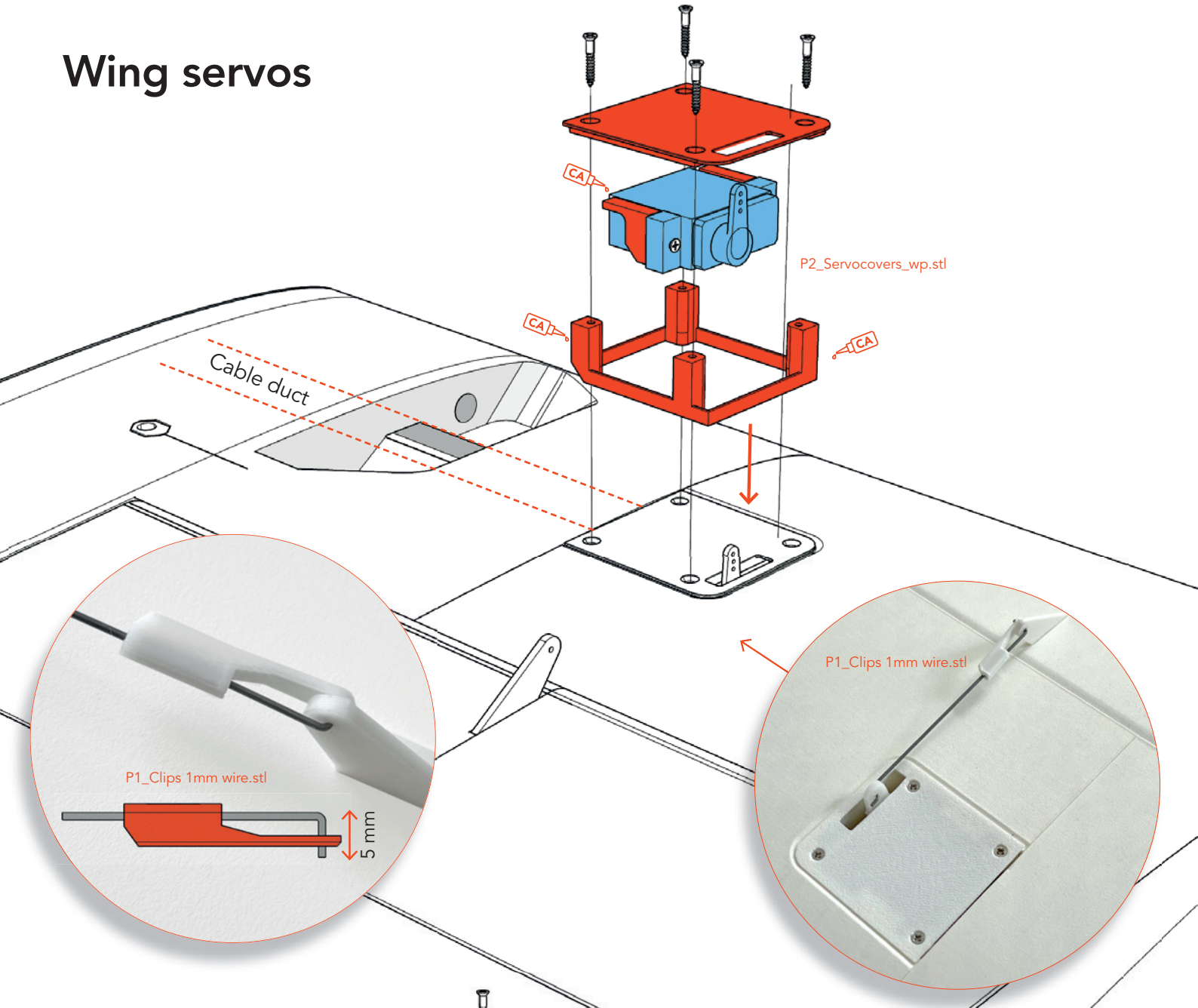
Top wing assembly

CA medium liquid

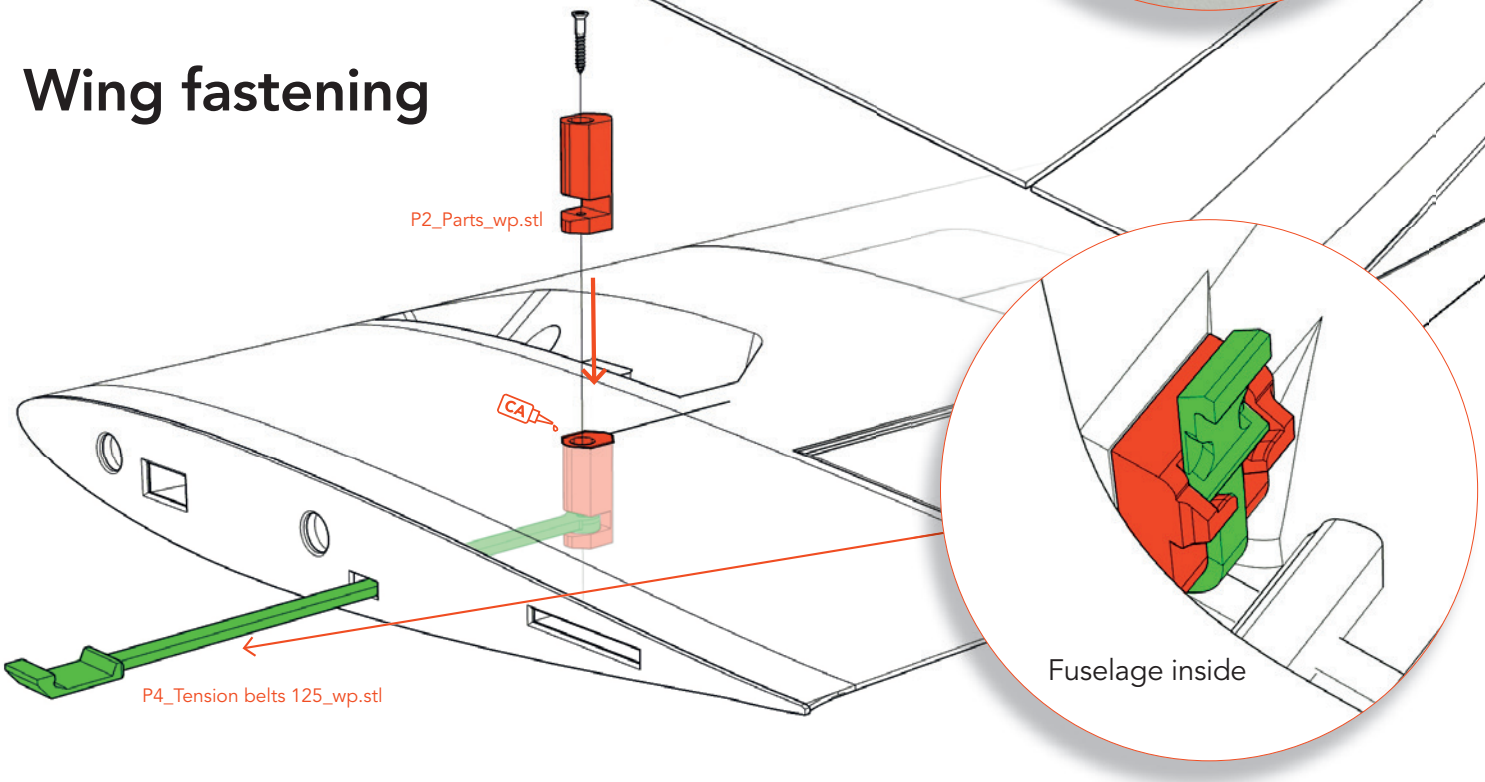


The carbon tubes do not need to be glued in place, then you can reuse them if you ever need to reprint the upper wing.

