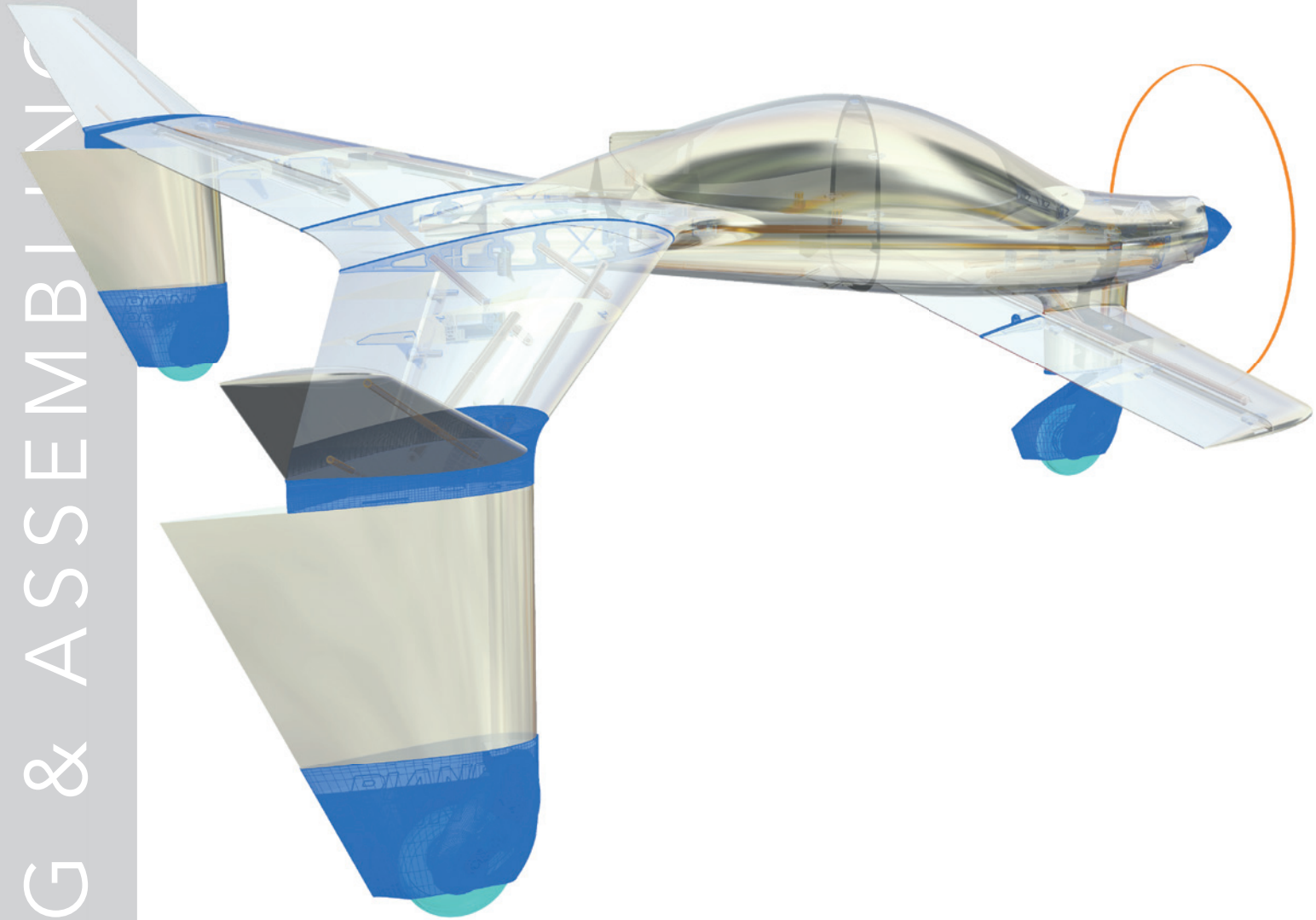


PLANE PRINT



PLANE PRINT **Y**

Experimental RC Canard Plane



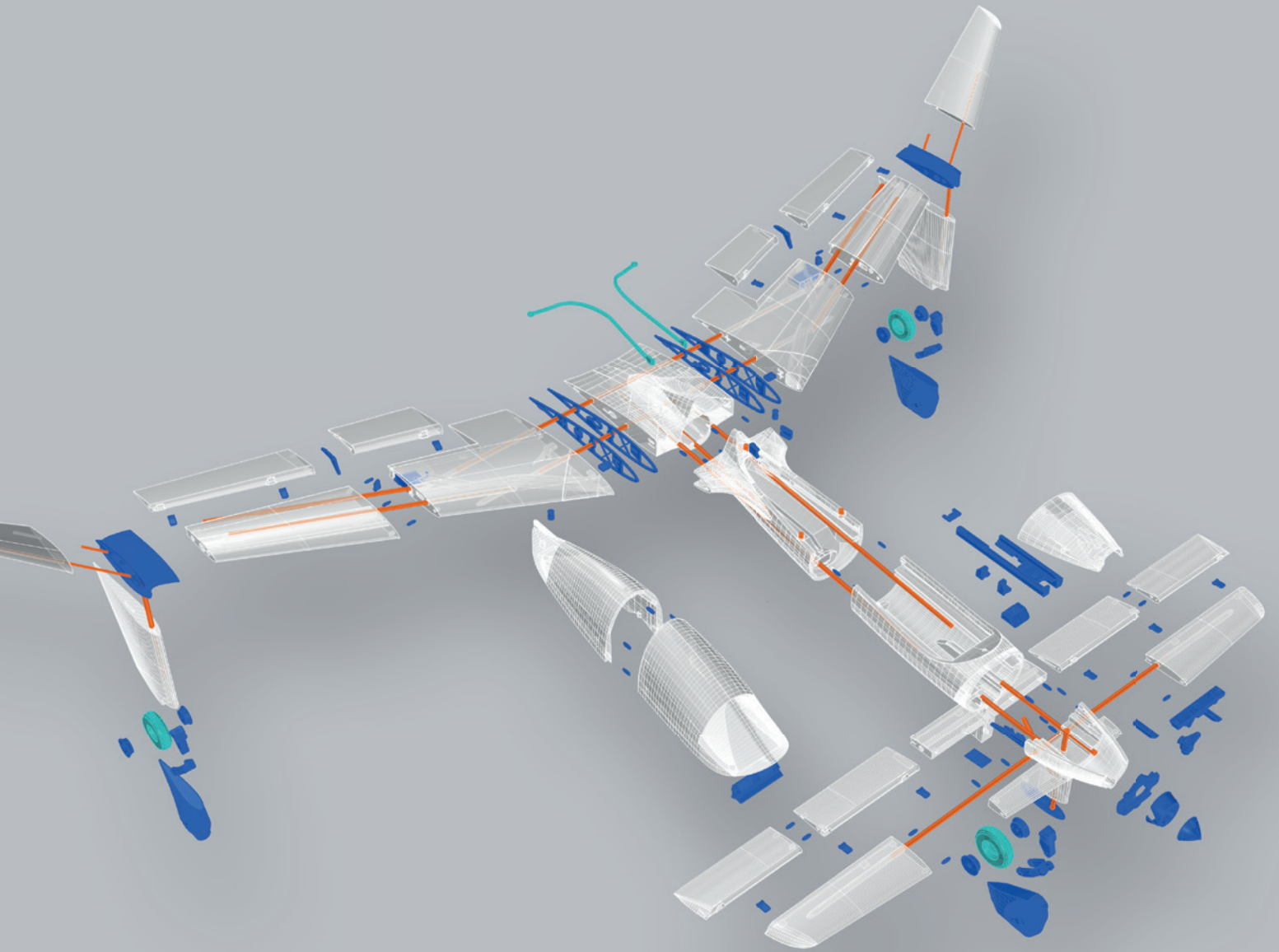
www.planeprint.com

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

© Copyright info:

The design of this aircraft is subject to the copyright of René Marschall and PLANEPRINT and may **not** be used or modified for any other purpose.

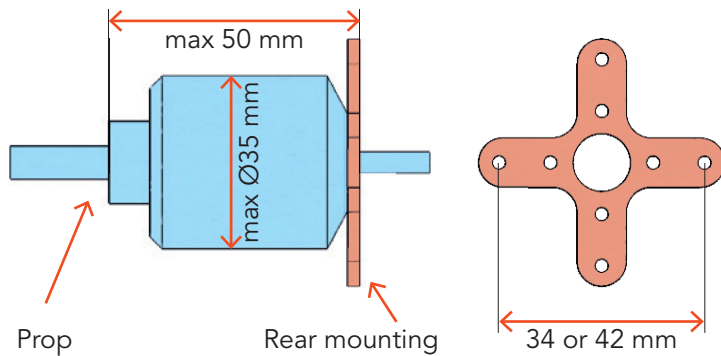
PLANEPRINT **Y**



RC Components

MOTOR Motors for example :
(ideal maximum weight 70g, If the motor is heavier, there may be issues with the center of gravity)

- KAVAN Brushless Motor C2836-915
 - ROXXY BL Outrunner C28-34-1100
 - Torcster Brushless Gold A2836/8-1100
- or comparable motors



PROP 11x6, 10x6 (follow the engine manufacturer's recommendation)

BEC-CONTROLLER min. 30 A (must fit the engine!)

RECEIVER 5 Channel (Throttle, 2xAileron, Elevator, Nose Gear)

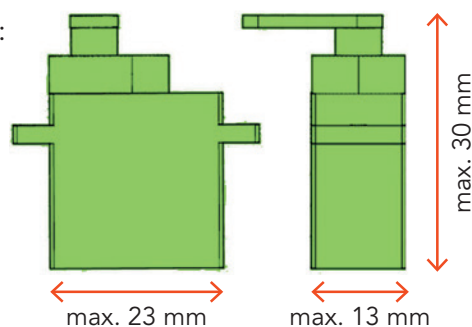
BATTERY 3S LiPo-Battery, 2500 – 3000 mAh (Ideal weight 200g)
A setting with 4S is of course also possible, prop size must then be adjusted accordingly.

SERVO EXTENSION CABLE 200 mm, 2 Pieces

SERVOS 4 pieces (We recommend using servos with metal gears, especially for the nose gear):

- KST Clubman CM509MG
 - Hitec 112055 HS-55
 - Savöx SH-0254
- or equivalent

Maximum dimensions:



Required accessoires – basic equipment

Links to recommended accessories can be found on www.planeprint.com/y (scroll down)

- LW-PLA foaming! (**cannot be replaced by PLA!**), ~500 grams
- Tough PLA, ~200 grams
- TPU A95 and LW-TPU Colorfabb VarioShore, ~150 grams

Printer space of 200x200x200 mm (cube) needed!

Materials

- CA super glue ([thin and liquid medium](#))
- CA activator
- Sortiment of Tapping screws Ø2mm
- Sortiment of Metal Screws Ø3mm ([Countersunk head recommended](#))
- Carbon tube Ø6mm*1000mm (inside 4mm), 5 pieces
Cut the tubes to the following lengths (mm):
 - Tube 1: 580, 420
 - Tube 2: 574, 361
 - Tube 3: 574, 361
 - Tube 4: 2x283, 2x177, 80
 - Tube 5: 478, 2x146, 138
- Carbon rod Ø3mm*500mm, 1 piece
Cut the rod to the following lengths (mm):
 - 2x195, 2x51
- Steel wire Ø1*1000mm, 2 pieces
- Ball bearings 3x6x2.5mm, 6 pieces ([optional for better wheel running](#))
- Neodym-Super-Magnet 5x5x5mm, 6 pieces
- Threaded inserts M3 ([optional, see description nose gear lever](#))
- Self-adhesive Velcro tape

Tools

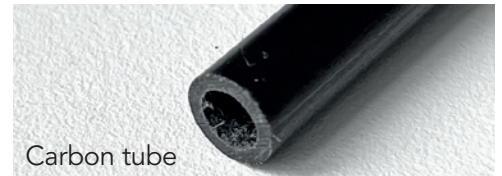
- Cutter knife
- small Philips screwdriver
- Sandpaper grain ~150
- Metal saw
- Needle nose pliers



Tapping screws Ø2mm



Metal screws Ø3mm



Carbon tube



Carbon rod



Threaded insert ([optional](#))



The development of a complex, airworthy RC flight model to express on any standard 3D printer is a very 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!

Printing the parts – Printing profiles

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

To print all **PLANEPRINT** models **you need to set some basic profiles in Cura** (If you use another slicer, please set the same parameters).

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

For this model you need the following profiles:

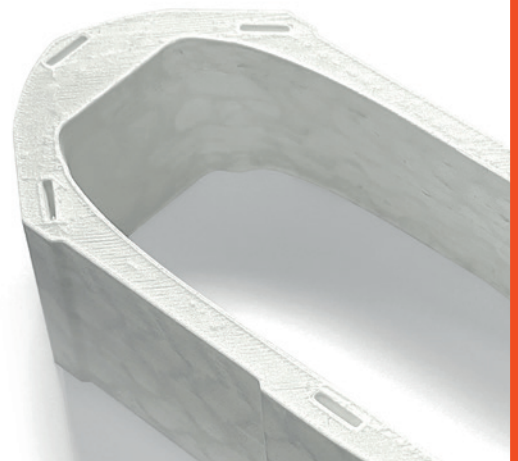


NOTE When printing the PLANEPRINT Y you should pay particular attention to a light weight of **each** individual part.

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 55 to 65 % (depending on brand and printer).

Caution: at too high temperatures, LW-PLA becomes brittle and breaks more easily.



PROFILE P1_Fullbody Tough PLA or PLA



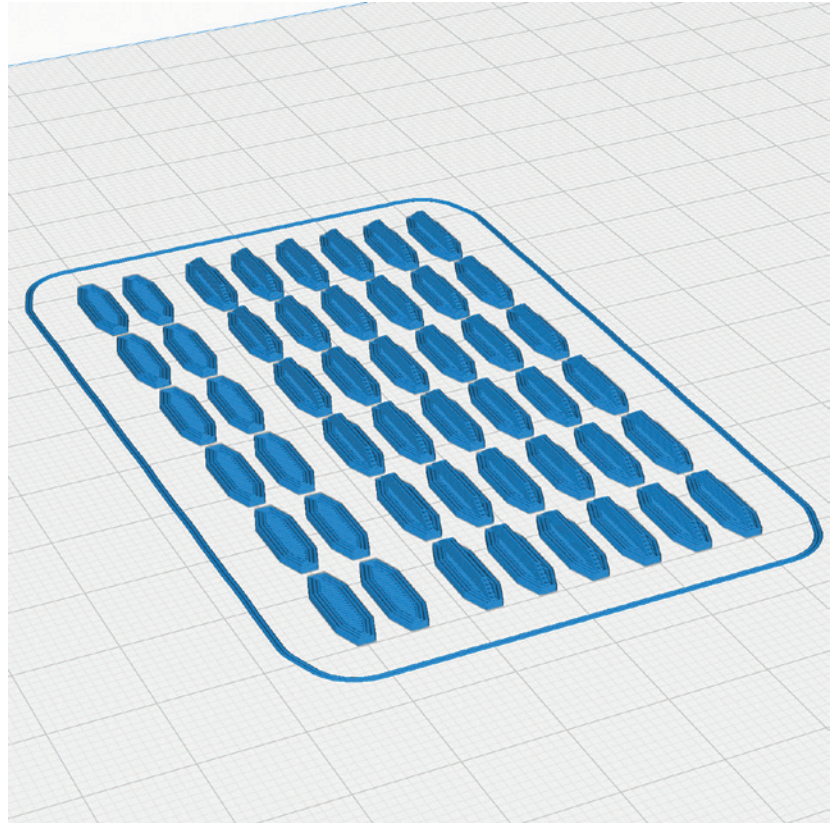
The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P1_Interconnects_y.stl

MATERIAL PLA, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required

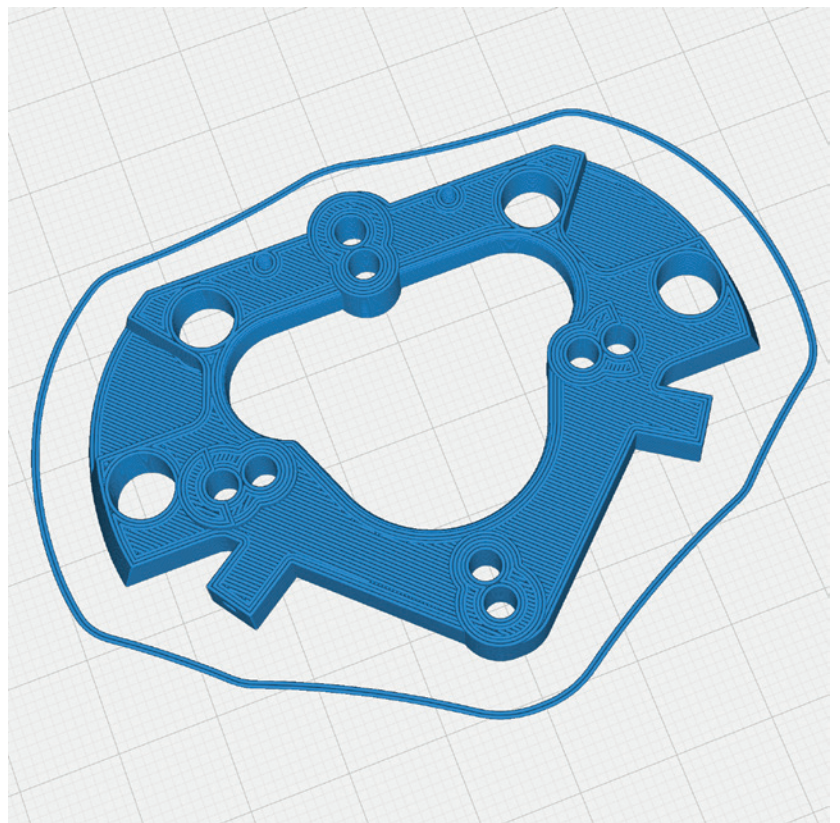


P1_Motor mount 34-42_y.stl

MATERIAL PLA, Weight: ~ 8 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody **Tough PLA or PLA**



The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

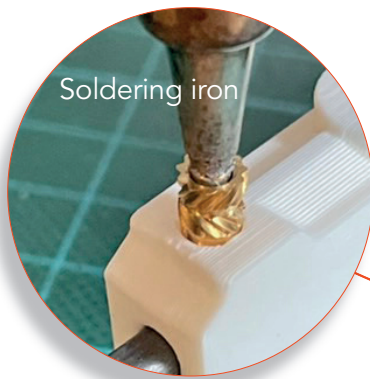
P1_Nose Gear Lever_y.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

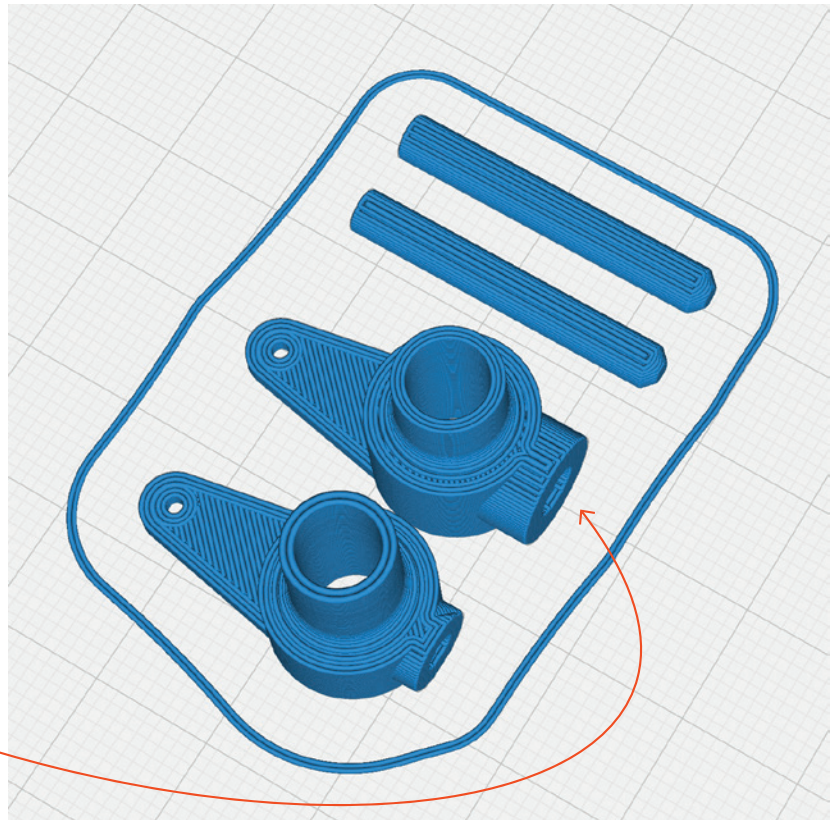
None required

There are two versions, one for the 3mm screw and one for Threaded inserts
(recommended)



