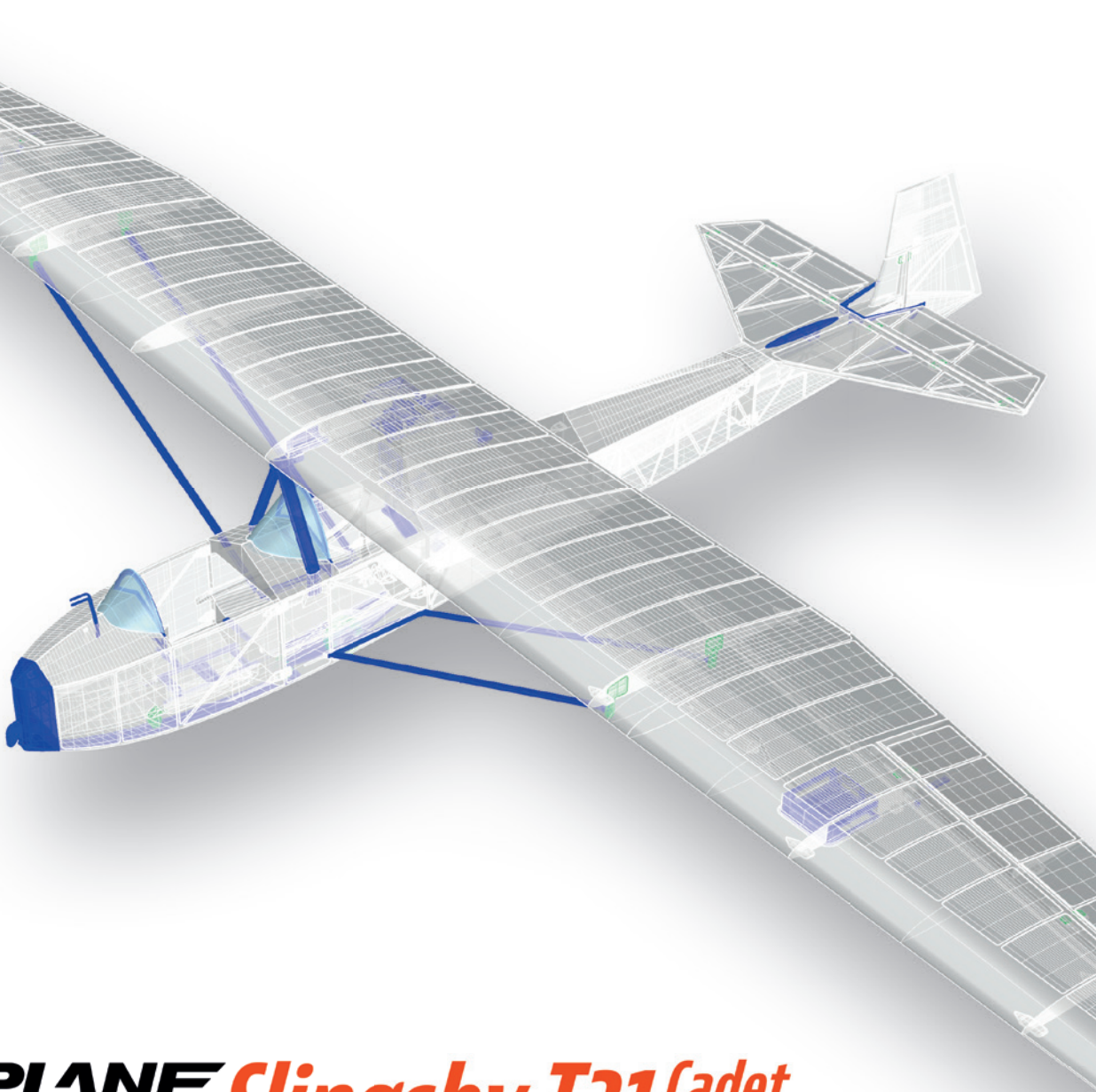


PLANE PRINT



PLANE PRINT *Slingsby T31* **Cadet**

Glider version/**Hidden EDF version** PLANEPRINT
Innovation



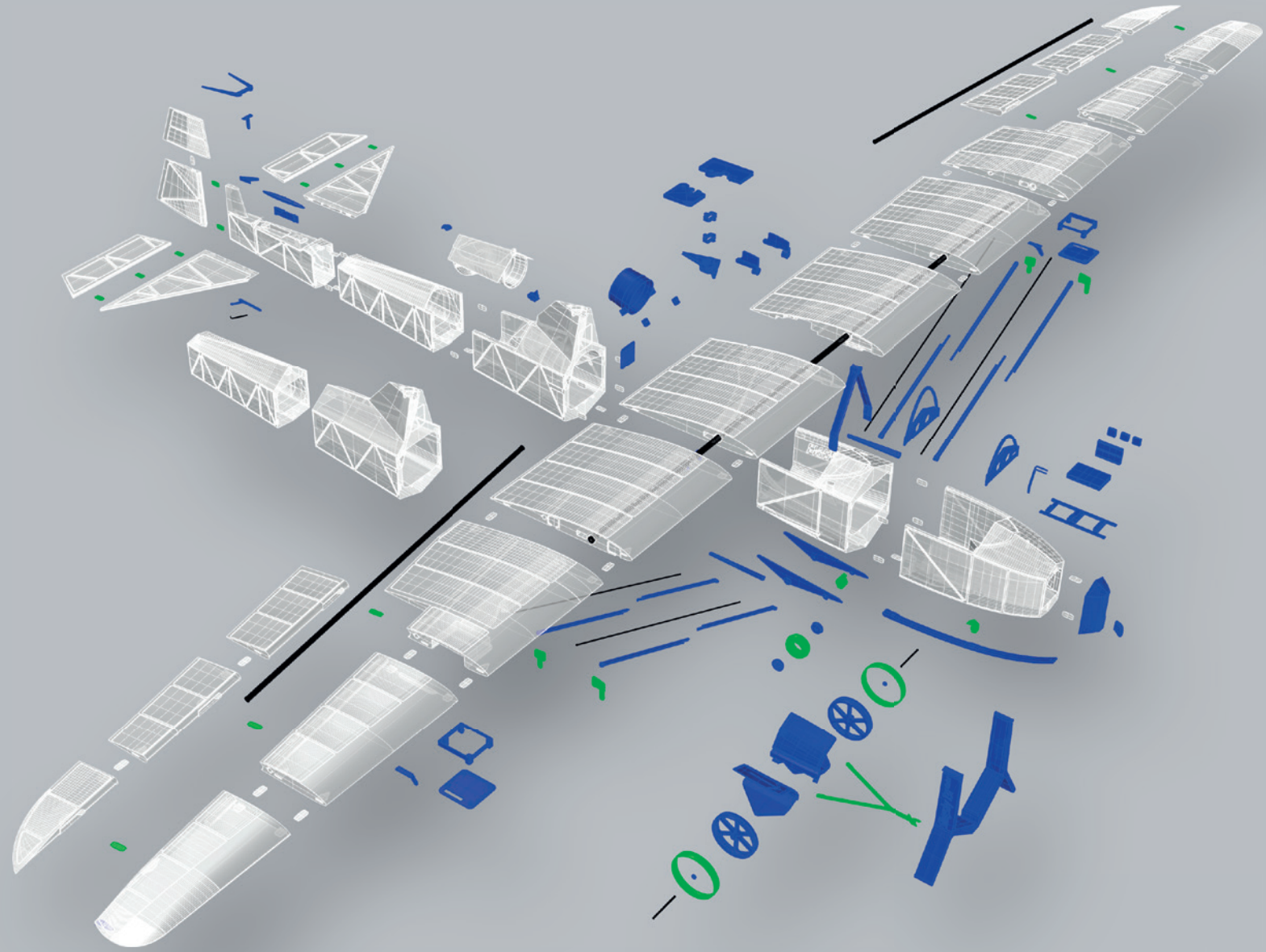
NOTE: Slicing only works with CURA!



www.planeprint.com

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

PLANE PRINT *Slingsby T31 Cadet*



 LW-PLA  PLA  TPU  CARBON

Required accessoires – basic equipment

- **LW-PLA** (cannot be replaced by PLA!), ~750 grams
- **PLA** oder bether **Tough PLA**, ~250 grams
- **TPU A95**, ~30 grams

- some tapping screws $\varnothing 2$ mm
- Metal screw 3*20mm, 5 pieces (2 nuts included)
- CA super glue (liquid and liquid medium)
- CA activator
- UHU All Purpose Adhesive glue (or equivalent)
- Carbon tube $\varnothing 8 \times 1000$ mm, 1 piece
- Carbon tube $\varnothing 6 \times 1000$ mm, 1 piece
- Carbon rod $\varnothing 2.5 \times 1000$ mm (also possible $\varnothing 2$ mm), 2 pieces
- Steel wire $\varnothing 0.8 \times 1000$ mm (or $\varnothing 1$ mm), 2 pieces
- Rod connection, 5 pieces
- Servo extension cable 500mm, 4 pieces (or a soldered servo cable extension)
- Self-adhesive Velcro tape
- Some lead (depending on the weight of the battery)
- MPX Connector, 1 piece
- Overhead foil (or binding cover of scripts, office trade)
- Small cable ties

(simply search for:
M2 flat head tapping
screw assortment)



Tools

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

RC Components

ENGINE 4S EDF 50 MM – (We use the FMS), but it also works well with 3S.

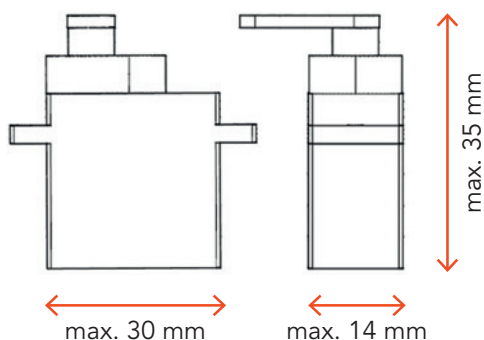
BEC-CONTROLLER suitable for your EDF

BATTERY 4S LiPo-Akku, 2500 – 3000 mAh (ideal weight 300g)

RECEIVER 5 Channel (Glider Version)/6 Channel (EDF Version)

SERVOS 5 pieces like **MODSTER MEX 55MG BB**, Corona 929MG, 939MG, Hitec HS-5070MH or equivalent

Maximum dimensions::



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.planepprint.com/print

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

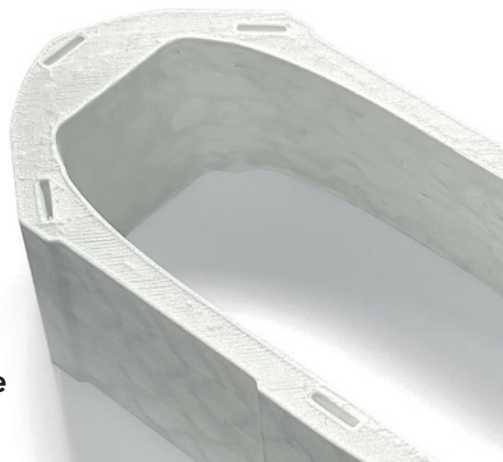
In order to print airfoils of the lowest possible weight with high stability, it is necessary to print with only one wall line (Nozzle 0.4 mm). Decisive here is the adhesion between the layers! To achieve this, you must print at a much higher temperature than normal. As a **guideline**, 230° C is a good 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.



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_EDF mount_sy.stl

MATERIAL PLA, Weight: ~ 5 g

ADDITIONAL SETTINGS

None required

**This part is only necessary
for EDF version!**

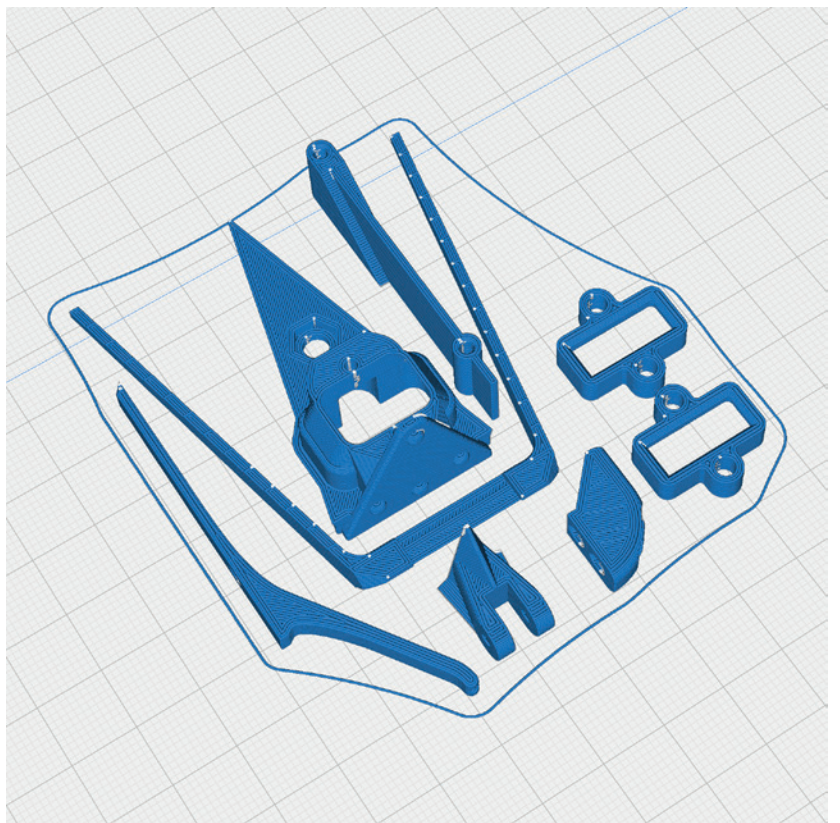


P1_Parts 1_sy.stl

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_Parts 2_sy.stl

MATERIAL PLA, Weight: ~ 12 g

ADDITIONAL SETTINGS

None required



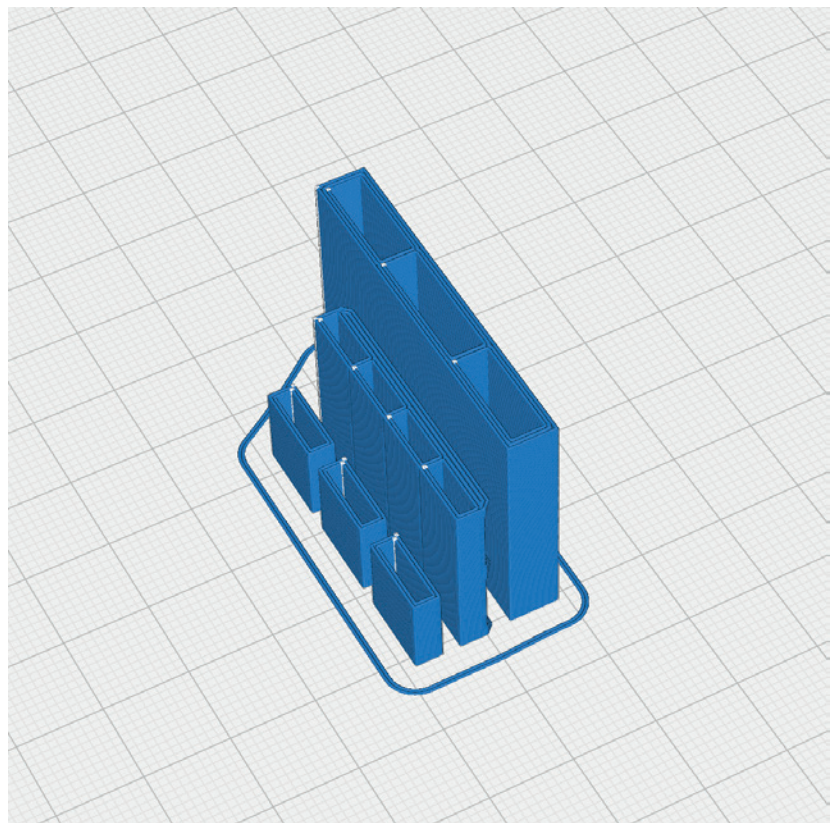
P1_RC mount_sy.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required

**This part is only necessary
for EDF version!**



PROFILE P1_Fullbody **PLA or Tough PLA**

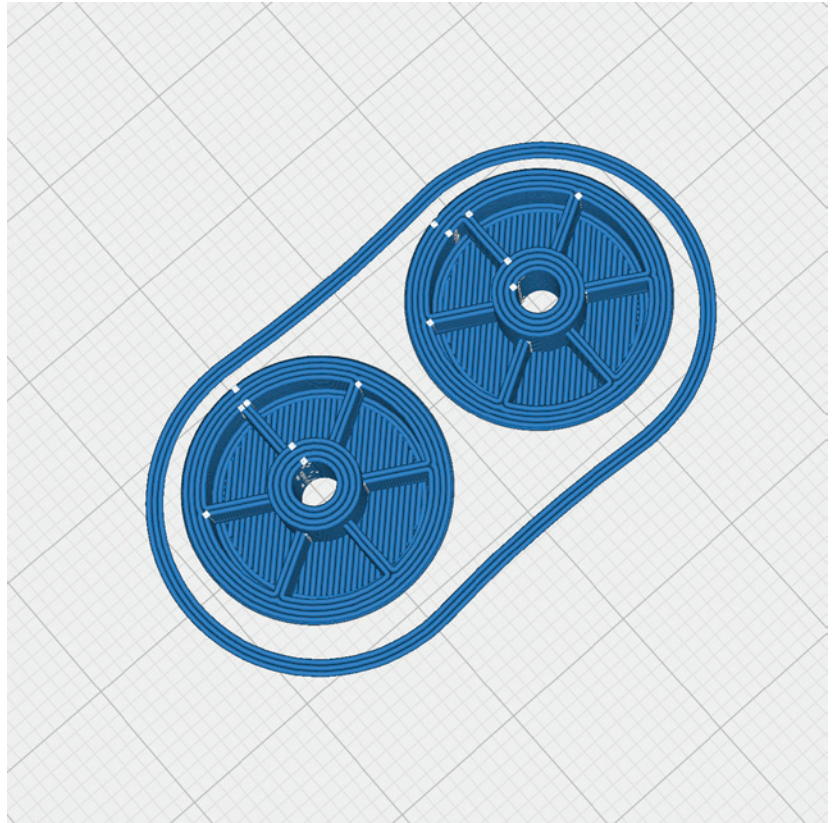
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Rim_sy.stl

MATERIAL PLA, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required

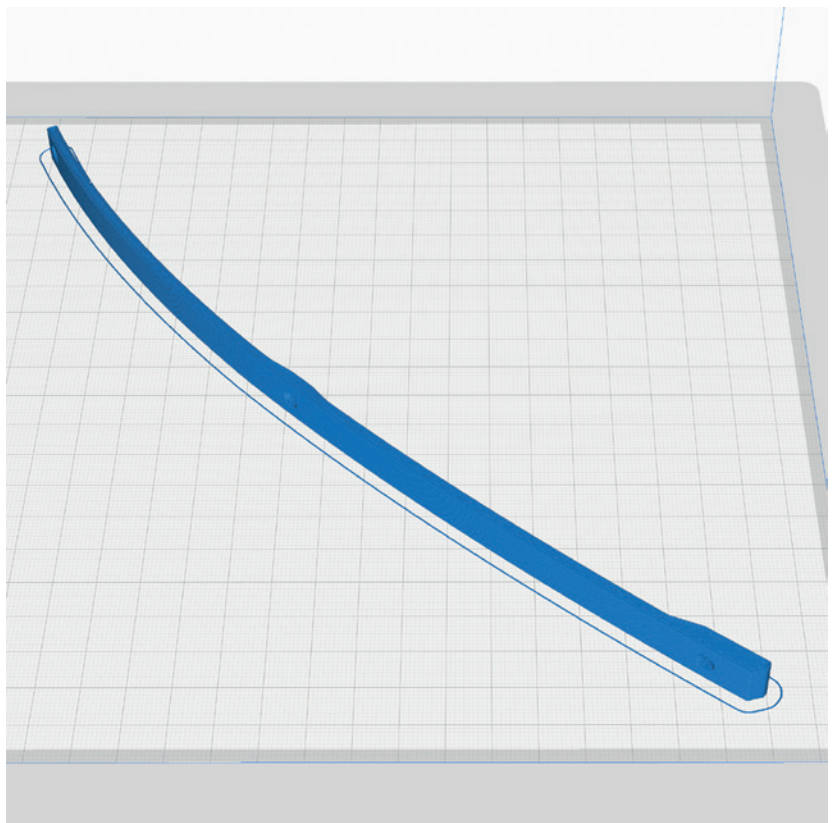


P1_Skid_sy.stl

MATERIAL PLA, Weight: ~ 10 g

ADDITIONAL SETTINGS

- Wall Line Count: 6



PROFILE P1_Fullbody **PLA or Tough PLA**

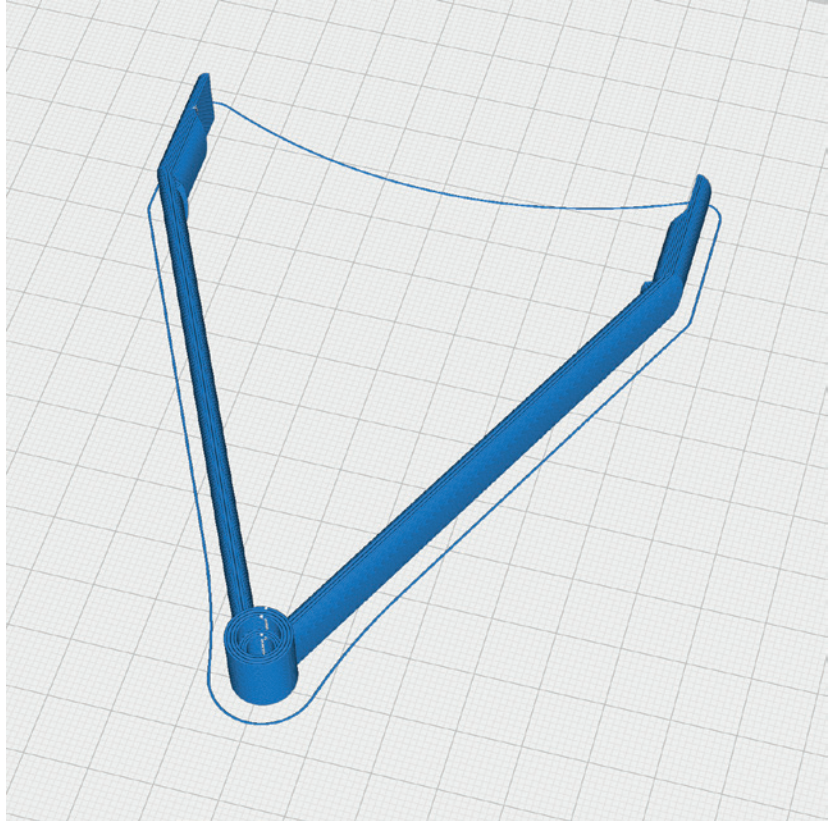
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Tower_sy.stl

MATERIAL PLA, Weight: ~ 10 g

ADDITIONAL SETTINGS

- Wall Line Count: 6

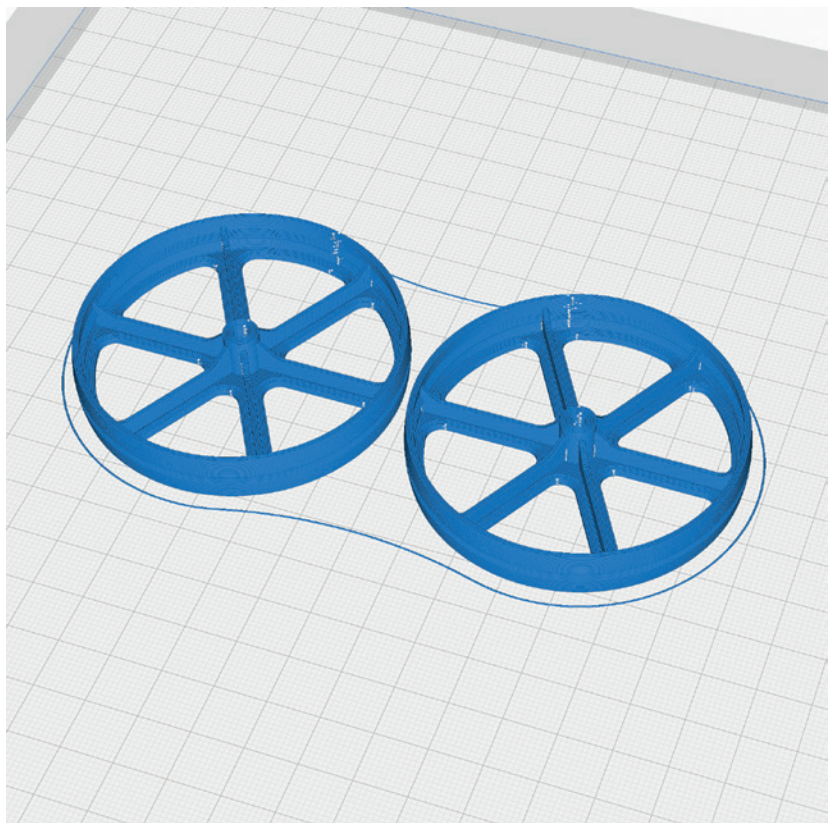


P1_Trolley Rims_sy.stl

MATERIAL PLA, Weight: ~ 14 g

ADDITIONAL SETTINGS

None required



PROFILE P1_Fullbody **PLA or Tough PLA**

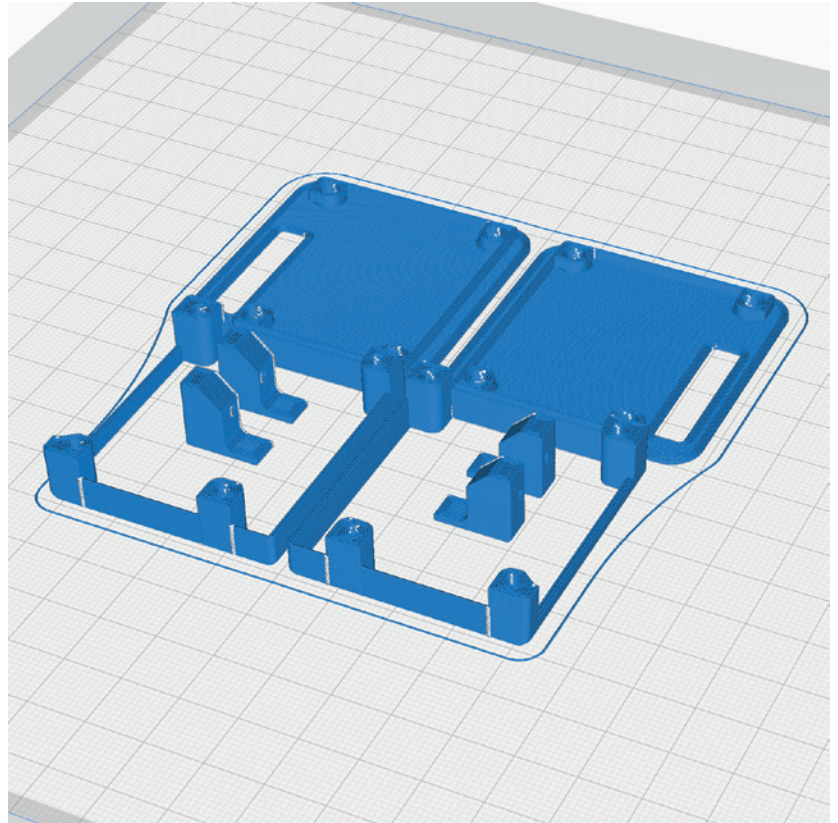
The following parts must be sliced with the PROFILE P1_Fullbody.
Please note the additional settings for the individual parts!