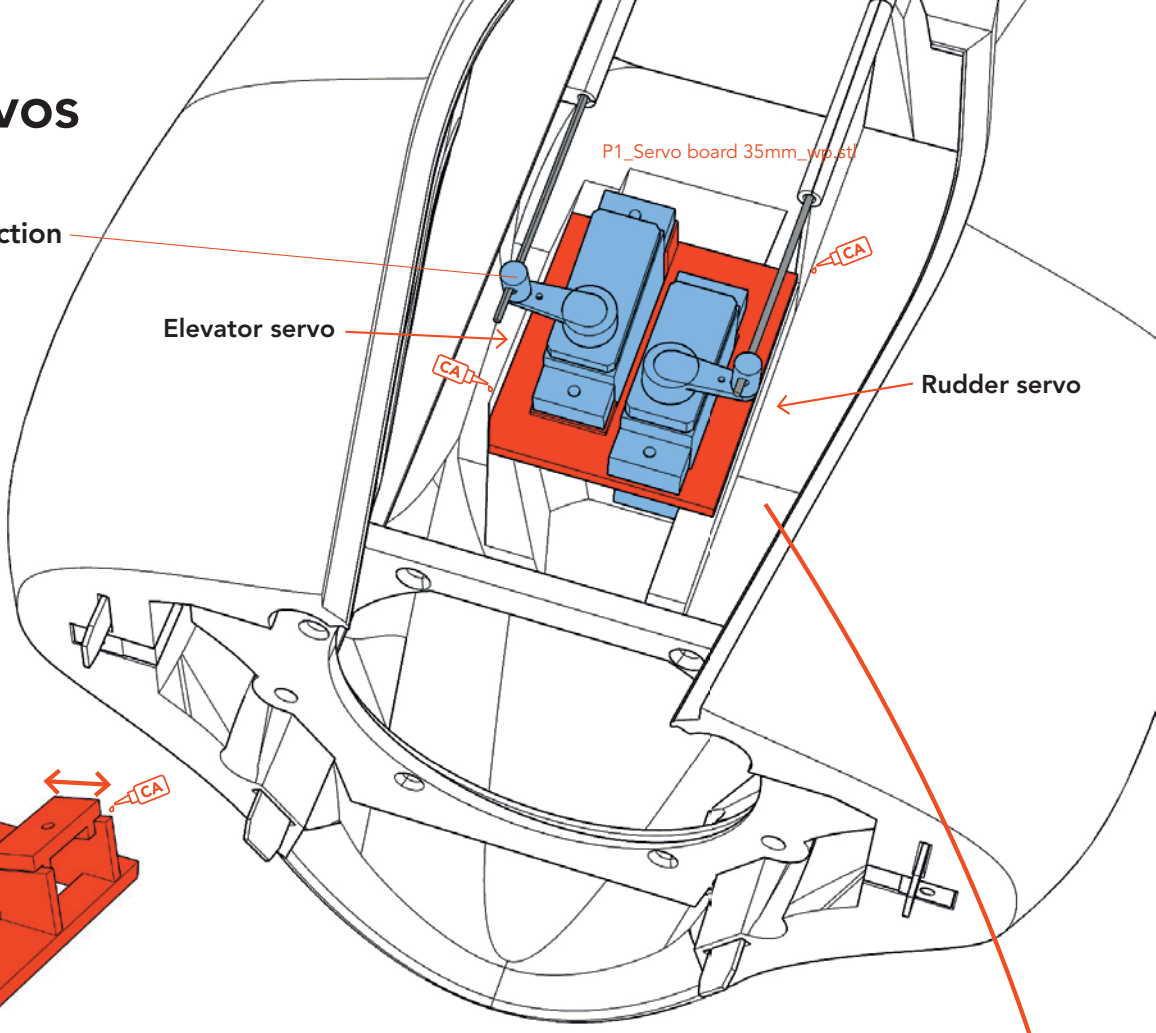
Wing servos



Wing fastening

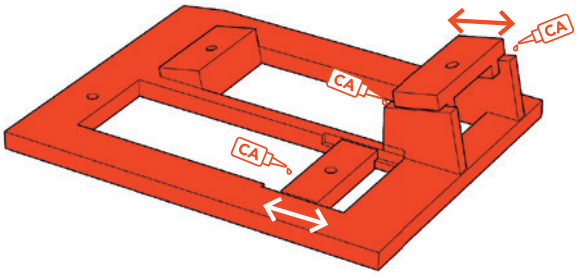


Fuselage servos

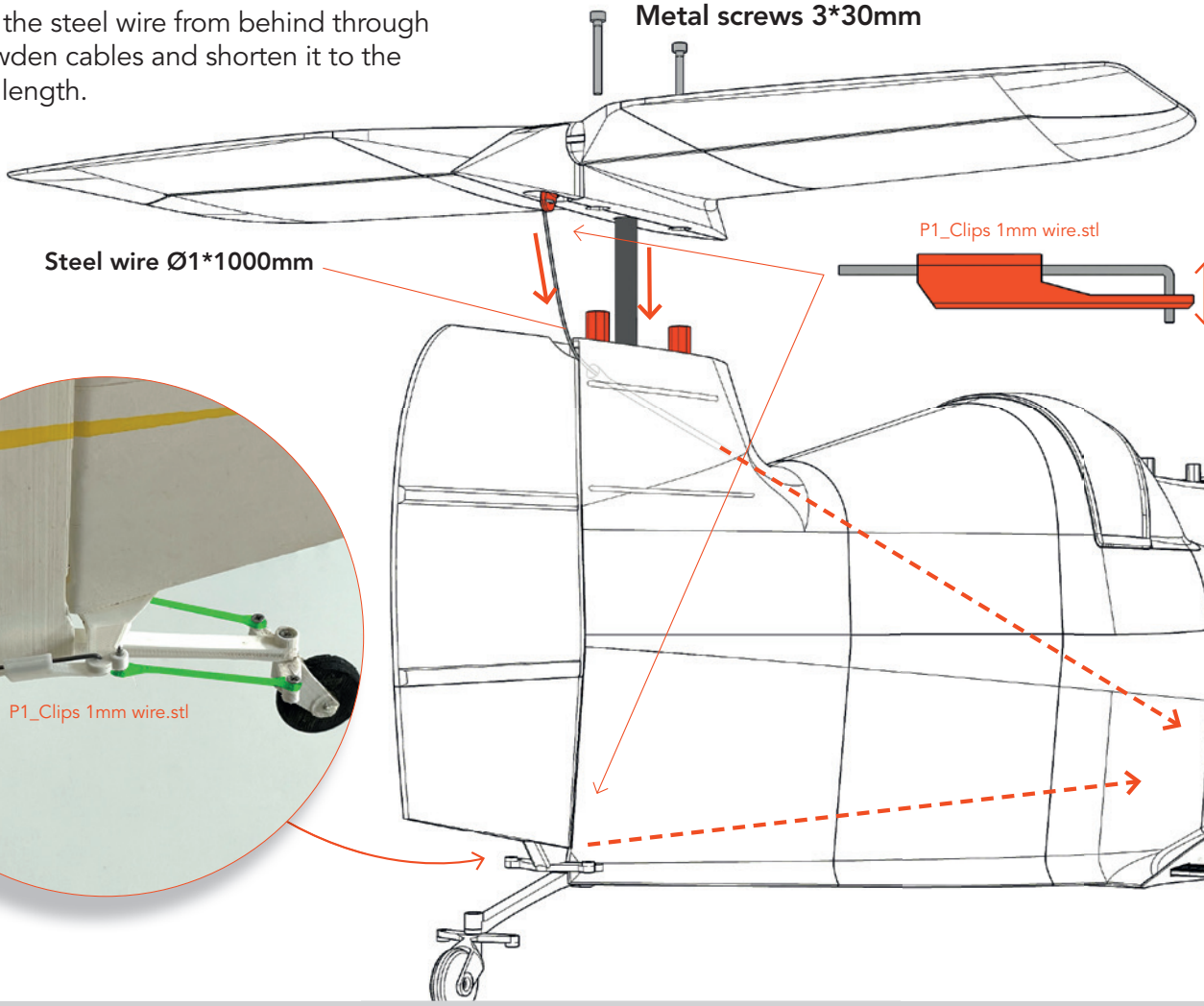


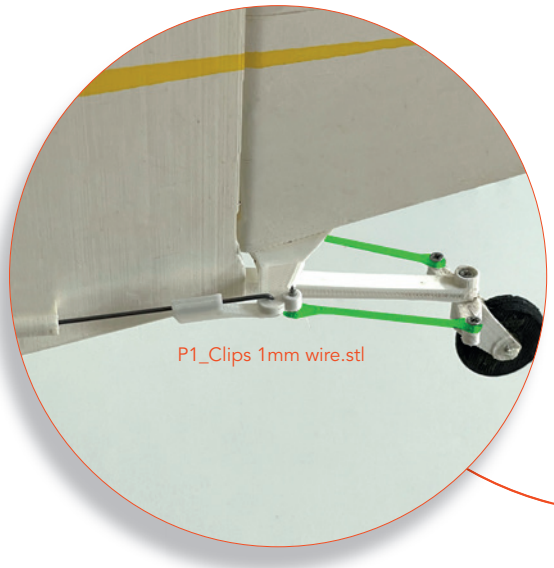
If your servos have a different format, you can use the customizable version.