Soldering iron

Threaded inserts

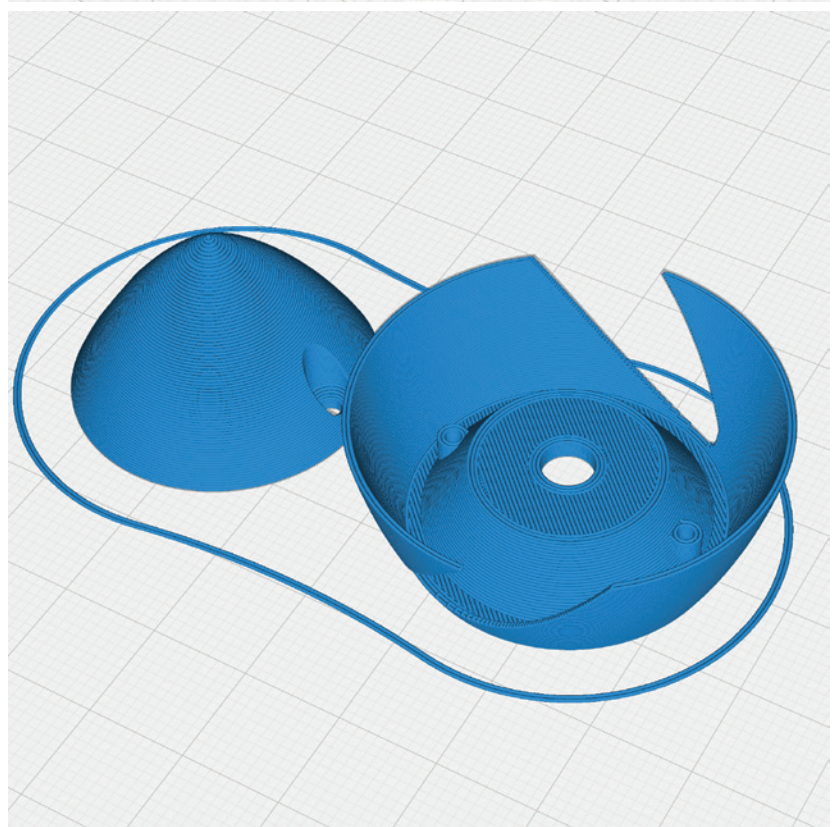


P1_Spinner_y.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

- Set Seam Position to **Random**
- Activate Support



PROFILE P1_Fullbody Tough PLA or PLA



The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P1_ALL Parts_y.stl

MATERIAL PLA, Weight: ~ 8 g

ADDITIONAL SETTINGS

None required

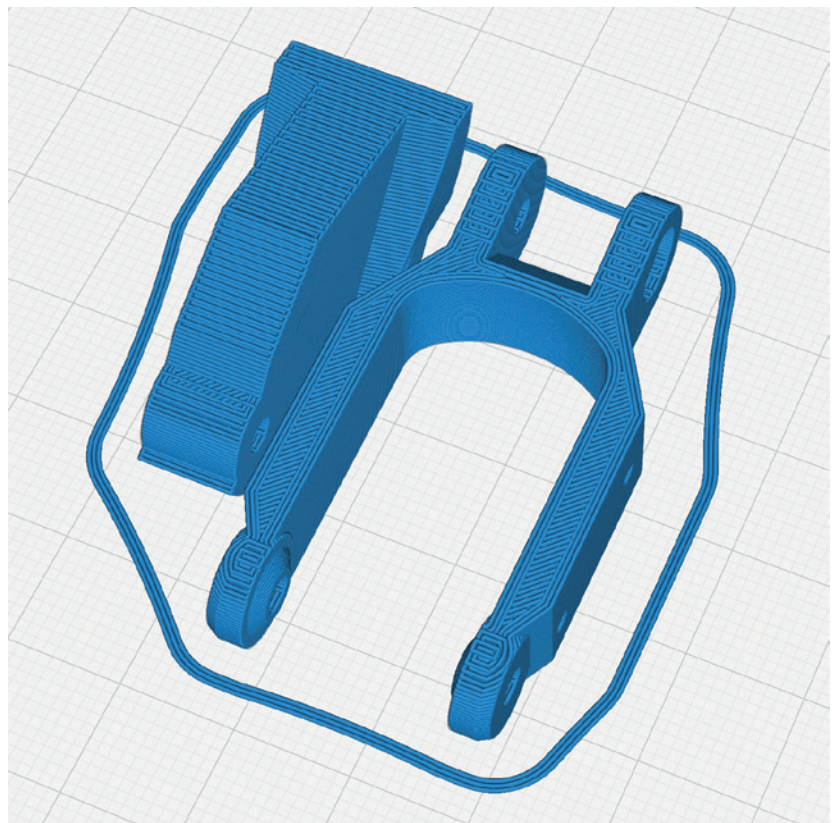


P1_Gear Leg_y.stl

MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

- Print this three times



PROFILE P2_Hollowbody Tough PLA or PLA



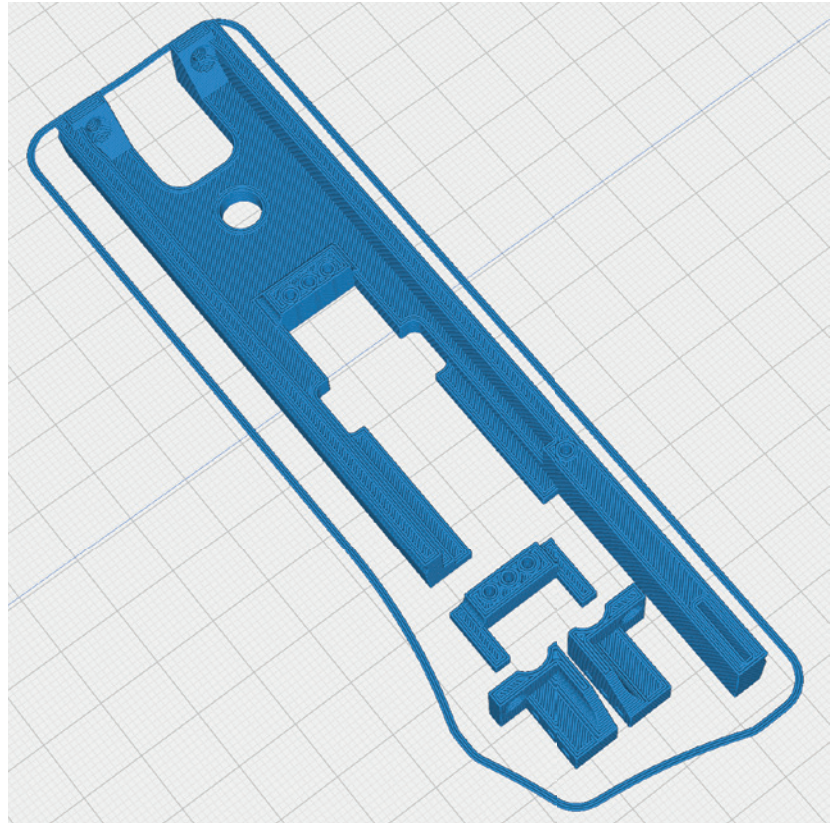
The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P2_Nose Gear Plate_y.stl

MATERIAL PLA, Weight: ~ 11 g

ADDITIONAL SETTINGS

None required



P2_Nose Parts_y.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required



PROFILE P2_Hollowbody Tough PLA or PLA



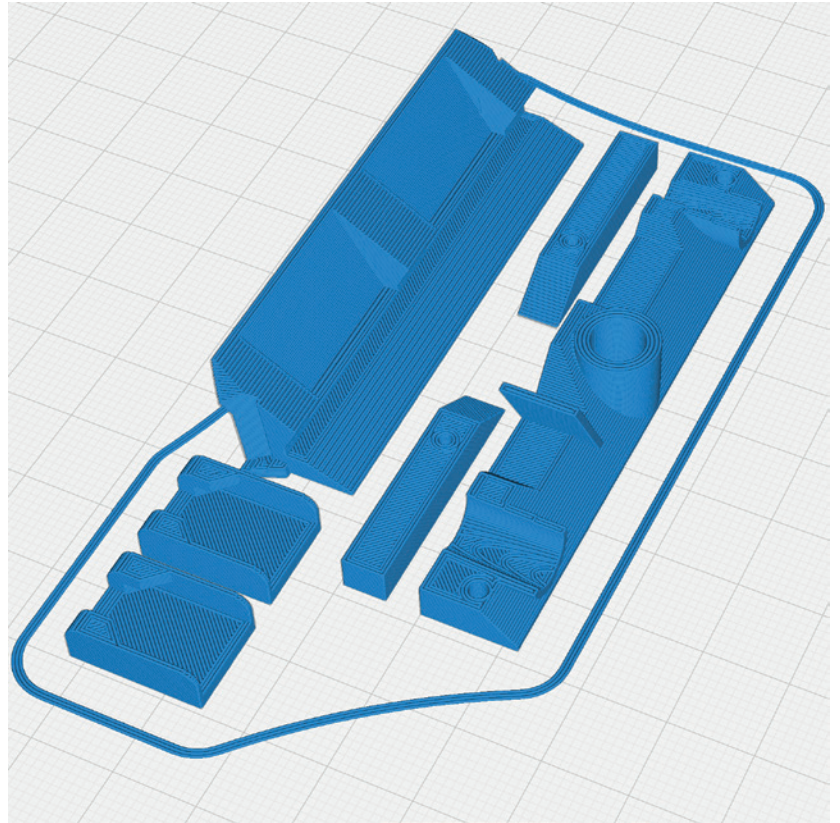
The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P2_Parts_y.stl

MATERIAL PLA, Weight: ~ 8 g

ADDITIONAL SETTINGS

None required

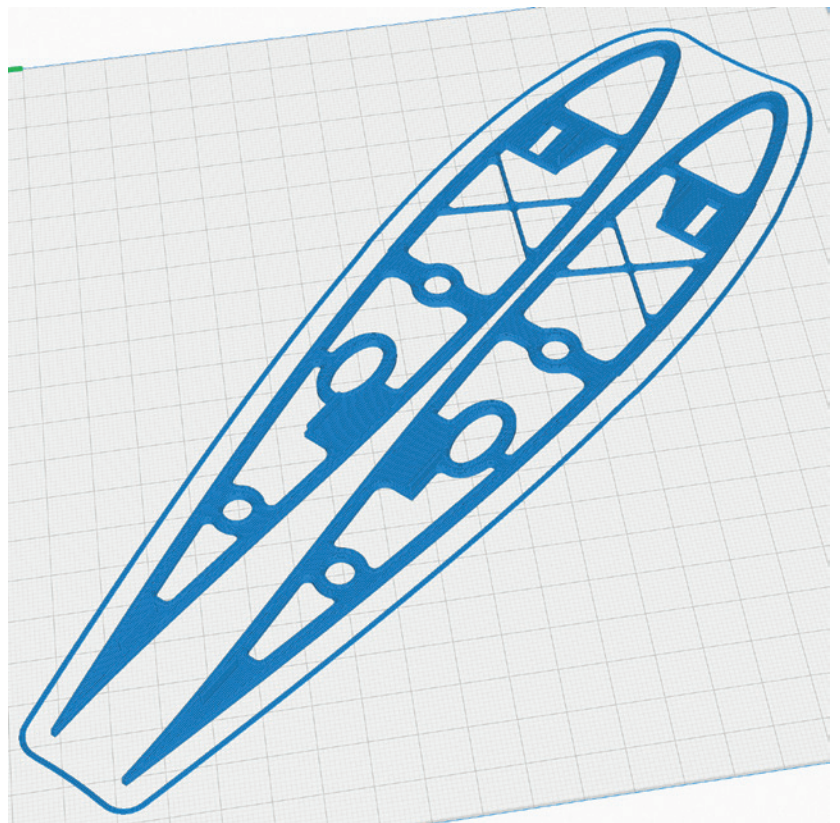


P2_Protectors FUS_y.stl

MATERIAL PLA, Weight: ~ 8 g

ADDITIONAL SETTINGS

None required



PROFILE P2_Hollowbody Tough PLA or PLA



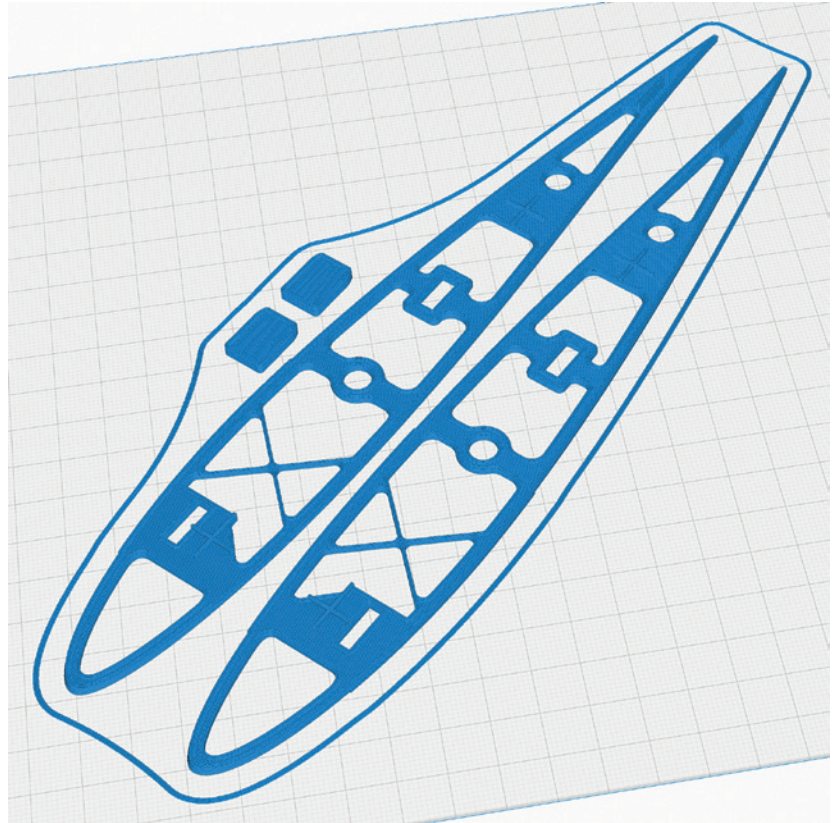
The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P2_Protectors Wing_y.stl

MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

None required

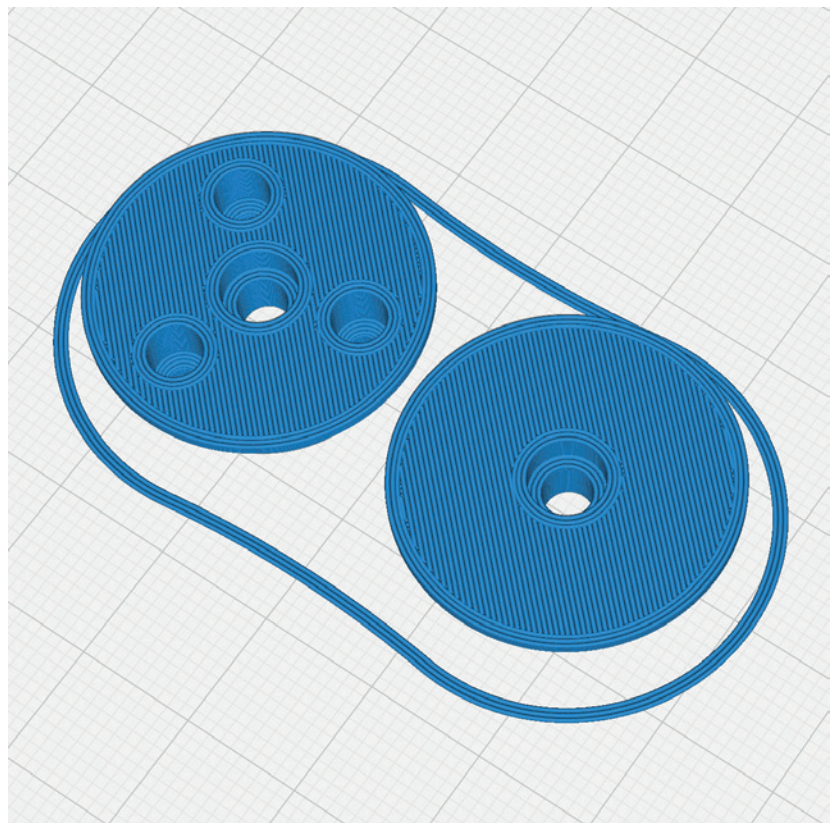


P2_Rim BB_y.stl or P2_Rim_y.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

- Print this three times



PROFILE P2_Hollowbody Tough PLA or PLA



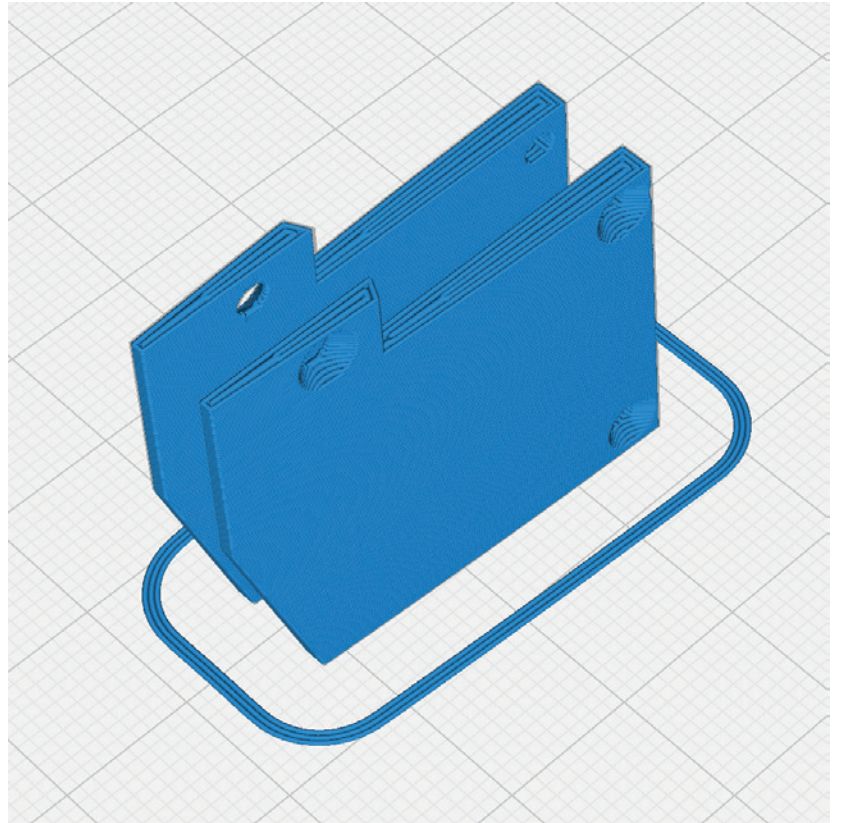
The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P2_Servo Covers_y.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

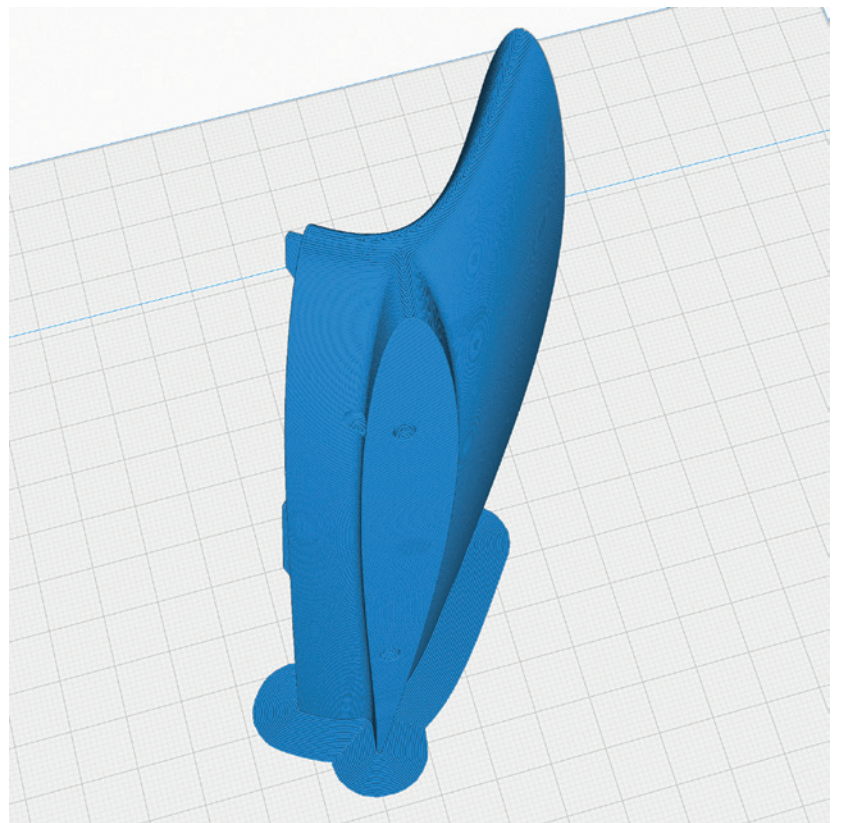


P2_Winglet PLA L_y.stl and P2_Winglet PLA R_y.stl

MATERIAL PLA, Weight: ~ 18 g

ADDITIONAL SETTINGS

- Wall Line Count/Perimeters: 1
- Infill Density: 8 %
- Seam Gap Distance: -1mm
- set Brim



PROFILE P2_Hollowbody Tough PLA or PLA



The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

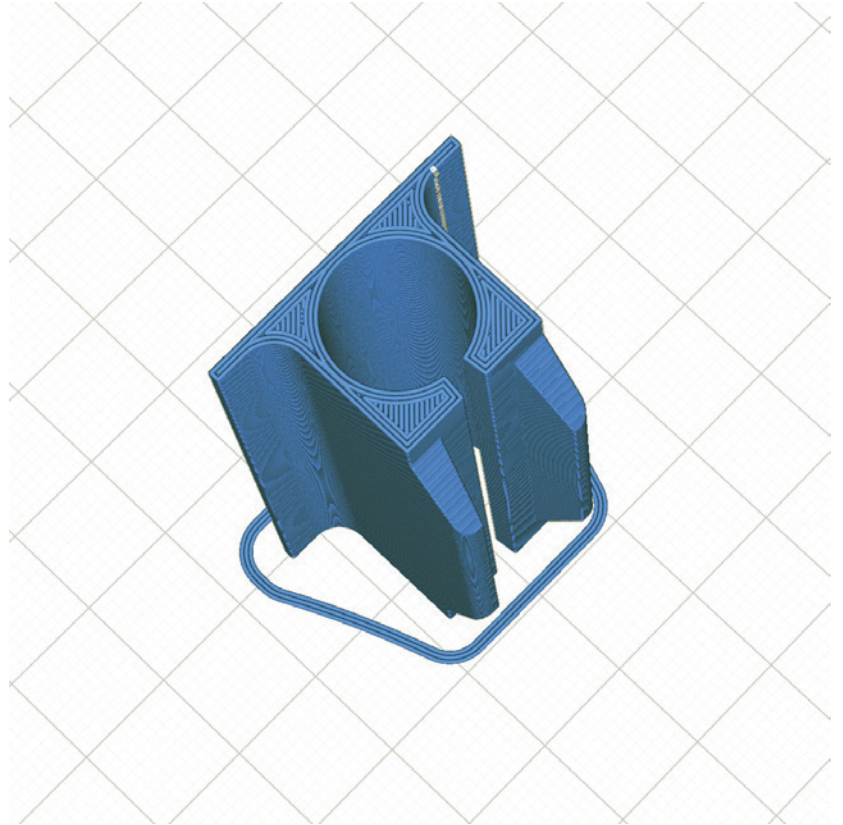
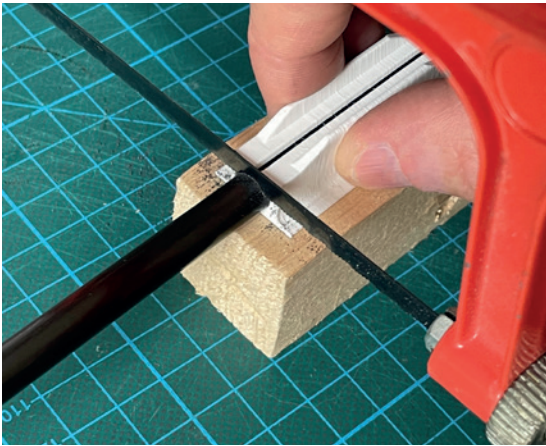
P2_Carbon tool 6mm.stl

MATERIAL PLA

ADDITIONAL SETTINGS

None required

This tool helps to saw the carbon tubes



SPIRALIZE/VASE MODE – Tough PLA or PLA

The following parts must be sliced with the Funktion **Spiralize Outer Contour** (Cura) or **Spiral Vase** (Prusa Slicer). For these parts, only the outer wall (1 line/perimeter) is printed without Z-seam, no top layers.