P1_Wingservo mount_sy.stl

MATERIAL PLA, Weight: ~ 12 g

ADDITIONAL SETTINGS

None required



PROFILE P2_HOLLOWBODY PLA or Tough PLA

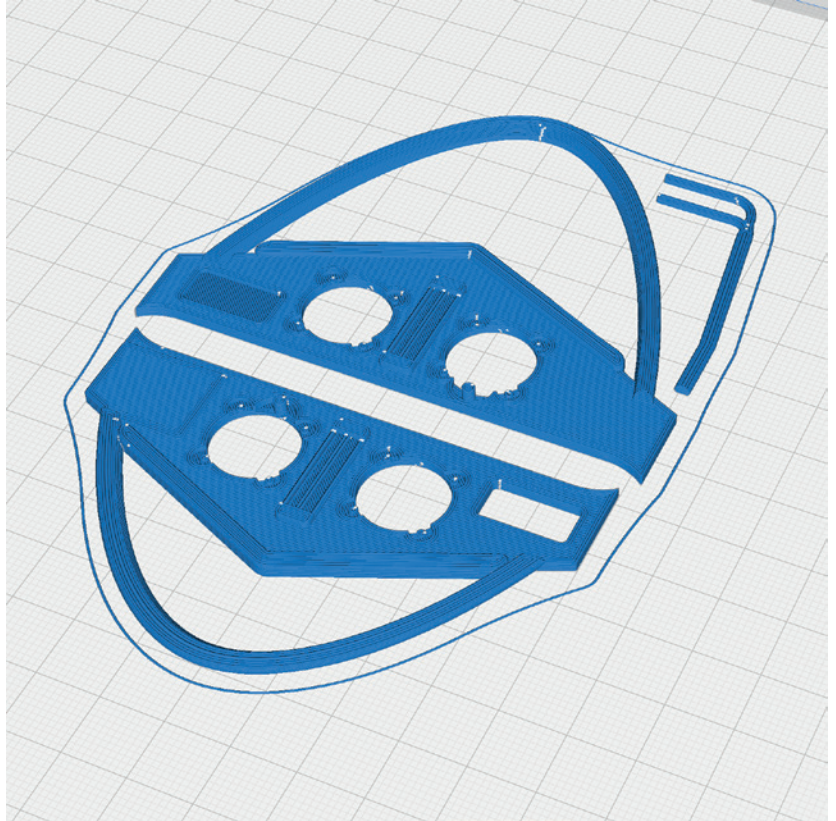
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

P2_Cockpits_sy.stl

MATERIAL PLA, Weight: ~ 8 g

ADDITIONAL SETTINGS

None required

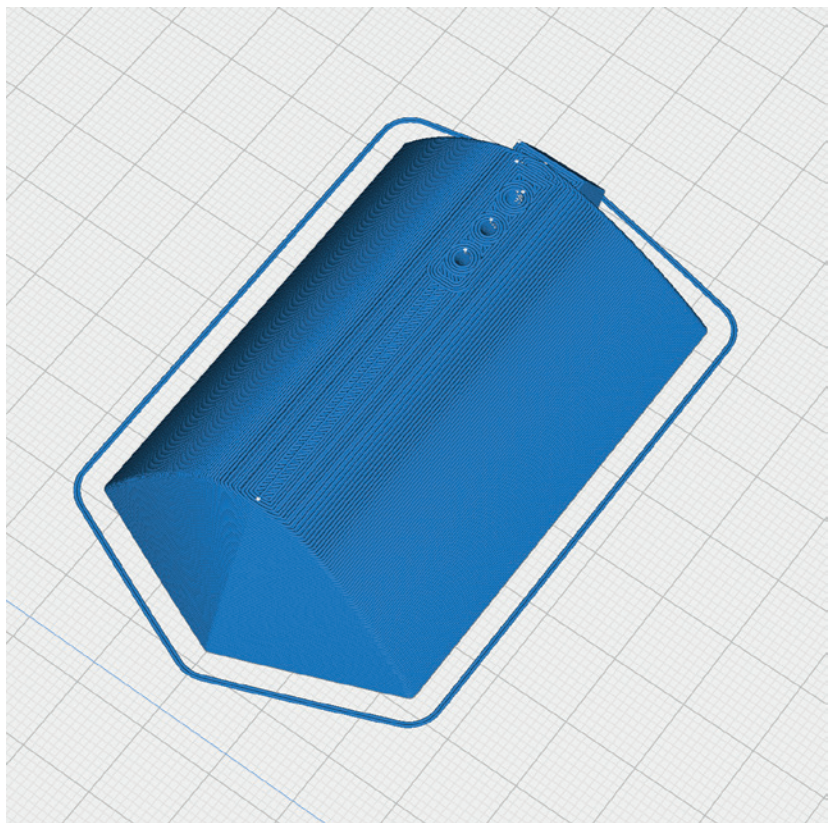


P2_Nose_sy.stl

MATERIAL PLA, Weight: ~ 17 g

ADDITIONAL SETTINGS

- Wall Line Count: 3



PROFILE P2_HOLLOWBODY PLA or Tough PLA

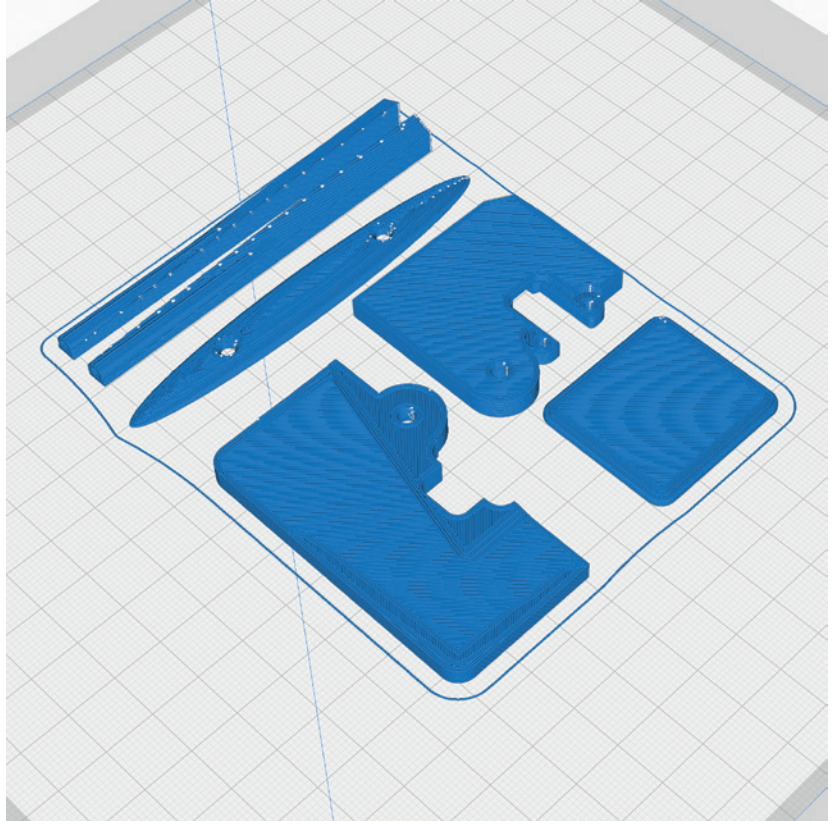
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

P2_Parts_sy.stl

MATERIAL PLA, Weight: ~ 15 g

ADDITIONAL SETTINGS

None required

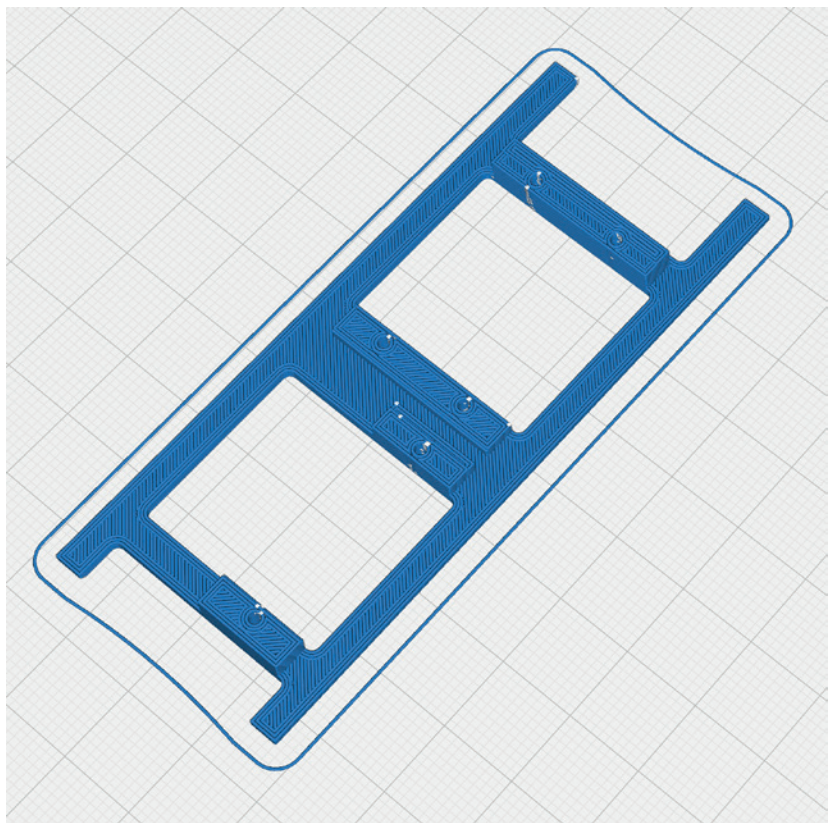


P2_Servo board_sy.stl

MATERIAL PLA, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required



PROFILE P2_HOLLOWBODY PLA or Tough PLA

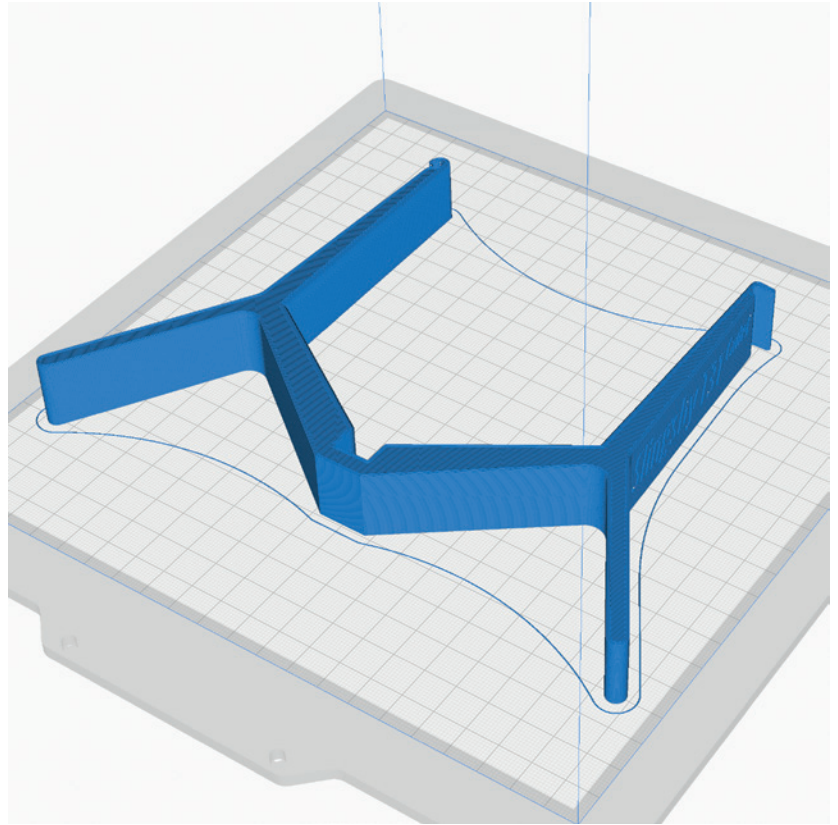
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

P2_Stand_sy.stl

MATERIAL PLA, Weight: ~ 41 g

ADDITIONAL SETTINGS

None required

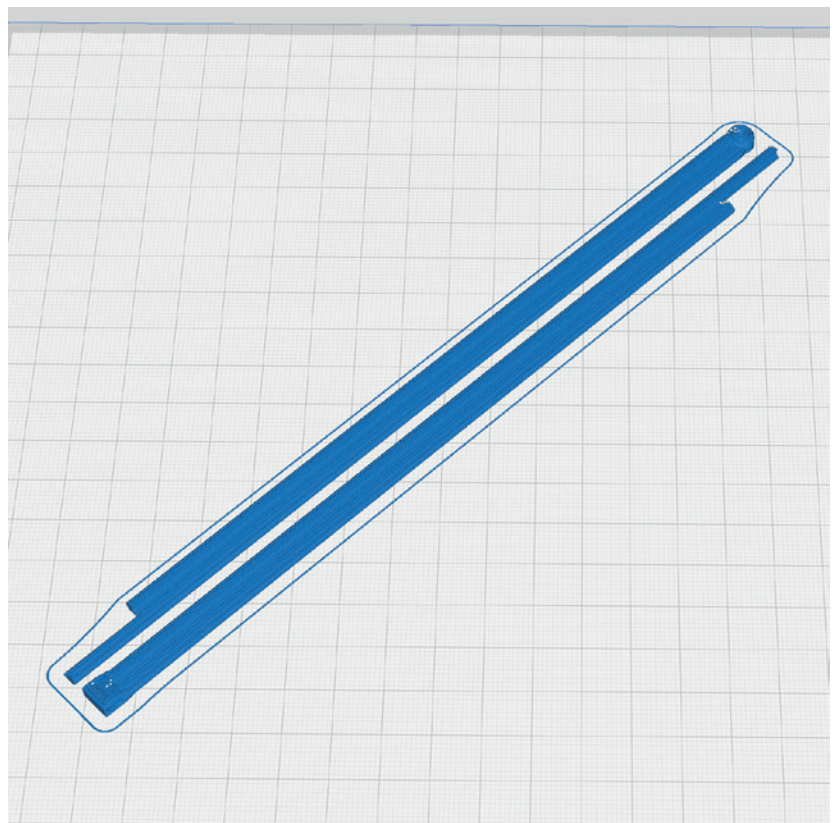


P2_Strut_sy.stl

MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

- print this STL 4 times
- Wall Line Count: 6



PROFILE P2_HOLLOWBODY PLA or Tough PLA

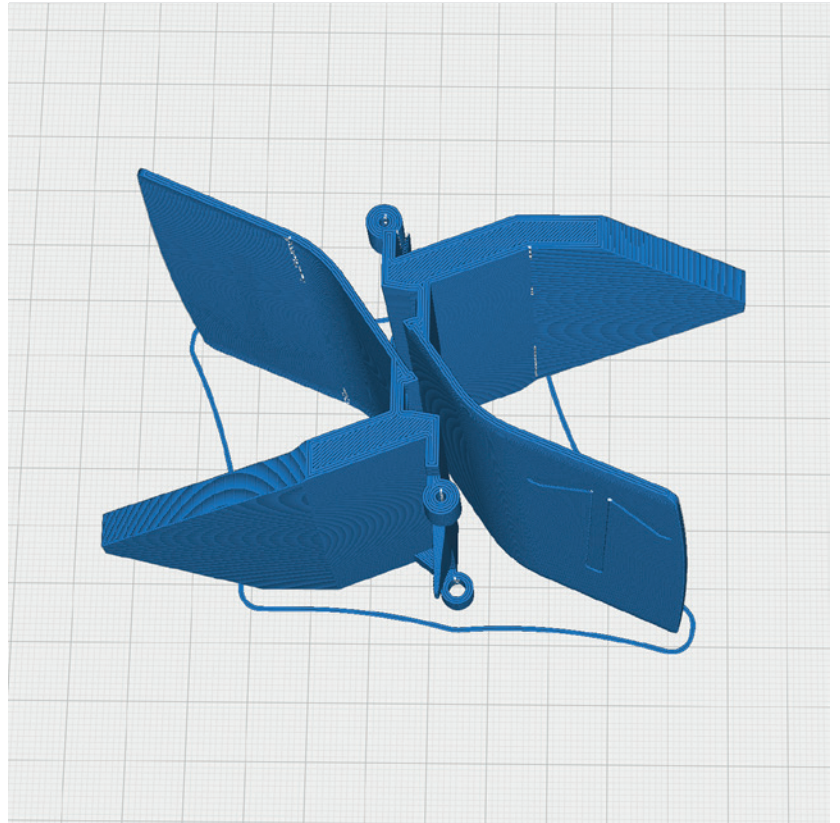
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

P2_Trolley_sy.stl

MATERIAL PLA, Weight: ~ 39 g

ADDITIONAL SETTINGS

None required



PROFILE P4_Flex TPU A95

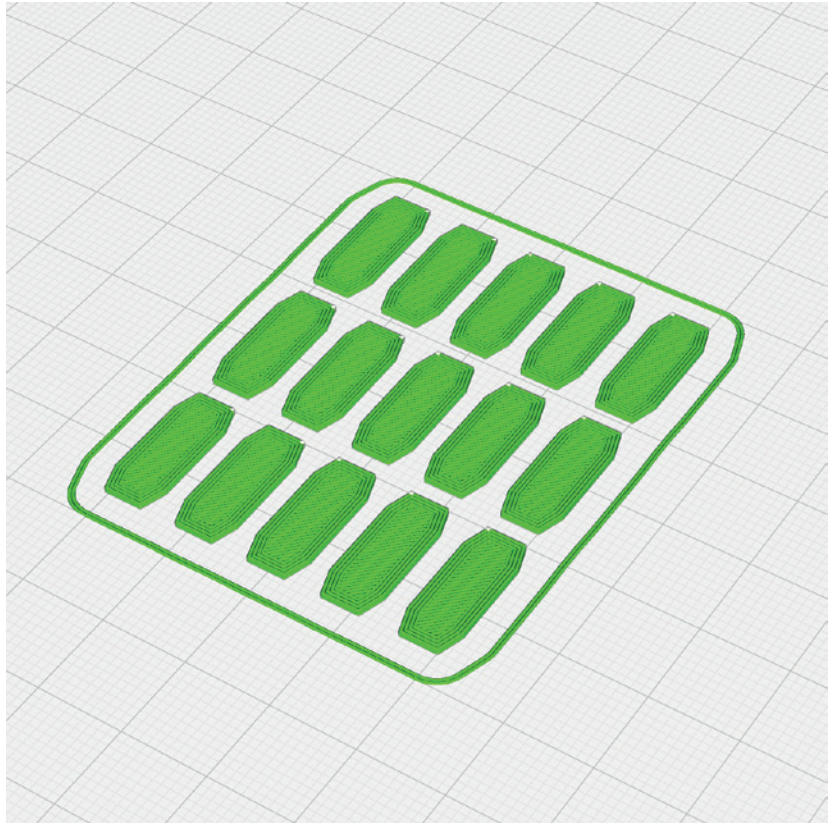
The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

P4_Hinges_sy.stl

MATERIAL TPU A95, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required

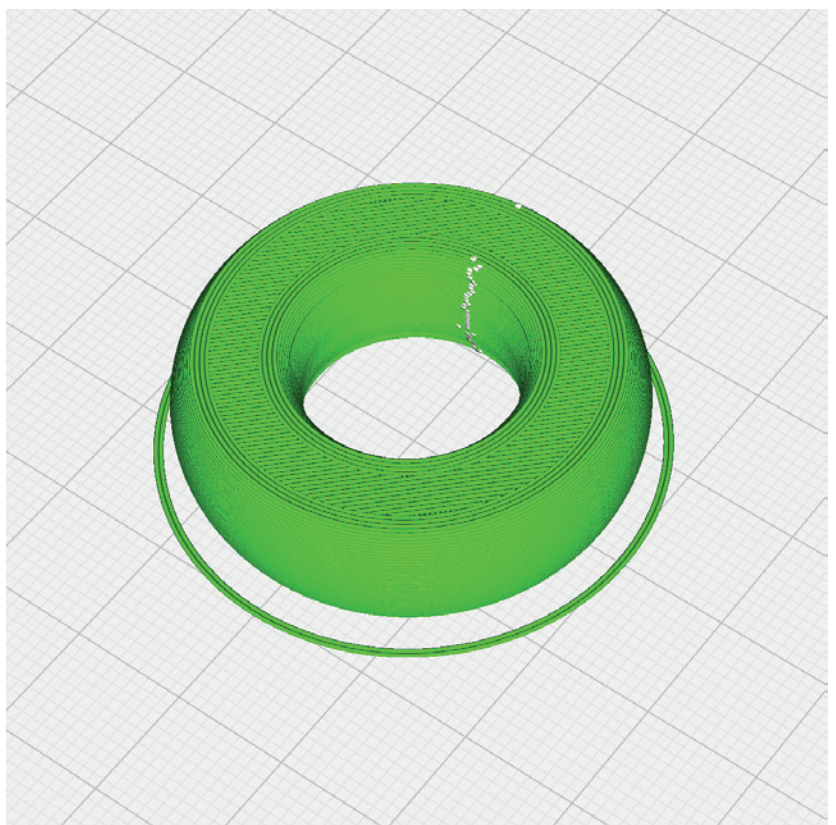


P4_Tire_sy.stl

MATERIAL TPU A95, Weight: ~ 6 g

ADDITIONAL SETTINGS

- Wall Line Count: 4
- Top Layers: 4
- Bottom Layers: 4
- Infill Density: 15 %
- Infill Pattern: Gyroid



PROFILE P4_Flex TPU A95

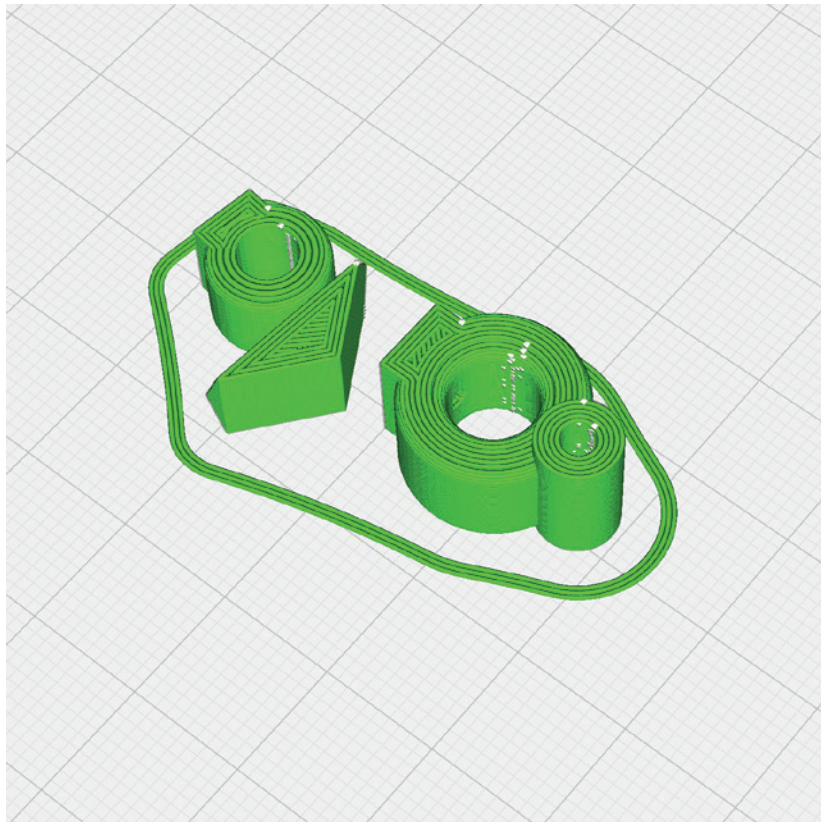
The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

P4_TPU Skid_sy.stl

MATERIAL TPU A95, Weight: ~ 3 g

ADDITIONAL SETTINGS

- Infill Density: 15 %
- Combing Mode: All

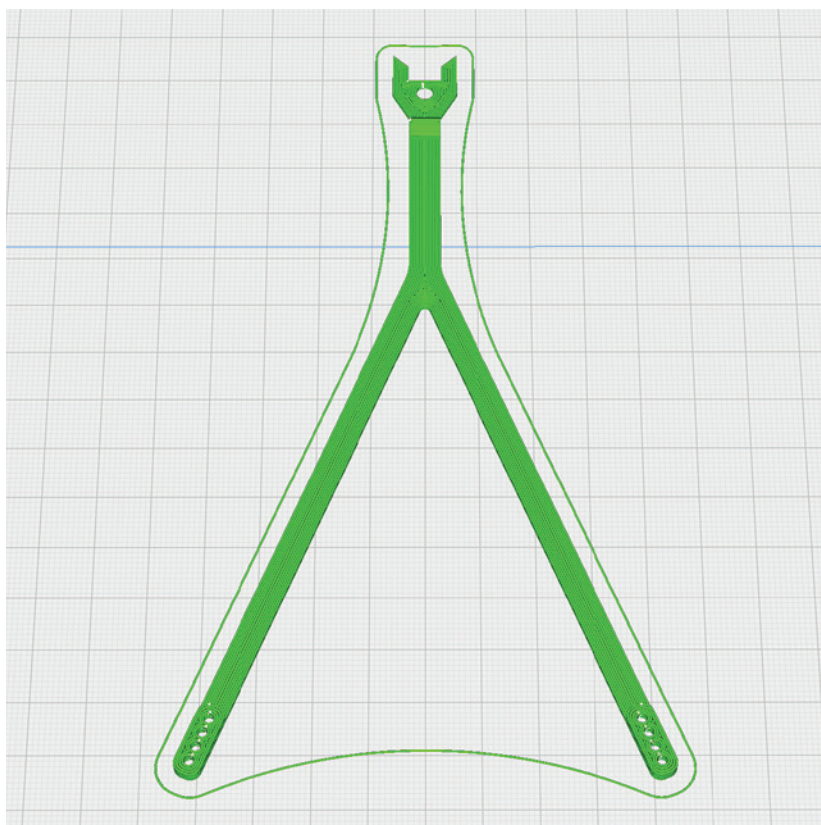


P4_Trolley Belt_sy.stl

MATERIAL TPU A95, Weight: ~ 3 g

ADDITIONAL SETTINGS

- Wall Line Count: 8



PROFILE P4_Flex TPU A95

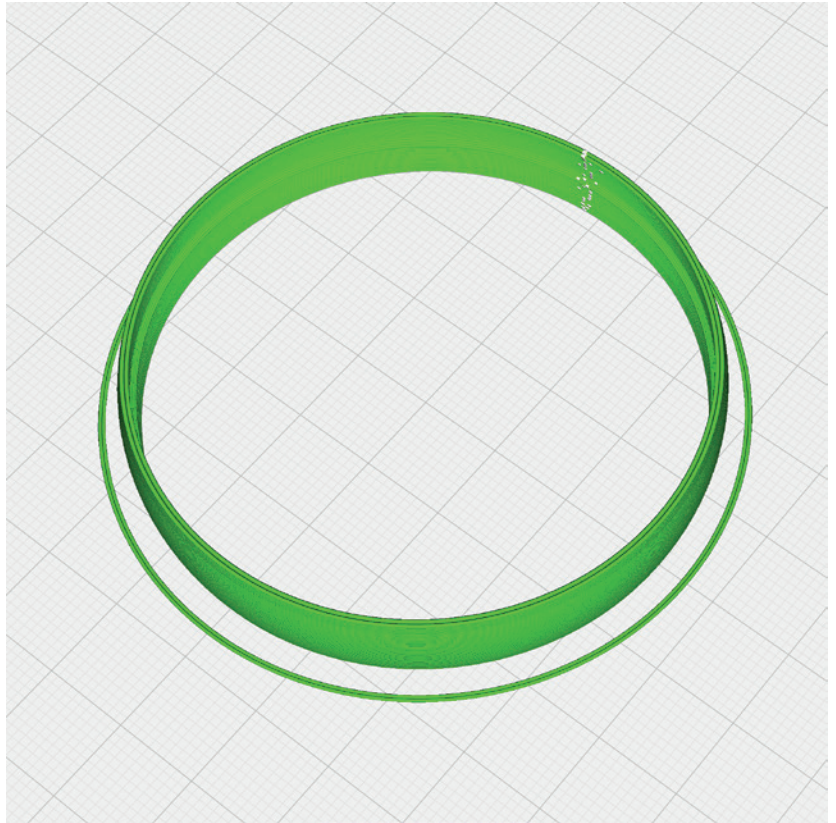
The following parts must be sliced with the PROFILE P4_Flex.
Please note the additional settings for the individual parts!