P1_Servo board customizable_wp.stl



Thread the steel wire from behind through the Bowden cables and shorten it to the correct length.

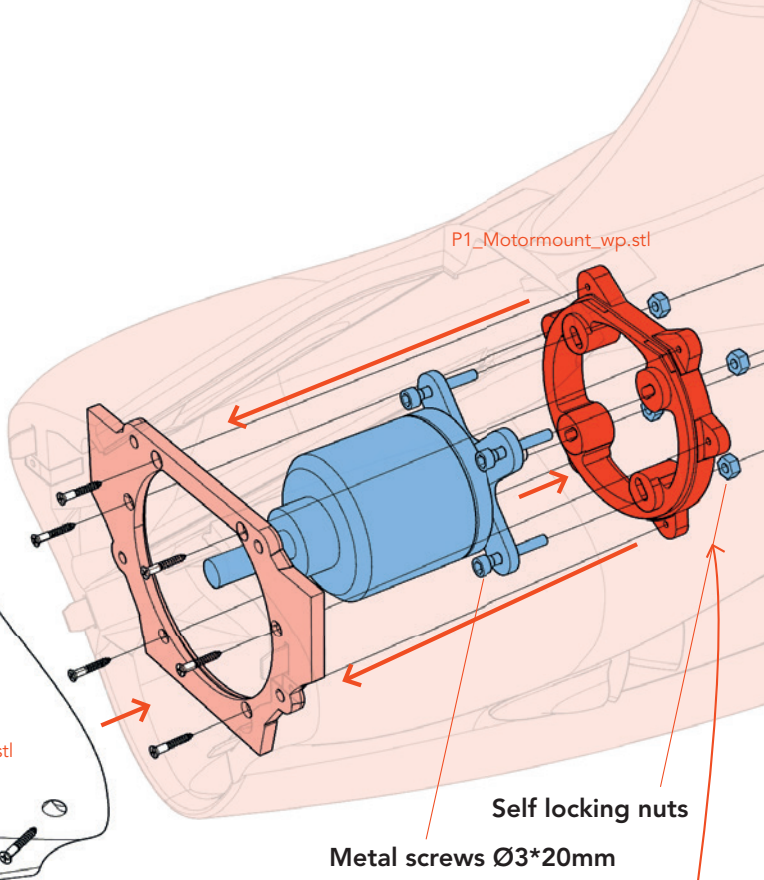


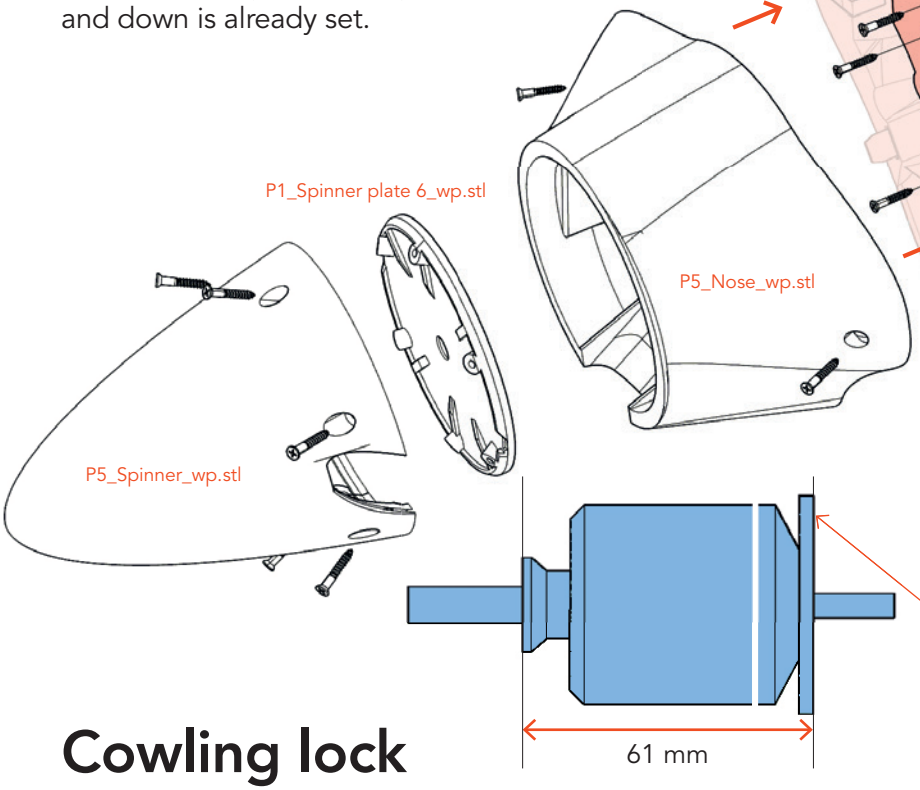


Motor mounting

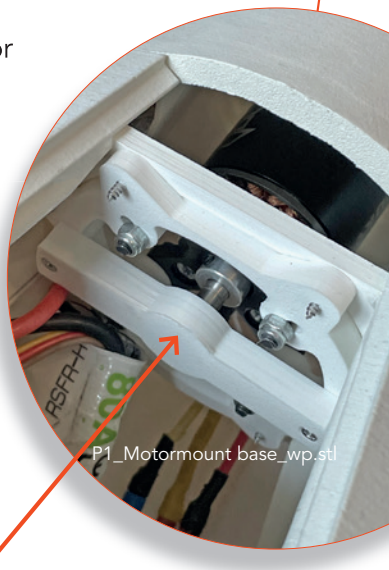
SAFETY FIRST Use appropriate screws for motor mounting to ensure safe operation! Make sure the prop runs smoothly and does not generate vibrations. **Check regularly that the motor mounting is absolutely tight!**

Mount the motor on the cross. The correct angle to the right and down is already set.





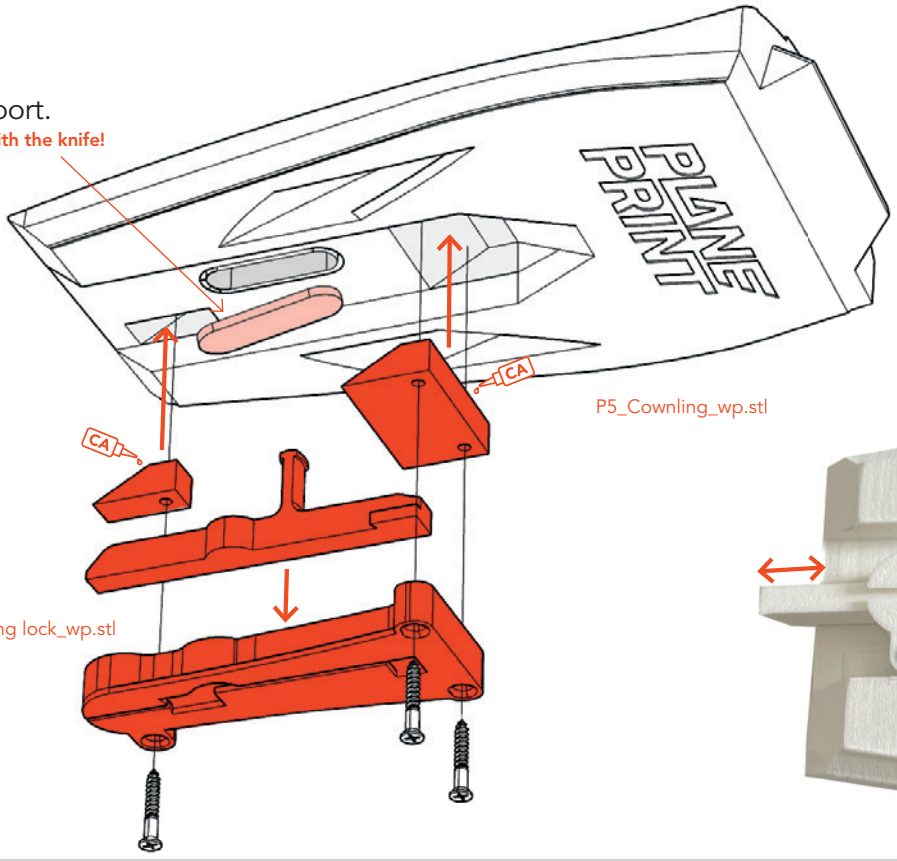
The optimum motor length (propeller mount to motor cross) is 61 mm. If this distance differs, you must compensate for the difference.



This bar can be screwed behind the motor shaft to protect the battery.