Vase_Hubcap front_y.stl

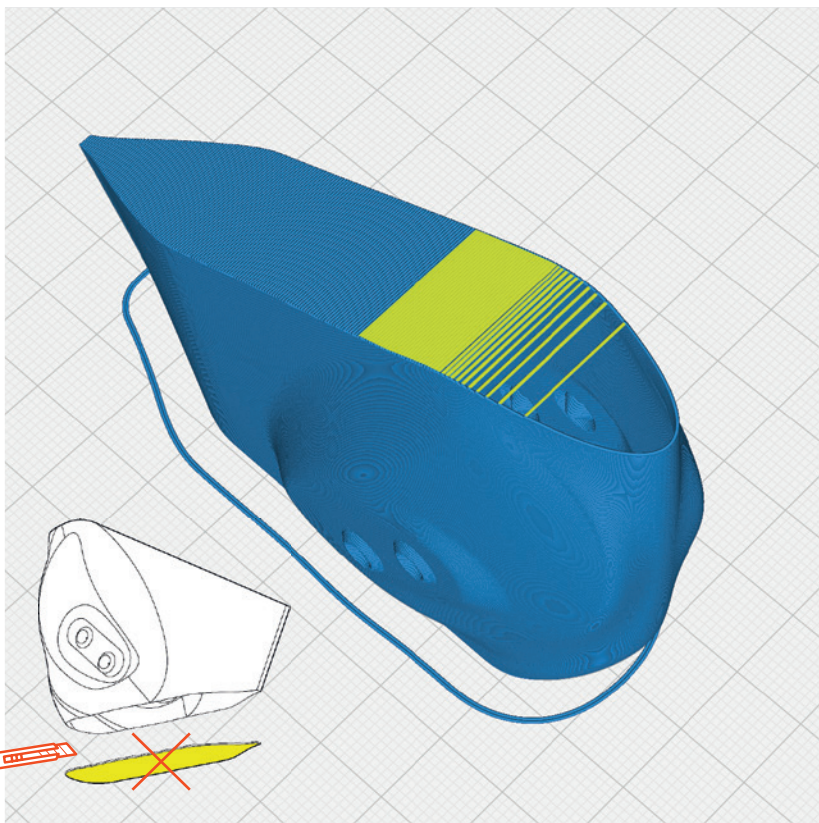
MATERIAL PLA, ~ 6 g

SETTINGS

- Wall Line Count/Perimeters: 1
- Spiralize Outer Contour (Cura)/
Spiral Vase (Prusa)
- Bottom Layers: 1

TIP If the walls of your print are too thin, you can increase the wall thickness (to 0.5) or increase the flow rate slightly.

Remove the yellow-marked support



Vase_Hubcap_y.stl

MATERIAL PLA, ~ 10 g

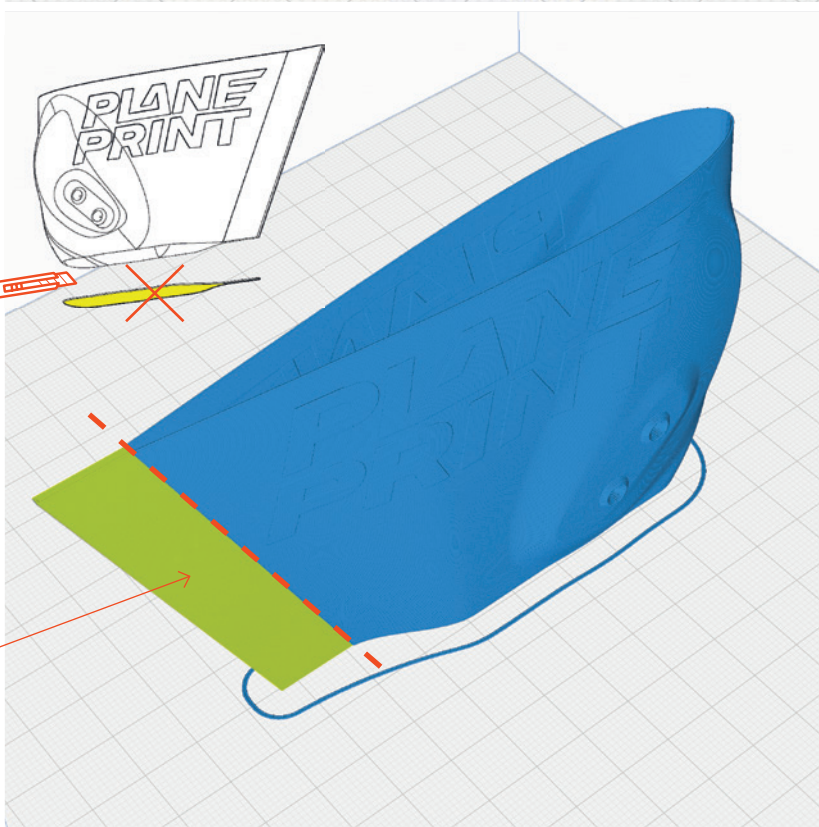
SETTINGS

- Wall Line Count/Perimeters: 1
- Spiralize Outer Contour (Cura)/
Spiral Vase (Prusa)
- Bottom Layers: 1
- Print twice

TIP If the walls of your print are too thin, you can increase the wall thickness (to 0.5) or increase the flow rate slightly.

Remove the yellow-marked support

Remove this yellow-marked support with **scissors** (the rear edge will then be open).



PROFILE P4_Flex LW TPU (A95/VarioShore)



The information about the basic settings you can find on our website at PRINT.
Please note the additional settings for the individual parts!

P4_Tire_y.stl

MATERIAL VarioShore or TPU A95

ADDITIONAL SETTINGS

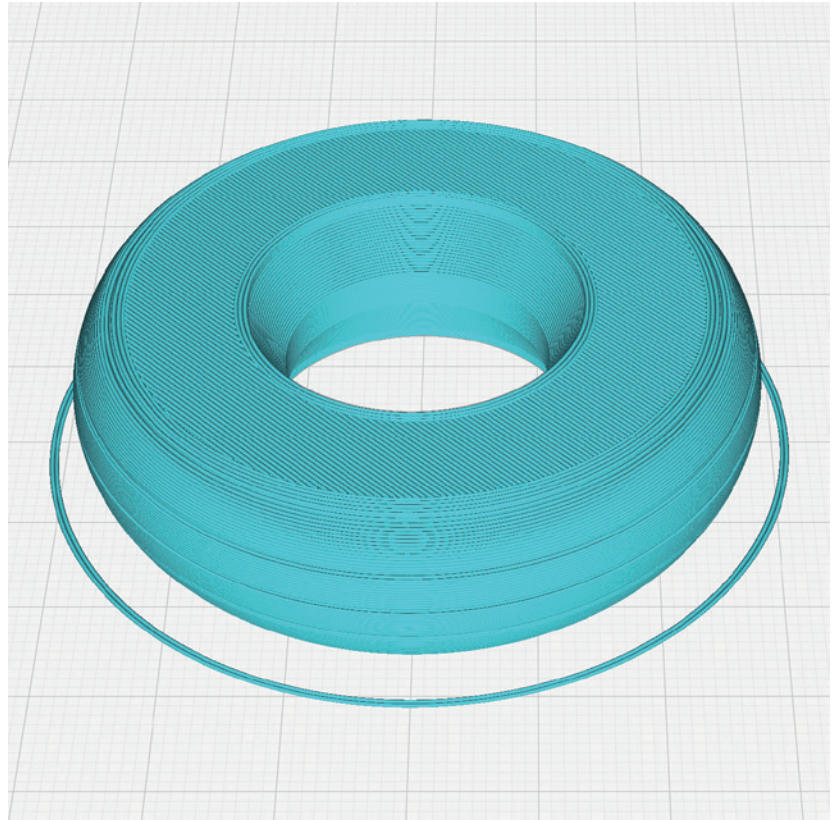
- Print this three times

VarioShore with Flow 70 %:

- Wall Line Count/Perimeters: 5
- Top Layers: 5
- Bottom Layers: 5
- Infill Density: 10 %
- Infill Pattern: Gyroid

TPU A95:

- Wall Line Count: 3
- Top Layers: 3
- Infill Density: 6 %
- Infill Pattern: Gyroid

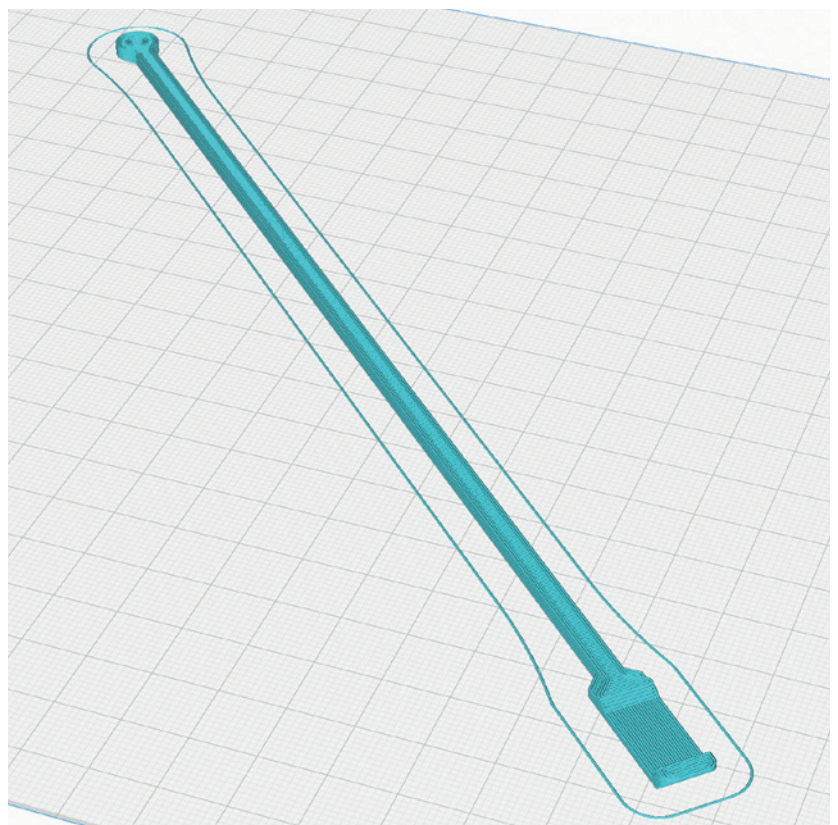


P4_Wingbelt_y.stl

MATERIAL TPU A95, Weight: ~ 1 g

ADDITIONAL SETTINGS

- print twice
- Wall Line Count/Perimeters: 10



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

P5_Ail 1_y.stl

MATERIAL LW PLA, Weight: ~ 19 g

TIME ~ 2 hours 10 minutes
(calculated with Prusa MK4S)

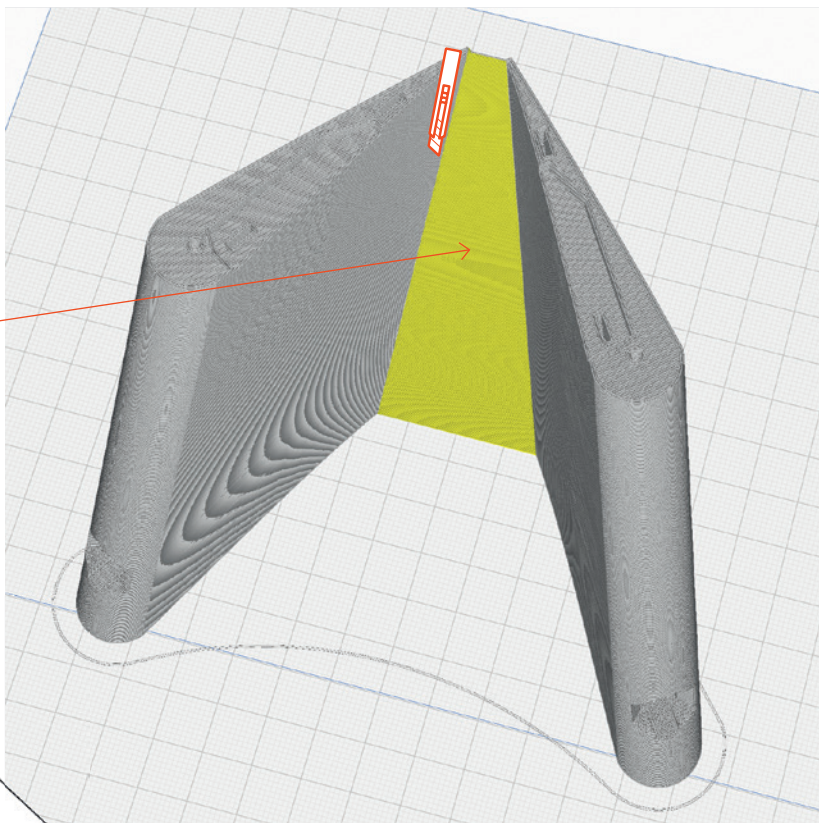
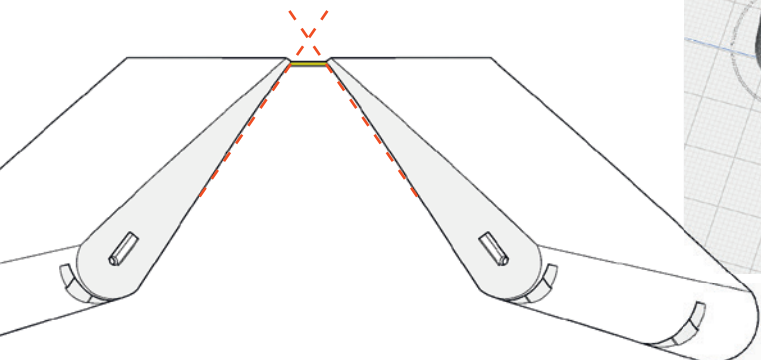
ADDITIONAL SETTINGS



Remove support.

Please be careful with the knife!

Place the blade flat on the aileron. It works best if you cut very often with little pressure.