P4_Trolley Tire_sy.stl

MATERIAL TPU A95, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required

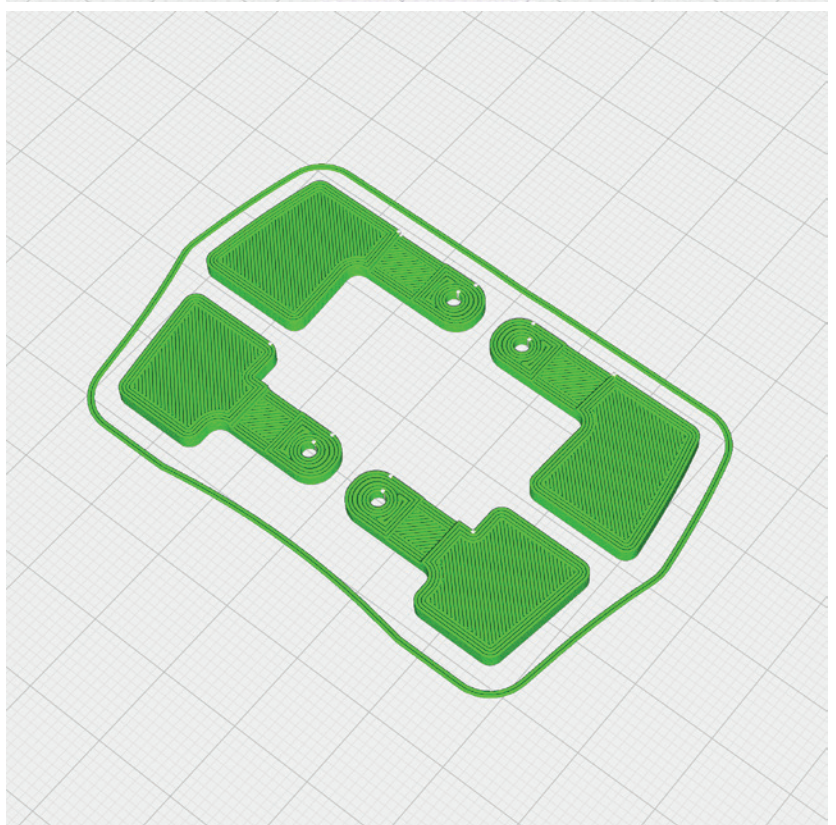


P4_Wingparts TPU_sy.stl

MATERIAL TPU A95, Weight: ~ 3 g

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!

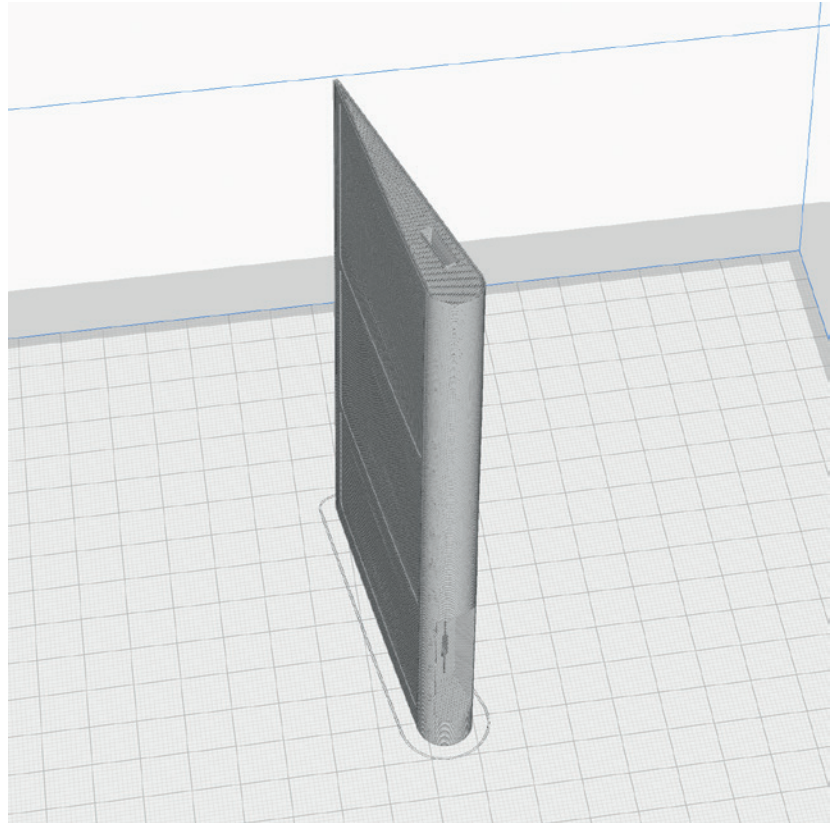
P5_Aileron 1-L_sy.stl and P5_Aileron 1-R_sy

MATERIAL LW-PLA, ~ 9 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



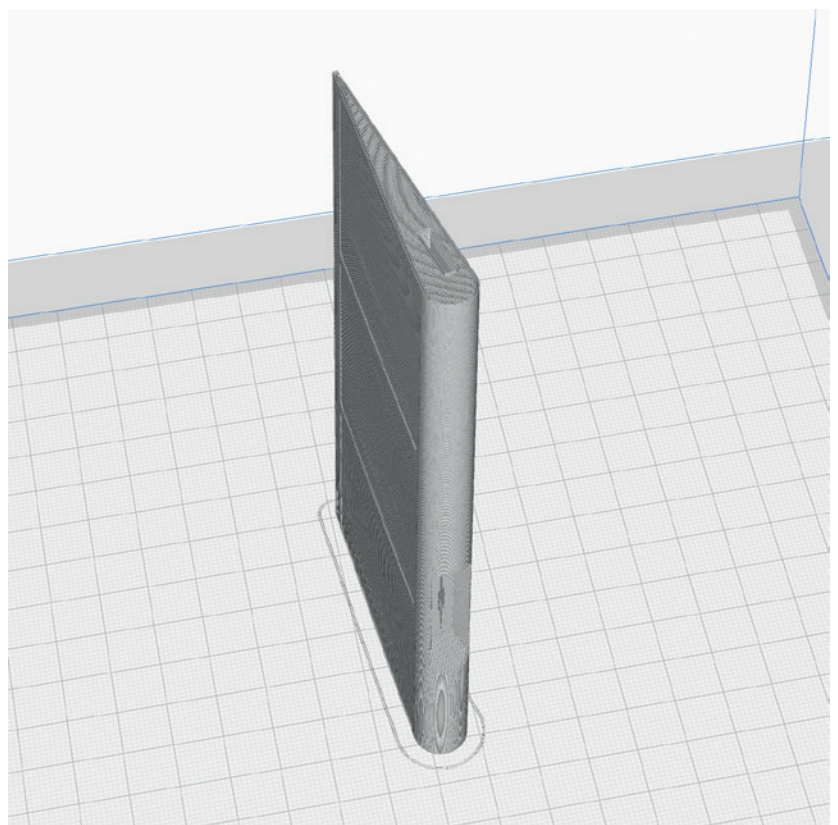
P5_Aileron 2-L_sy.stl and P5_Aileron 2-R_sy

MATERIAL LW-PLA, ~ 8 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!

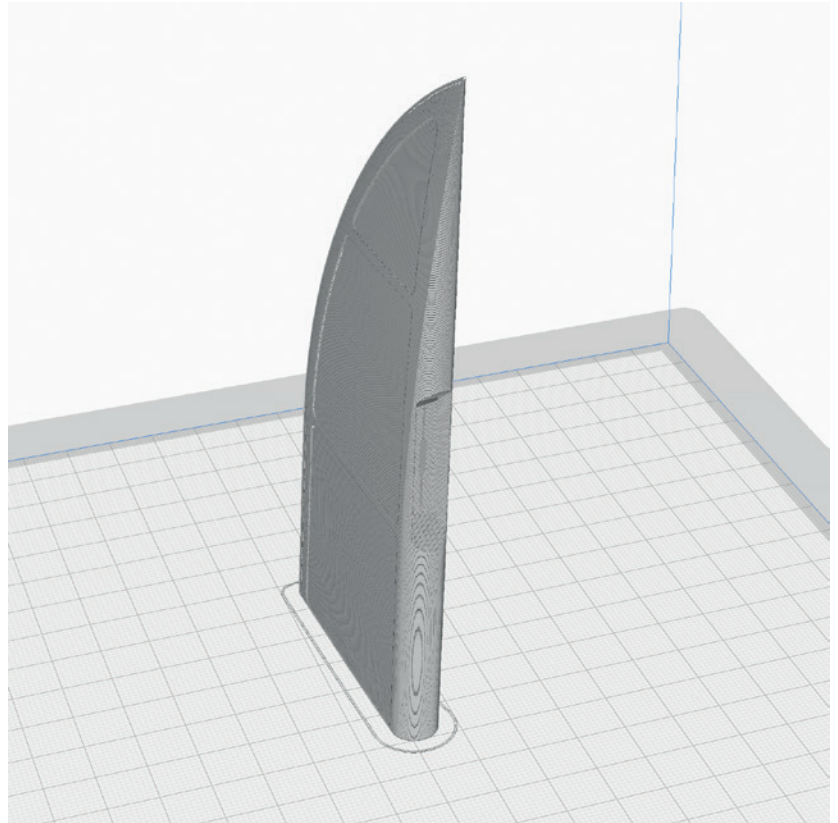
P5_Aileron 3-L_sy.stl and P5_Aileron 3-R_sy.stl

MATERIAL LW-PLA, ~ 6 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



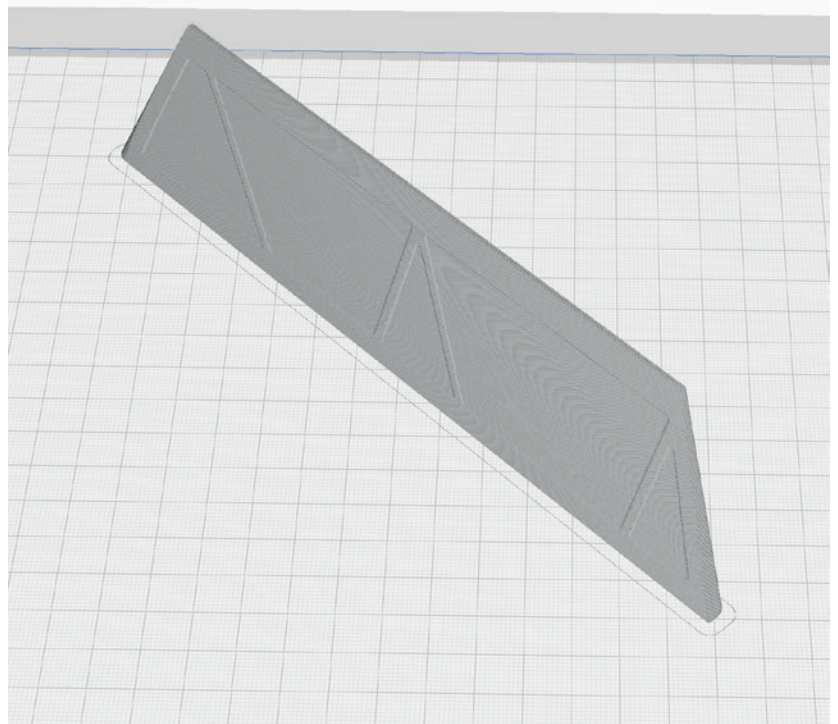
P5_Elevator-L_sy.stl and P5_Elevator-R_sy.stl

MATERIAL LW-PLA, ~ 8 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!

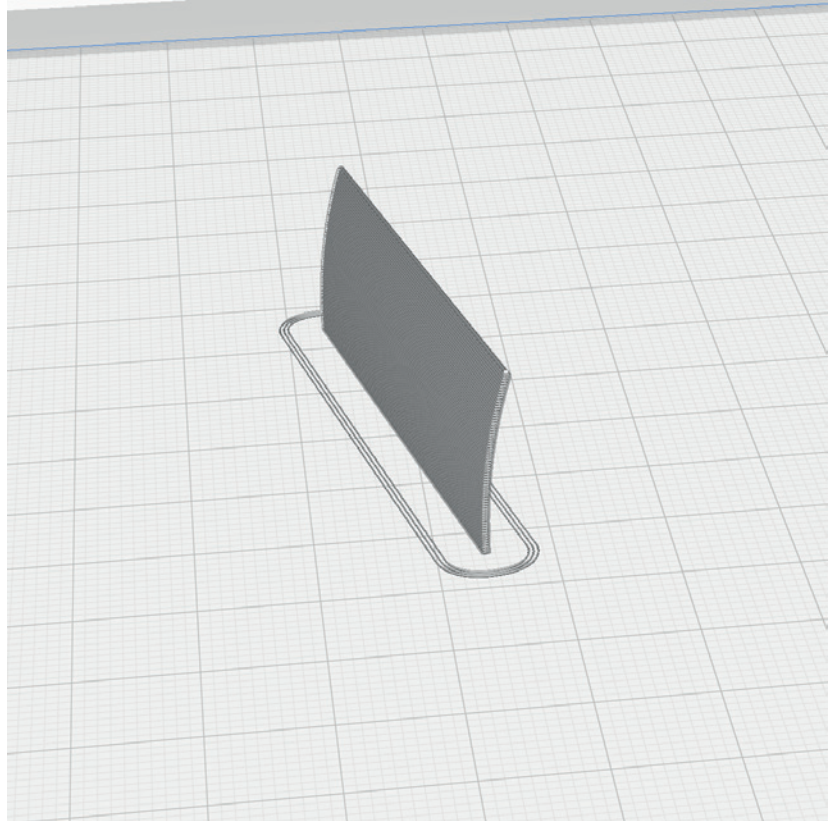
P5_Fin EDF_sy.stl

MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



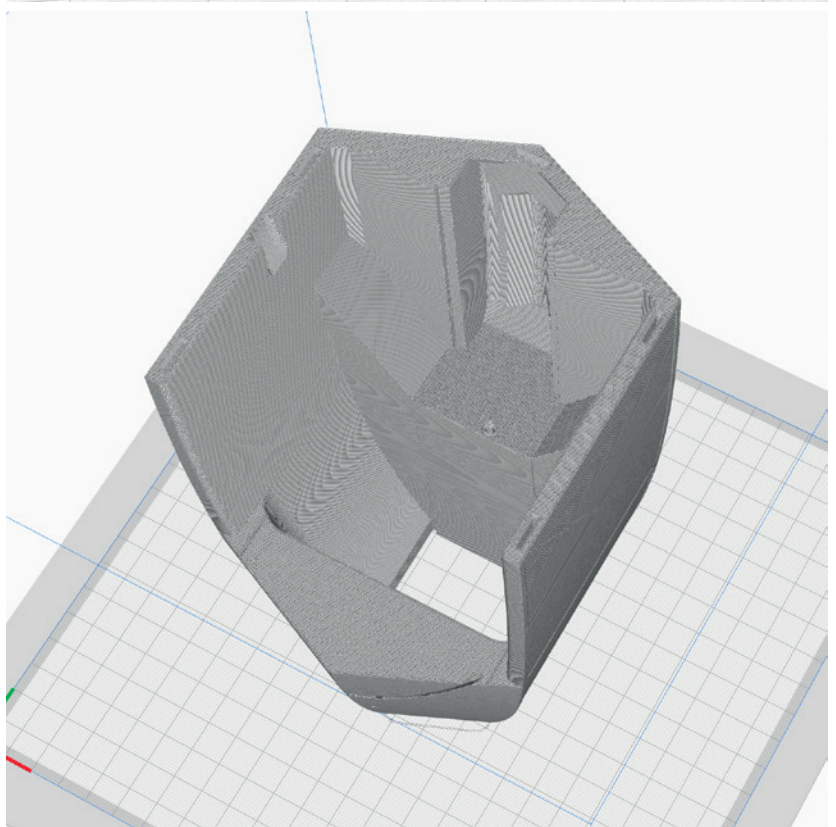
P5_Fus 1_sy.stl

MATERIAL LW-PLA, ~ 58 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!

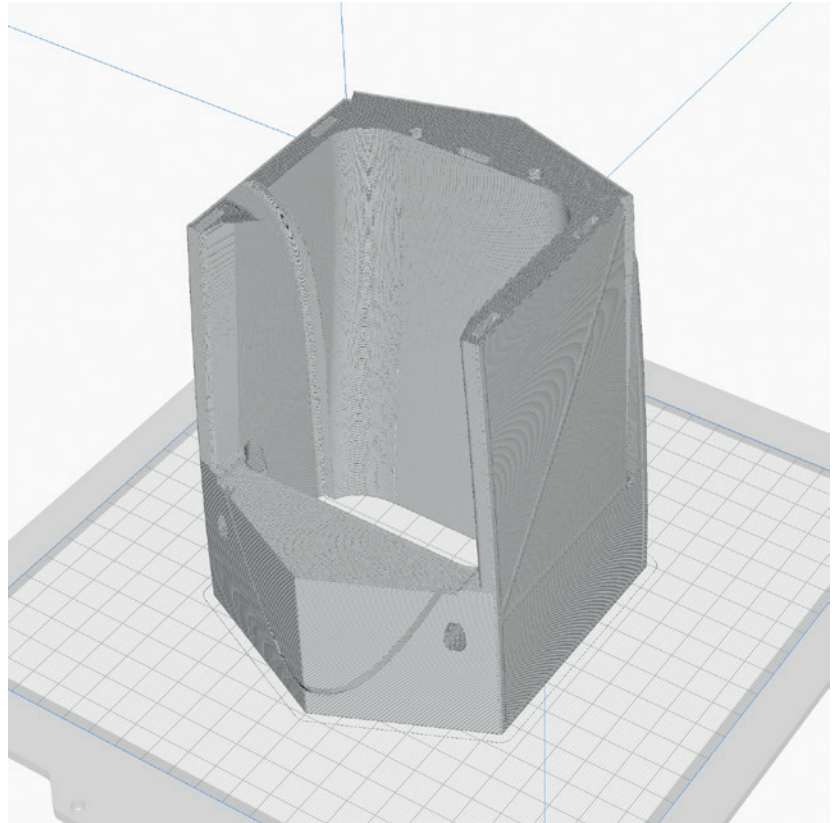
P5_Fus 2_sy.stl

MATERIAL LW-PLA, ~ 58 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



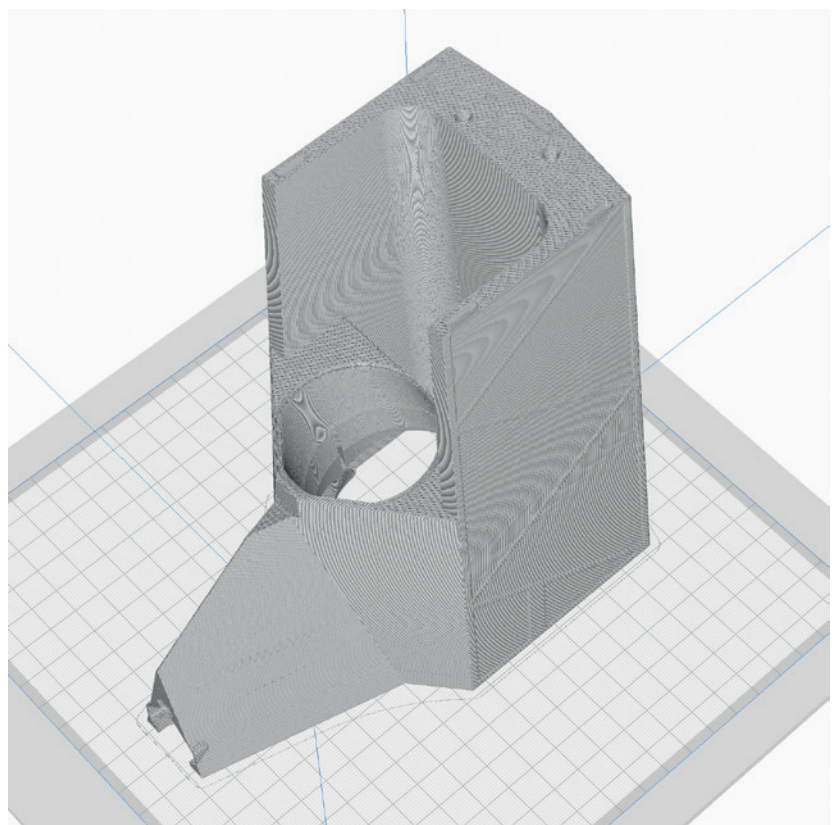
P5_Fus 3 Glider_sy.stl or P5_Fus 3 EDF A_sy.stl

MATERIAL LW-PLA, ~ 68 or 62 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 3 EDF B_sy.stl

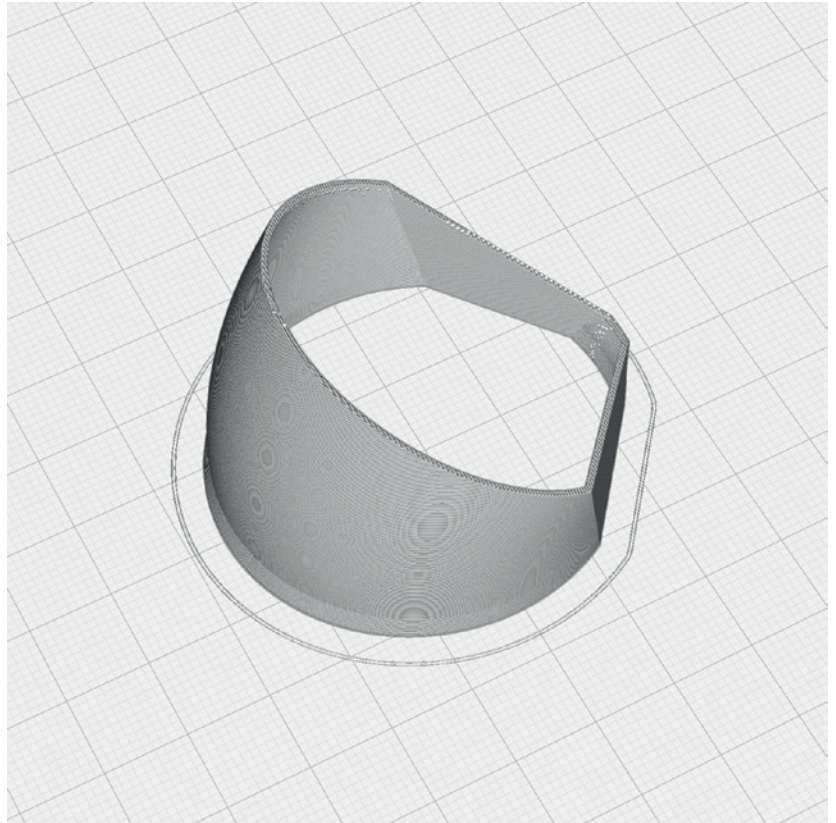
MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

This part is only necessary for EDF version!