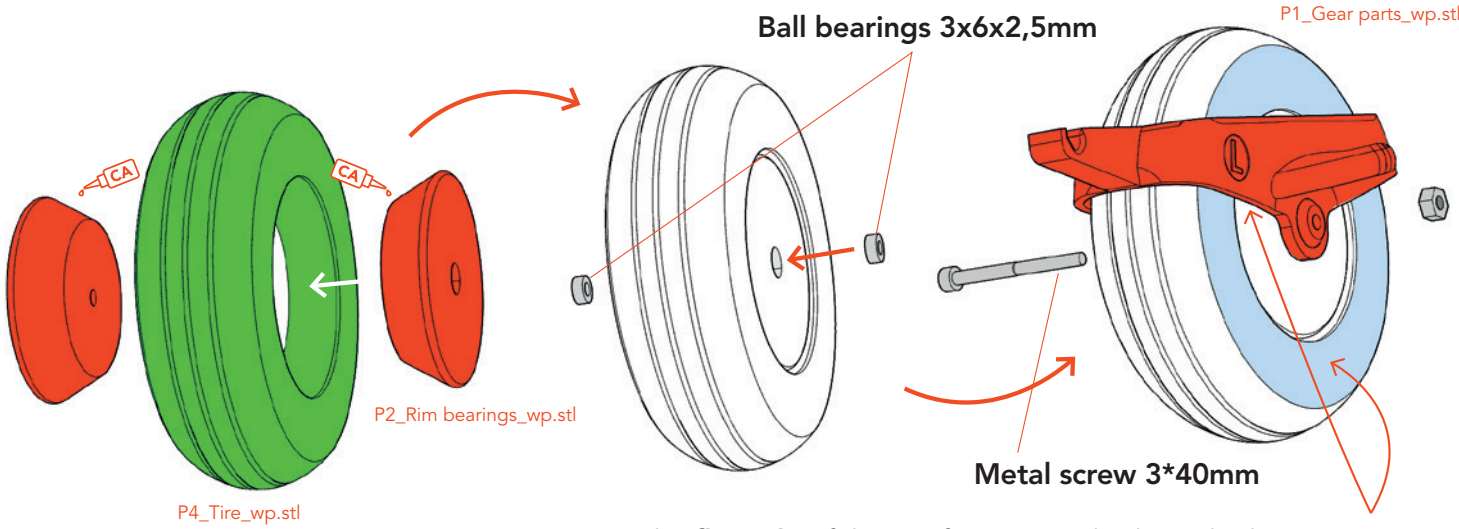
Cowling lock

Remove support.
Please be careful with the knife!

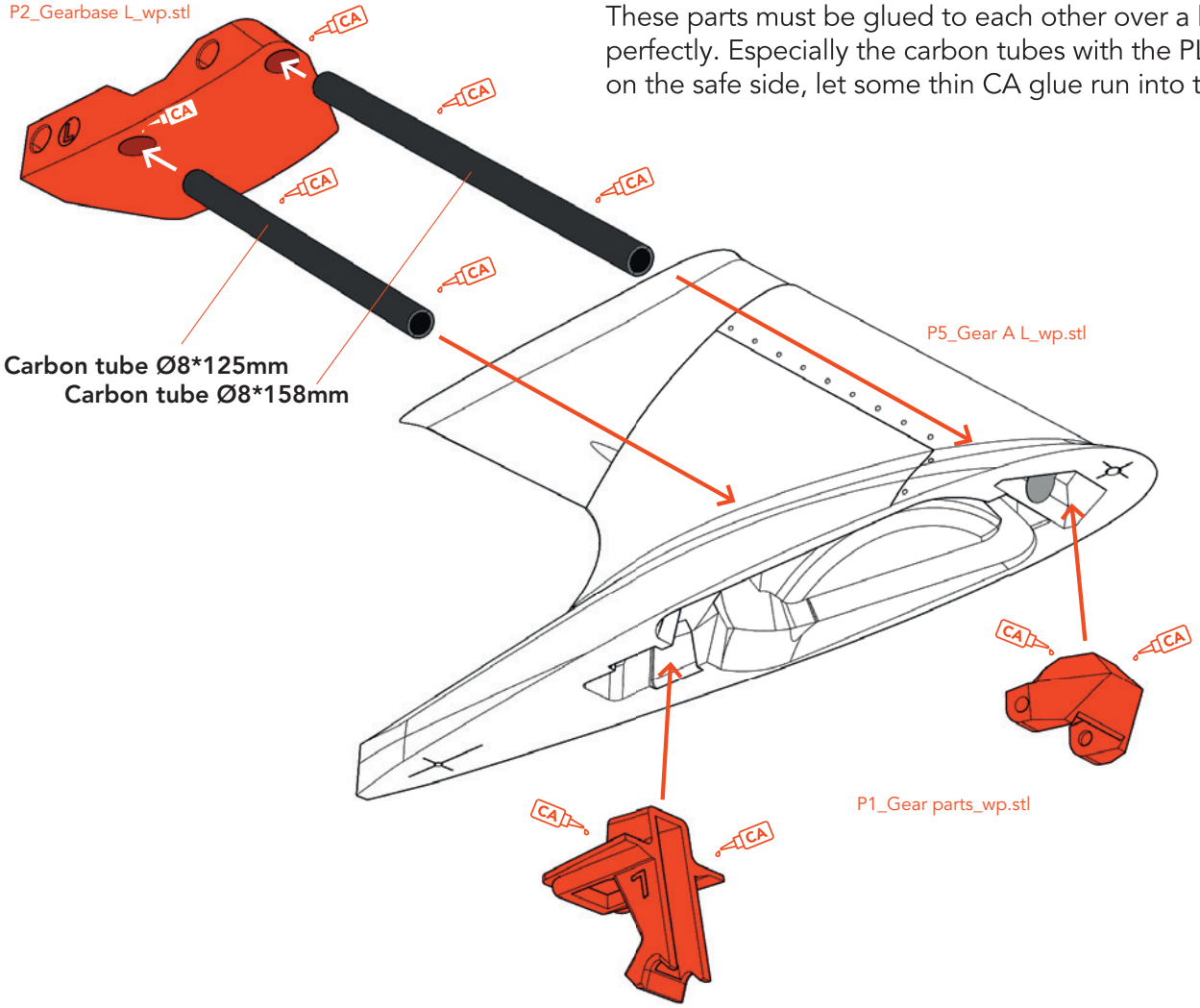


Gear

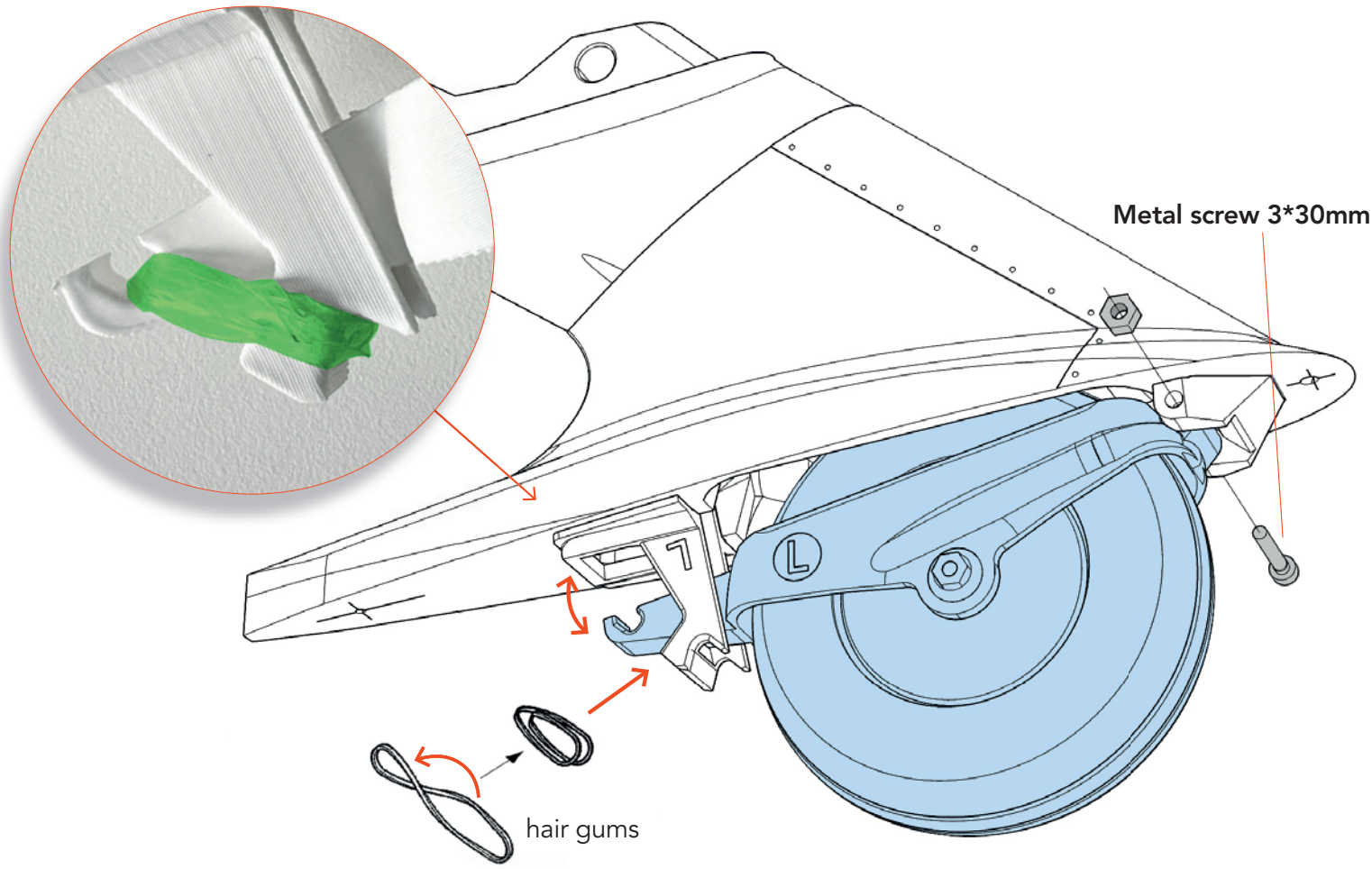
NOTE The wheels must be **absolutely smooth-running**, otherwise there is a risk that the aircraft will roll over during landing! Therefore, make sure that all screws and parts of the gear are installed very precisely and that the wheel cannot drag anywhere. For this reason, we strongly recommend that you build the version **with ball bearings**.