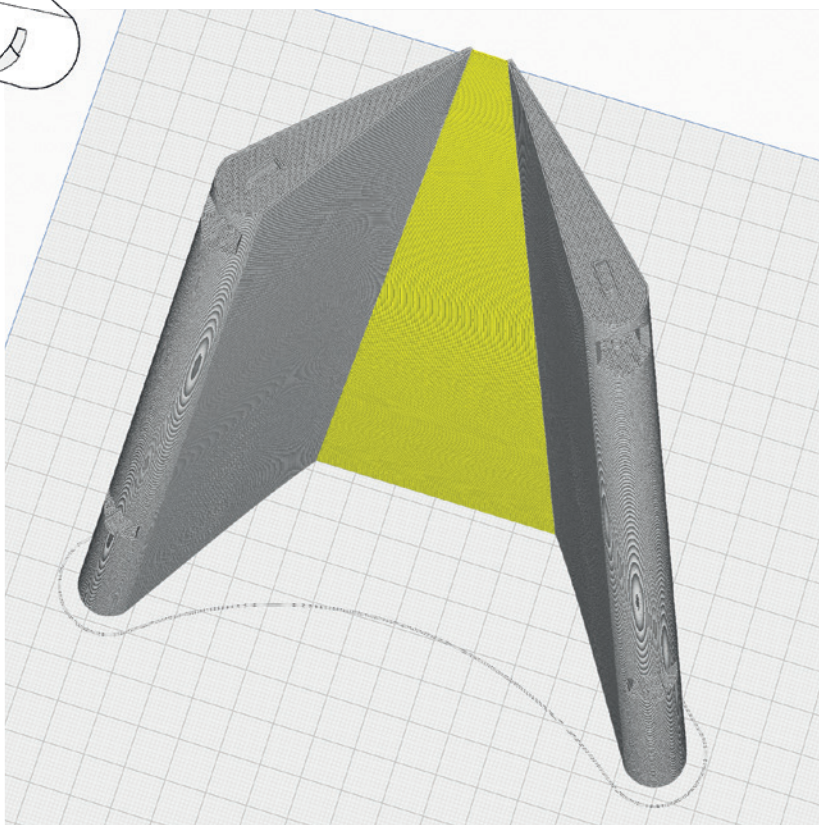
P5_Ail 2_y.stl

MATERIAL LW PLA, Weight: ~ 28 g

TIME ~ 3 hours minutes

ADDITIONAL SETTINGS

- Remove support as described in AIL 1



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

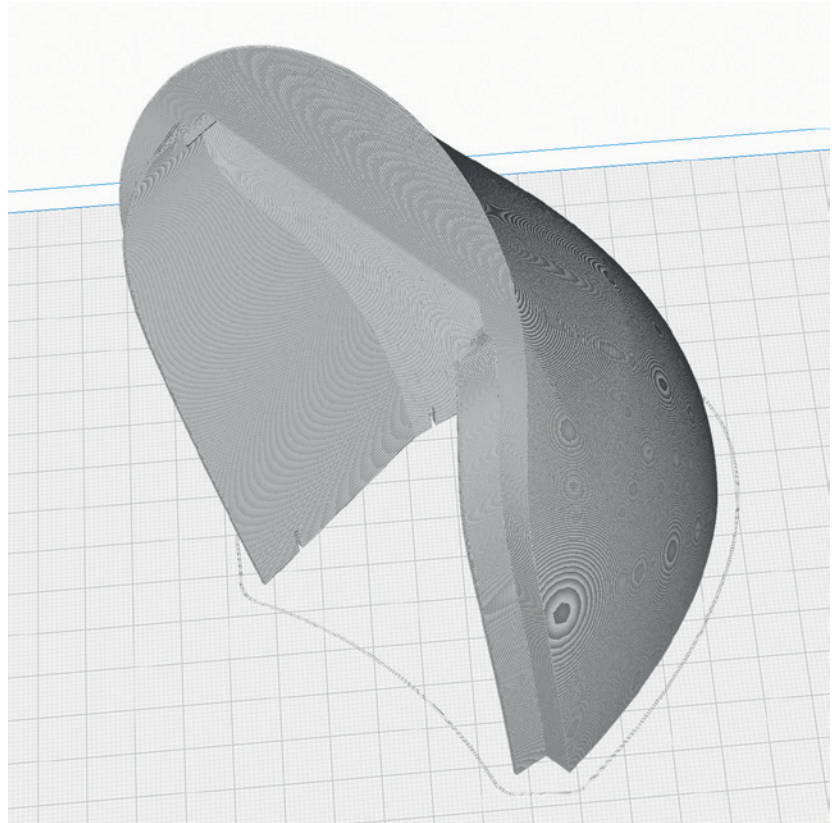
P5_Canopy 1_y.stl

MATERIAL LW PLA, Weight: ~ 25 g

TIME ~ 3 hours

ADDITIONAL SETTINGS

None required



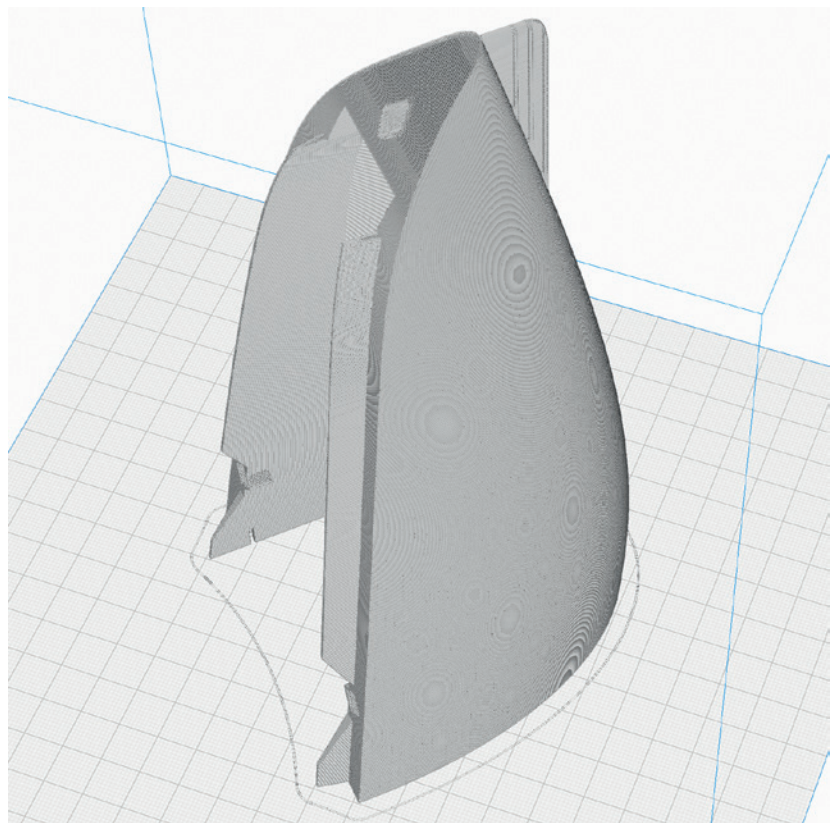
P5_Canopy 2_y.stl

MATERIAL LW PLA, Weight: ~ 23 g

TIME ~ 2 hours 40 minutes

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

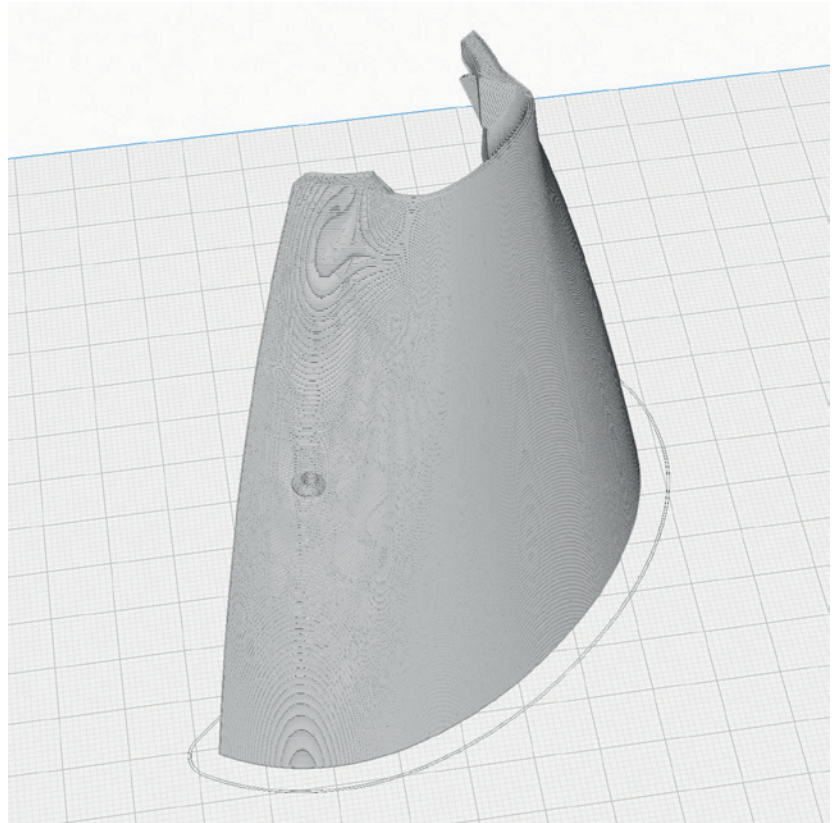
P5_Cowling_y.stl

MATERIAL LW PLA, Weight: ~ 7 g

TIME ~ 50 minutes

ADDITIONAL SETTINGS

None required



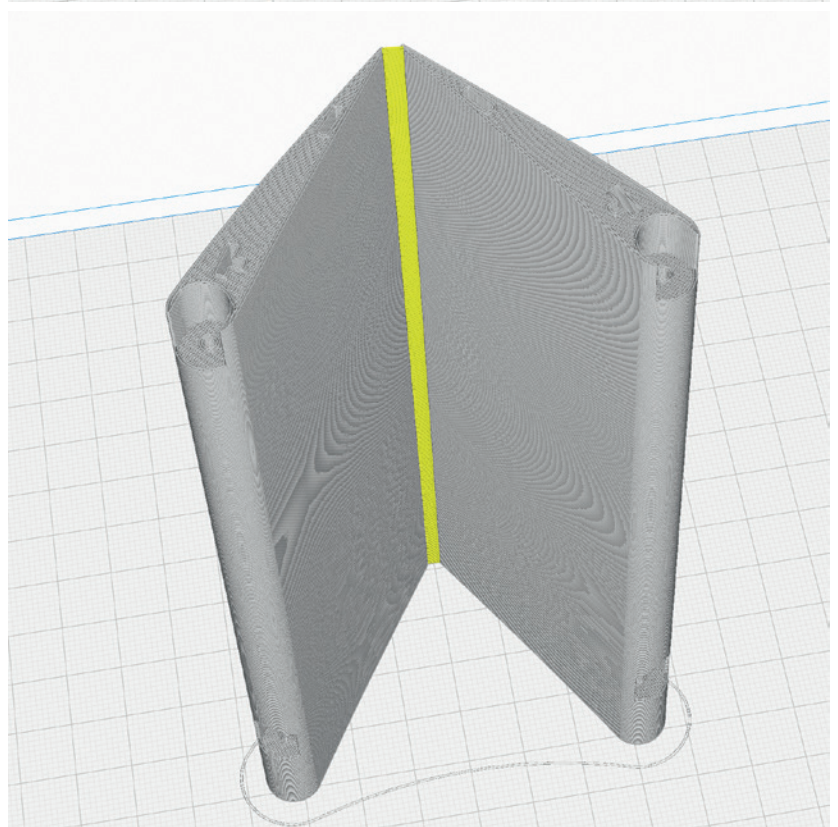
P5_ELE 1_y.stl

MATERIAL LW PLA, Weight: ~ 17 g

TIME ~ 2 hours

ADDITIONAL SETTINGS

- Remove support as described in AIL 1



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

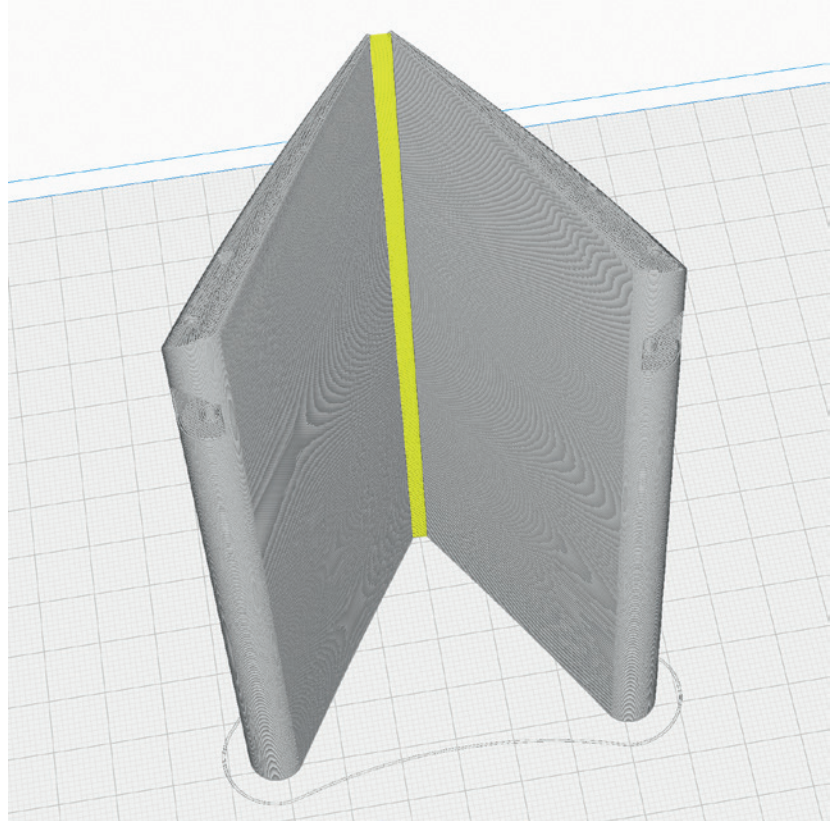
P5_ELE 2_y.stl

MATERIAL LW PLA, Weight: ~ 16 g

TIME ~ 1 hour 40 minutes

ADDITIONAL SETTINGS

- Remove support as described in AIL 1



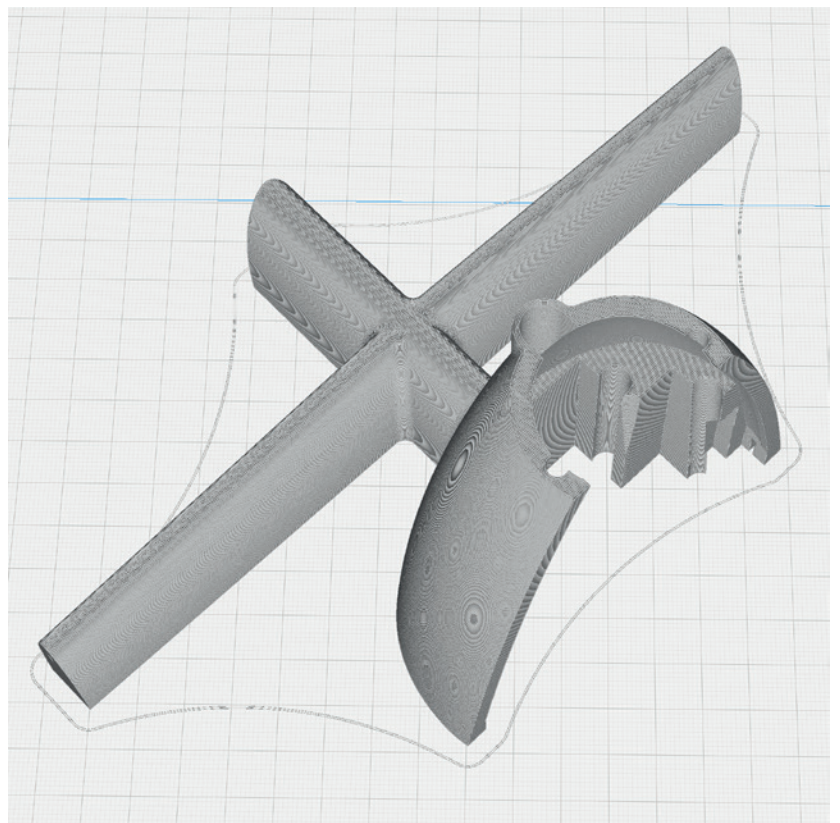
P5_FUS 1_y.stl

MATERIAL LW PLA, Weight: ~ 20 g

TIME ~ 2 hours 30 minutes

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

P5_FUS 2_y.stl

MATERIAL LW PLA, Weight: ~ 48 g

TIME ~ 6 hours

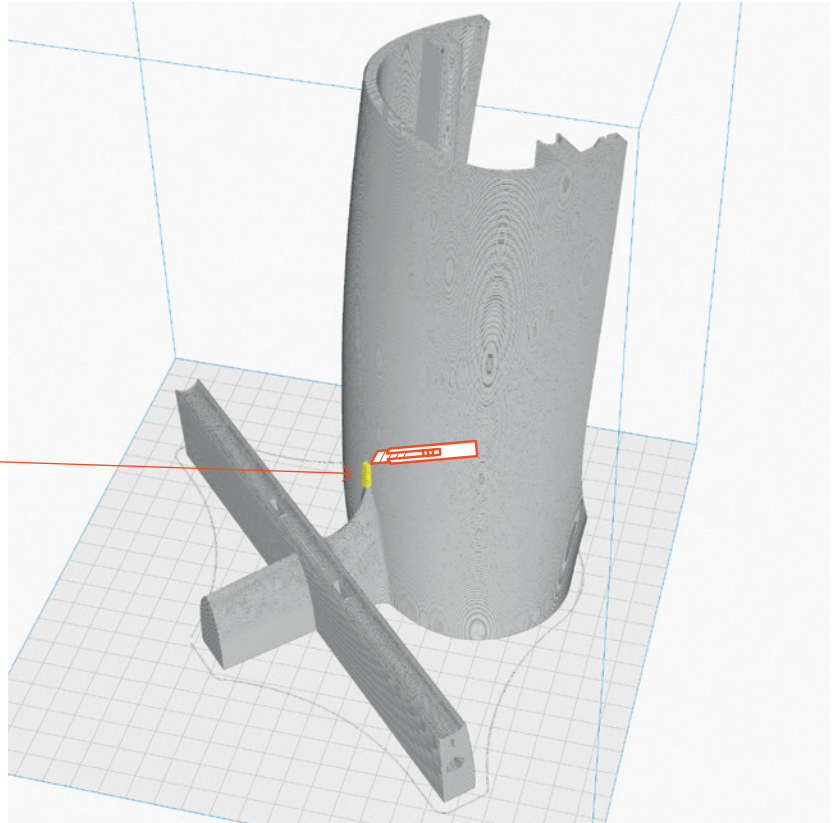
ADDITIONAL SETTINGS

None required



Remove support.

Please be careful with the knife!