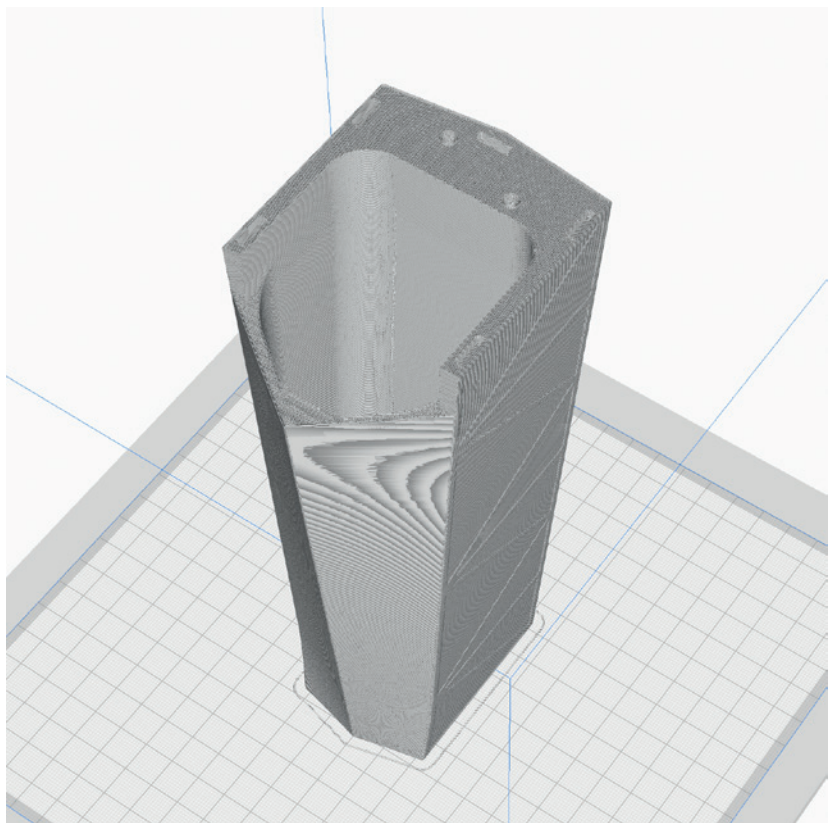
P5_Fus 4 Glider_sy.stl or P5_Fus 4 EDF_sy.stl

MATERIAL LW-PLA, ~ 44 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!

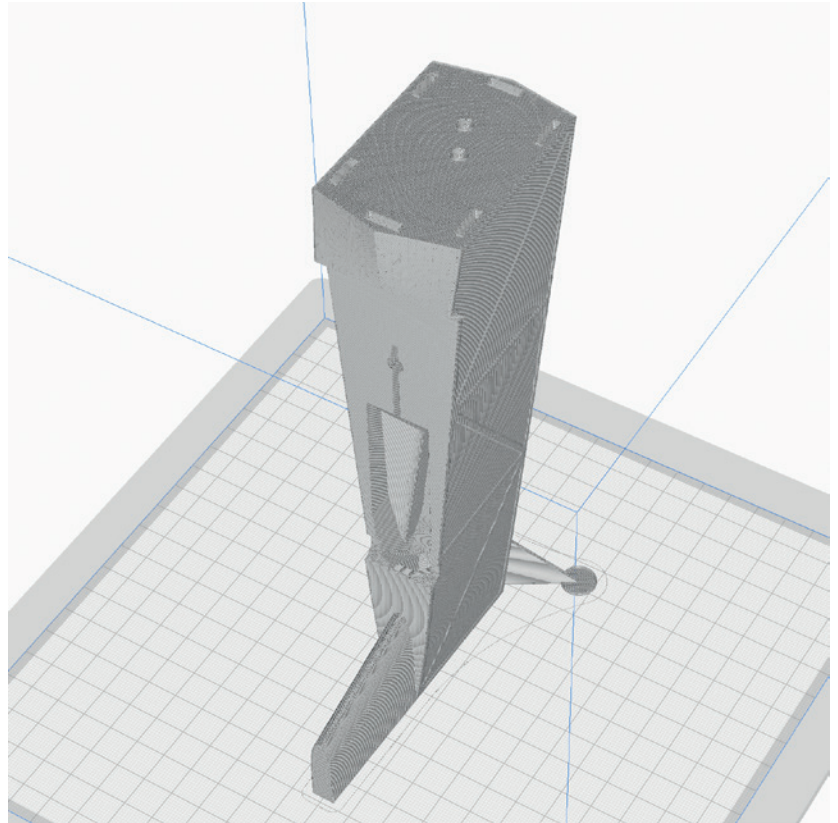
P5_Fus 5_sy.stl

MATERIAL LW-PLA, ~ 28 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



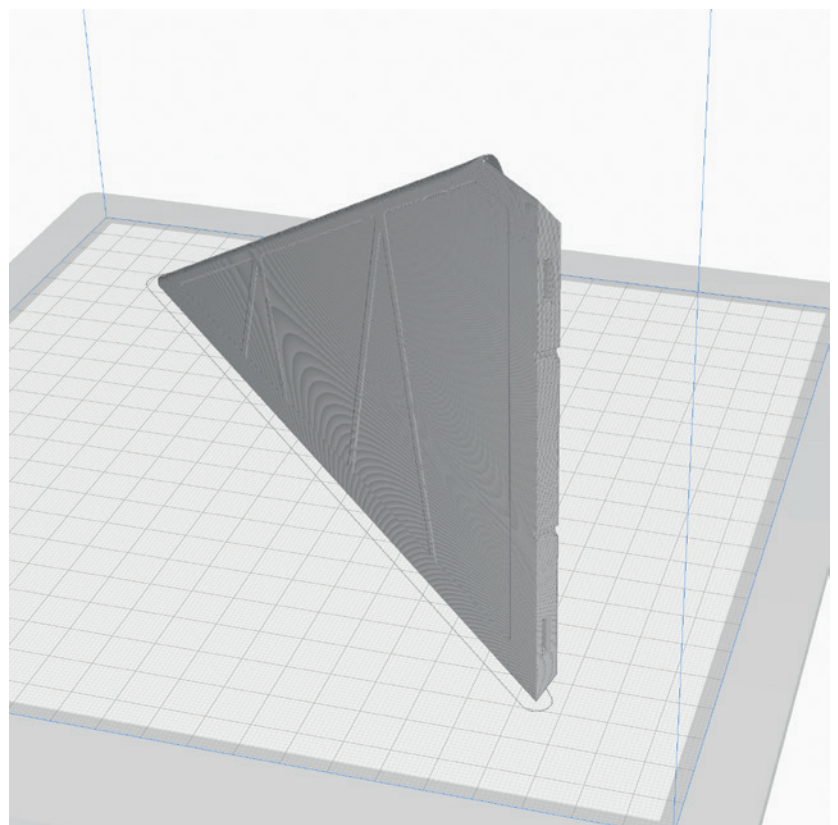
P5_HS-L_sy.stl and P5_HS-R_sy.stl

MATERIAL LW-PLA, ~ 11 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!

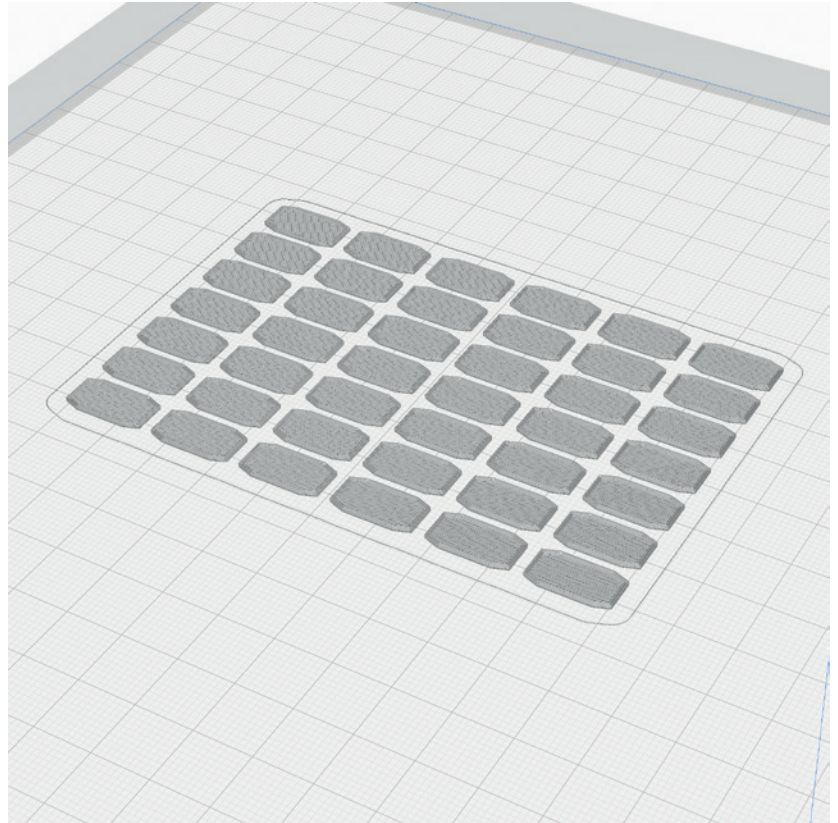
P5_Interconnects_sy.stl

MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



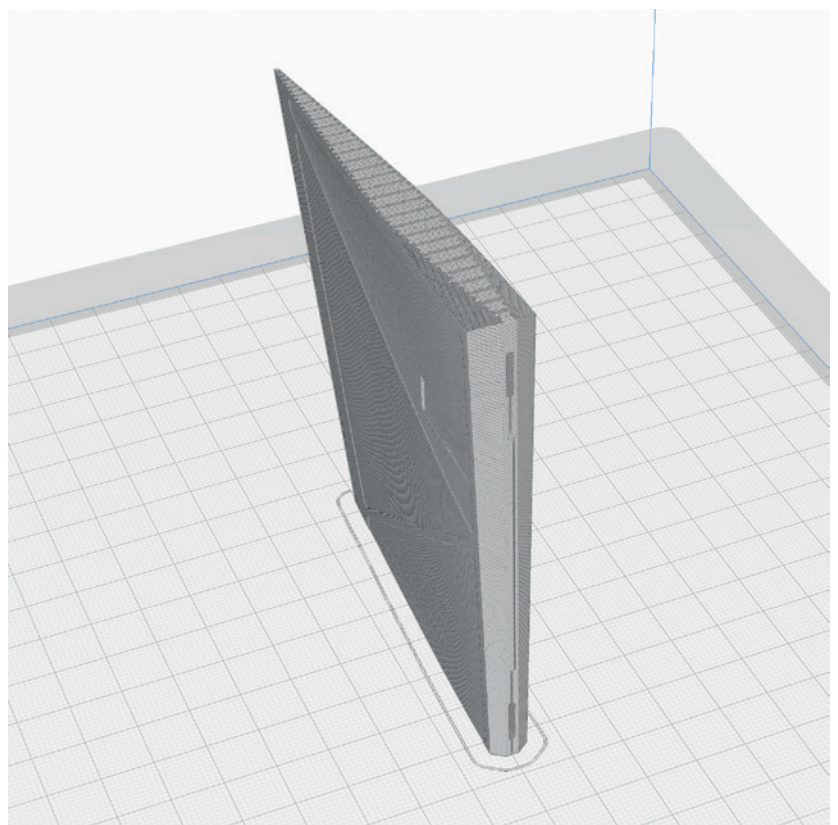
P5_Rudder 1_sy.stl

MATERIAL LW-PLA, ~ 7 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!

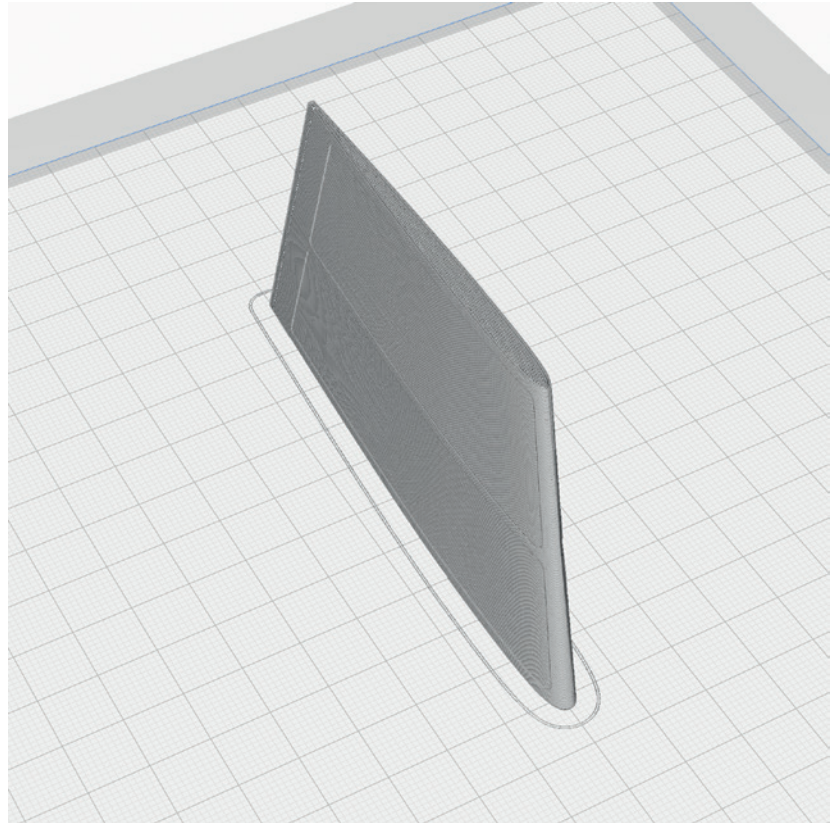
P5_Rudder 2_sy.stl

MATERIAL LW-PLA, ~ 5 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



P5_Thrust tube EDF_sy.stl

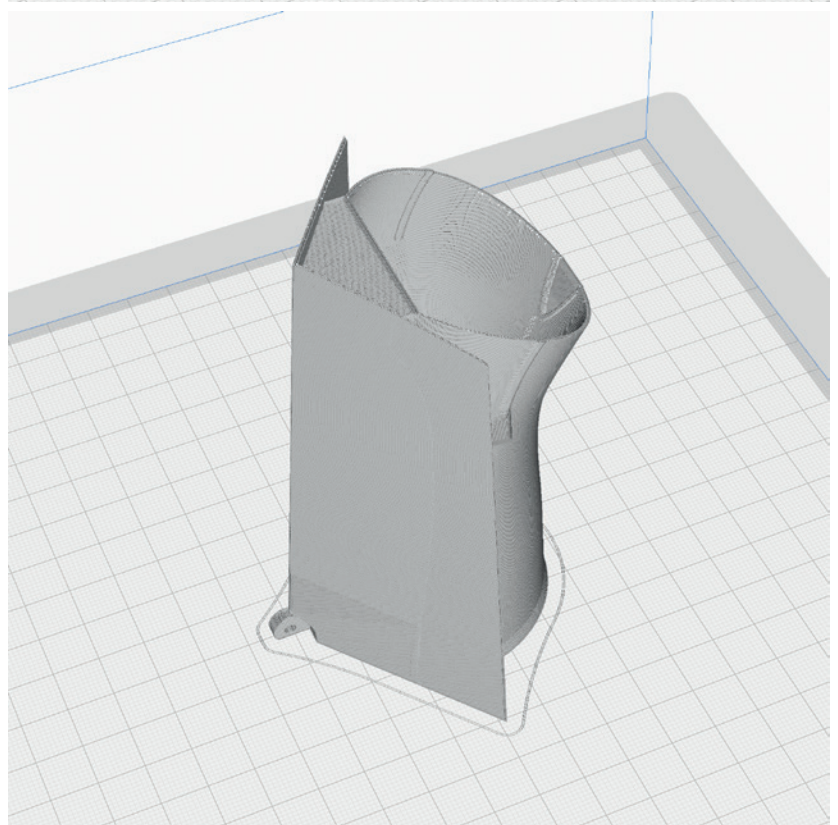
MATERIAL LW-PLA, ~ 11 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

This part is only necessary for EDF version!



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!

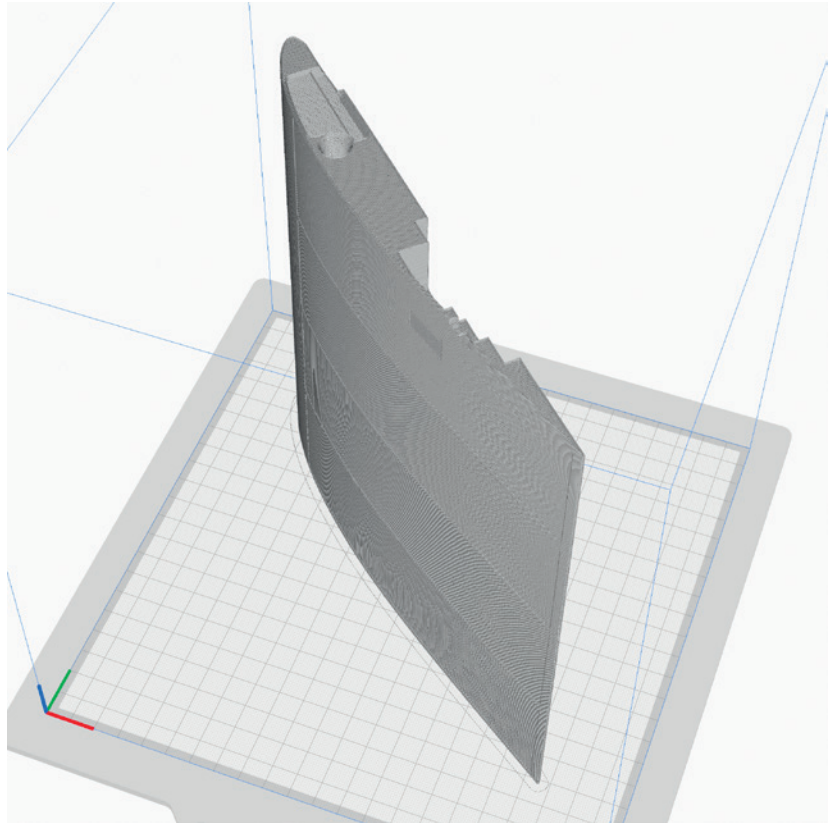
P5_Wing 1-L_sy.stl and P5_Wing 1-R_sy.stl

MATERIAL LW-PLA, ~ 51 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position:
Wing 1-L: Back Left
Wing 1-R: Back Right



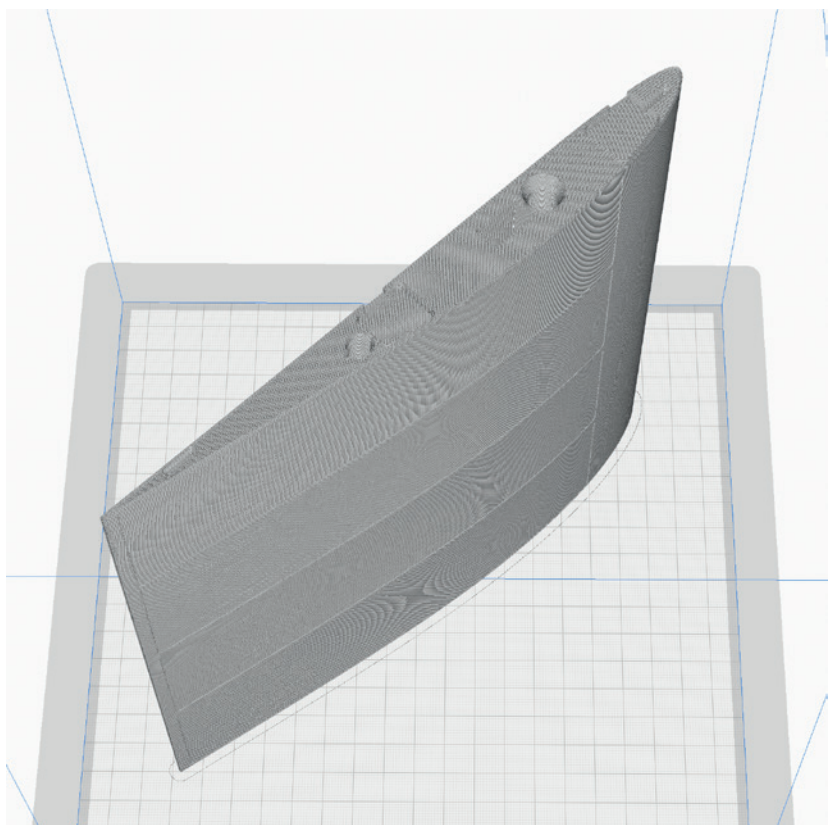
P5_Wing 2-L_sy.stl and P5_Wing 2-R_sy.stl

MATERIAL LW-PLA, ~ 50 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Z Seam Position:
Wing 2-L: Back Right
Wing 2-R: 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!

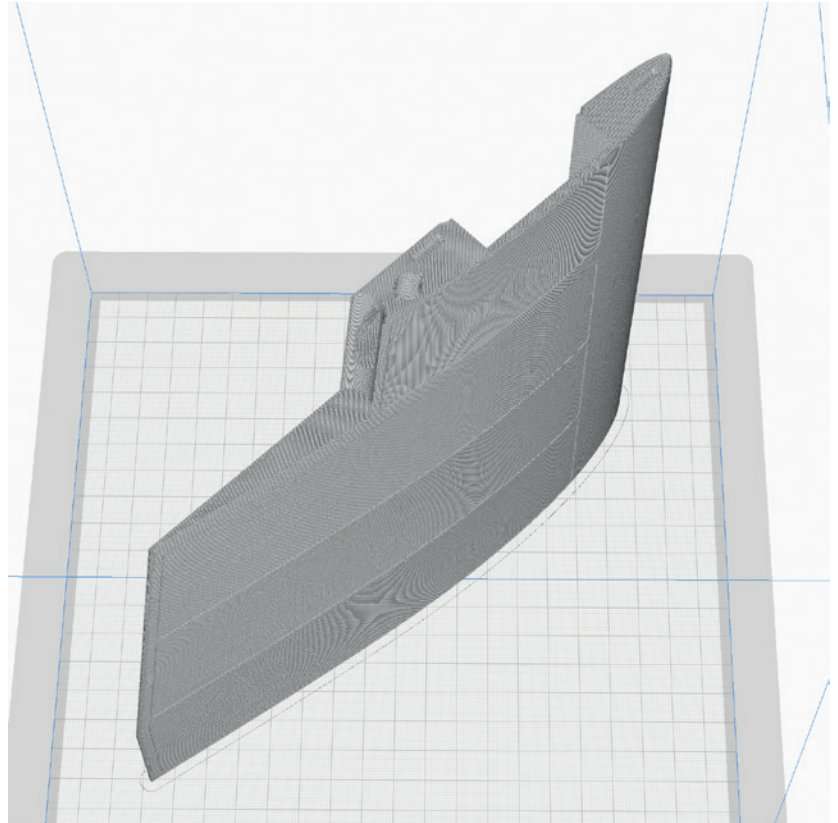
P5_Wing 3-L_sy.stl and
P5_Wing 3-R_sy.stl

MATERIAL LW-PLA, ~ 43 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



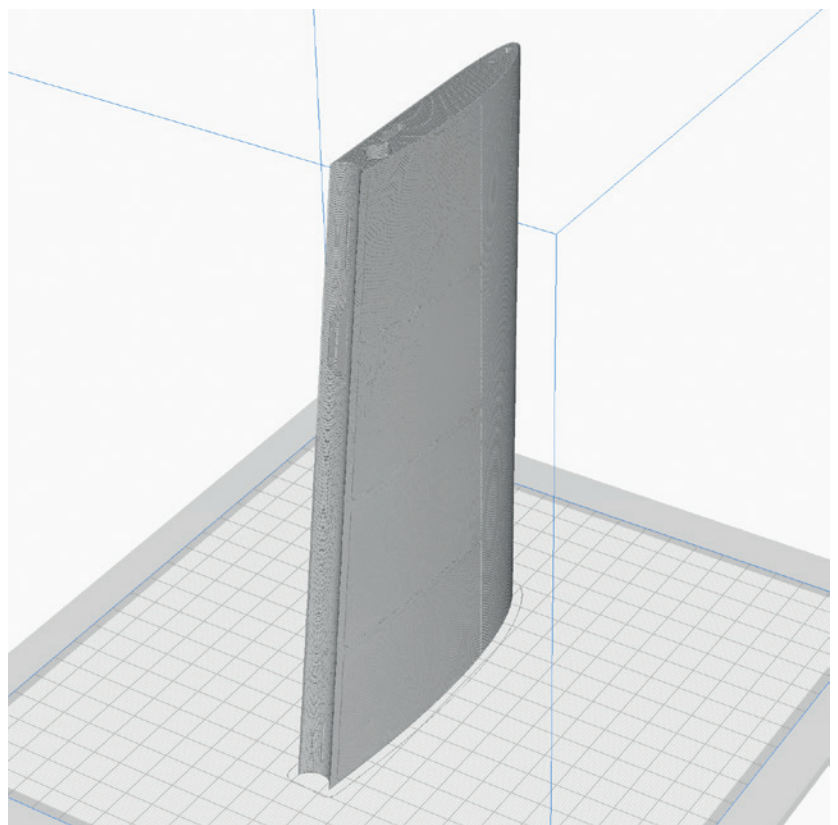
P5_Wing 4-L_sy.stl and
P5_Wing 4-R_sy.stl

MATERIAL LW-PLA, ~ 24 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!