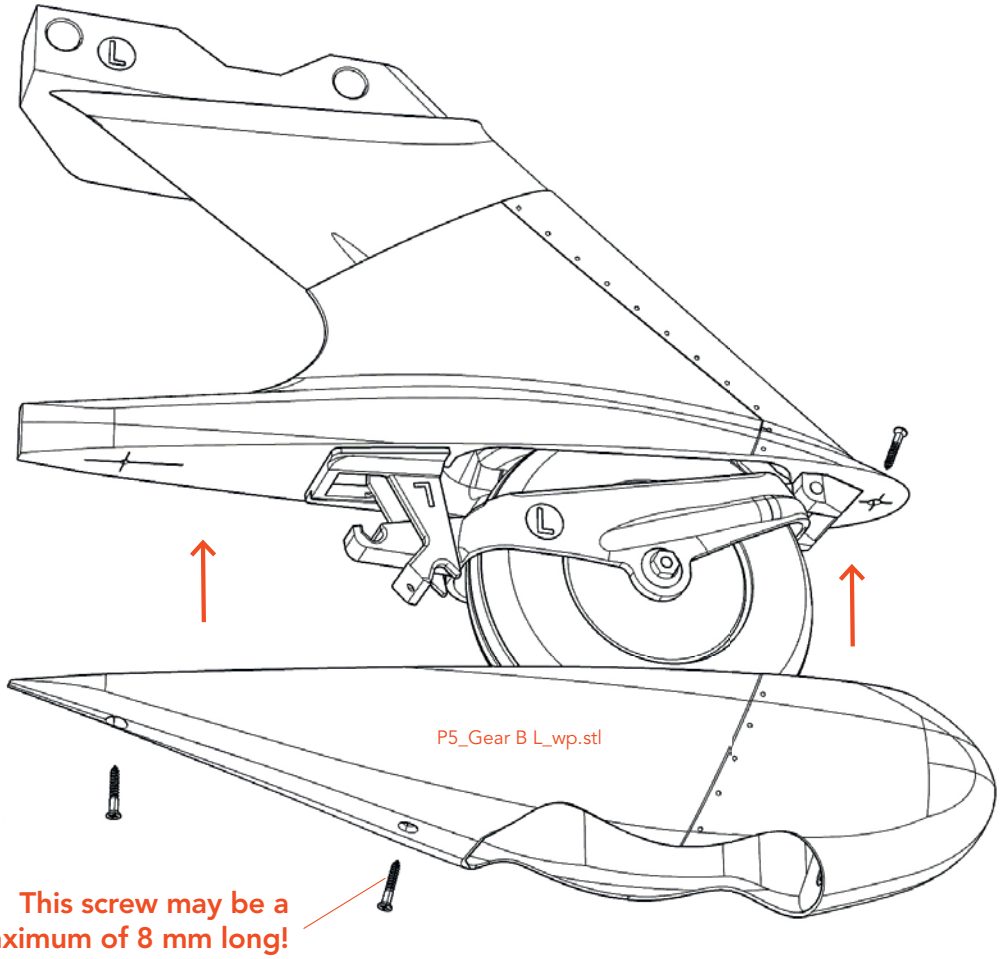
Attention, the **flat side** of the tire faces inward (where the letter L or R is)!



These parts must be glued to each other over a large area and perfectly. Especially the carbon tubes with the PLA parts. To be on the safe side, let some thin CA glue run into the gaps.

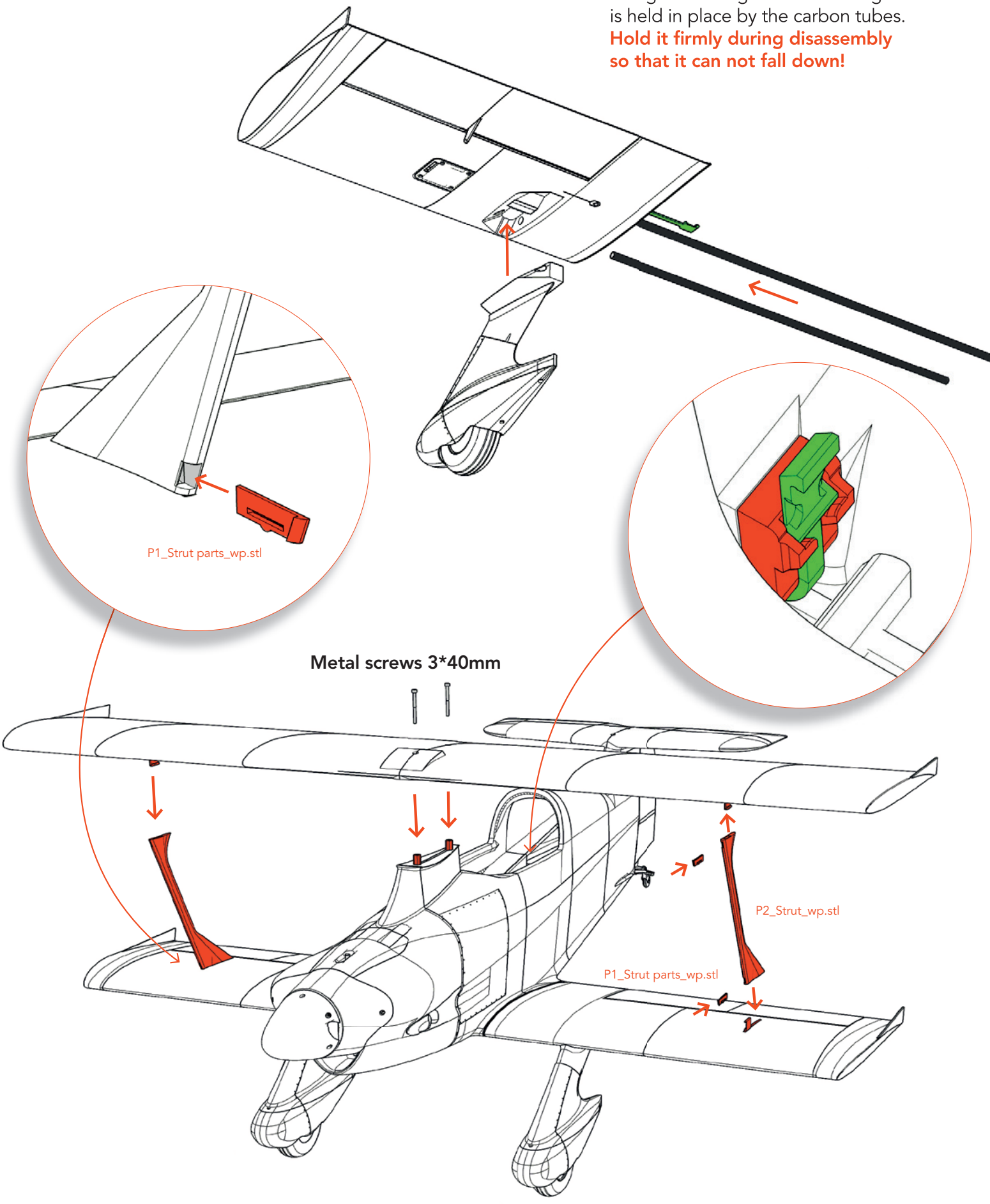


Use about 3 or 4 hair gums to adjust the spring force. It should not be too tight.