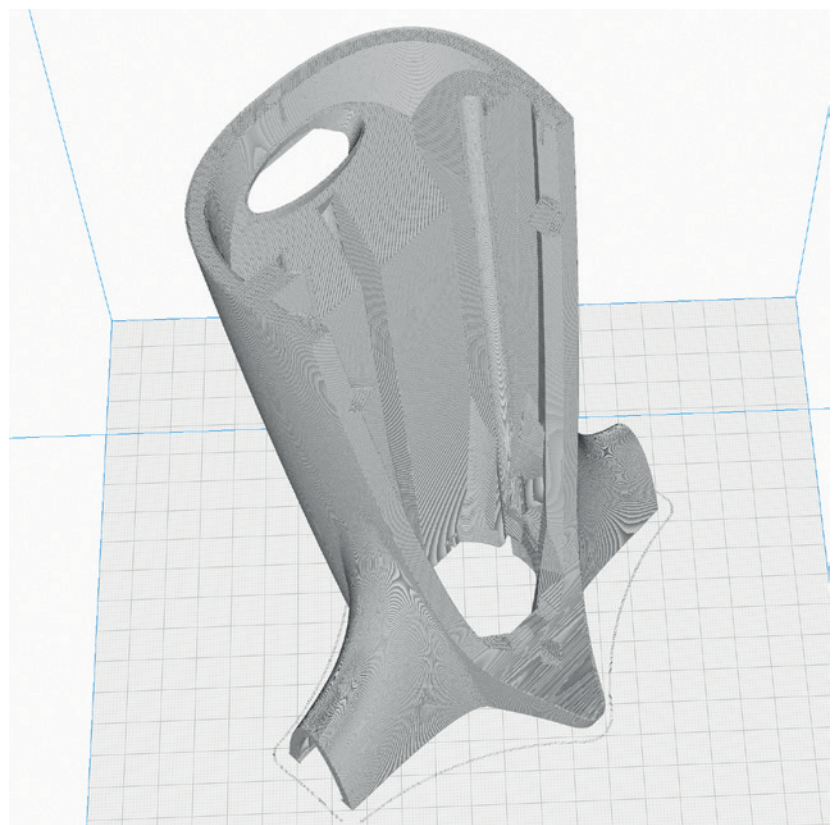
P5_FUS 3_y.stl

MATERIAL LW PLA, Weight: ~ 38 g

TIME ~ 4 hours 30 minutes

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

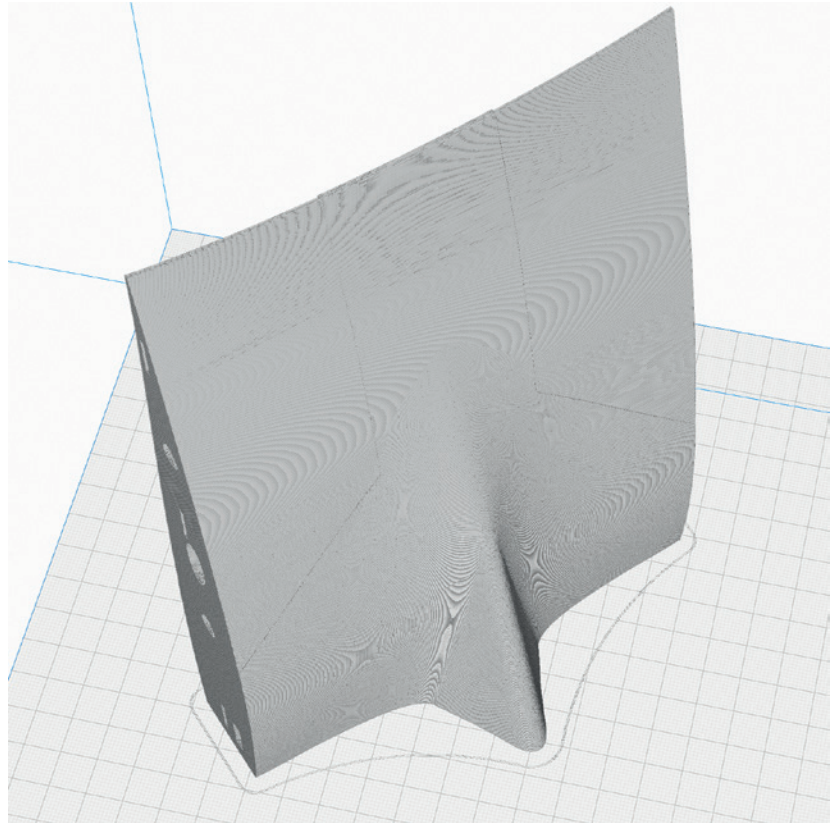
P5_FUS 4_y.stl

MATERIAL LW PLA, Weight: ~ 45 g

TIME ~ 5 hours 20 minutes

ADDITIONAL SETTINGS

None required



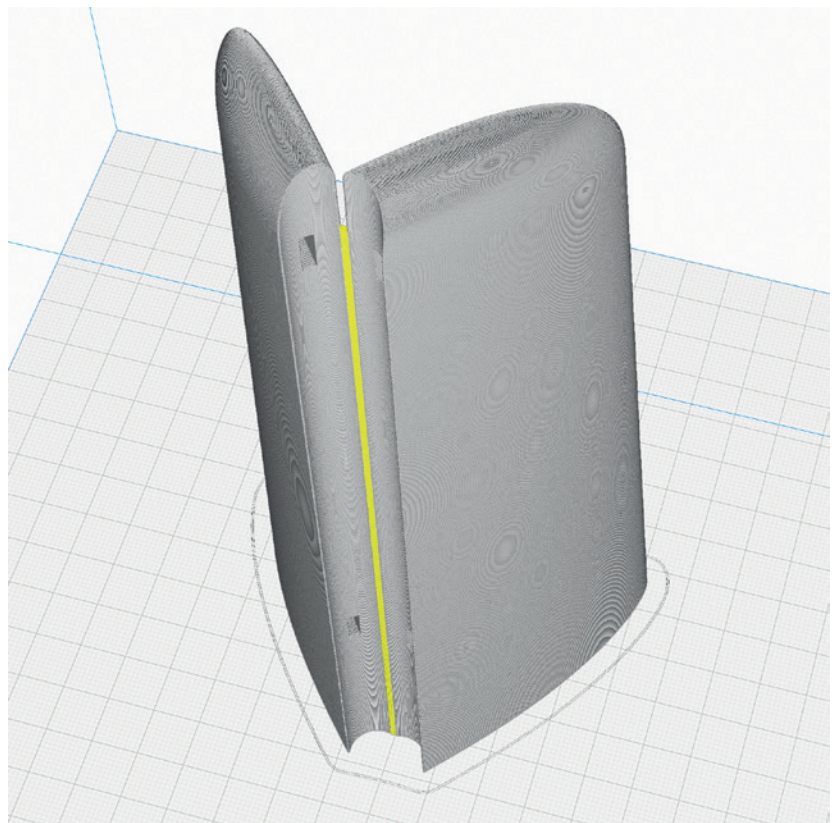
P5_HS_y.stl

MATERIAL LW PLA, Weight: ~ 25 g

TIME ~ 3 hours

ADDITIONAL SETTINGS

- Remove support as described in AIL 1



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

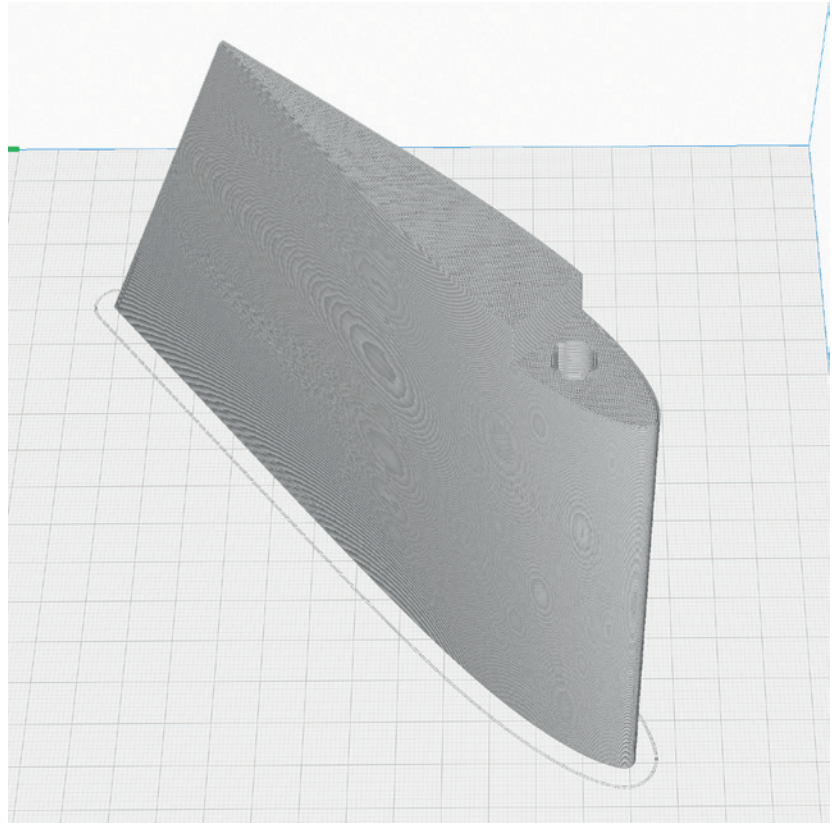
P5_VS L_y.stl and P5_VS R_y.stl

MATERIAL LW PLA, Weight: ~ 20 g

TIME ~ 2 hours 30 minutes

ADDITIONAL SETTINGS

None required



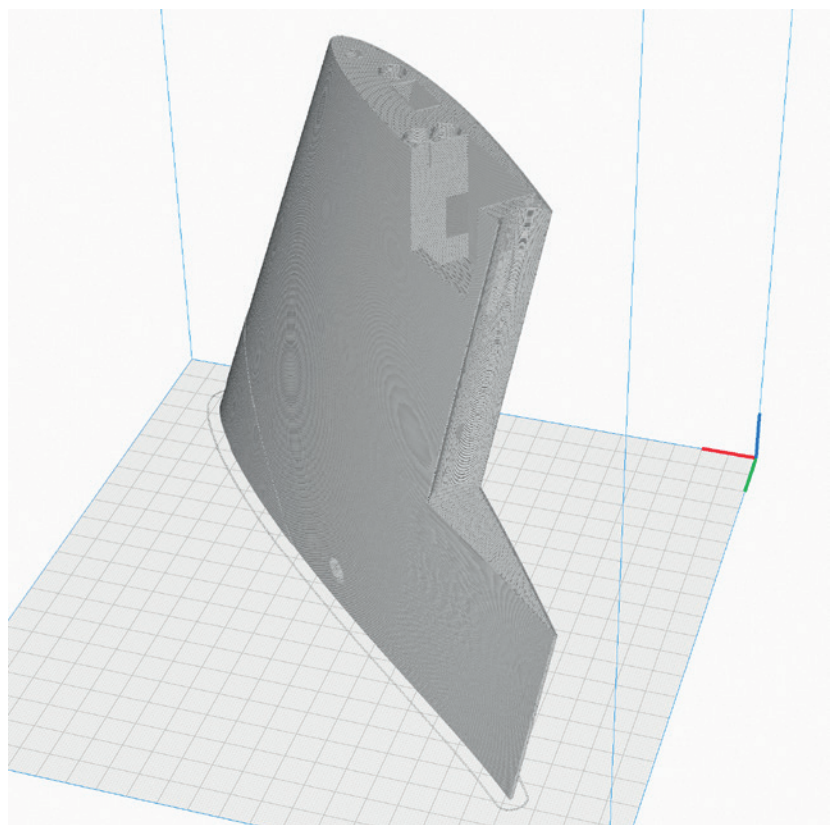
P5_Wing L1_y.stl and P5_Wing R1_y.stl

MATERIAL LW PLA, Weight: ~ 48 g

TIME ~ 6 hours

ADDITIONAL SETTINGS

None required



PROFILE P5_Gyroid LW-PLA (foaming)!



The information about the basic settings you can find on our website at PRINT.

Please note the additional settings for the individual parts!

It is essential to print these parts with foaming LW-PLA (pre-foamed is heavier)!

Basic settings for LW-PLA: Please follow the instructions in our **WINGTEST AND CALIBRATION TOOL** on our website for correct adjustment! Print only one STL at a time!

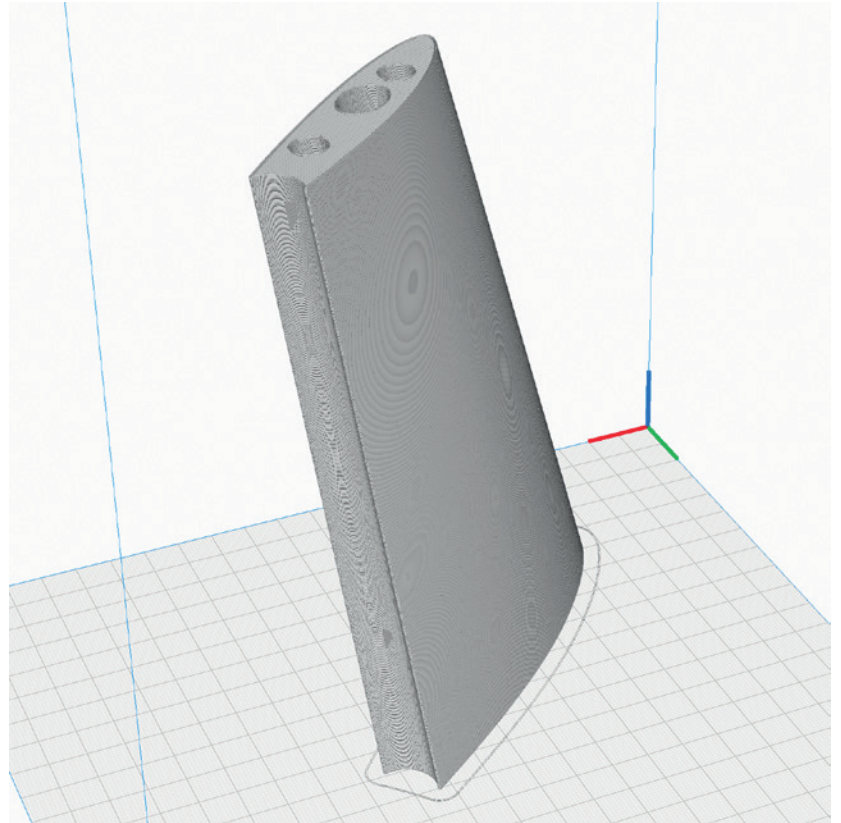
P5_Wing L2_y.stl and P5_Wing R2_y.stl

MATERIAL LW PLA, Weight: ~ 25 g

TIME ~ 3 hours 30 minutes

ADDITIONAL SETTINGS

None required



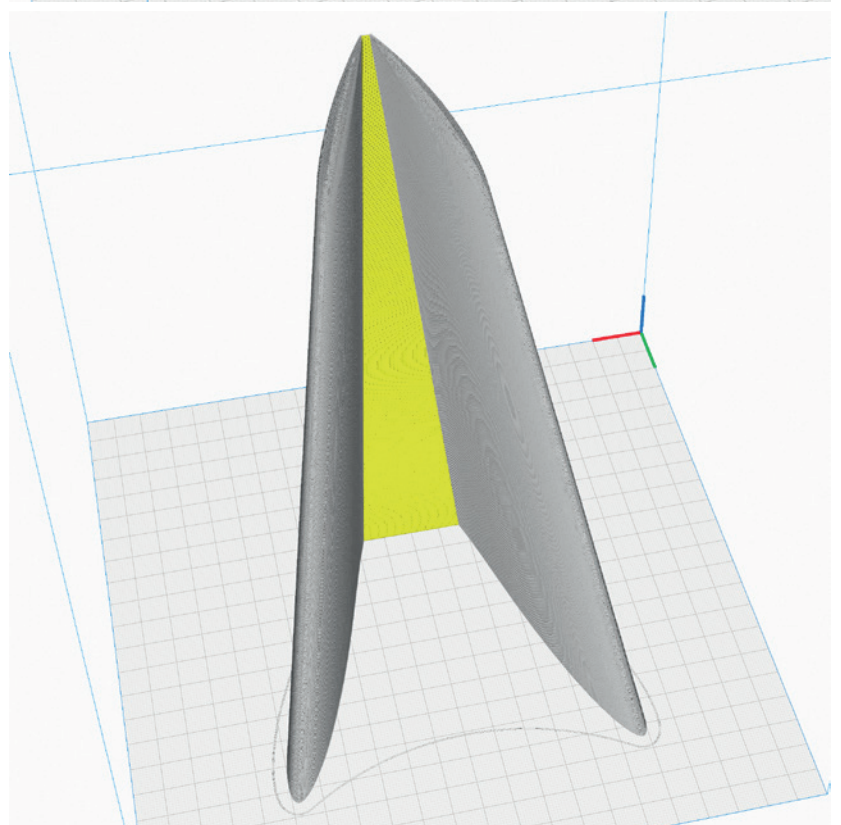
P5_Winglets_y.stl

MATERIAL LW PLA, Weight: ~ 30 g

TIME ~ 3 hours 40 minutes

ADDITIONAL SETTINGS

- Remove support as described in AIL 1



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.

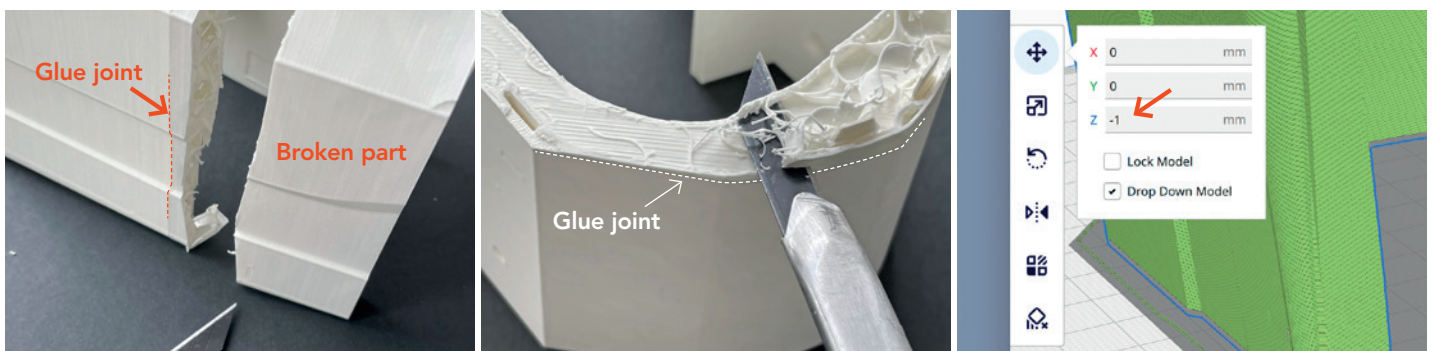
After assembly, **align the two parts exactly** and wipe off the excess CA glue from the surface with a cloth. Now spray with activator spray along the gluing surface and carefully press the parts together.

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



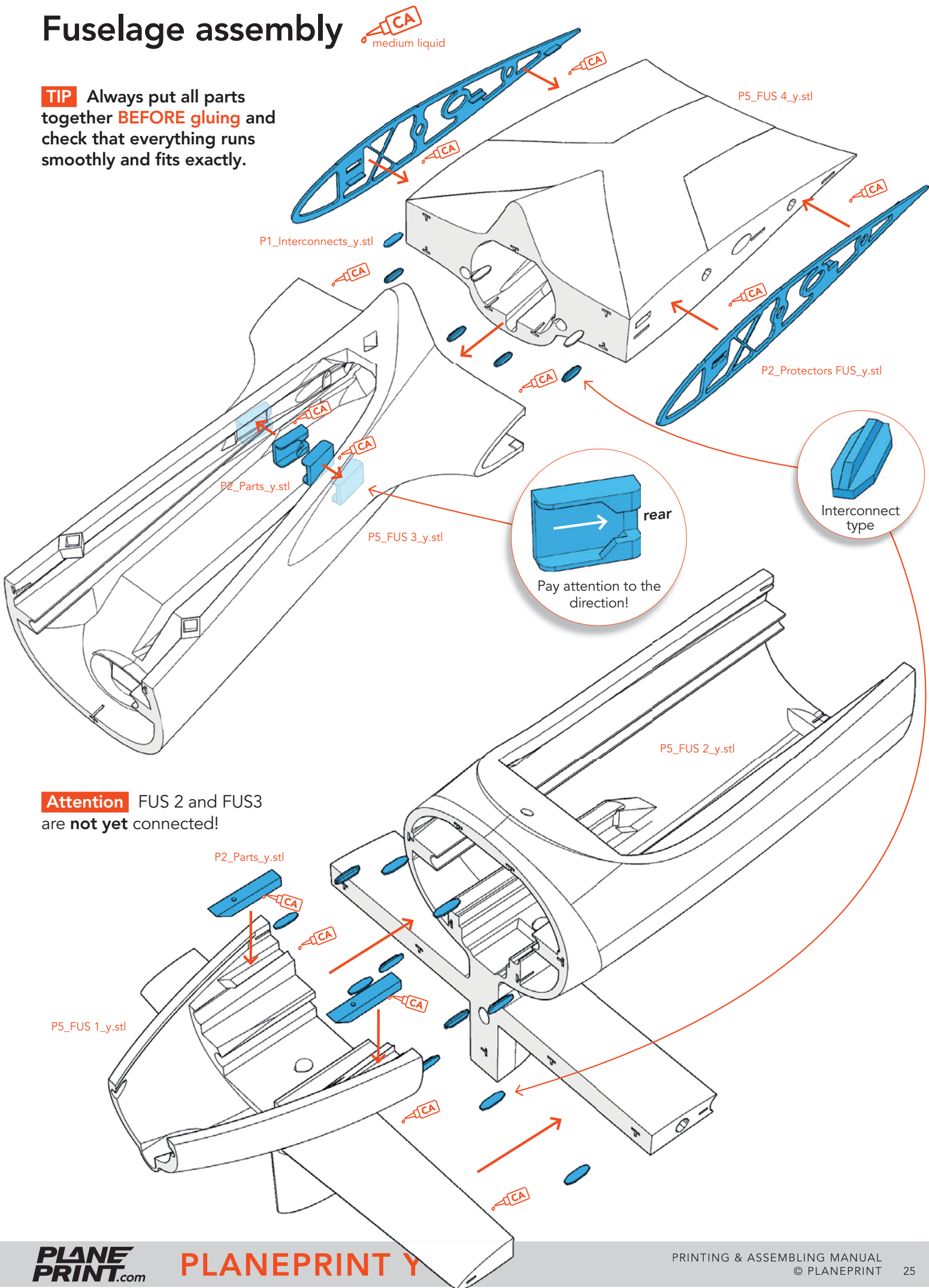
PROFILES 5 parts are easy to repair

- 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.



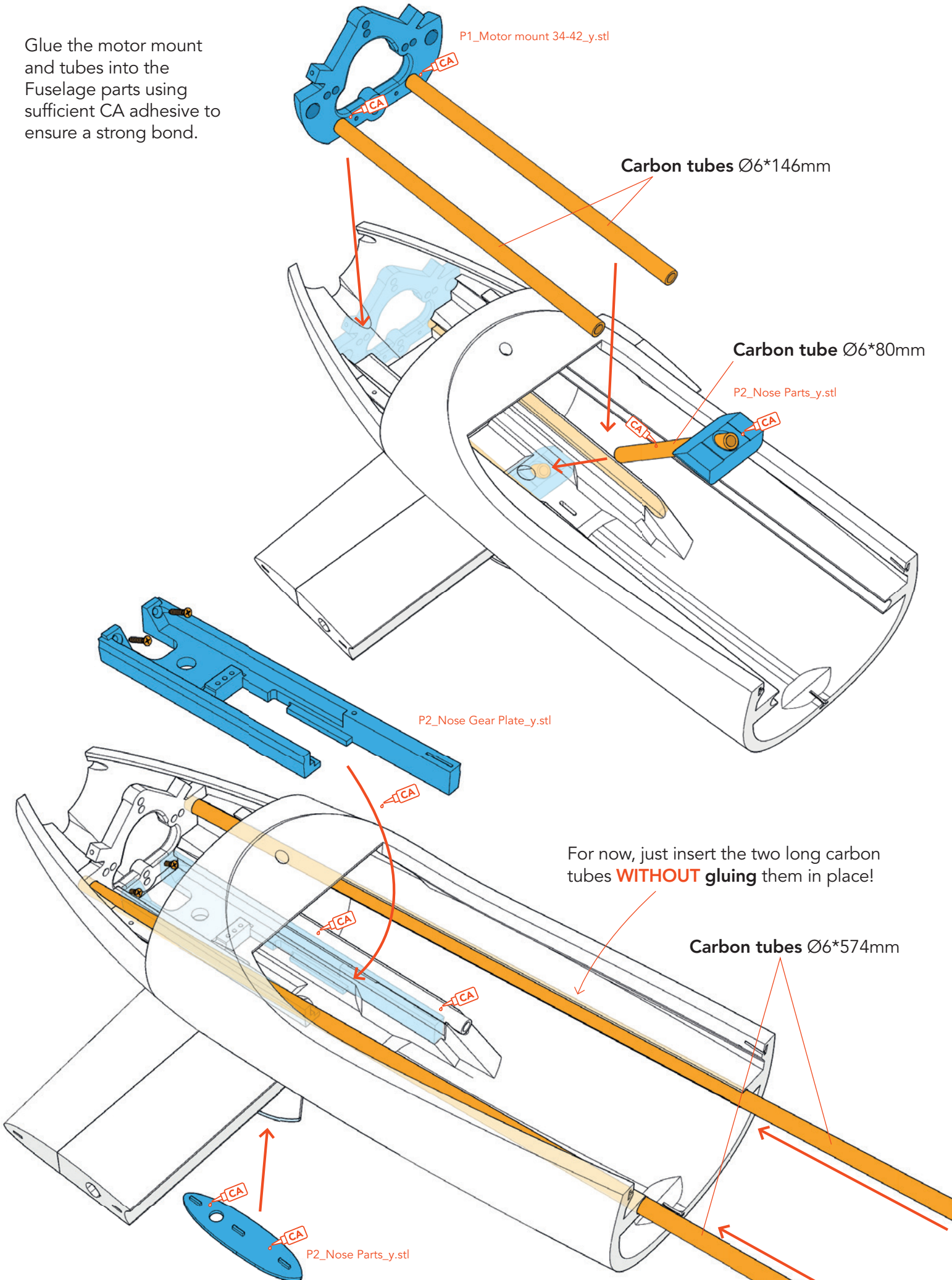
Fuselage assembly

TIP Always put all parts together **BEFORE** gluing and check that everything runs smoothly and fits exactly.



Attention FUS 2 and FUS3 are **not yet** connected!

Glue the motor mount and tubes into the Fuselage parts using sufficient CA adhesive to ensure a strong bond.