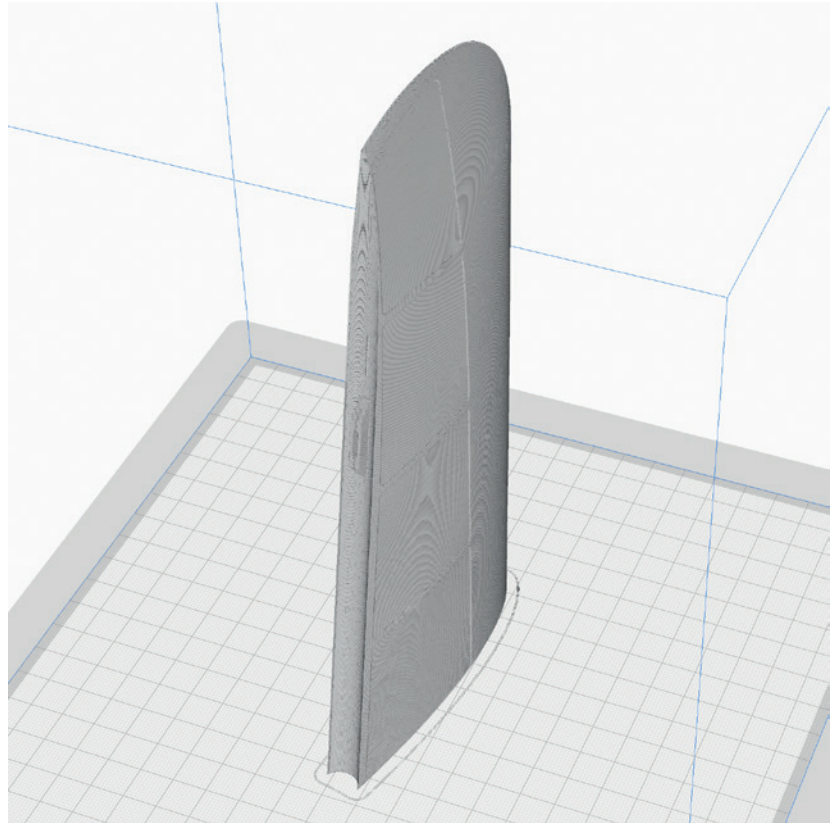
P5_Wing 5-L_sy.stl and
P5_Wing 5-R_sy.stl

MATERIAL LW-PLA, ~ 15 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



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.

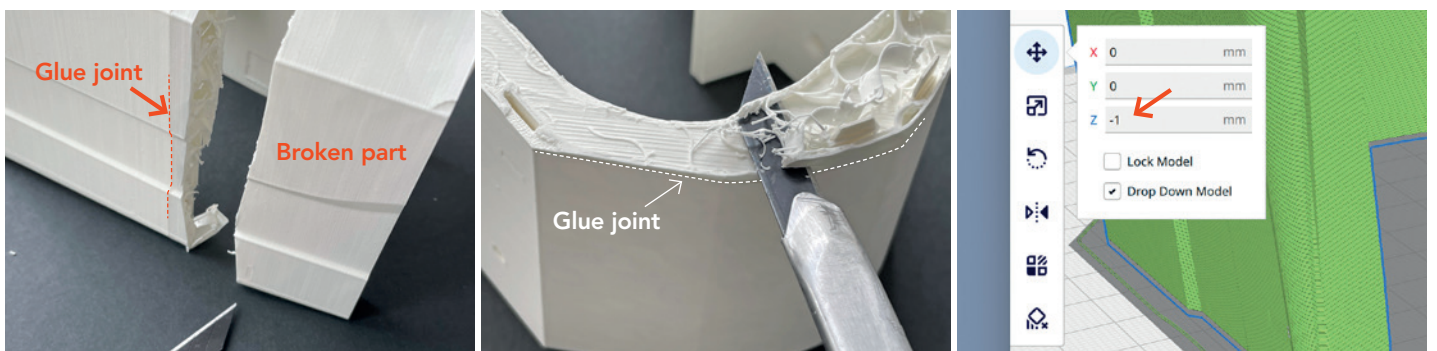
After assembly, **align the two parts exactly** and wipe off the excess CA glue from the surface with a cloth. Now spray with activator spray along the gluing surface and carefully press the parts together.

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



PROFILES 5 parts are easy to repair

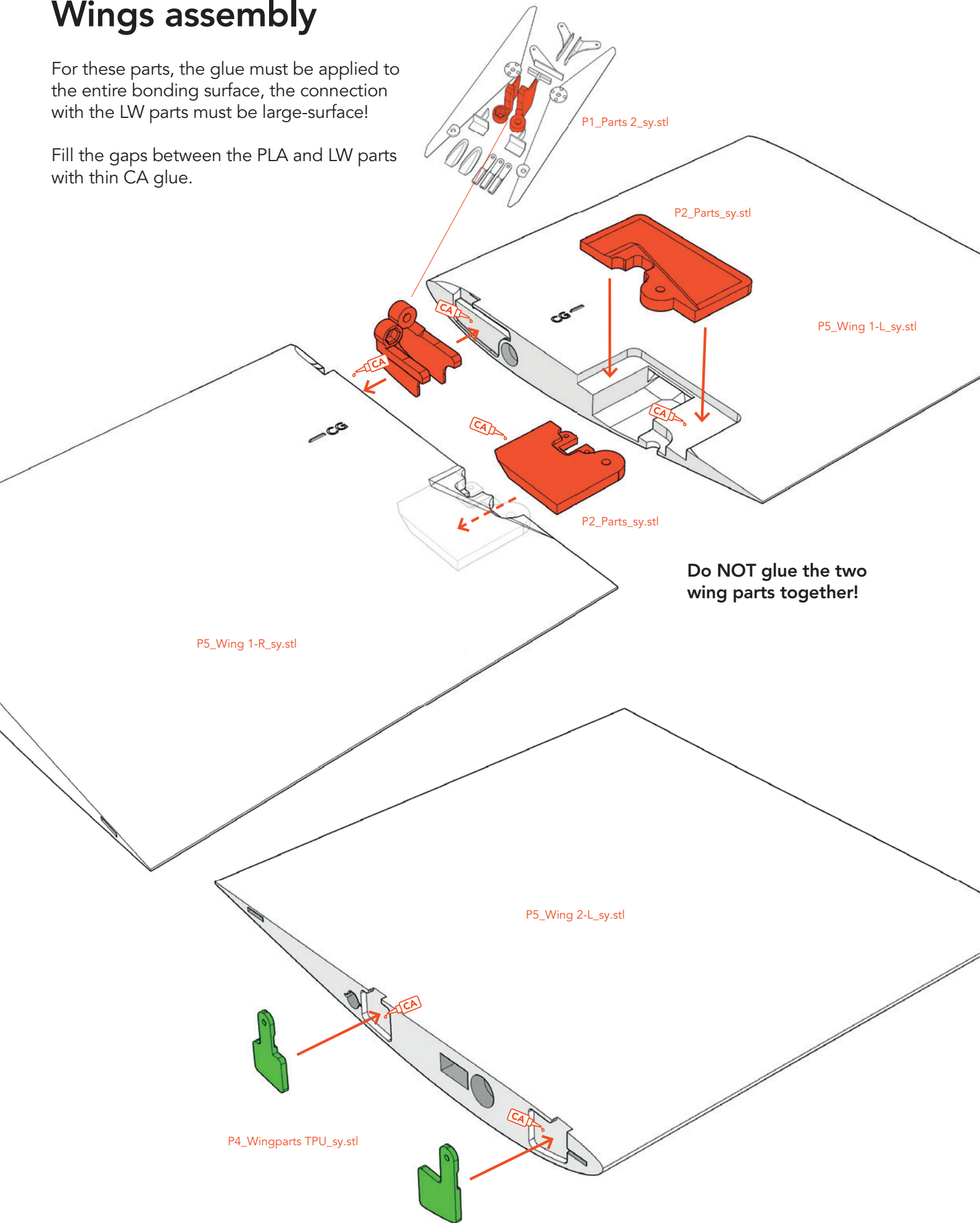
- STEP 1** Using the knife, carefully remove the damaged part about 3 mm from the glue joint between two parts.
- STEP 2** Cut wall and infill and clean the surface with sandpaper. **The top surface of the damaged part remains!**
- STEP 3** The remaining top surface is about 1 mm thick. To compensate for this, you can move the new part to be printed down the Z axis in Cura by 1 mm.



Wings assembly

For these parts, the glue must be applied to the entire bonding surface, the connection with the LW parts must be large-surface!

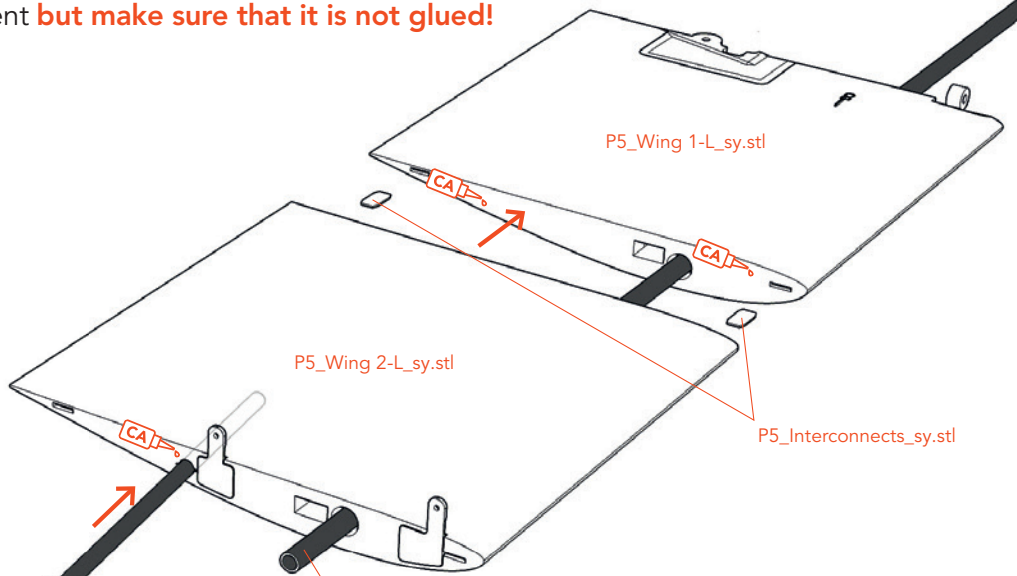
Fill the gaps between the PLA and LW parts with thin CA glue.



Use the 8mm carbon tube for alignment **but make sure that it is not glued!**

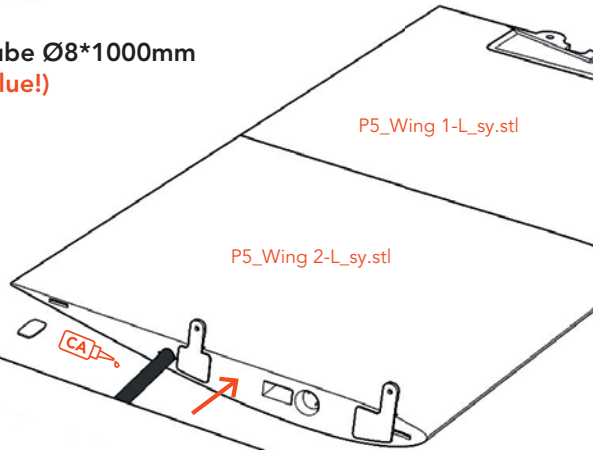


The 6mm carbon tube **must be glued in place.**

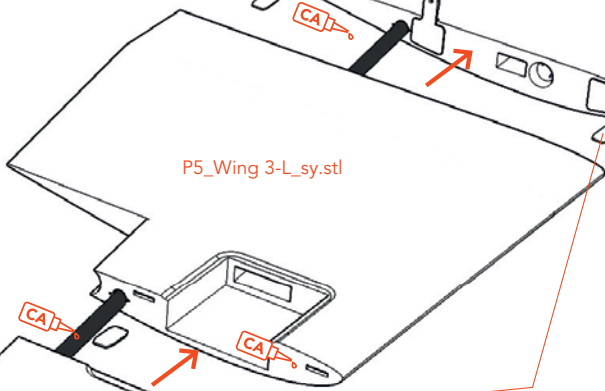


Carbon tube $\text{\O}8*1000\text{mm}$
(Do not glue!)

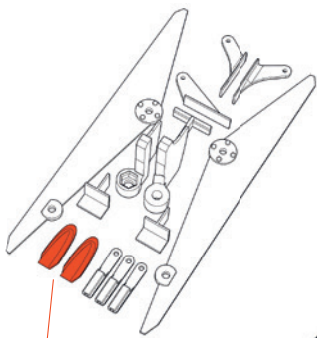
Carbon tube $\text{\O}6*500\text{mm}$



P5_Wing 3-L_sy.stl



P5_Wing 4-L_sy.stl



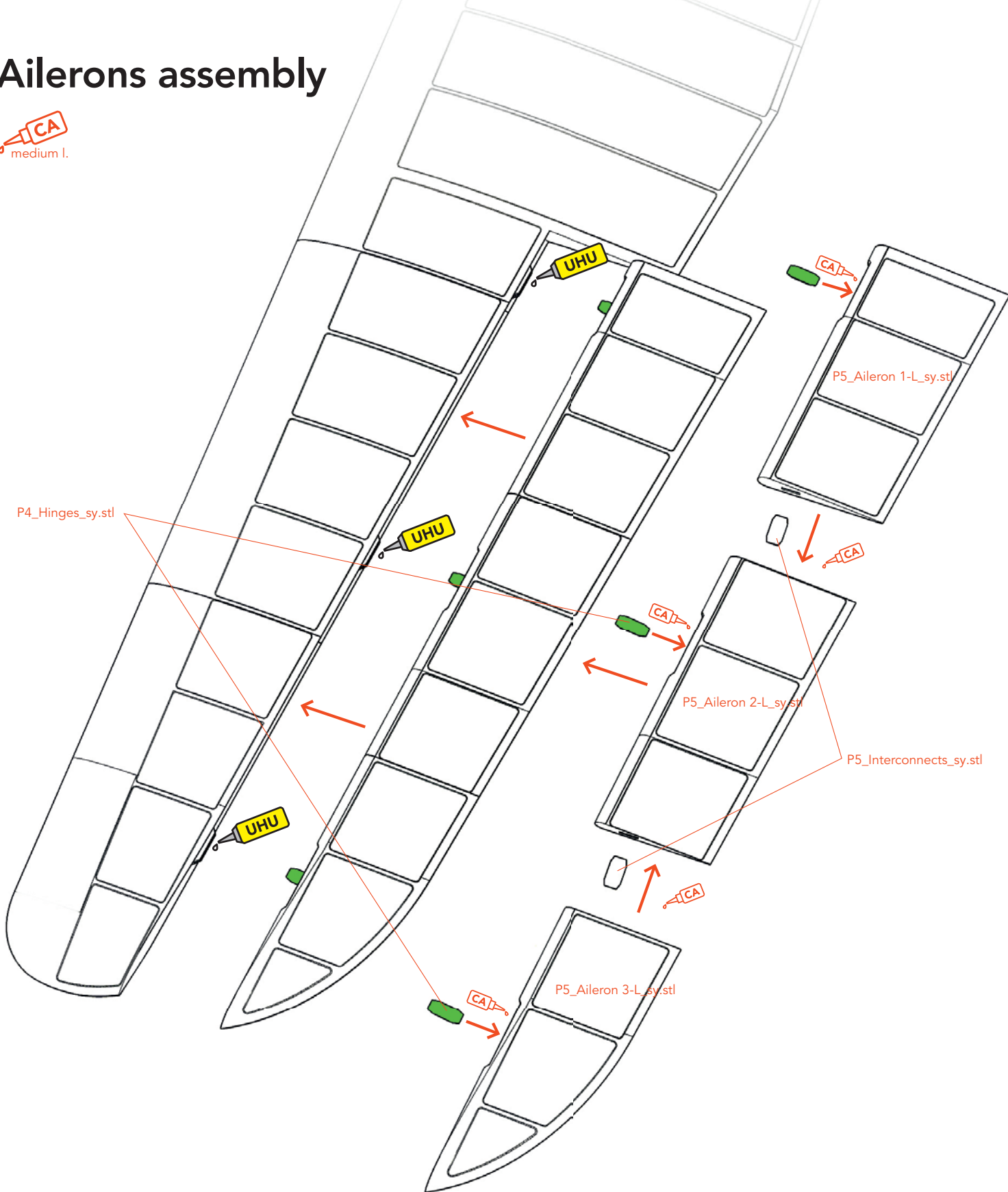
P1_Parts 2_sy.stl

P5_Wing 5-L_sy.stl

First glue wing 3 to wing 2 with **medium CA glue**, then set the wing up vertically and let **thin CA glue** run into the gap of the 6mm carbon tube.

The tube must be well bonded to the wing. Do the same for Wing 4.

Ailerons assembly

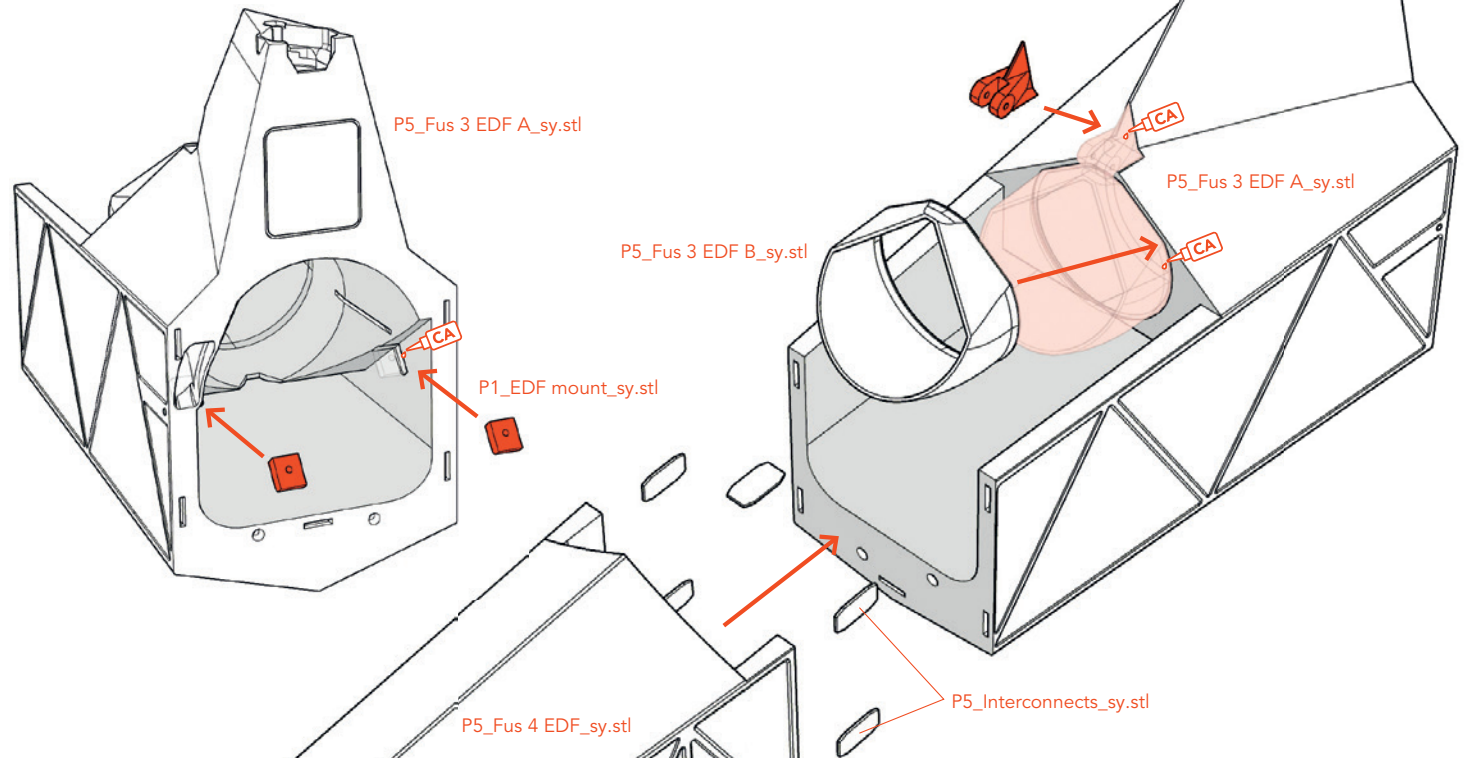


Installing the hinges

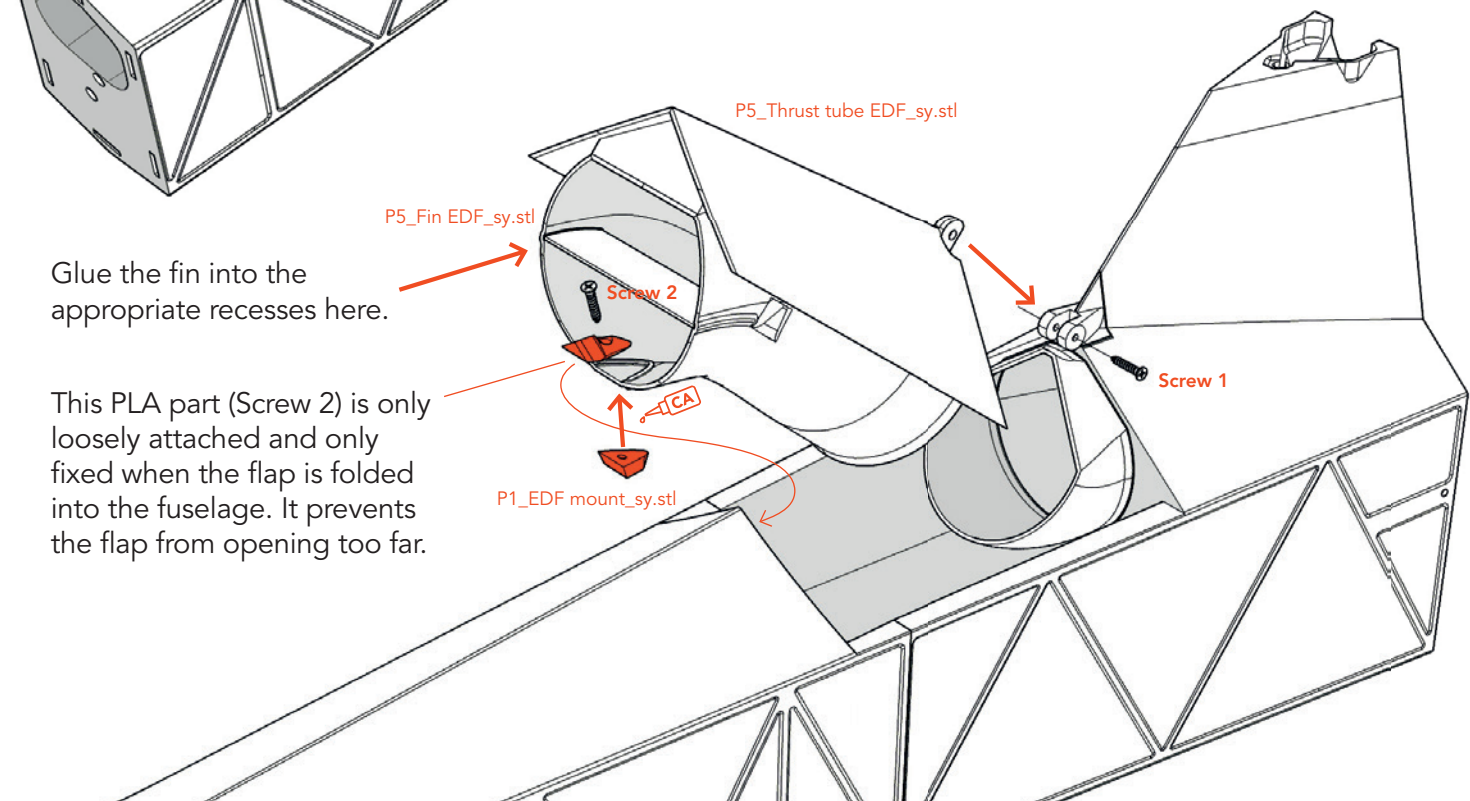
First glue the hinges into the aileron with **thin CA glue**. **Make sure that there is no glue on the protruding hinge to maintain flexibility.** To bond the aileron to the wing, use an adhesive that cures **slowly**, such as **UHU All Purpose Adhesive**. **Do not put the glue on the hinges**, but on the gaps in the wing, so that the movable part of the hinge between the wing and the aileron remains free of glue. Then push the aileron all the way to the wing and wait until the glue is dry.

Fuselage assembly – Hidden EDF version

If you want to build your Slingsby as a pure glider you can skip this step.



Screw the thrust tube (Screw 1) to the joint on the fuselage and clean the parts with the knife if necessary. **The flap must be able to move without resistance and fall down under its own weight.**



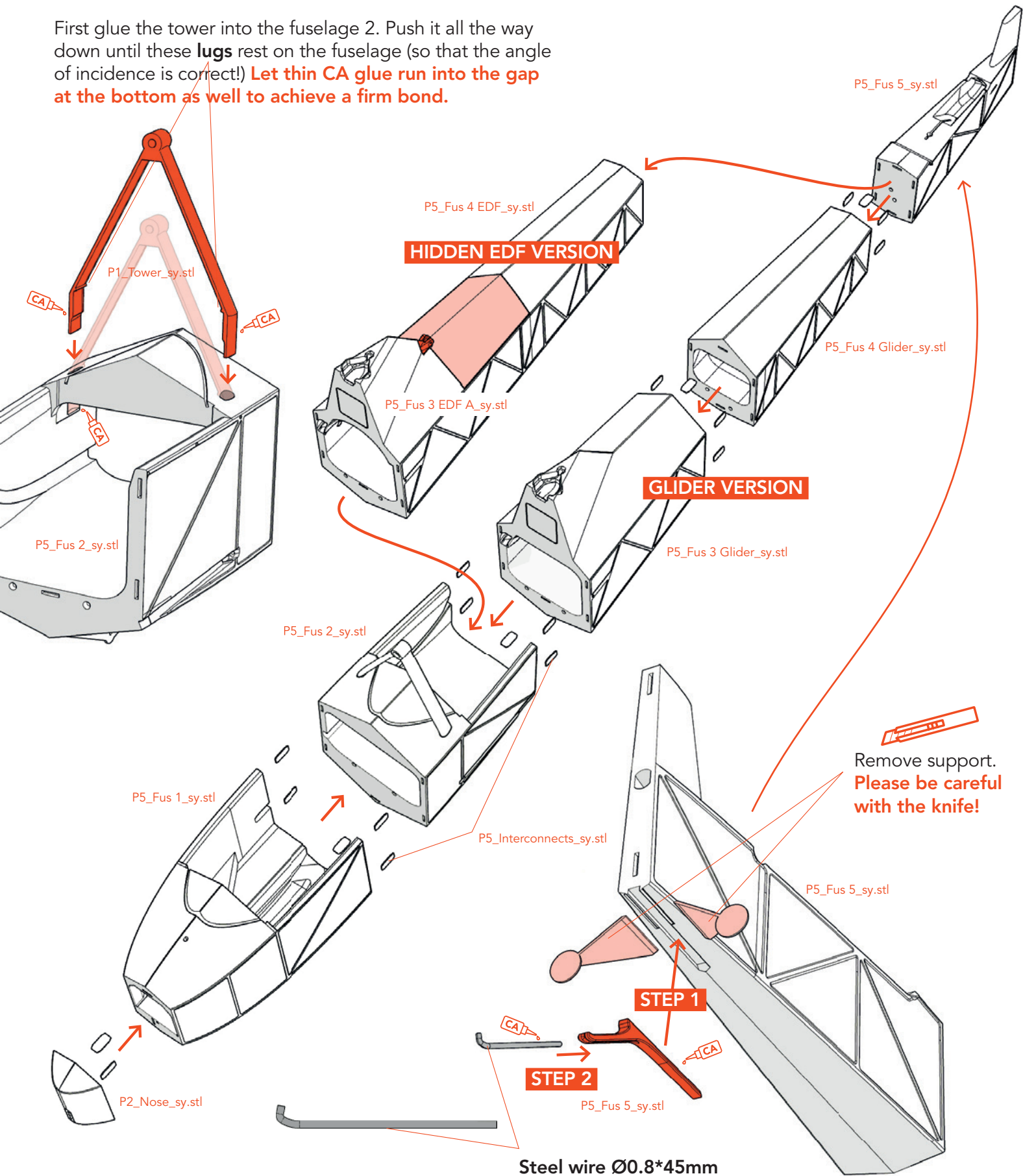
Glue the fin into the appropriate recesses here.