Wing fastening

The gear is not glued to the wing but is held in place by the carbon tubes.
Hold it firmly during disassembly so that it can not fall down!

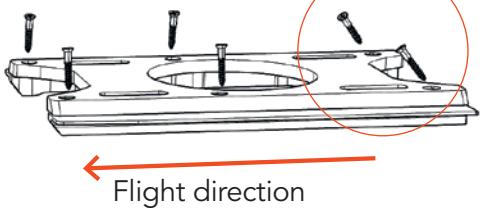


Battery fastening

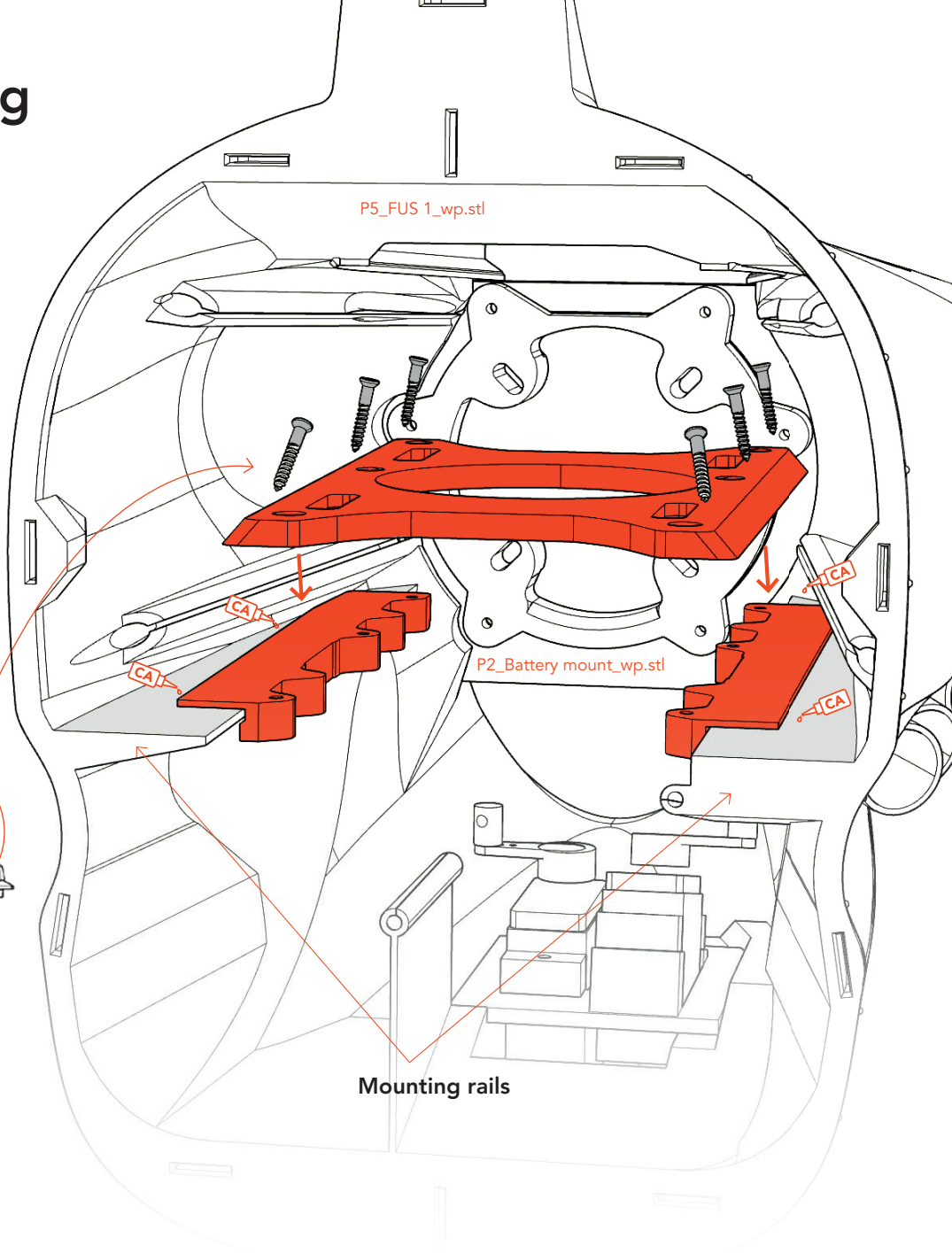
First screw the battery plate to the two brackets and then glue them to the mounting rails in fuselage 1. you can unscrew the battery plate later if you need to replace a servo, for example.

Use self-adhesive Velcro strips and Velcro strips to attach the battery.

Attention: the slanted screws are on the rear side!



Flight direction

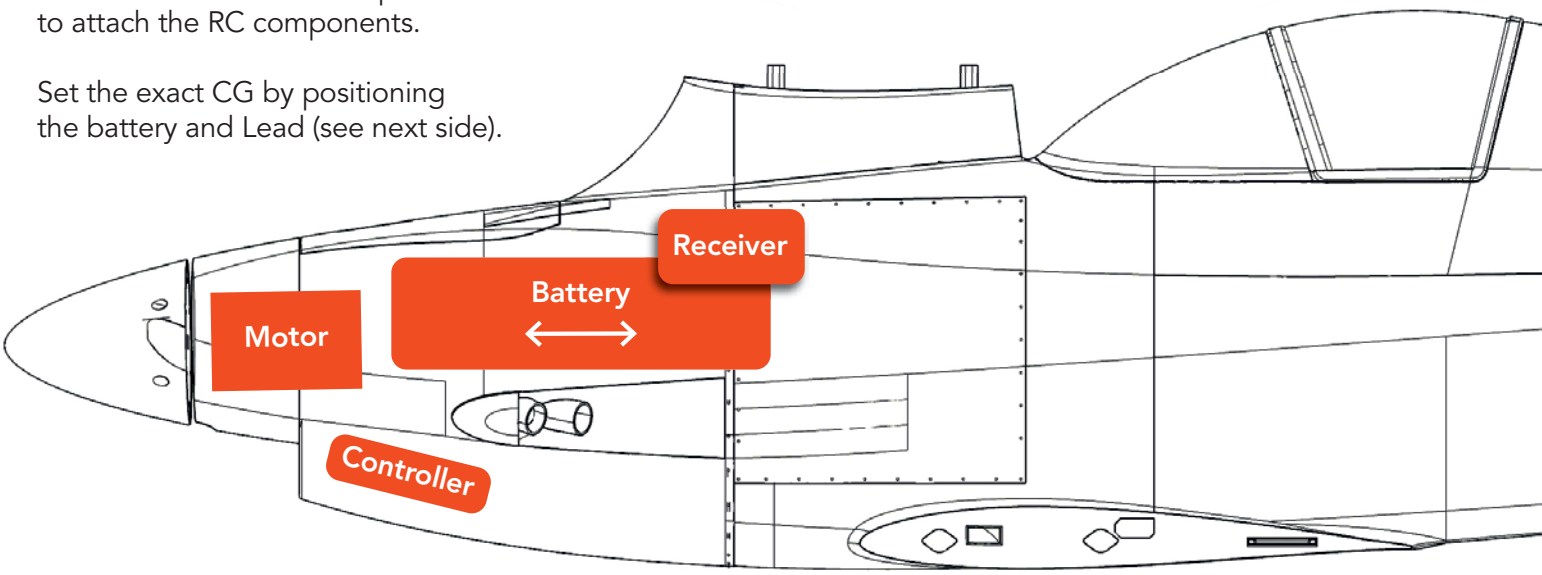


Mounting rails

RC components

Use self-adhesive Velcro tape to attach the RC components.

Set the exact CG by positioning the battery and Lead (see next side).