P1_Motor mount 34-42_y.stl

Carbon tubes Ø6*146mm

Carbon tube Ø6*80mm

P2_Nose Parts_y.stl

P2_Nose Gear Plate_y.stl

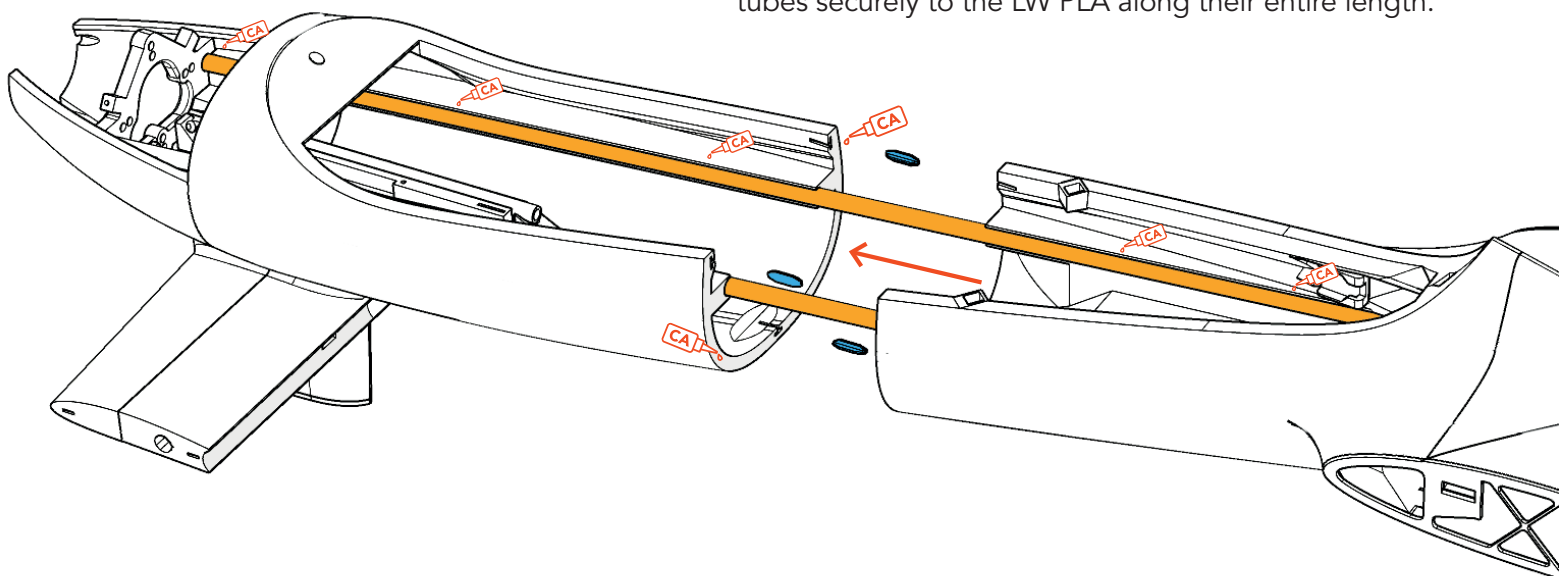
For now, just insert the two long carbon tubes **WITHOUT** gluing them in place!

Carbon tubes Ø6*574mm

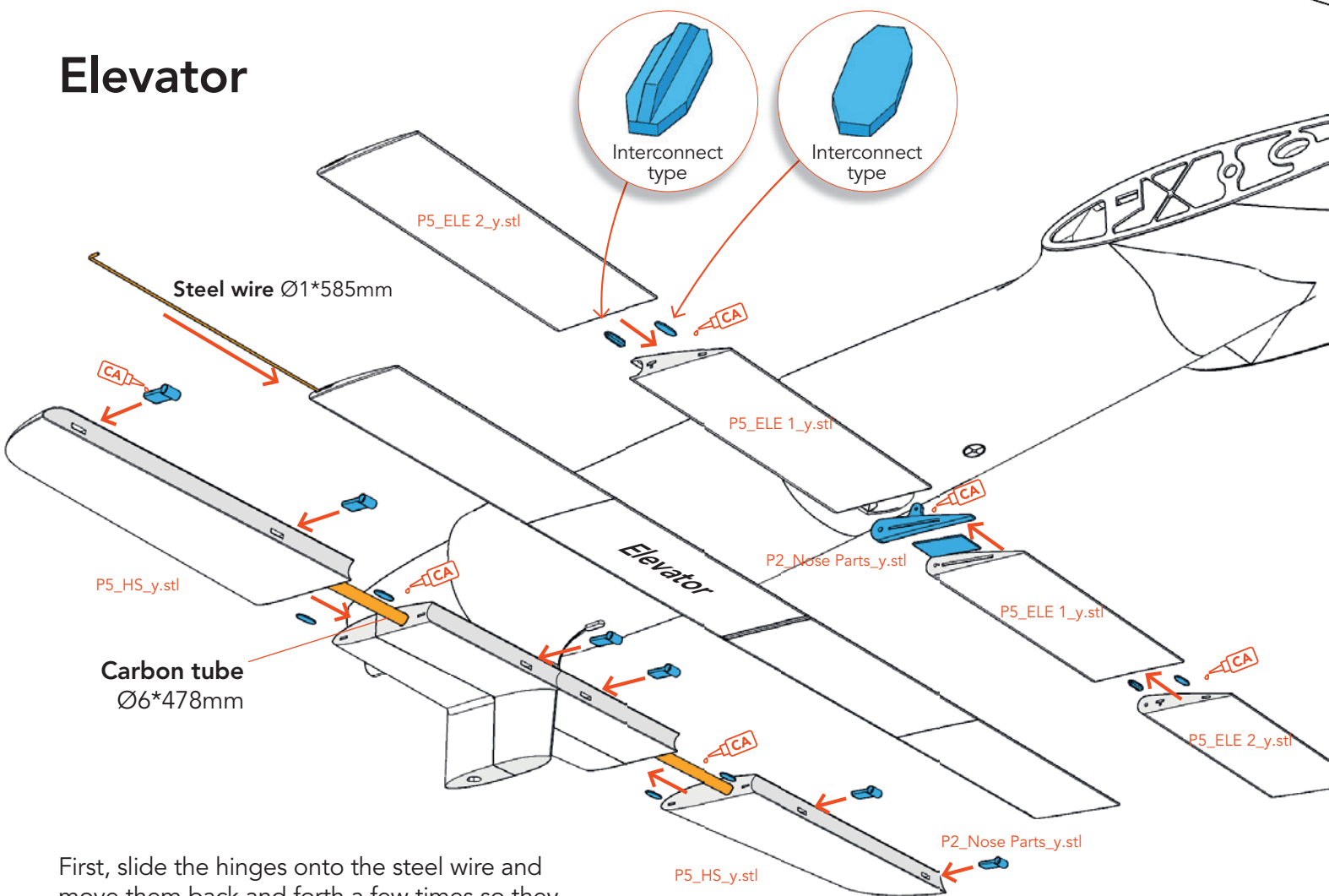
P2_Nose Parts_y.stl

Fuselage assembly

Glue the fuselage parts together using medium-viscosity CA glue. **Then** apply **thin CA glue** along the entire length of the carbon tubes and wait until it bonds the tubes securely to the LW PLA along their entire length.



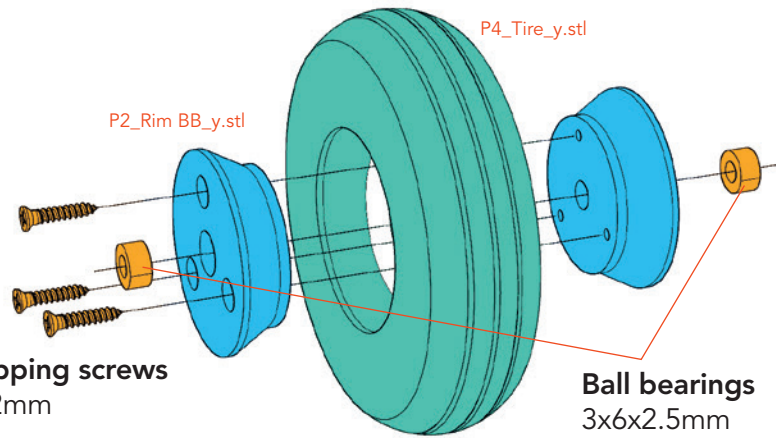
Elevator



First, slide the hinges onto the steel wire and move them back and forth a few times so they move smoothly. Do the same with the elevator.

Landing gear **PLANEPRINT Innovation**

You can build the wheels **with or without ball bearings**. However, if you choose the version without BB, please note that the rim can become hot due to friction on the screw when rolling, which can cause a temporary braking effect. It is advisable to use some grease or oil and to check the rim frequently.



Tapping screws
Ø2mm

Ball bearings
3x6x2.5mm

NOSE GEAR

You can **adjust the hardness of the suspension** with the number of these wires.

For the **Nose Gear** we recommend **4 pieces** (two each side).

For the **Main Gear** we recommend **2 pieces** (one each side).

MAIN GEAR

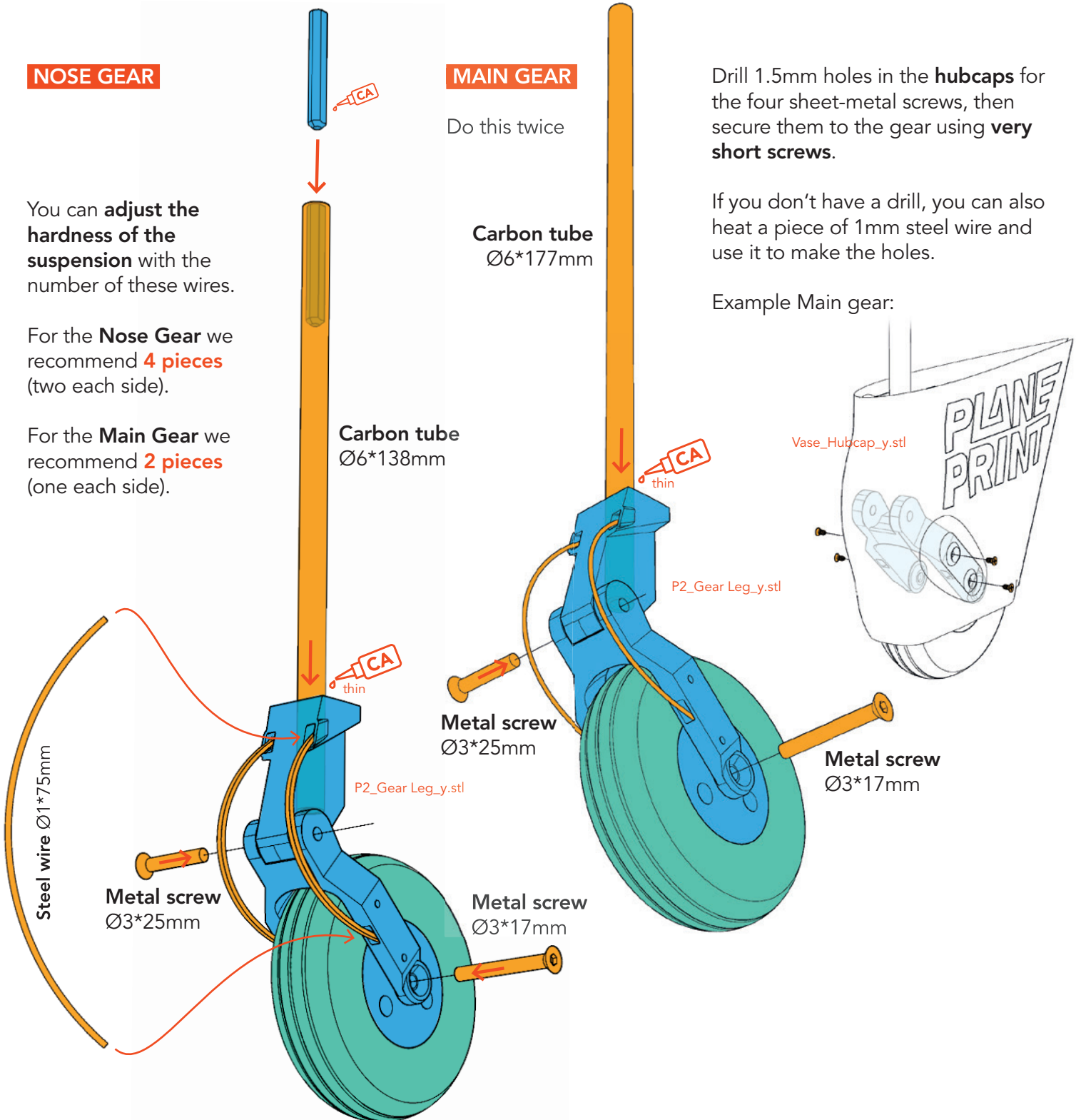
Do this twice

Carbon tube
Ø6*177mm

Drill 1.5mm holes in the **hubcaps** for the four sheet-metal screws, then secure them to the gear using **very short screws**.

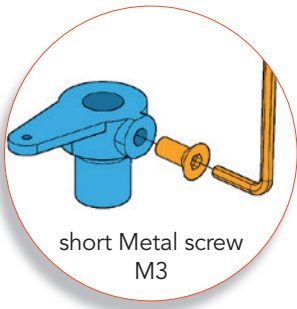
If you don't have a drill, you can also heat a piece of 1mm steel wire and use it to make the holes.

Example Main gear:



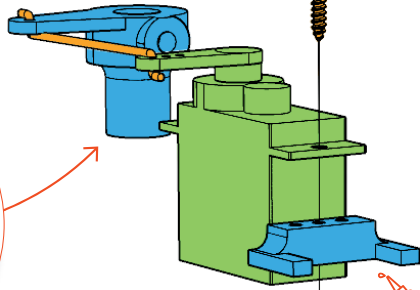
Servos Fuselage

If your servo doesn't fit exactly, you can use the STL file P1_Spacer_y.stl to position the elevator linkage exactly in the center of the fuselage. Measure the required distance and **adjust the Z-height in the slicer** to match this value.

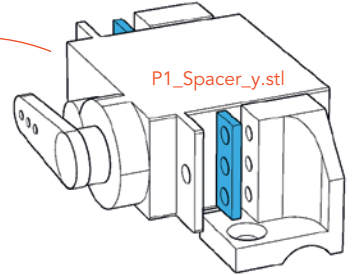


short Metal screw
M3

P1_Nose Gear Lever_y.stl

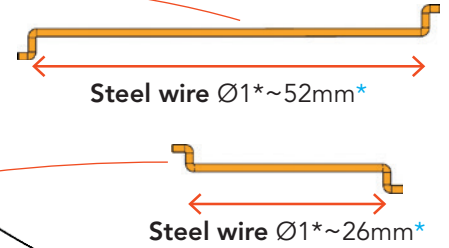


P2_Nose Gear Plate_y.stl



P1_Spacer_y.stl

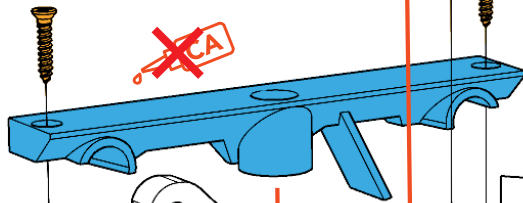
P2_Nose Gear Plate_y.stl



Steel wire Ø1*~52mm*

Steel wire Ø1*~26mm*

P2_Parts_y.stl



Insert the nose gear into the fuselage from below and **make sure the carbon tube turns easily**.

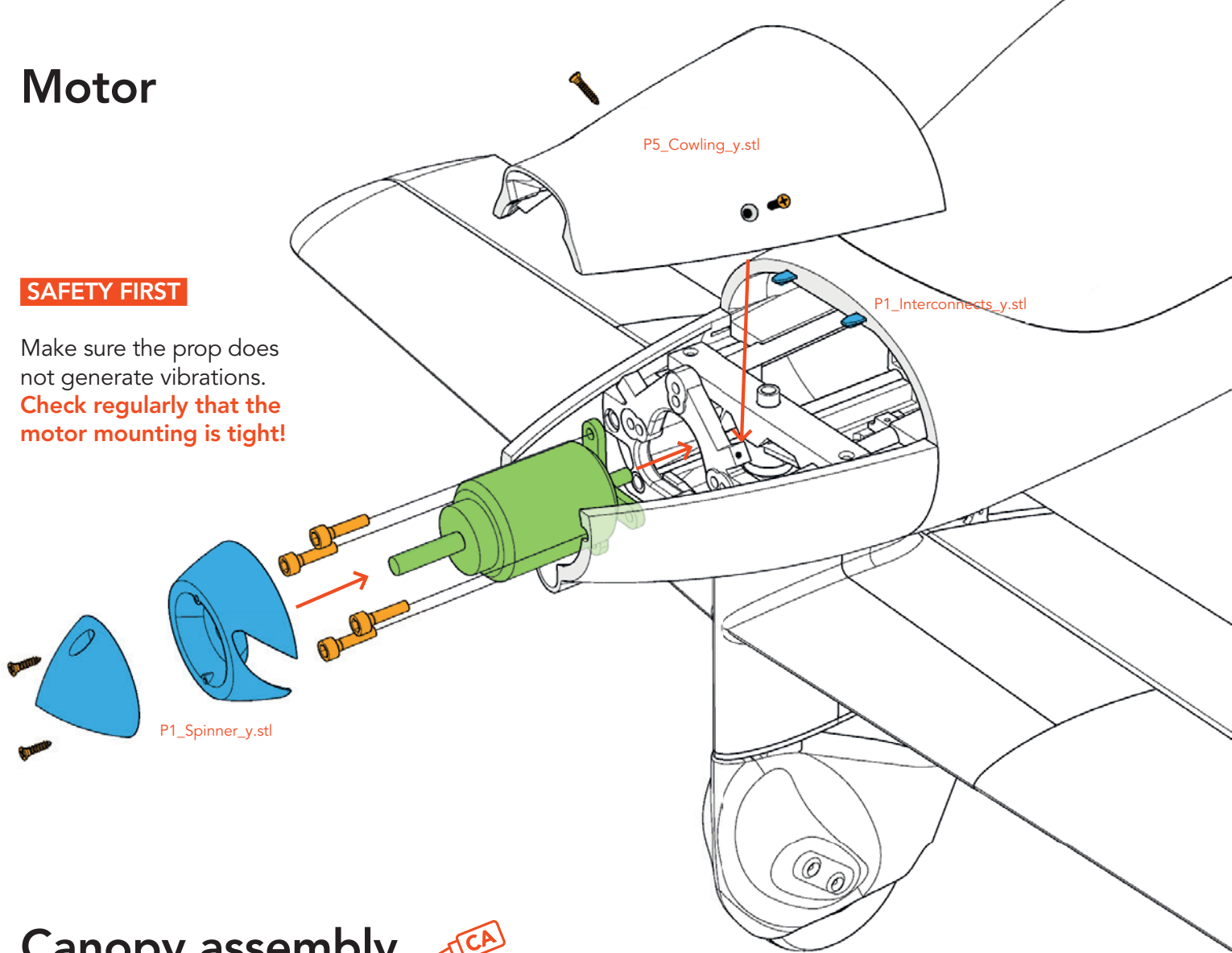
You can **sand a small flat spot** into the carbon tube where the lever screw is located.

*The exact length depends on the servo you are using.

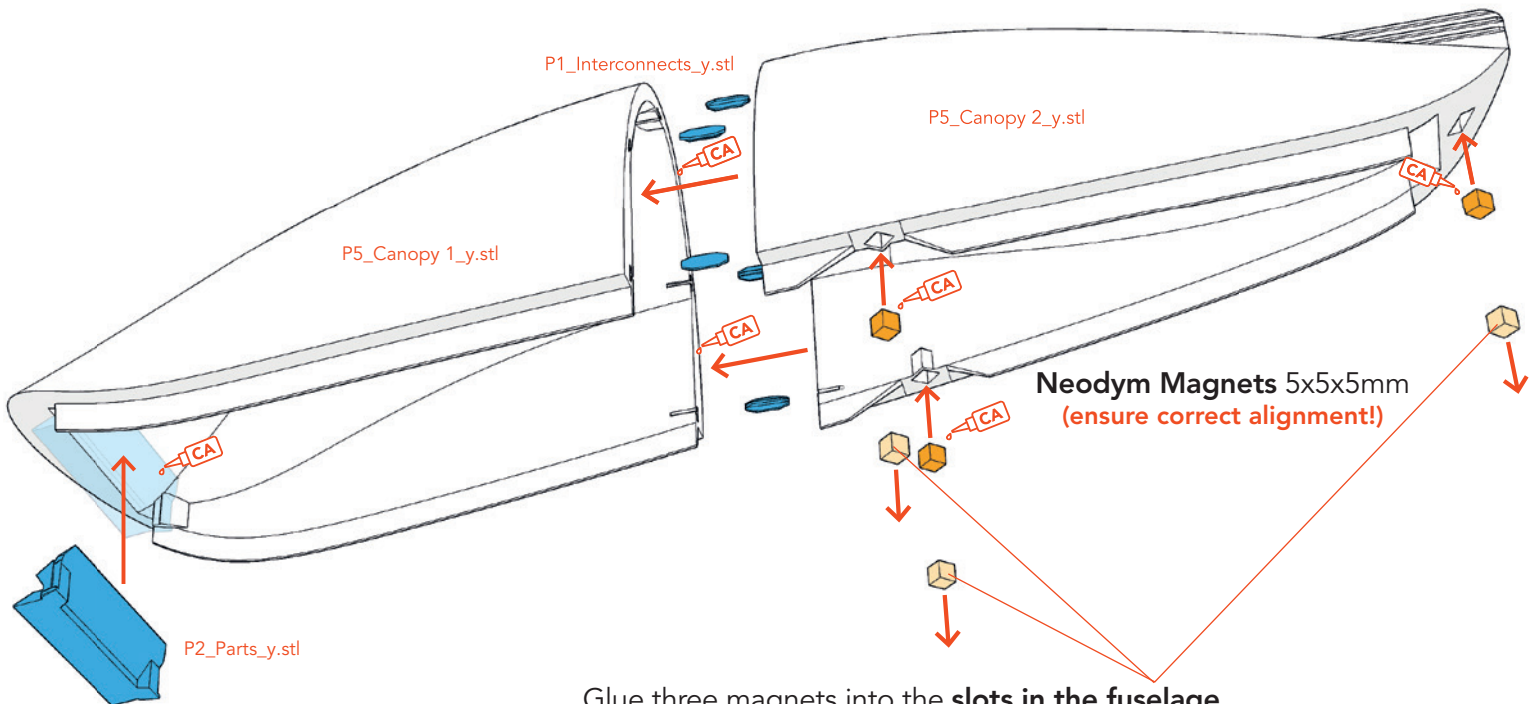
Motor

SAFETY FIRST

Make sure the prop does not generate vibrations.
Check regularly that the motor mounting is tight!