This PLA part (Screw 2) is only loosely attached and only fixed when the flap is folded into the fuselage. It prevents the flap from opening too far.

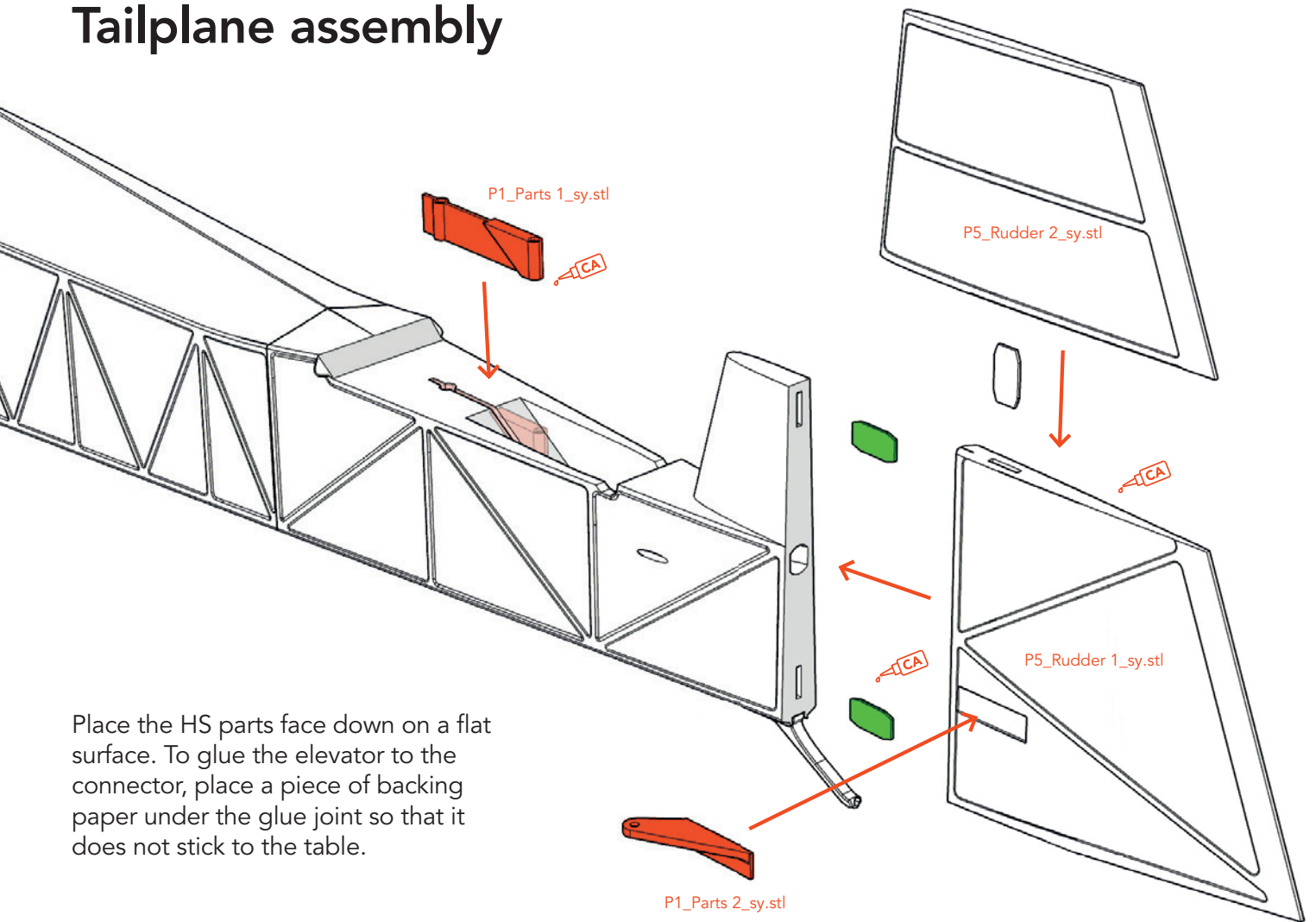
Fuselage assembly

IMPORTANT at this point you have to decide if you want to build the **EDF version** or the **Glider version**!

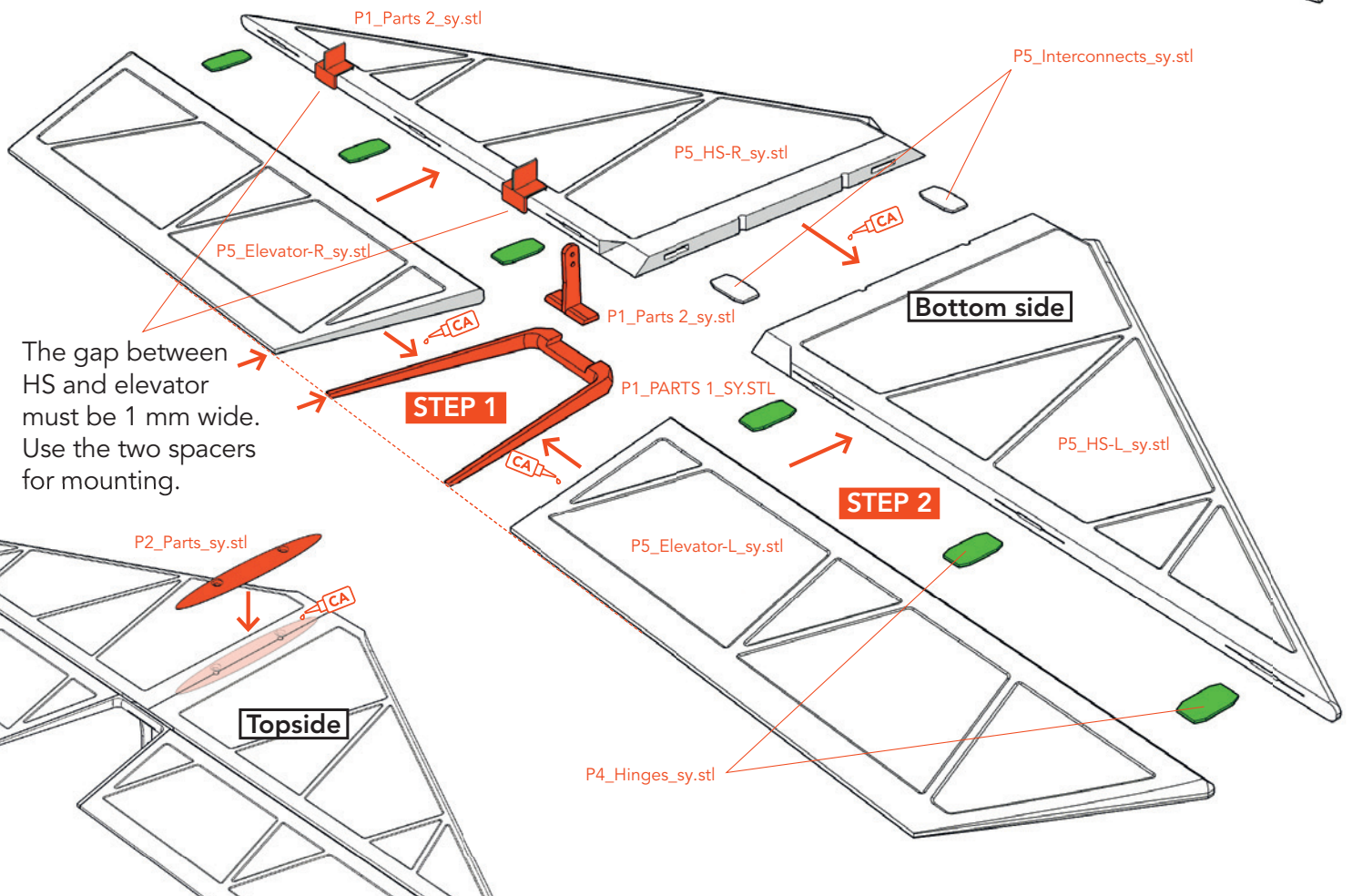
First glue the tower into the fuselage 2. Push it all the way down until these **lugs** rest on the fuselage (so that the angle of incidence is correct!) **Let thin CA glue run into the gap at the bottom as well to achieve a firm bond.**



Tailplane assembly



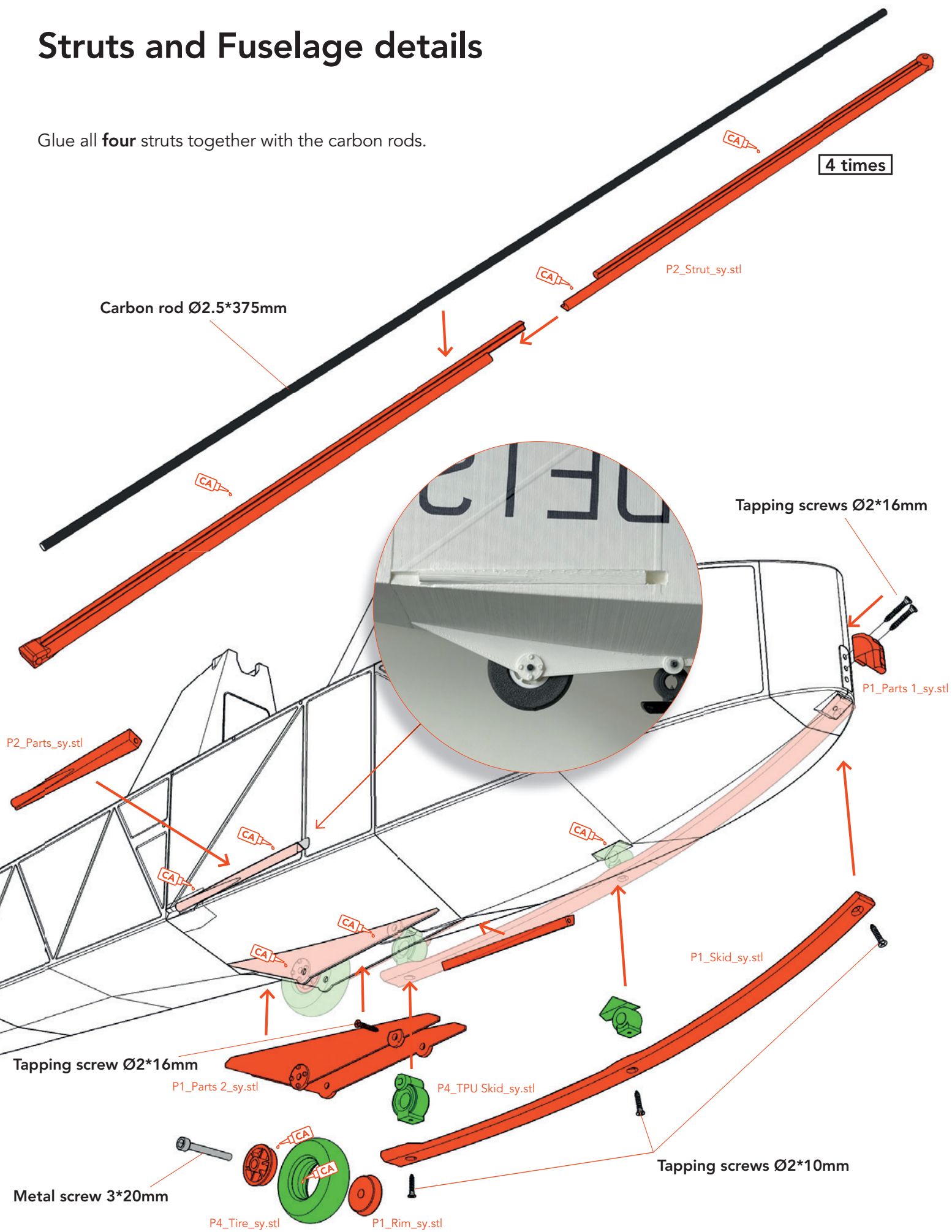
Place the HS parts face down on a flat surface. To glue the elevator to the connector, place a piece of backing paper under the glue joint so that it does not stick to the table.



The gap between HS and elevator must be 1 mm wide. Use the two spacers for mounting.

Struts and Fuselage details

Glue all **four** struts together with the carbon rods.

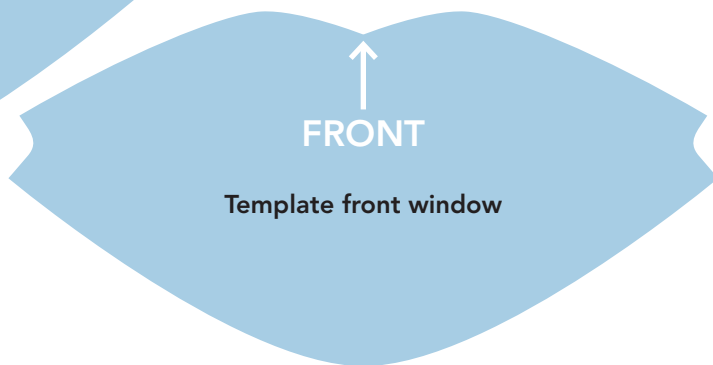
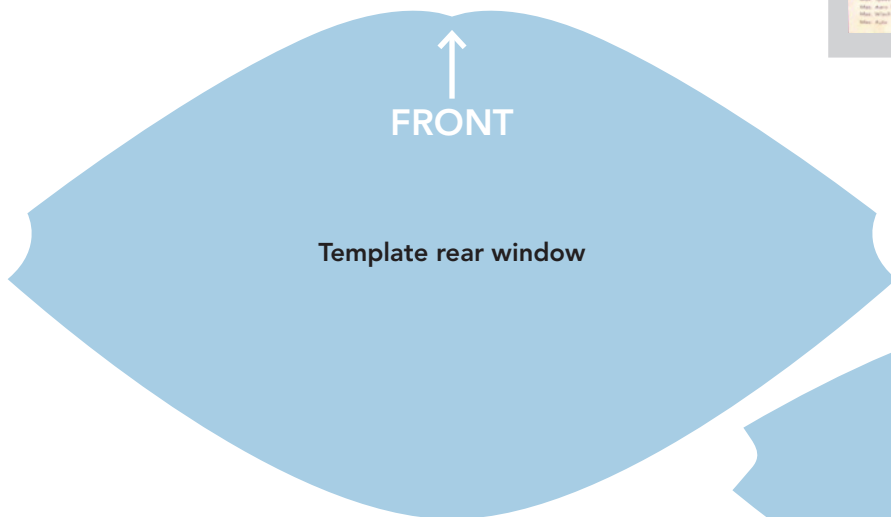


Cokpit and glass canopy

Print this page and use the glass template to cut out the foils and instrument panels for the cockpits.

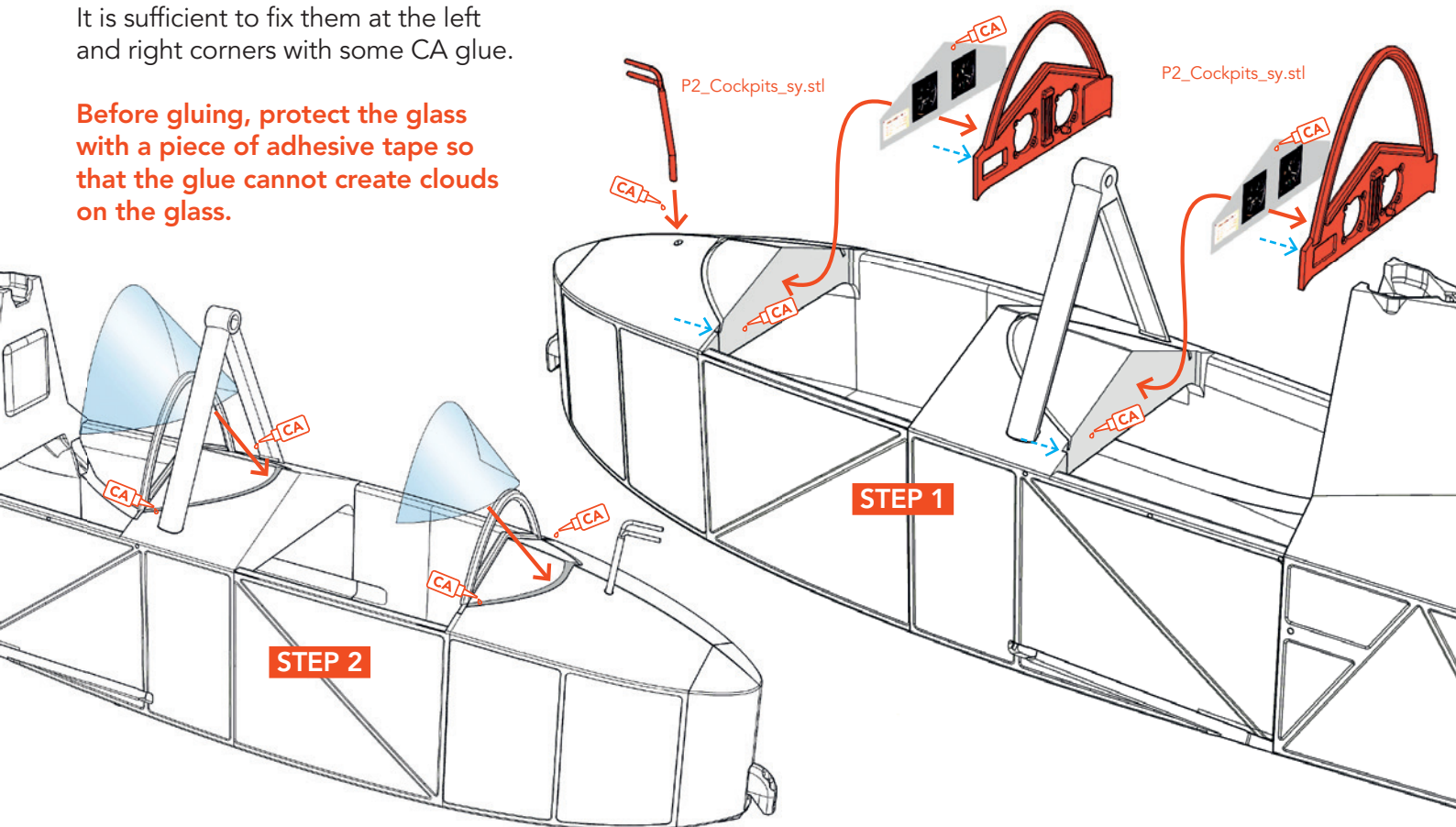
IMPORTANT: the print must be set to 100% page size, so that the size fits exactly!

Fix the foil on the printout and cut out the windows exactly with the knife.



Bend the foils and insert them from behind into the slot on the fuselage. It is sufficient to fix them at the left and right corners with some CA glue.

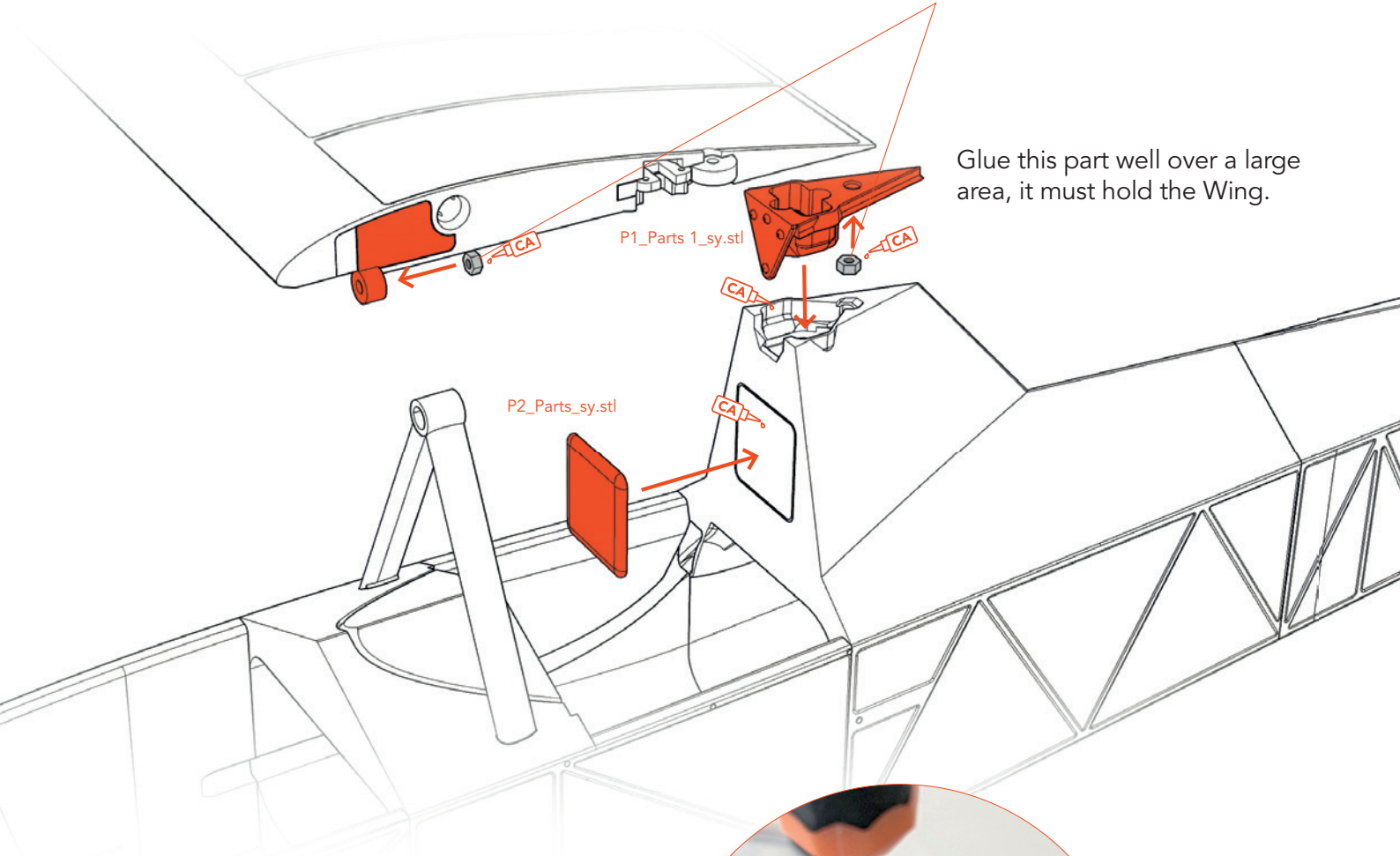
Before gluing, protect the glass with a piece of adhesive tape so that the glue cannot create clouds on the glass.



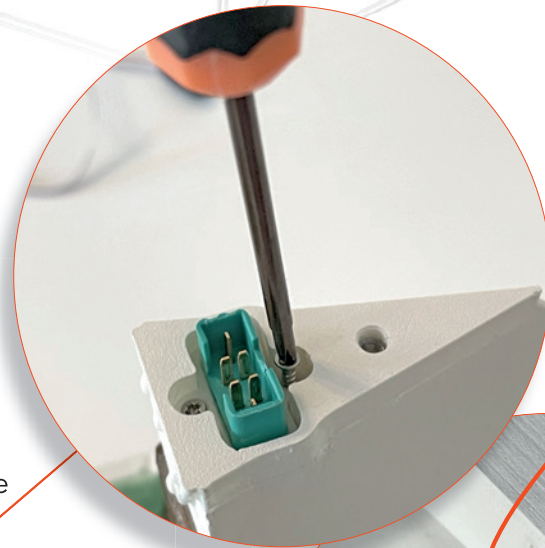
Wing mount

Nuts for metal screws 3*20mm

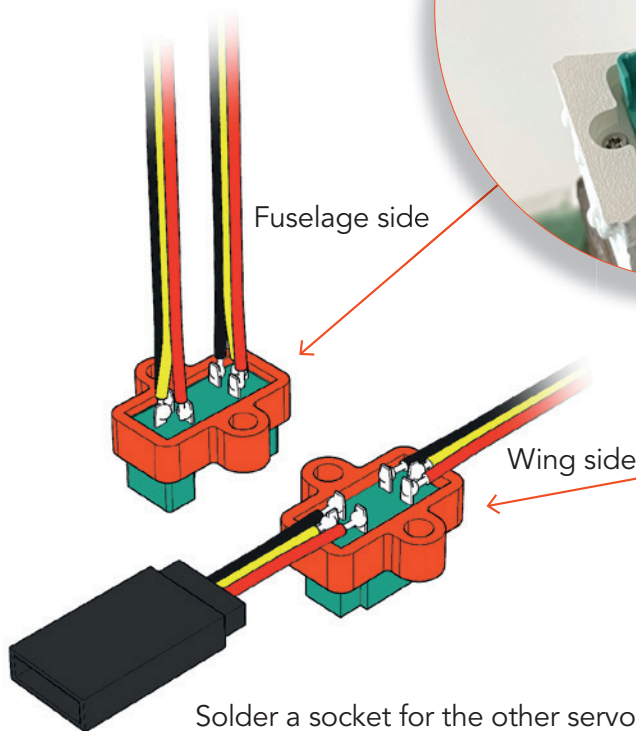
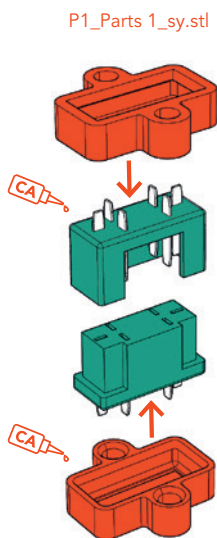
Glue this part well over a large area, it must hold the Wing.