Technical specifications

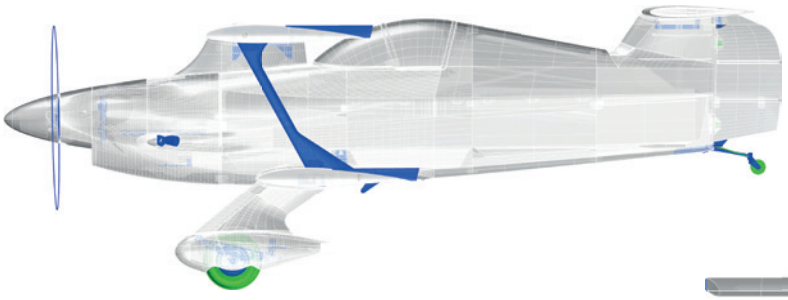
WINGSPAN 1100 mm/43.3 inches

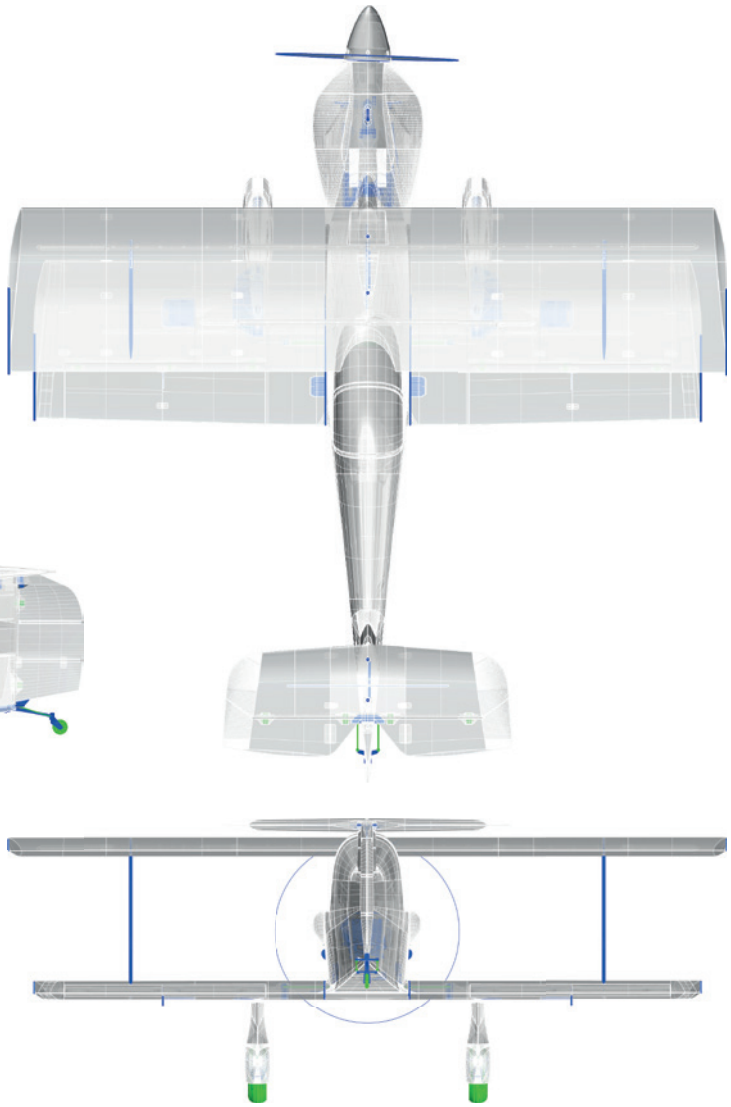
LENGTH 1191 mm/46.9 inches

HEIGHT 435 mm/17.1 inches

FLIGHT WEIGHT 2870 grams

WING LOAD 49 g/dm^2

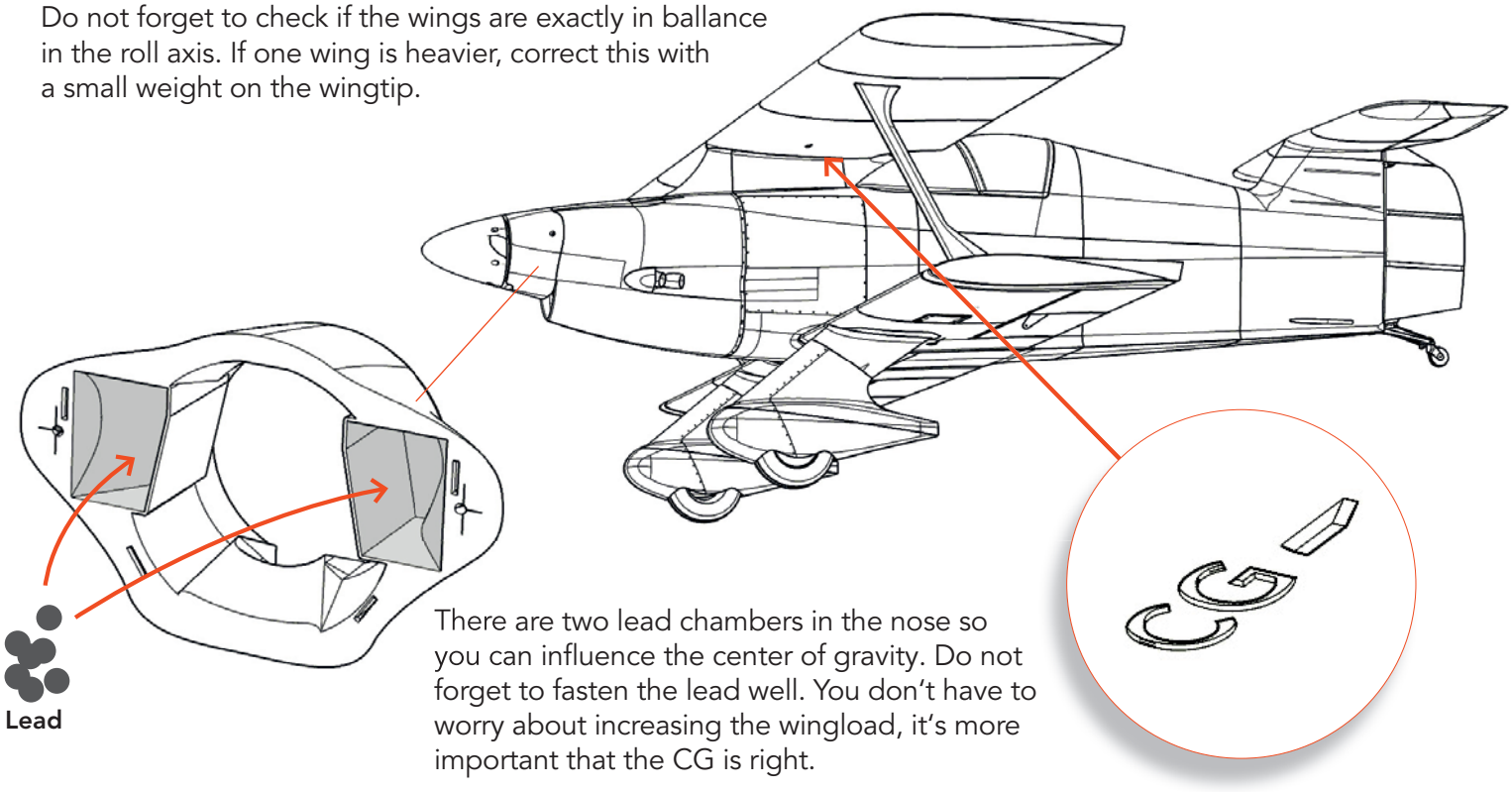




Center of Gravity (CG)

The aircraft must balance **precisely** on these points and the nose should tend rather minimally downward. (**94 mm** behind the leading edge of the upper wing – **see the markings on the upper wing**).

Do not forget to check if the wings are exactly in ballance in the roll axis. If one wing is heavier, correct this with a small weight on the wingtip.



There are two lead chambers in the nose so you can influence the center of gravity. Do not forget to fasten the lead well. You don't have to worry about increasing the wingload, it's more important that the CG is right.

Tips for flying

The Wanna Play II has a relatively high gear and you have to be careful when taxing and taking off and landing that the nose does not go down, which can result in a rollover. Therefore it is important to always keep some elevator up, especially when you see the tail taking off. Therefore, it is very important that the wheels run very smoothly and do not brake even when cornering.

START The original is a real racer, but our model was not designed for the highest speeds, but for very good-natured general flight characteristics. It is better not to give full throttle right away, but to increase the engine power sensitively when starting up. The airfoil used generates lift very quickly during takeoff and you are in the air after a few meters. Your piloting skills should allow you to make corrections with the rudder!