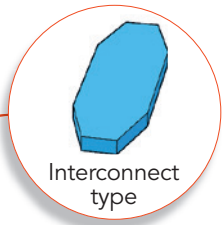
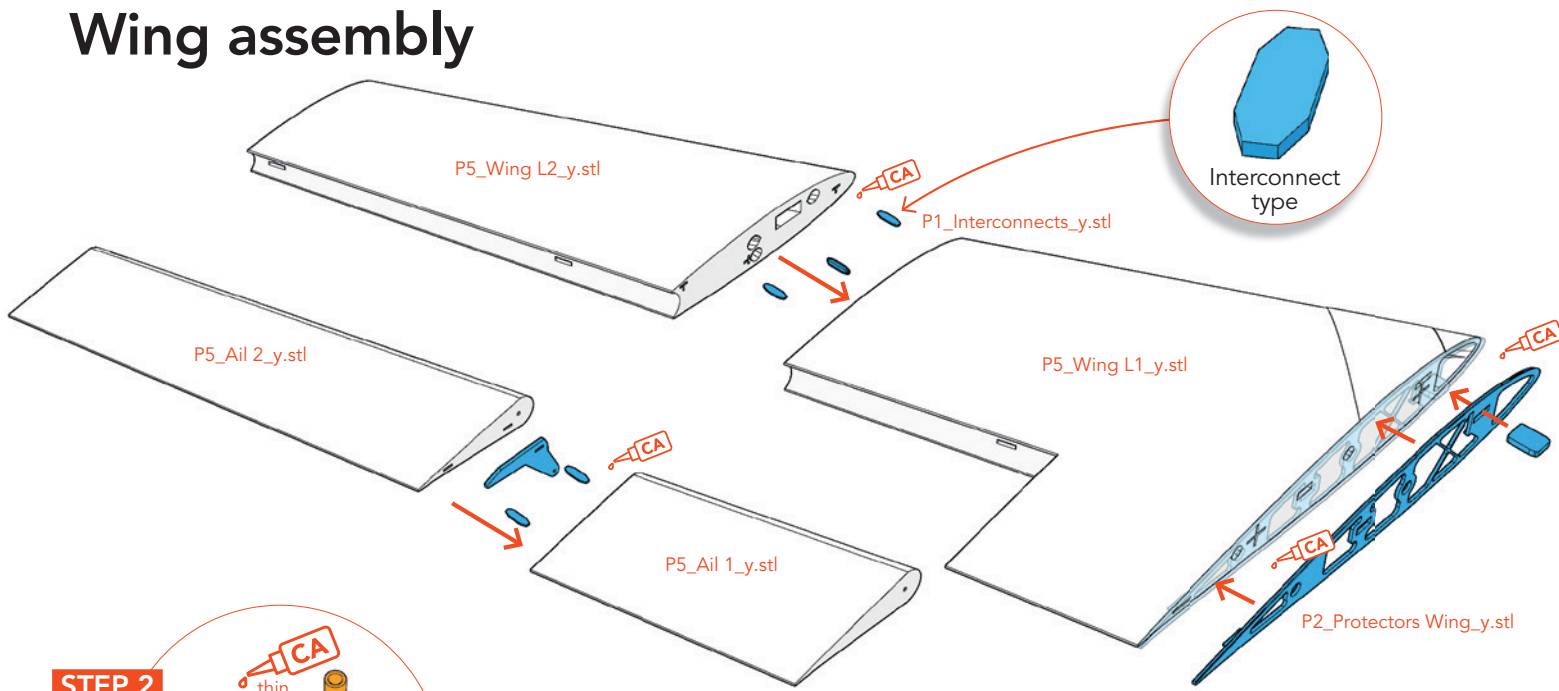
Canopy assembly



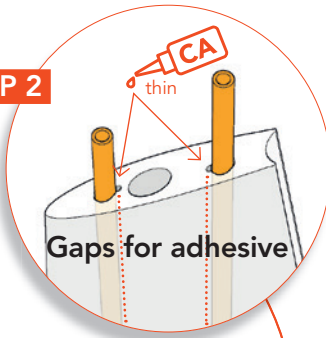
Glue three magnets into the **slots in the fuselage**.

Place a **strip of tape over the magnets** and attach the other three magnets to it. Apply some glue to the slots in the canopy and attach it to the magnets on the fuselage.

Wing assembly



STEP 2



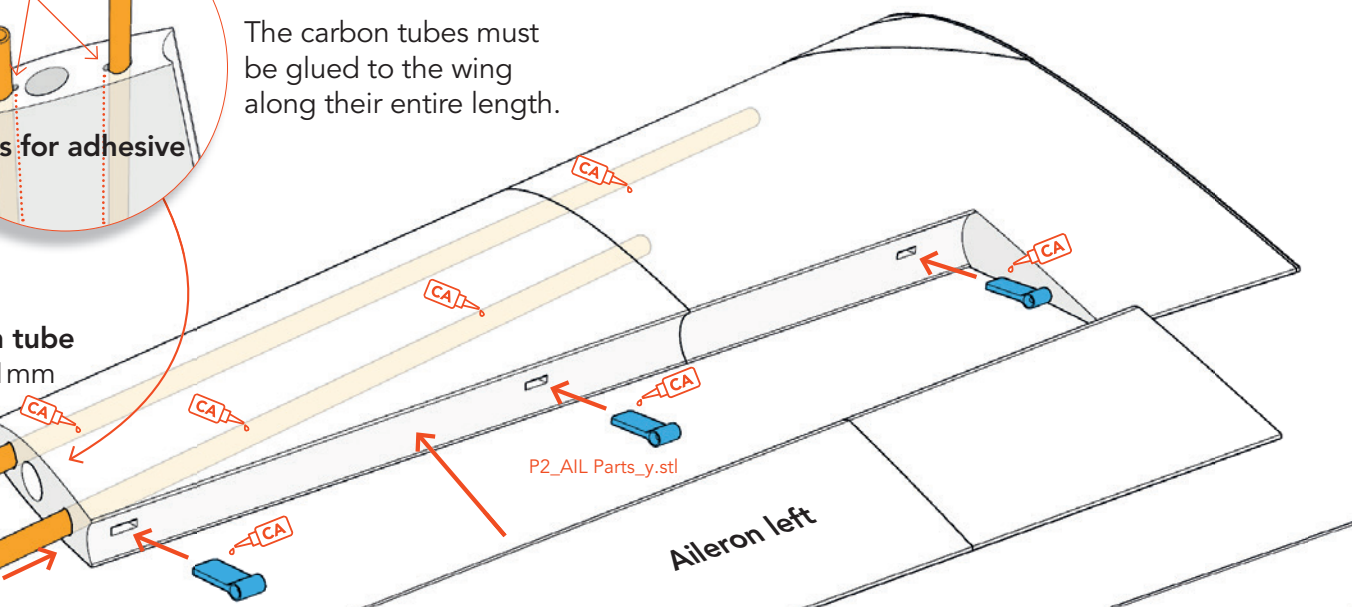
The carbon tubes must be glued to the wing along their entire length.

Carbon tube
Ø6*361mm

STEP 1

Carbon tube
Ø6*283mm

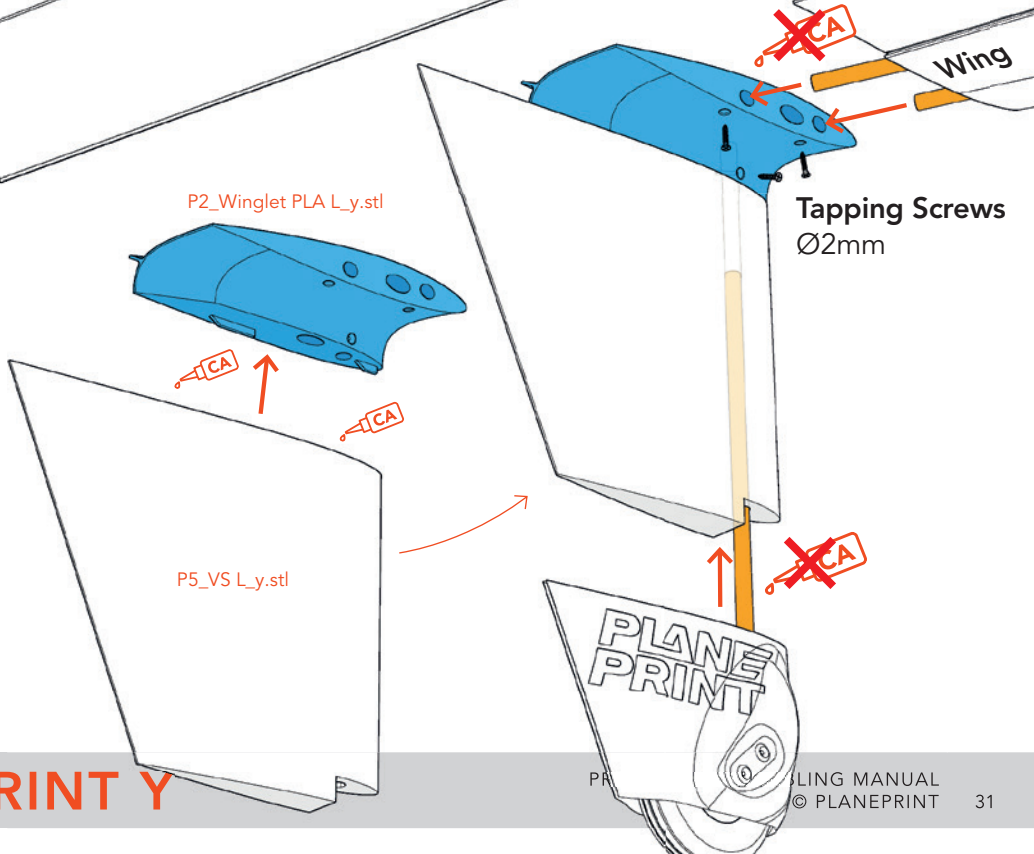
Steel wire Ø1*322mm



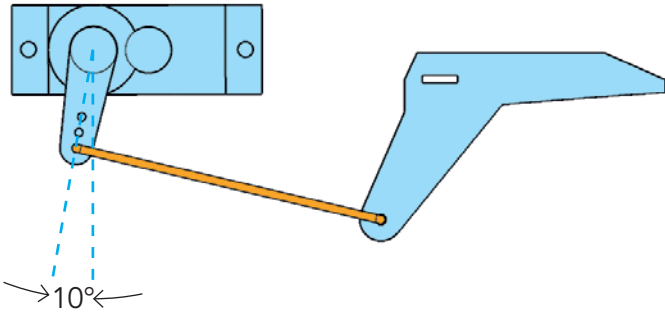
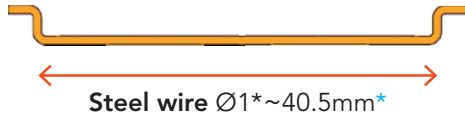
The gear and the wing are **not glued** together; they are secured with just three tapping screws.

The tubes do **not need to be drilled**; the sheet metal screws pass by the sides and clamp them securely in place.

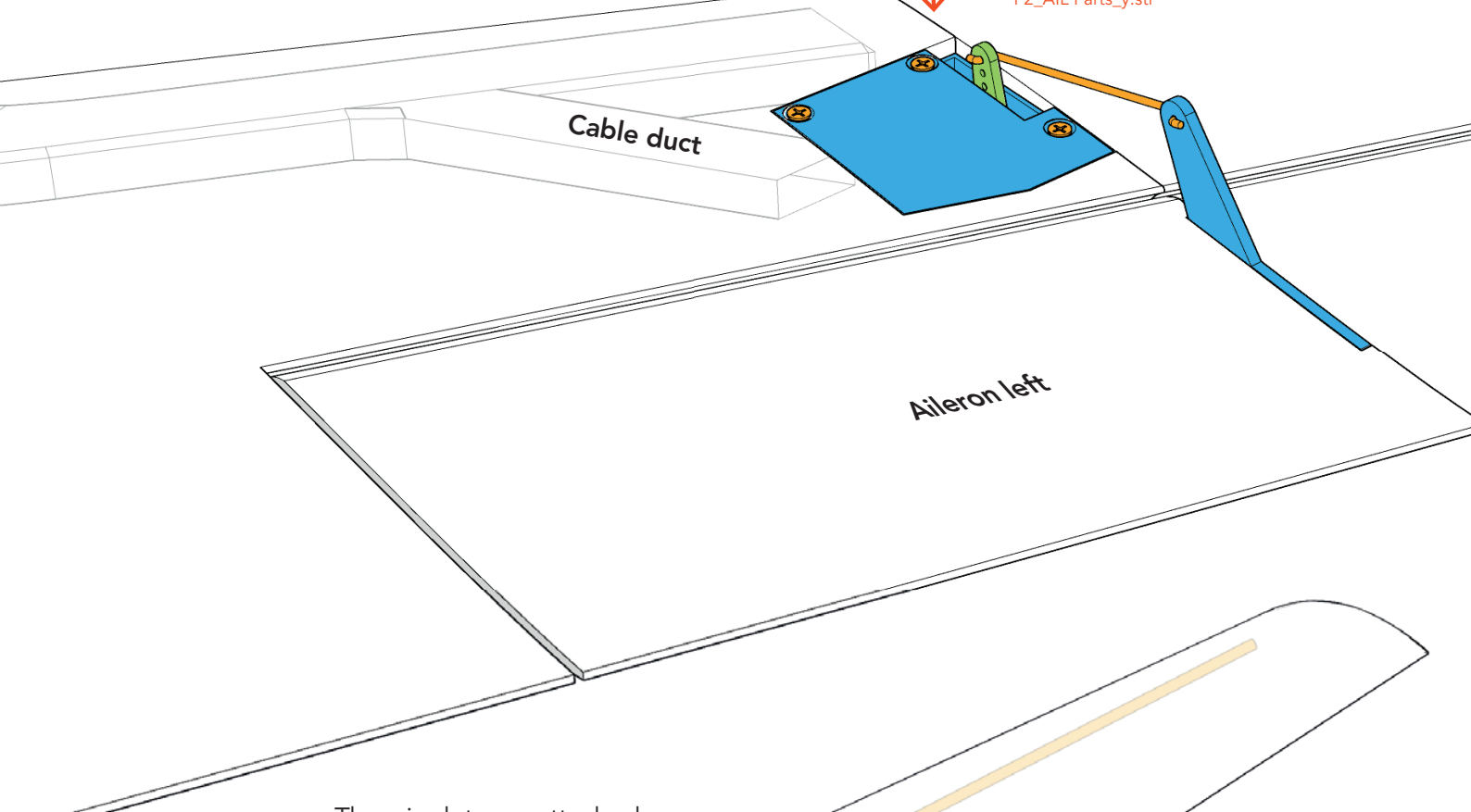
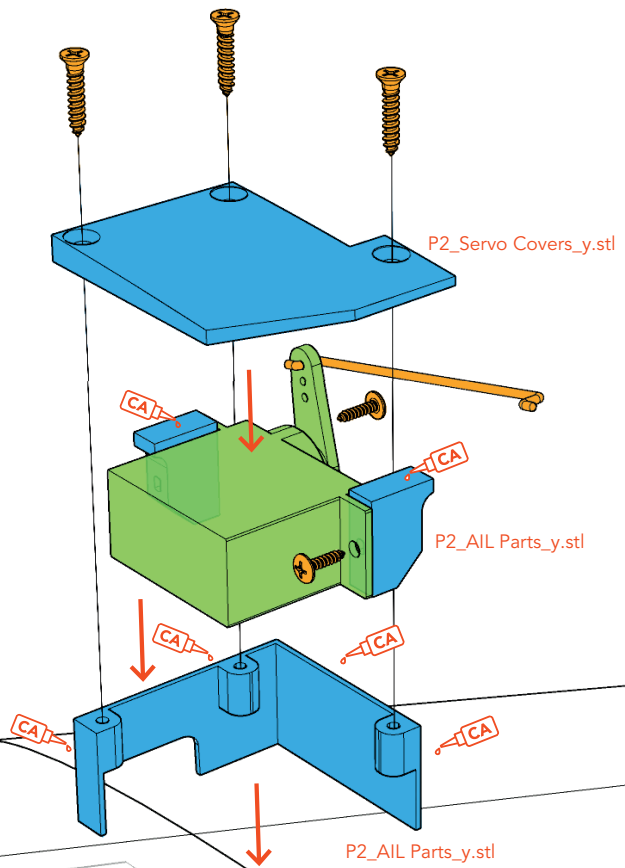
Make sure the connection is secure!



Servos Wing

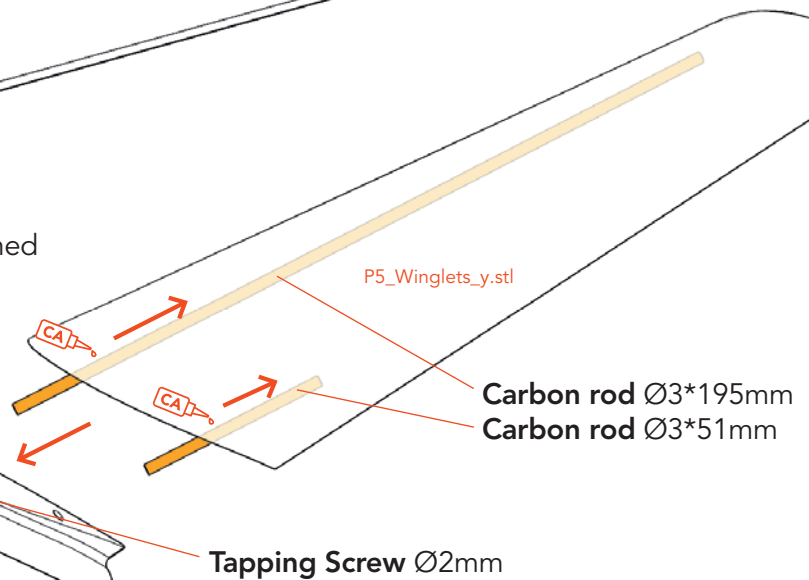


*The exact length depends on the servo you are using.

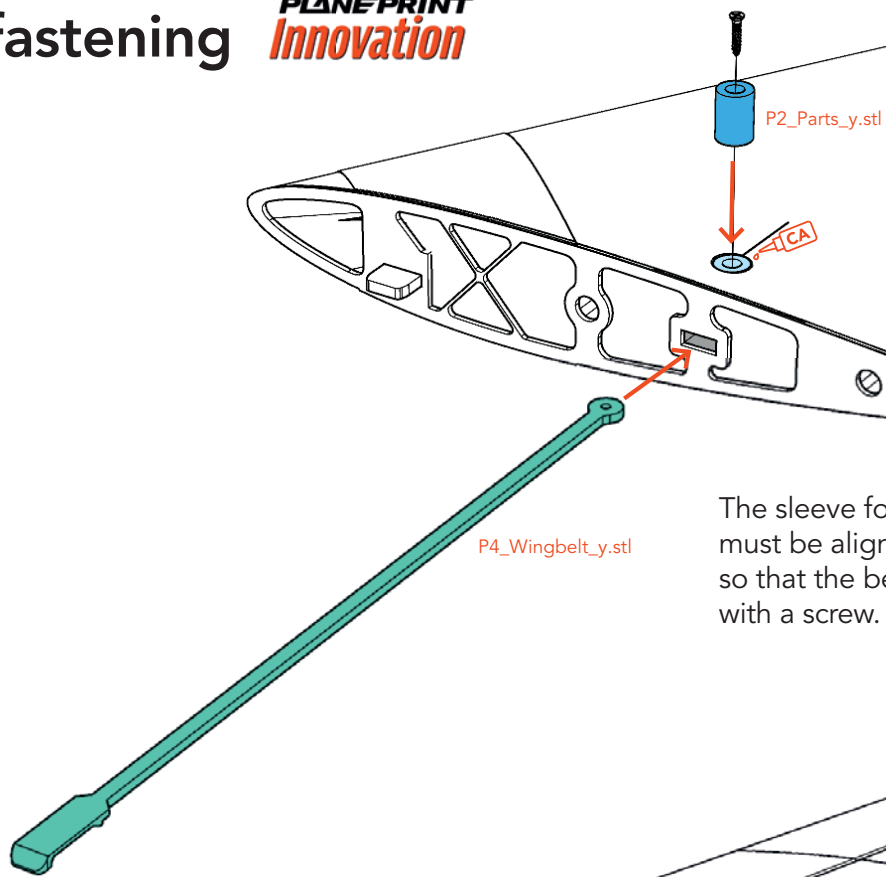


Winglet

The winglets are attached after transport and secured with a screw.