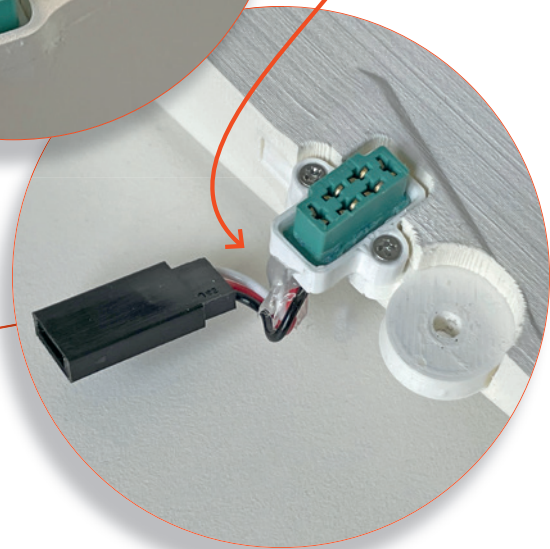
If you want to use MPX connectors as a quick connector for the **wingservos**, you have to solder the wiring as shown here:



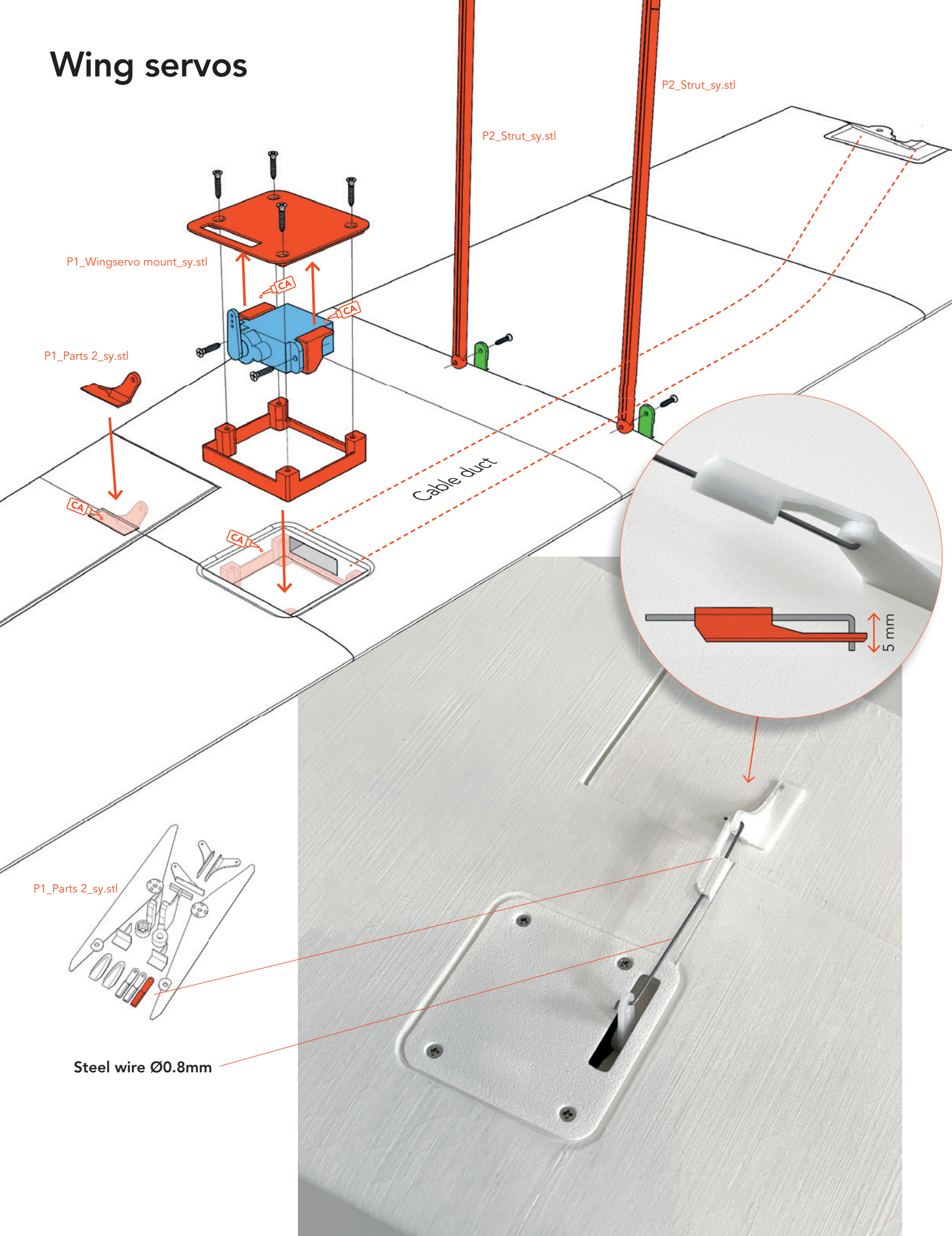
Secure the solder joints with a hot glue gun or epoxy resin



Solder a socket for the other servo cable.



Wing servos



P2_Strut_sy.stl

P2_Strut_sy.stl

P1_Wingservo mount_sy.stl

P1_Parts 2_sy.stl

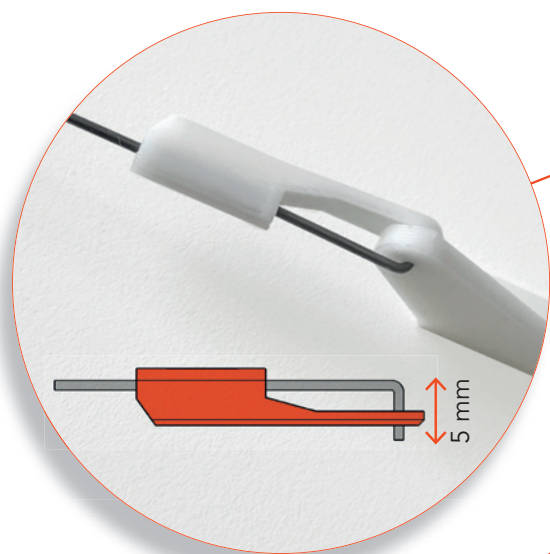
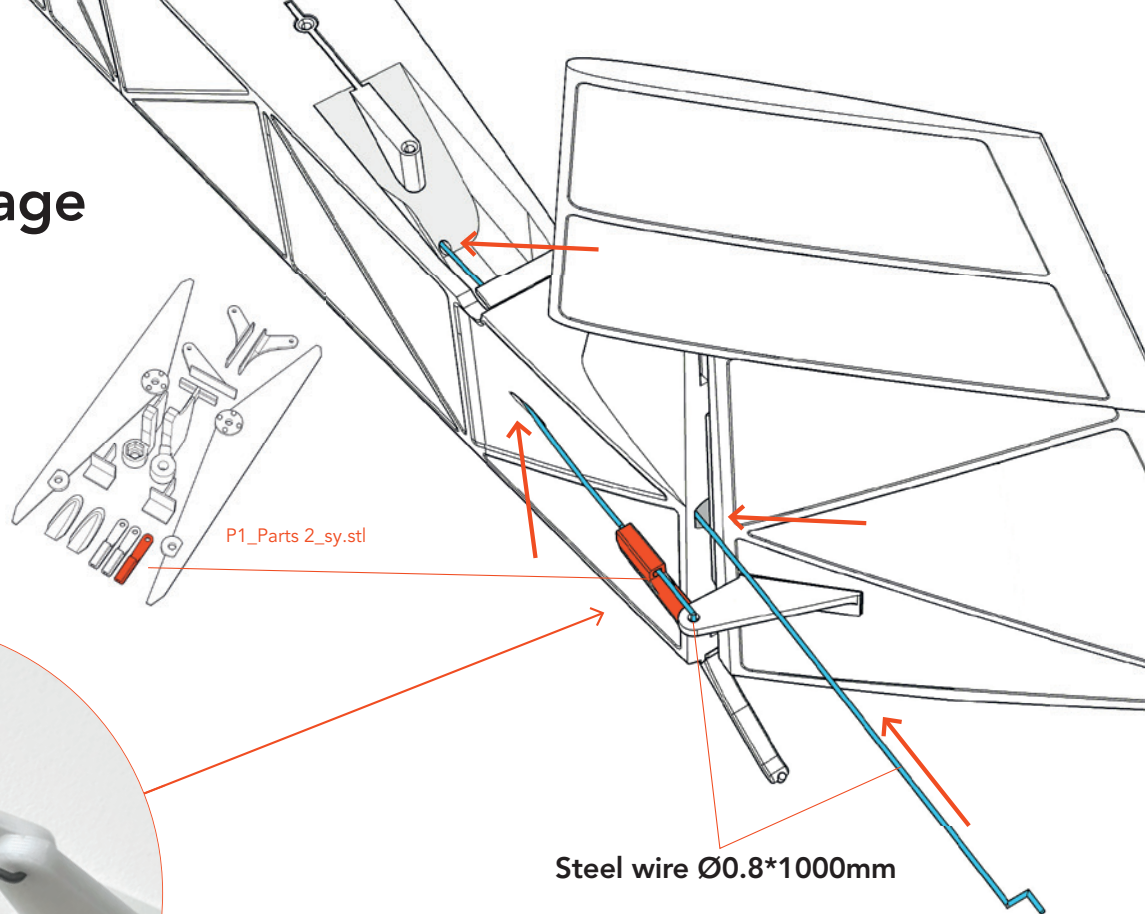
Cable duct

5 mm

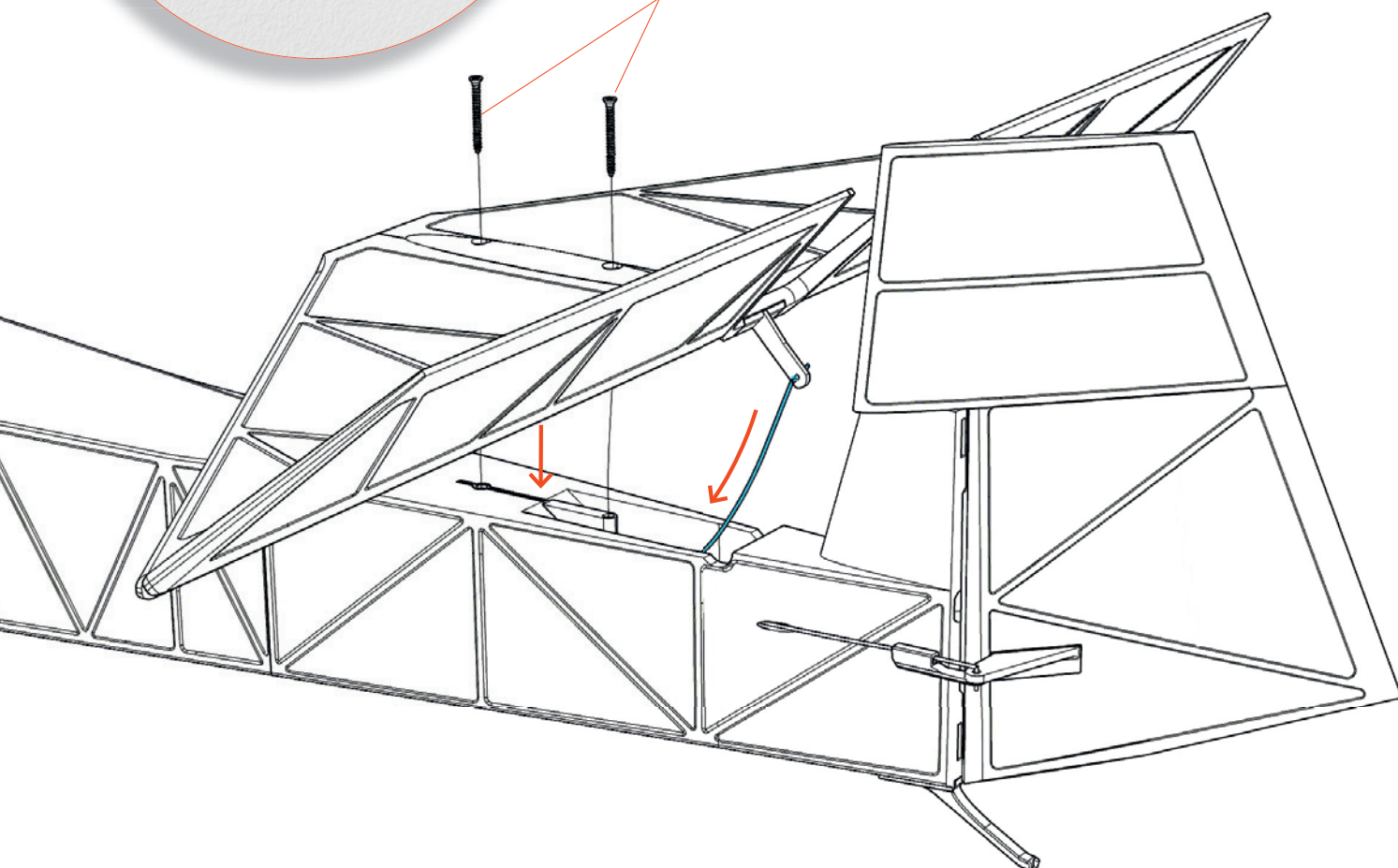
P1_Parts 2_sy.stl

Steel wire Ø0.8mm

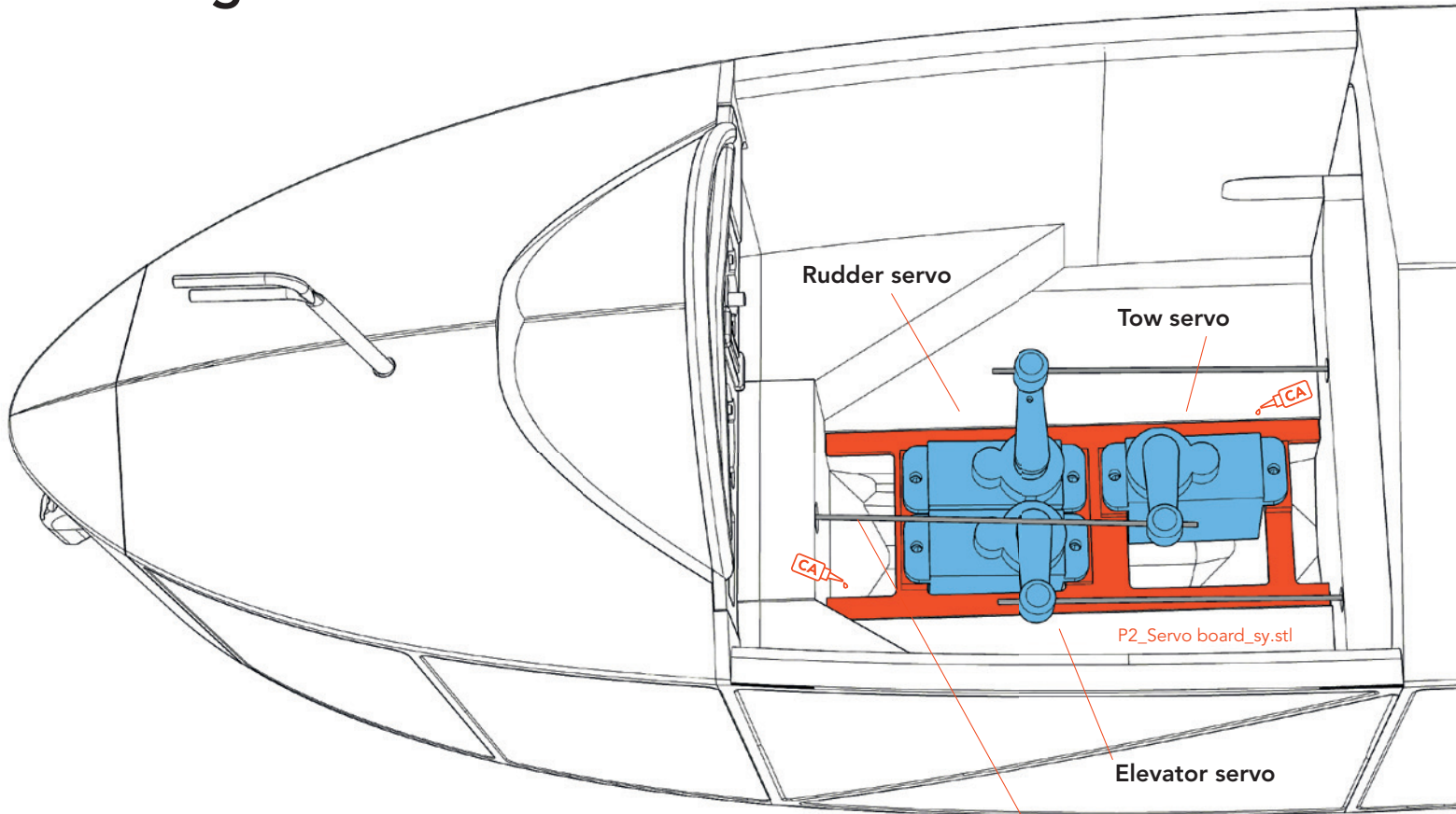
Tailplane linkage



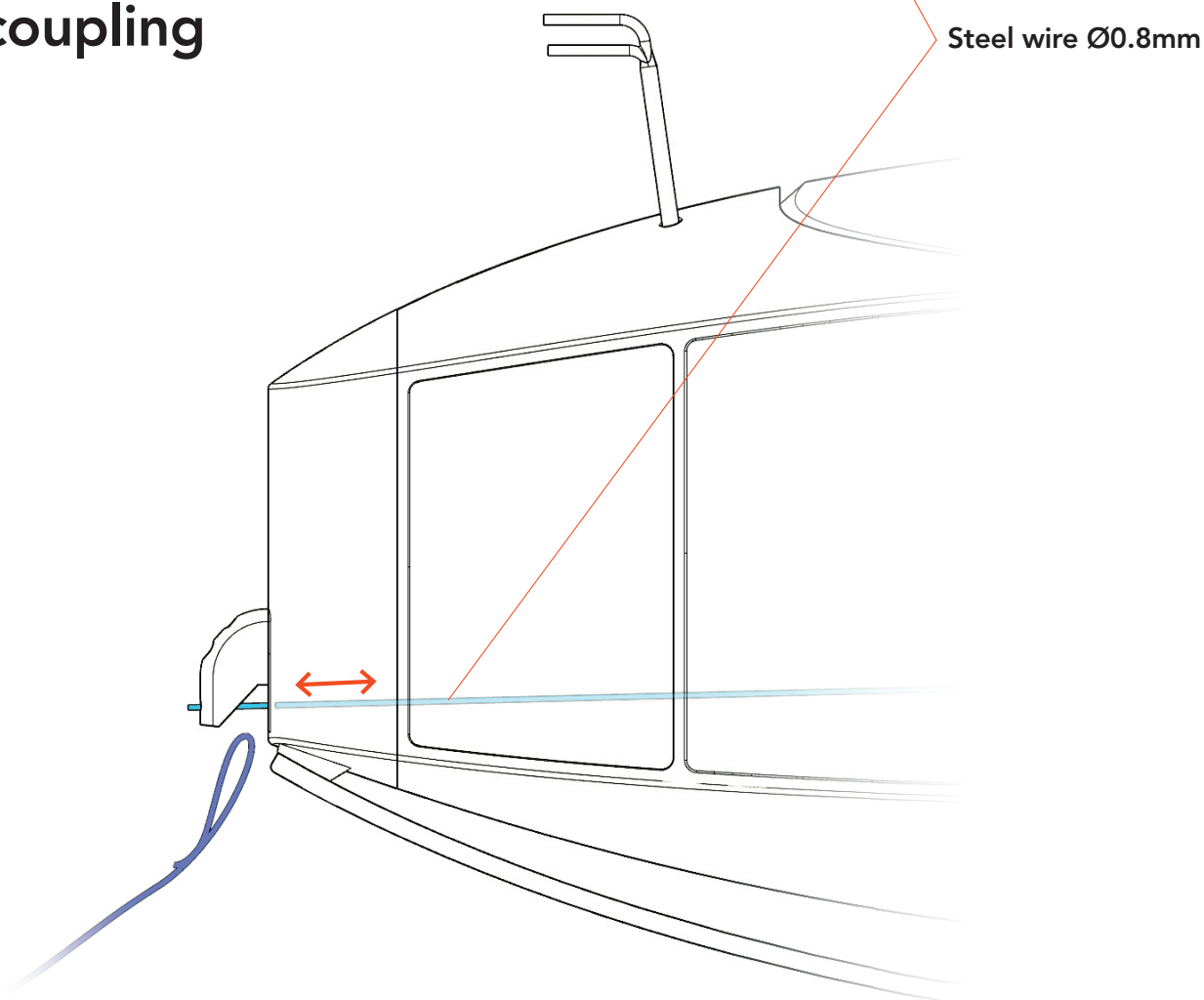
Tapping screws Ø2*20mm



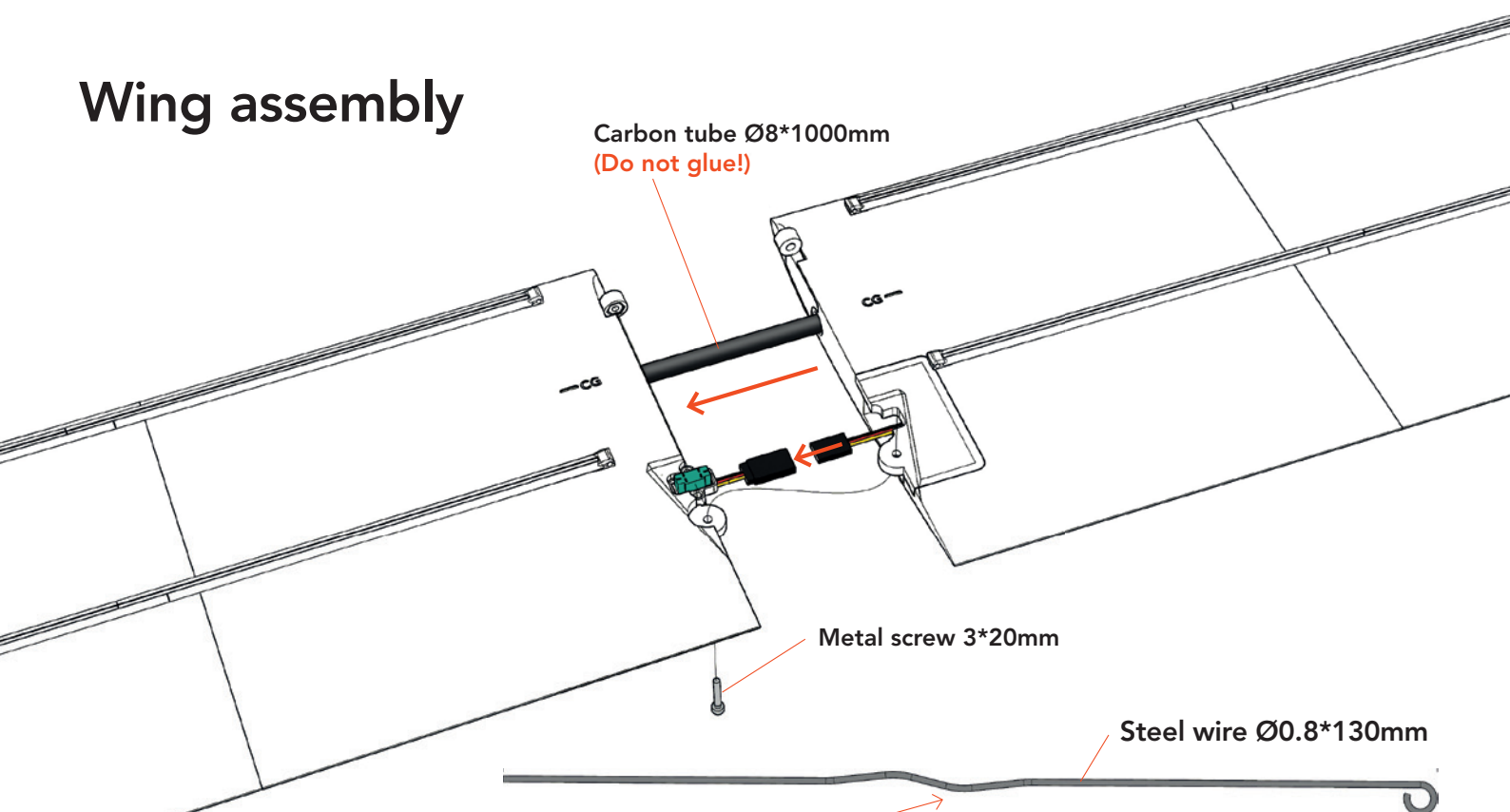
Fuselage servos



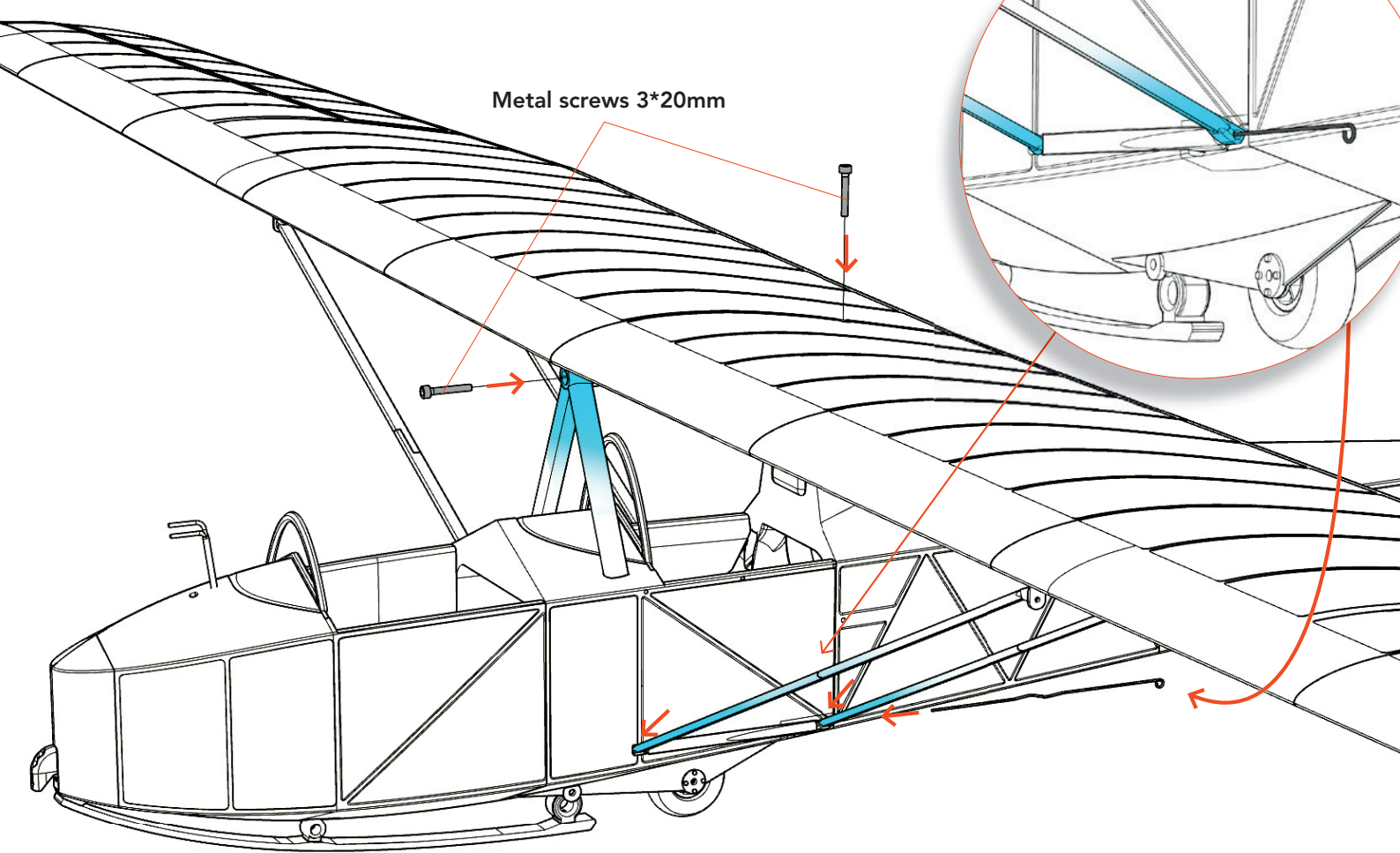
Tow coupling



Wing assembly



Bend two steel wires as shown here in original size.
Bend a „double bend“ in the middle that holds the wire.