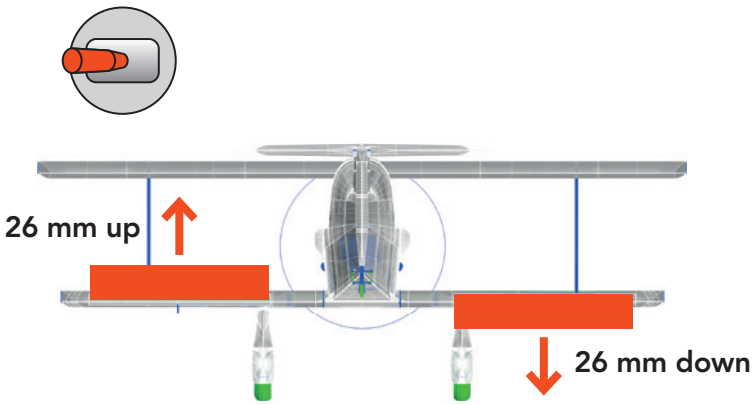
LANDING You should plan a wide landing approach and have enough space to flare out, because the model glides very much. The touchdown on the ground should be as slow as possible, otherwise it is better to accelerate again and make a new approach. Try at high altitude how the model reacts in slow flight, then you will quickly get a feeling for it. In no case should you force the landing when the speed is still high (but this applies to most models).

The **landing angle** is perfect when the nose points slightly upwards (See the official Planeprint video).

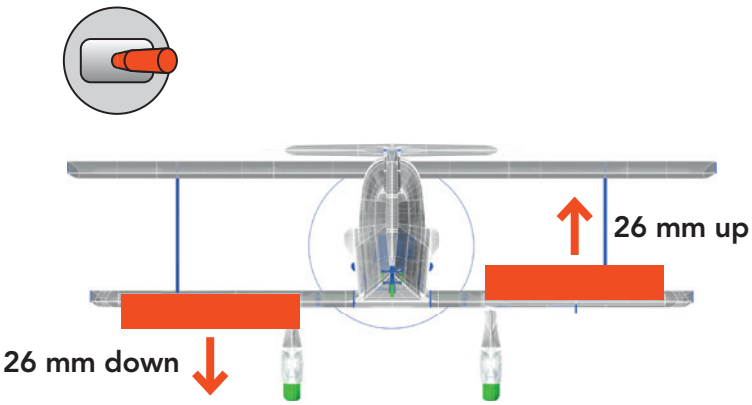
Settings for flying

When checking the control directions, **look at the aircraft from behind.**

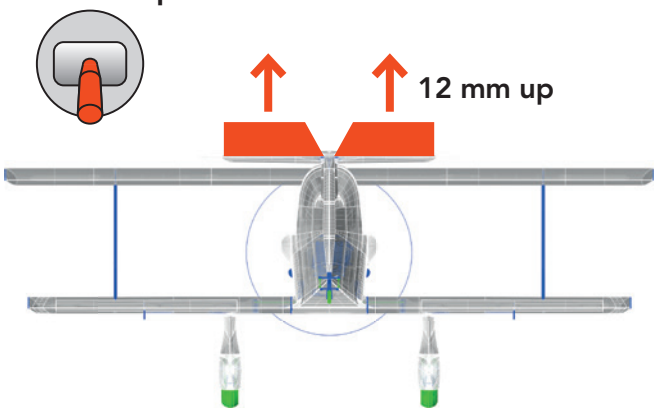
Aileron left



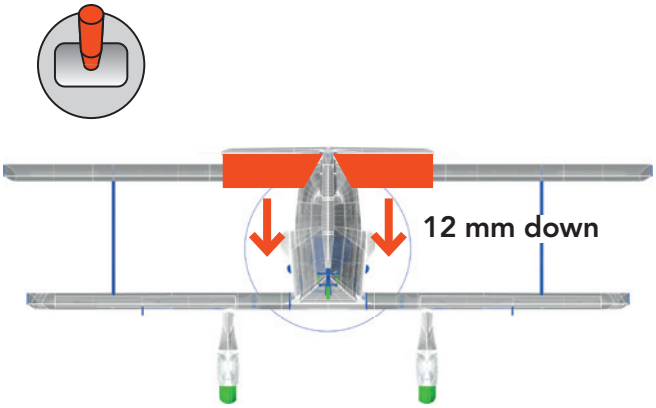
Aileron right



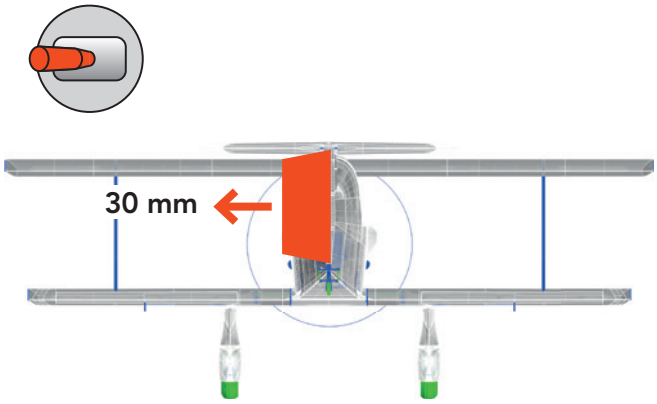
Elevator up



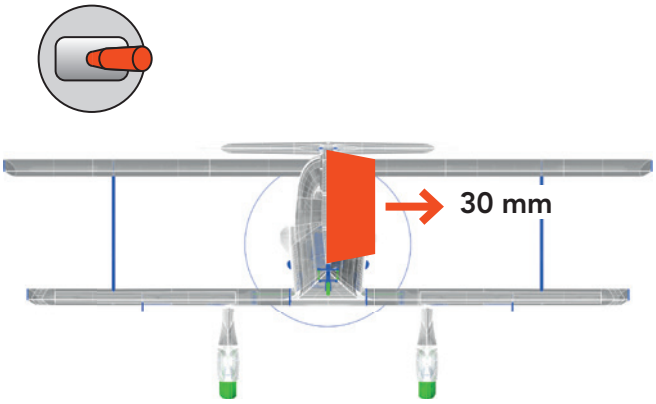
Elevator down



Rudder left

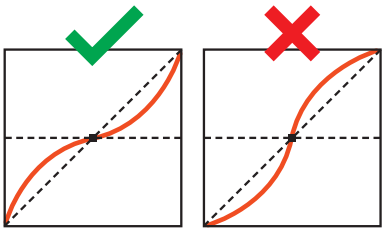


Rudder right



Expo setting

AILERON 30 % **ELEVATOR** 30 % **RUDDER** 30 %



(for some remote controls a minus has to be in front of the number)

AGE RECOMMENDATION 14+

NOT FOR CHILDREN UNDER 14 YEARS.
THIS IS NOT A TOY!

The STL data (or data processed from it, such as G codes) must never be passed on to third parties!

The purchase of the STL does not authorize the production of models for third parties.

By using the download data, an RC model airplane, called „model" for short, can be manufactured using a 3D printer. As a user of this model, only you are responsible for safe operation that does not endanger you or others, or that does not damage the model or property of others.

PLANEPRINT.com assumes no responsibility for damage to persons and property caused by pressure, transport or use of the product. Filaments, printing supplies, hardware or consumables that can not be used after faulty 3D printing will not be replaced by PLANEPRINT.com in any way.

When operating, always keep a safe distance from your model in all directions to avoid collisions and injuries.

This model is controlled by a radio signal. Radio signals can be disturbed from outside without being able to influence it. Interference can lead to a temporary loss of control.

Always operate your model on open terrains, far from cars, traffic and people.

Always follow the instructions and warnings for this product and any optional accessories (servos, receivers, motors, propellers, chargers, rechargeable batteries, etc.) carefully.

Keep all chemicals, small parts and electrical components out of the reach of children.

Avoid water contact with all components that are not specially designed and protected. Moisture damages the electronics.

Never take an item of the model or accessory in your mouth as this can lead to severe injuries or even death.

Never operate your model with low batteries in the transmitter or model.

Always keep the model in view and under control.
Use only fully charged batteries.

Always keep the transmitter switched on when the model is switched on.

Always remove the battery before disassembling the model.

Keep moving parts clean and dry at all times.

Always allow the parts to cool before touching them.

Always remove the battery after use.

Make sure that the Failsafe is properly set before the flight.

Never operate the model with damaged wiring.

Never touch moving parts.

We develop our models to the best of our knowledge and belief. We accept no liability for consequential damage and injuries caused by improper use or incorrectly printed parts. **Please be careful when handling motors, batteries and propellers** and only move your model with insurance and in approved places!

PLANE PRINT

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