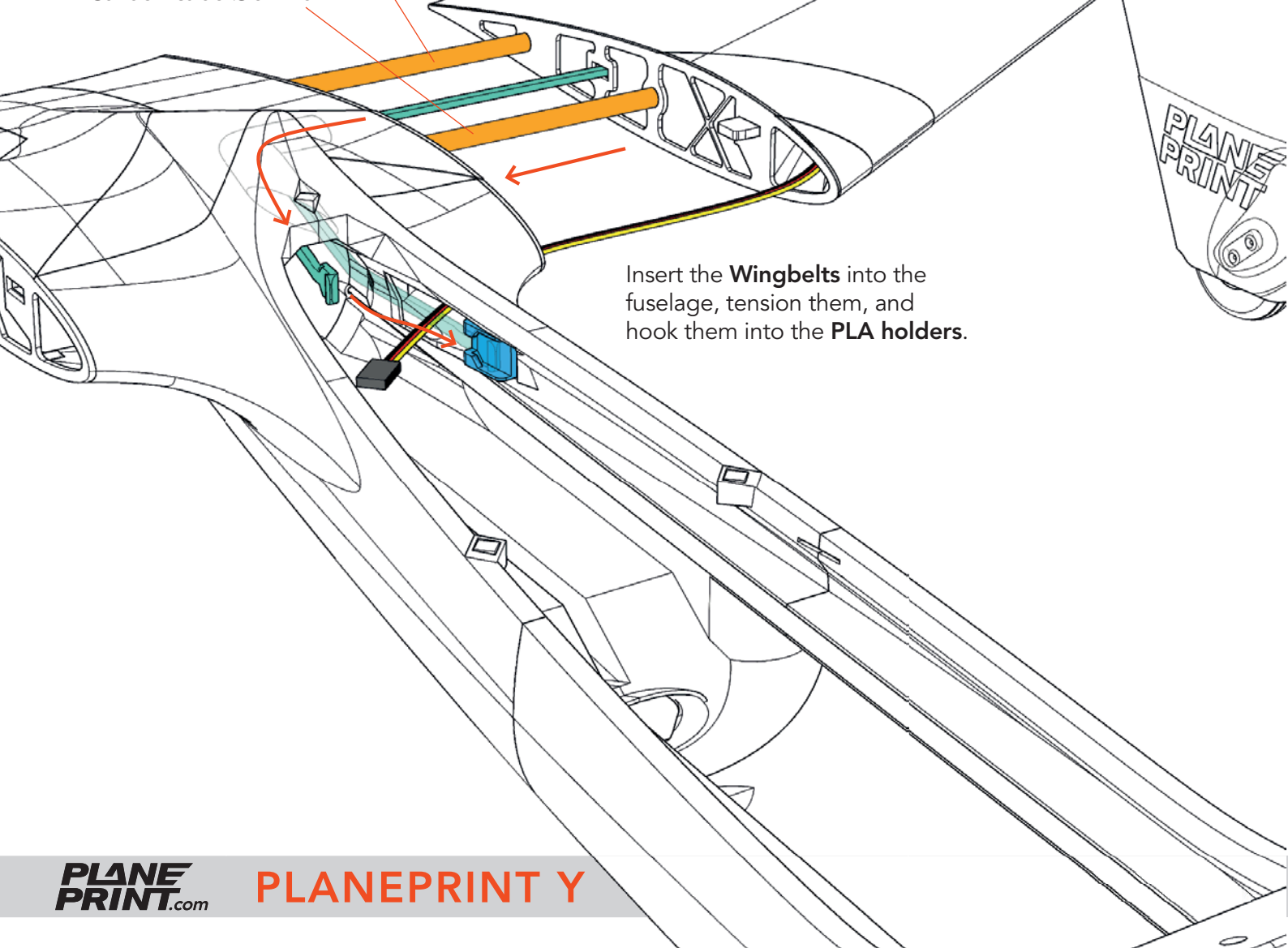


Wing fastening **PLANEPRINT Innovation**



The sleeve for the tension belt must be aligned as shown here so that the belt can be secured with a screw.

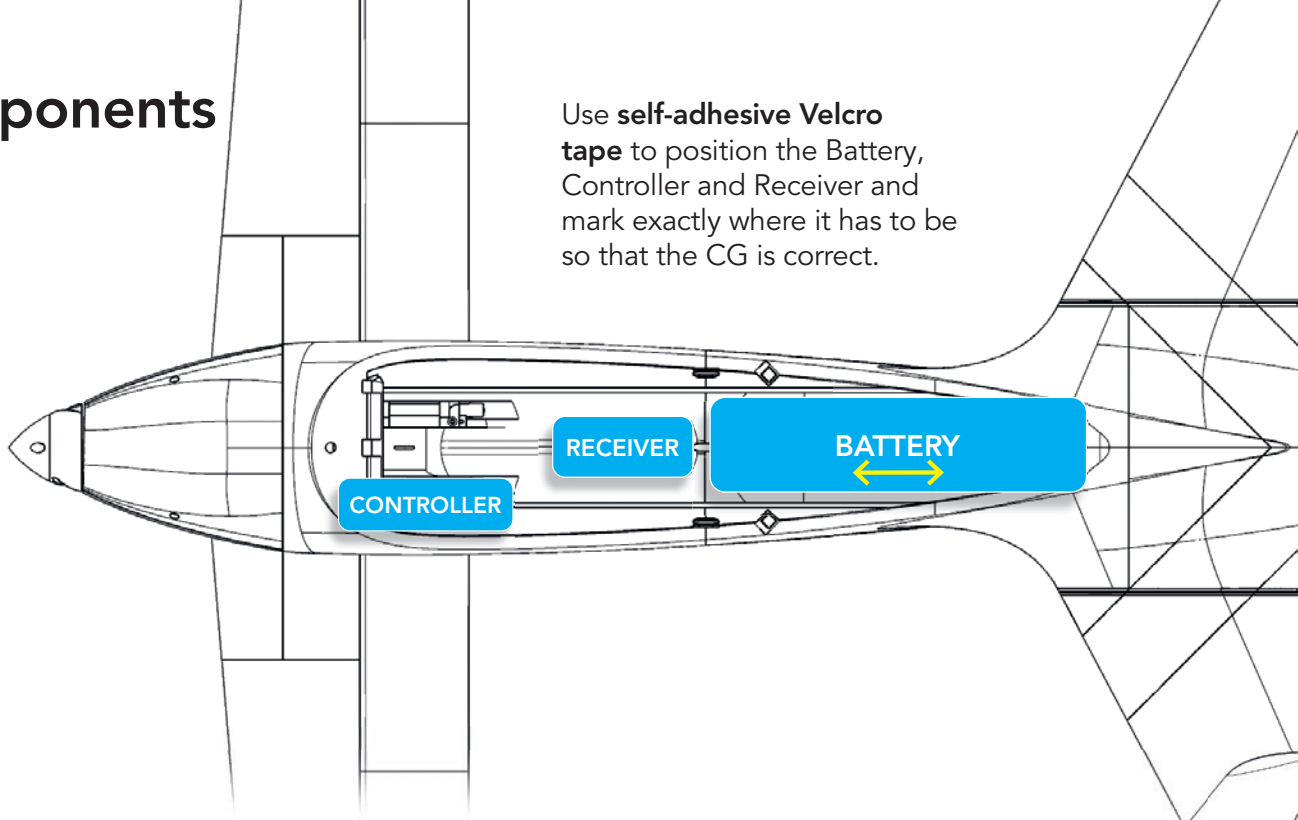
Carbon tube $\text{Ø}6 \times 580\text{mm}$
Carbon tube $\text{Ø}6 \times 420\text{mm}$



Insert the **Wingbelts** into the fuselage, tension them, and hook them into the **PLA holders**.

RC components

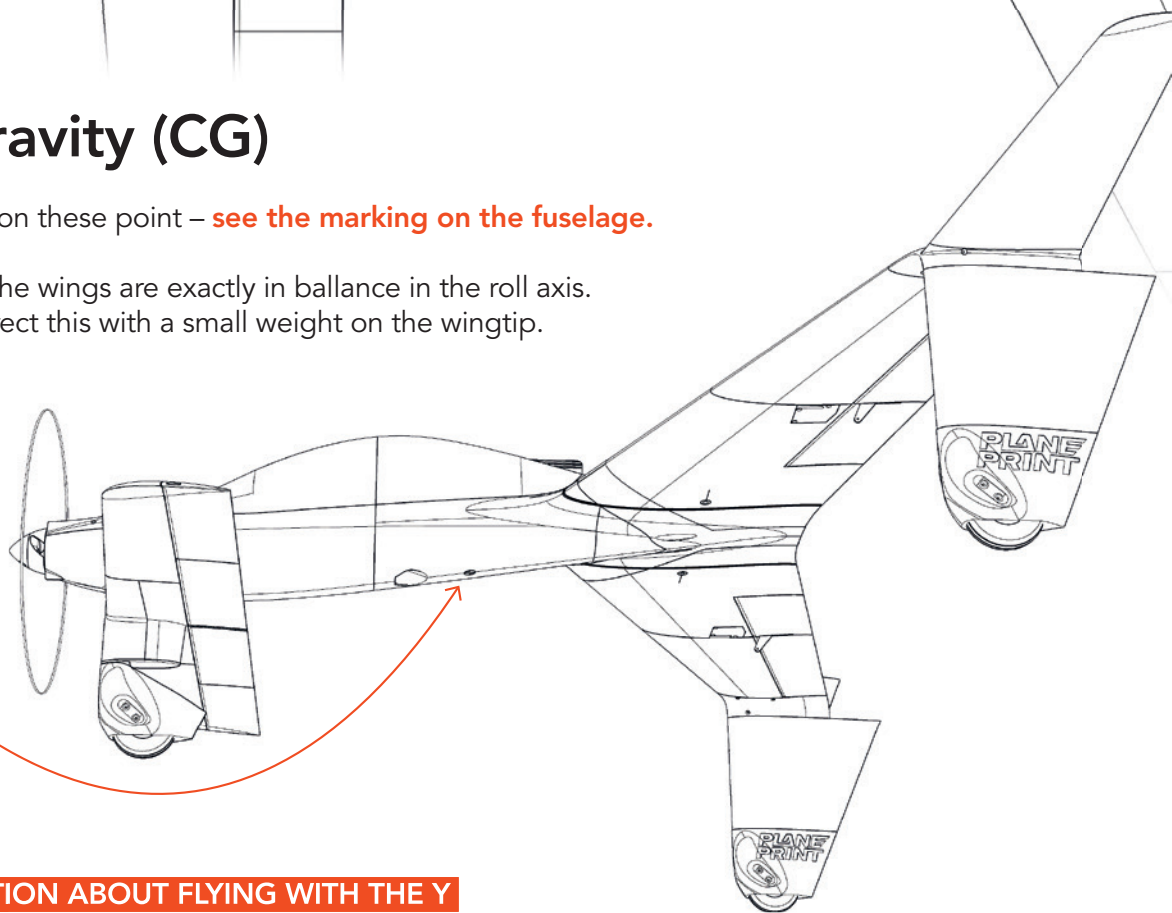
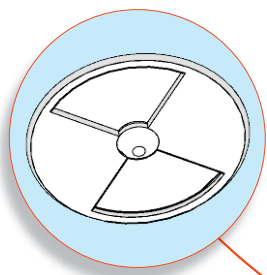
Use **self-adhesive Velcro tape** to position the Battery, Controller and Receiver and mark exactly where it has to be so that the CG is correct.



Center of Gravity (CG)

The aircraft must balance on these point – **see the marking on the fuselage.**

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.



IMPORTANT INFORMATION ABOUT FLYING WITH THE Y

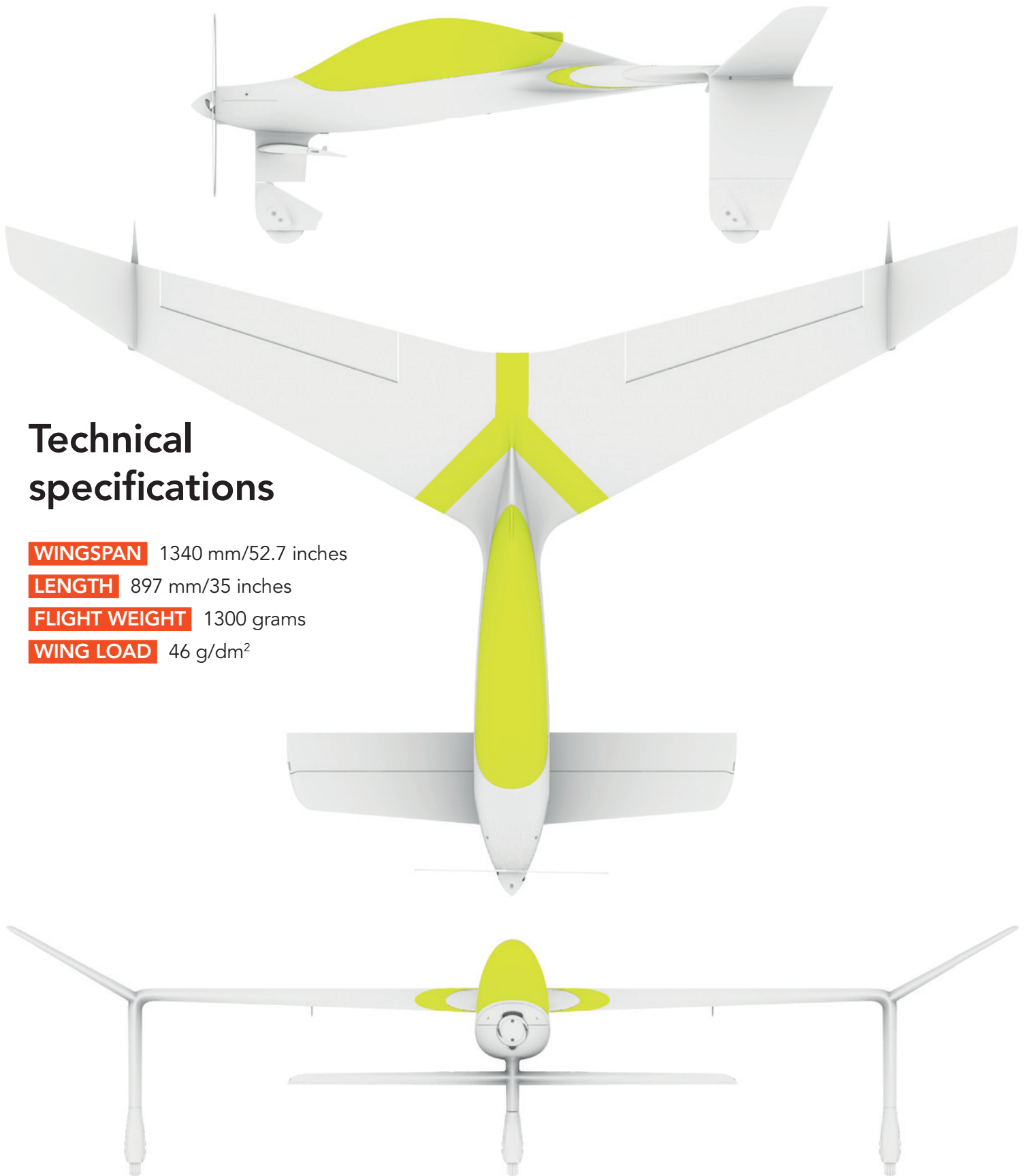
Make sure the Y doesn't slow down too much during landing!

The aerodynamic configuration of a canard aircraft, where the horizontal stabilizer is positioned forward of the main wing, ensures that the canard reaches its critical angle of attack first.

This built-in stall progression causes the nose to drop automatically, preventing a full stall of the main wing.

Consequently, pilots must maintain sufficient airspeed during the flare to prevent premature nose-drop before touchdown. Unlike conventional aircraft, which can be held at a high angle of attack until contact, **a canard aircraft should always be landed with the engine running at a moderate RPM so that the elevator receives airflow and remains controllable.**

PLANEPRINT **Y**



Technical specifications

WINGSPAN 1340 mm/52.7 inches

LENGTH 897 mm/35 inches

FLIGHT WEIGHT 1300 grams

WING LOAD 46 g/dm²

Control Direction Test (Look at the aircraft from behind)

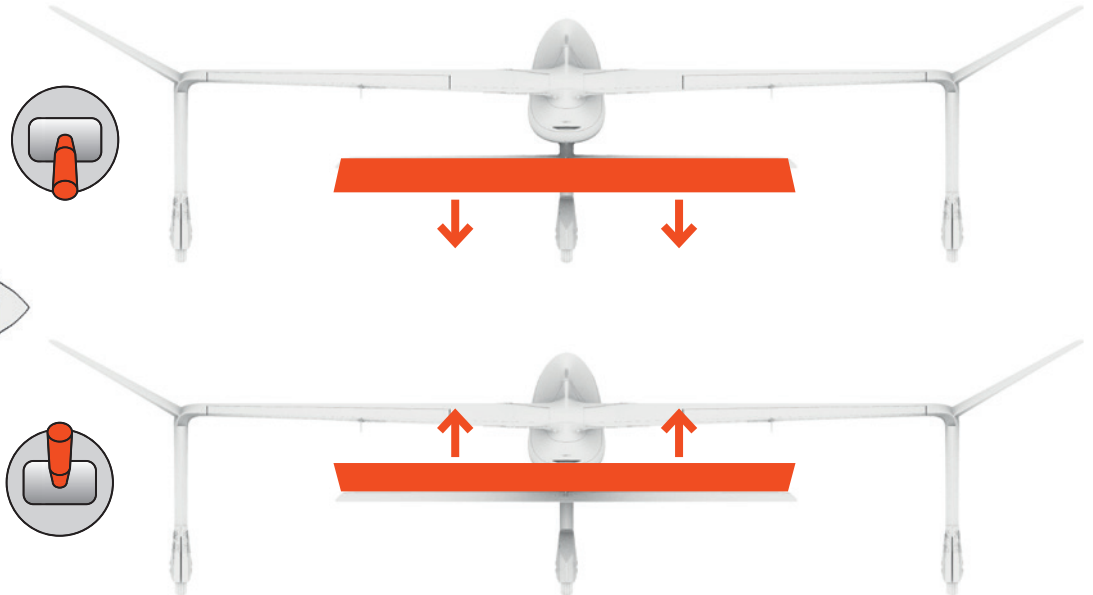
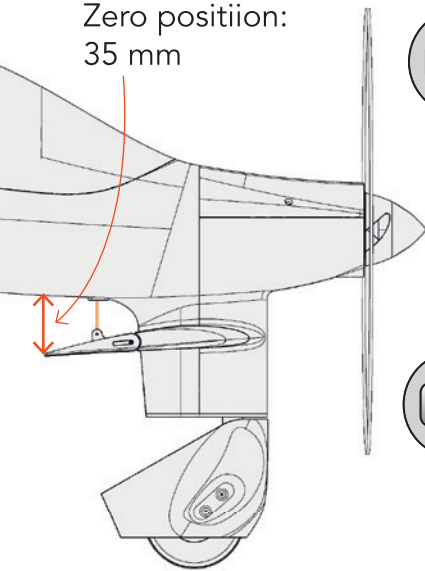
These default settings serve as a guideline and can be changed according to personal skills and preferences.

ELEVATOR

Attention! The elevator must point **downwards** so that the aircraft can **climb**. This is somewhat unusual compared to normal models.

15 mm down
15 mm up

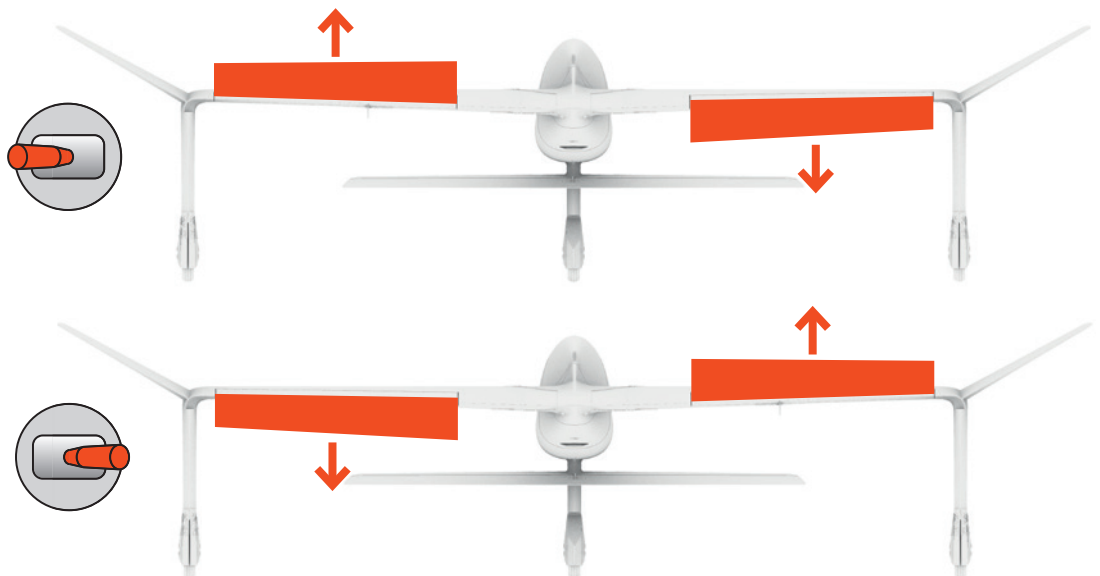
Zero position:
35 mm



The **Nose Gear** can be adjusted according to personal preference after initial taxiing tests.

AILERON

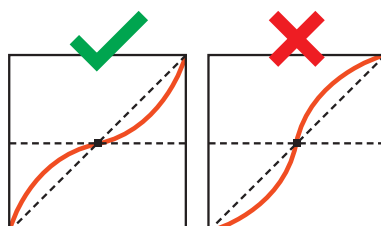
15 mm up
14 mm down



EXPO

ELEVATOR 40 %

AILERON 40 %



(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