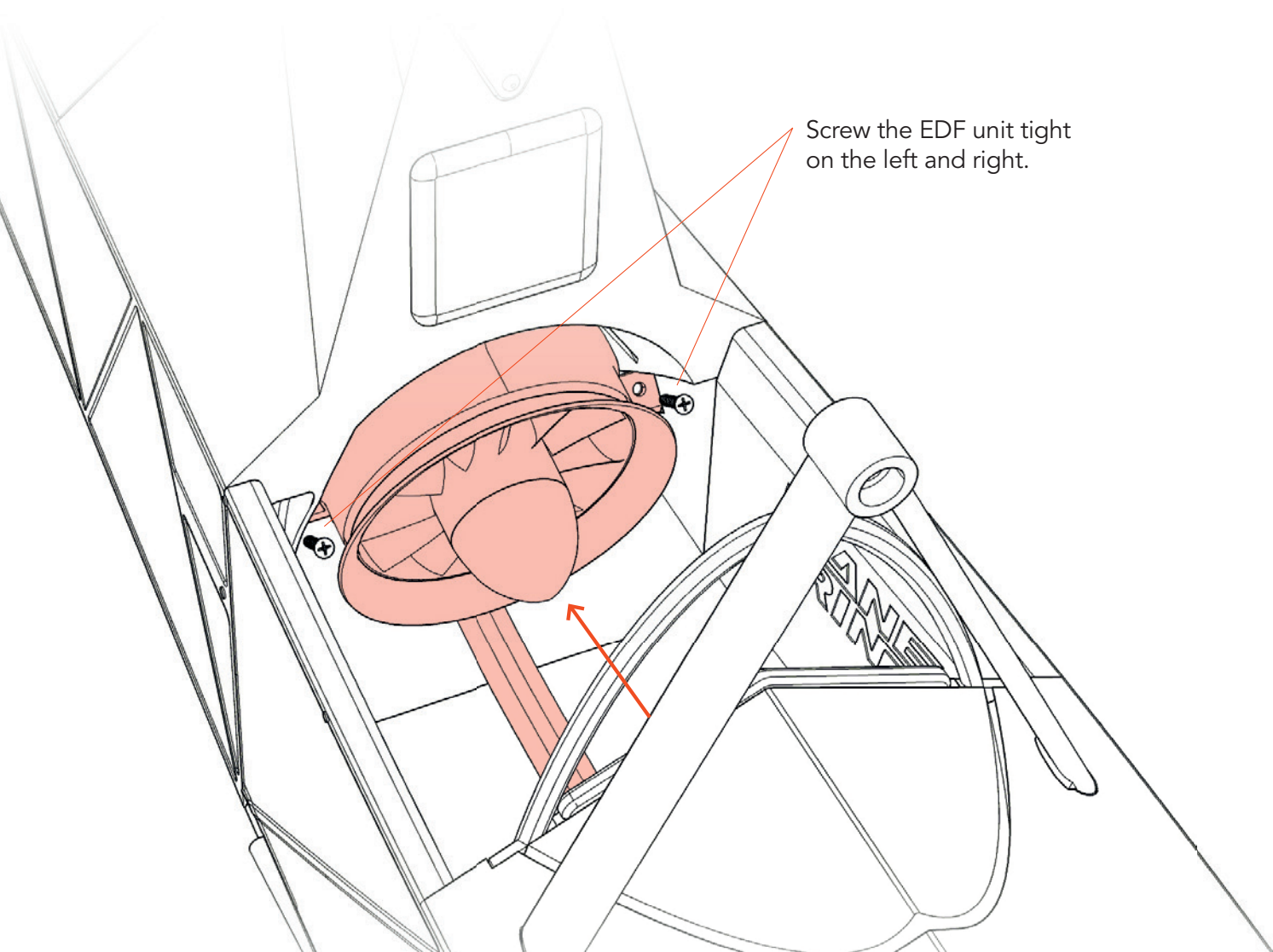
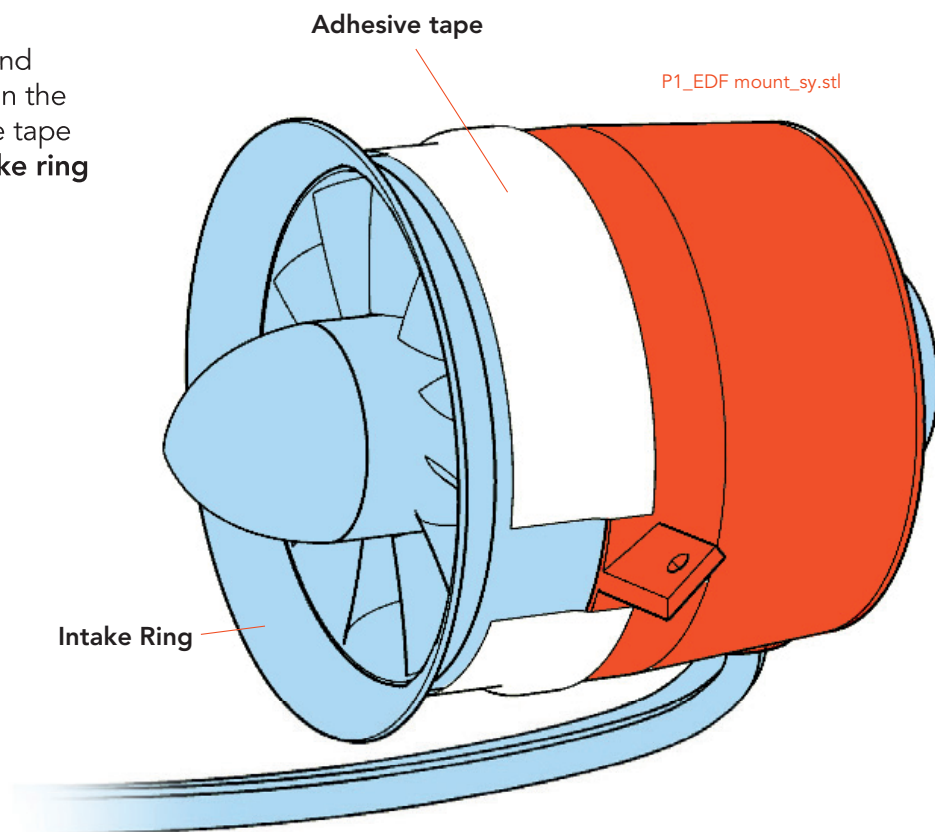


Hidden EDF mounting

Insert the EDF into the EDF tube and feed the cables through the hole on the bottom. Then tape it with adhesive tape and **make sure to mount the intake ring** that comes with the EDF!

Without this intake ring the EDF has about 40% less power!

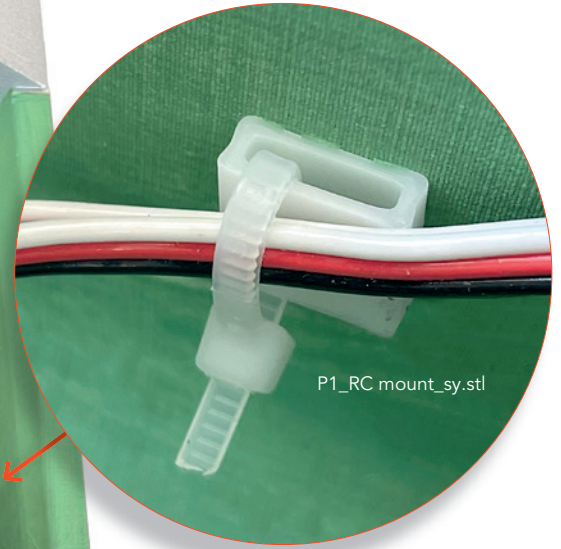
Also seal the cables at the outlet with adhesive tape.



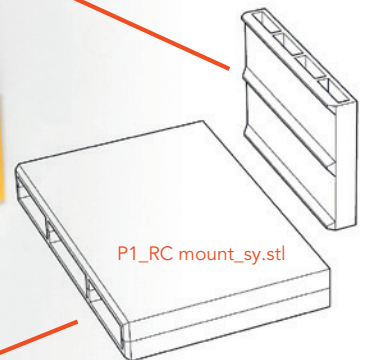
RC components

EDF

Make sure that all cables in the area of the EDF are well secured and cannot be sucked in!



Controller



Glue the **battery plate** and the **controller plate** to the fuselage.

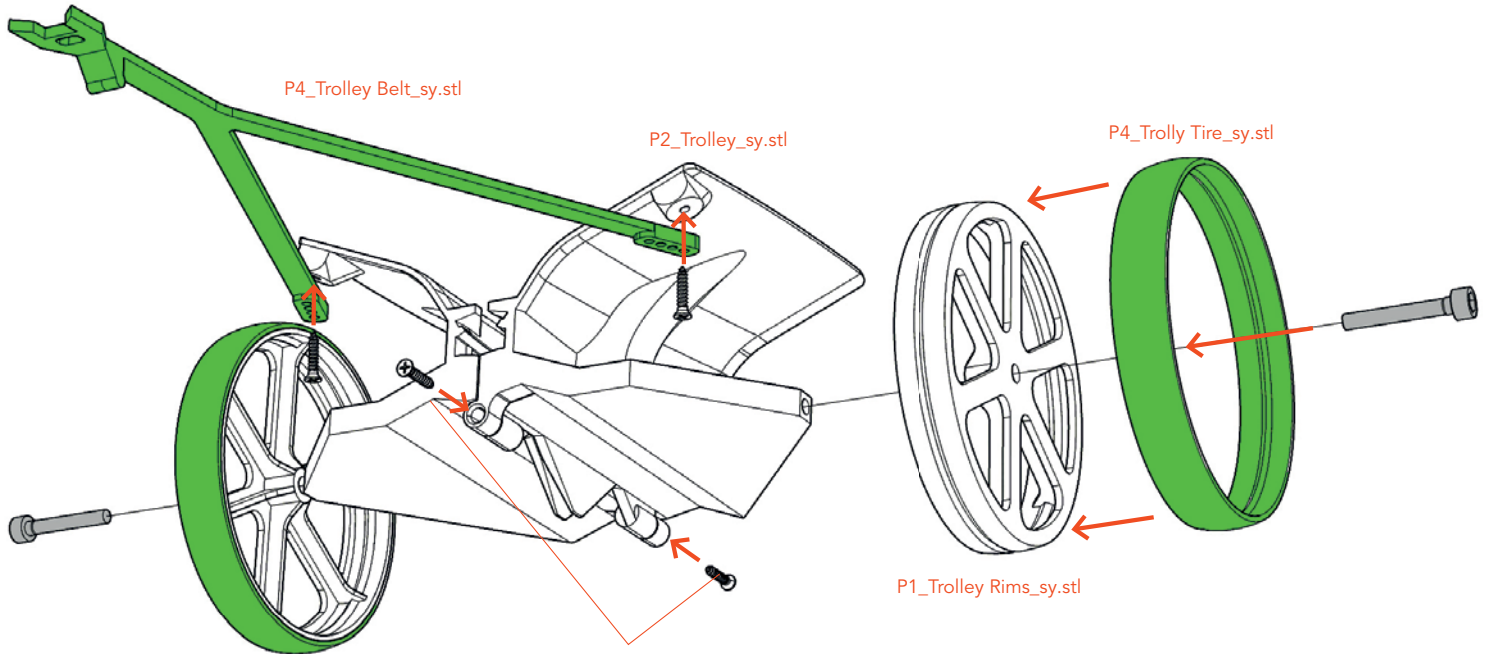
Attach the battery with Velcro and the controller with cable ties. **Note that the battery must not slip backwards even during jerky tows!**

Receiver

Battery

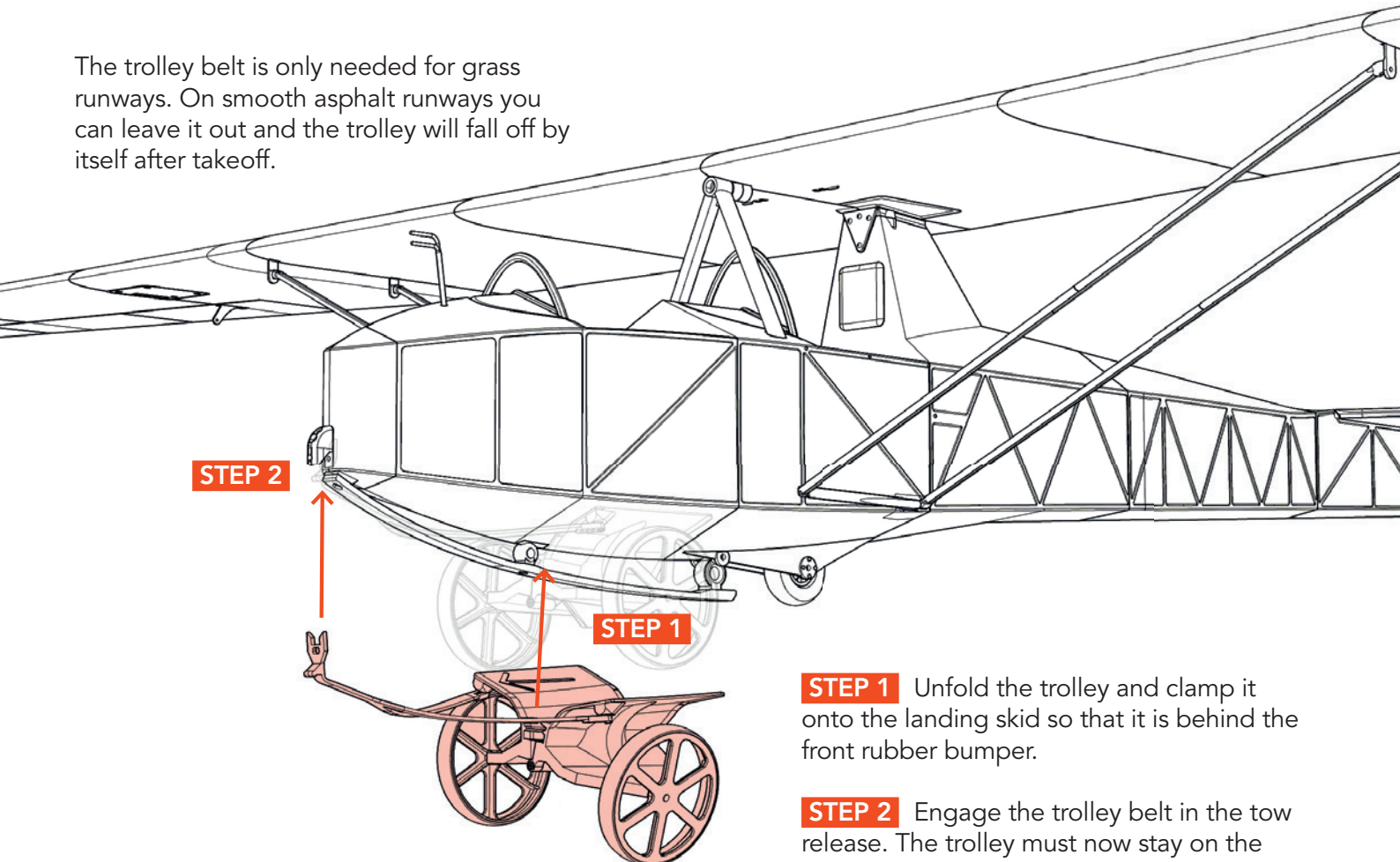
Launch trolley for EDF ground launches

This launch trolley is **only** needed for the EDF version at ground launch – not for towing.



Tighten this screws only so that the two parts fold easily.

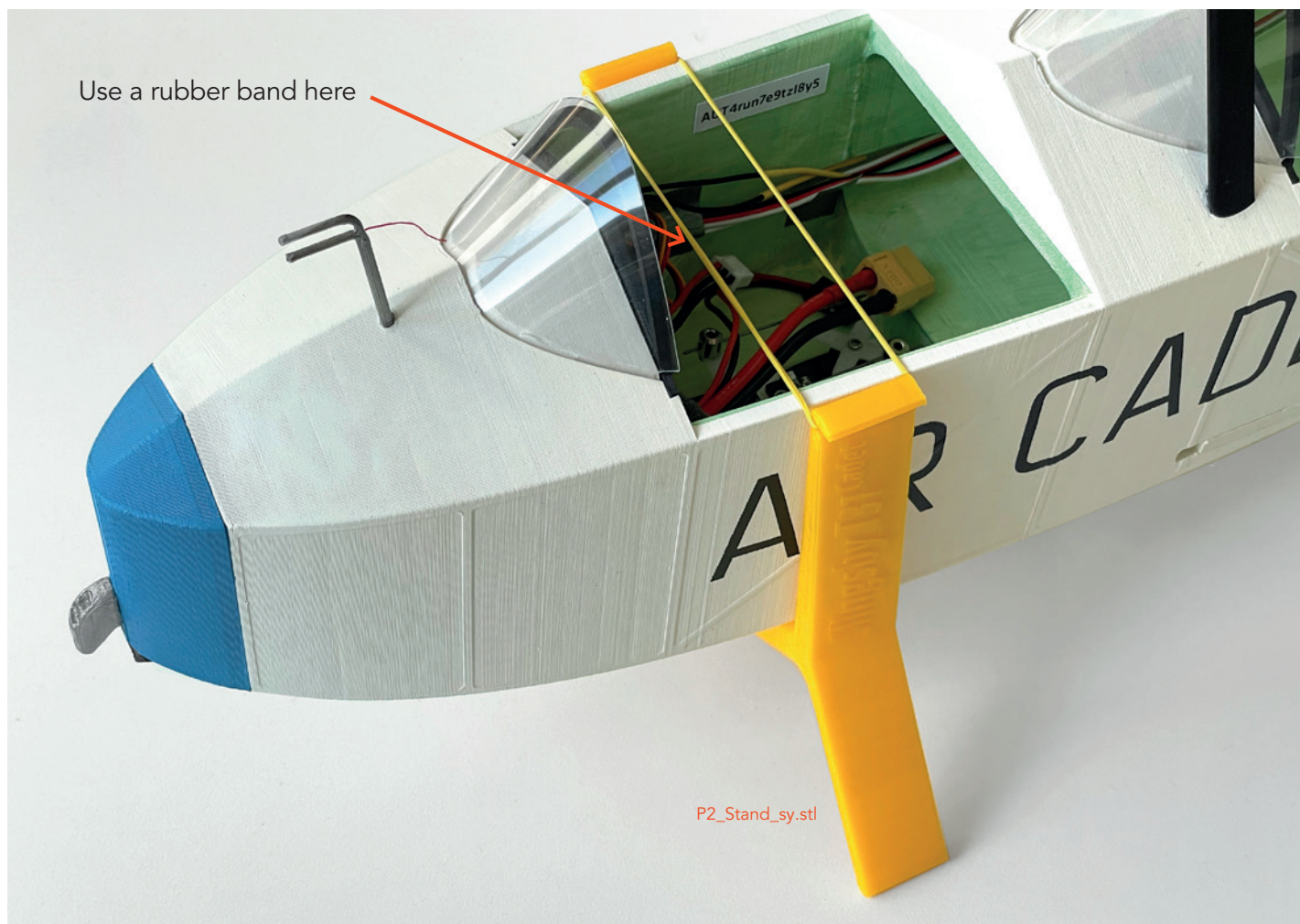
The trolley belt is only needed for grass runways. On smooth asphalt runways you can leave it out and the trolley will fall off by itself after takeoff.



STEP 1 Unfold the trolley and clamp it onto the landing skid so that it is behind the front rubber bumper.

STEP 2 Engage the trolley belt in the tow release. The trolley must now stay on the fuselage by itself and will be released via the remote control shortly after take-off.

Practical stand for transportation



Tips for flying

As with many vintage gliders, the Slingsby must be **clearly supported with the rudder** when changing turns. Controlled only with the aileron, the fuselage will push sideways and not lie nicely in the airflow. If your skills do not yet allow it, **you can also mix the rudder to the ailerons (Combi switch)**. It is better to control aileron and rudder independently, because in some cases you should control in the opposite direction.

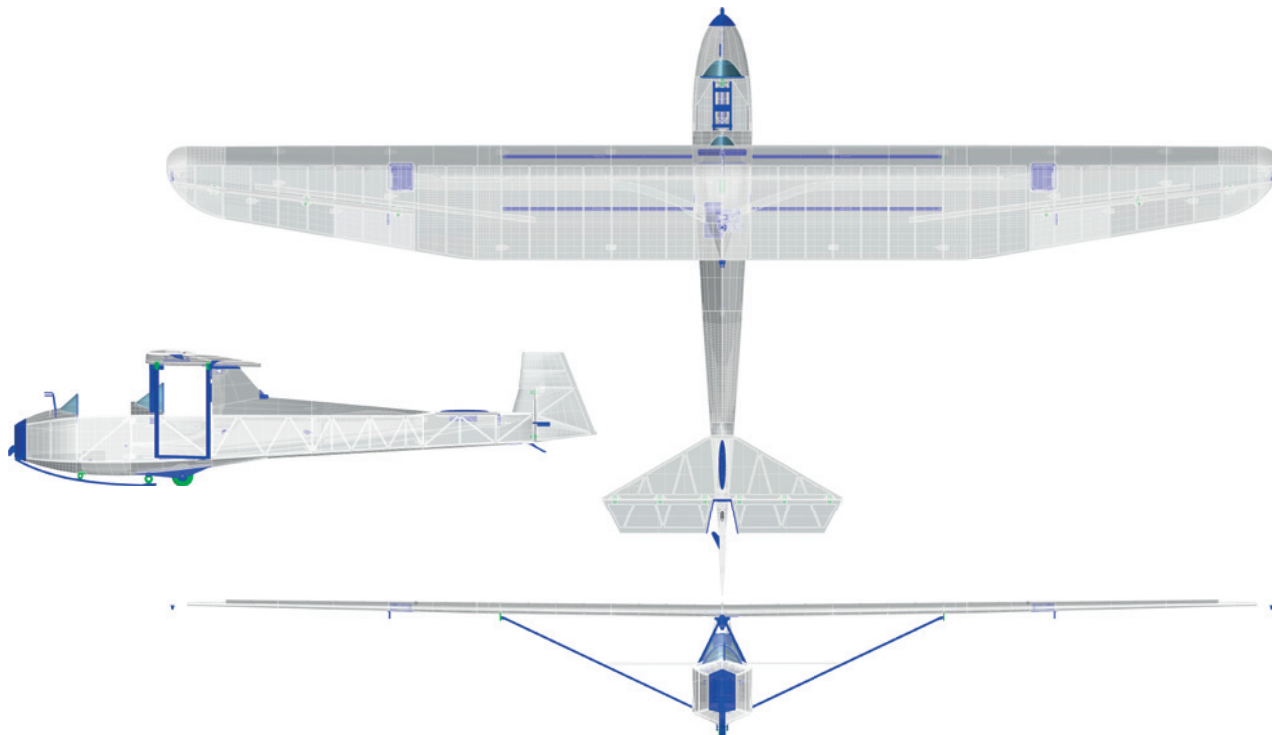
The Slingsby T31 Cadet has no flaps but it is great for **sideslip as a braking aid**. To reduce altitude on approach, angle the wings with the aileron and correct with the rudder in the other direction to maintain the desired flight direction. Support a little with the elevator. This flight condition has the **same effect as the use of airbrakes**. Straighten the aircraft in time before touchdown and make sure it does not slow down too much. **You can practice this very easily at higher altitudes.**

Technical specifications

WINGSPAN 2000 mm/78.8 inches

LENGTH 1058 mm/41.6 inches

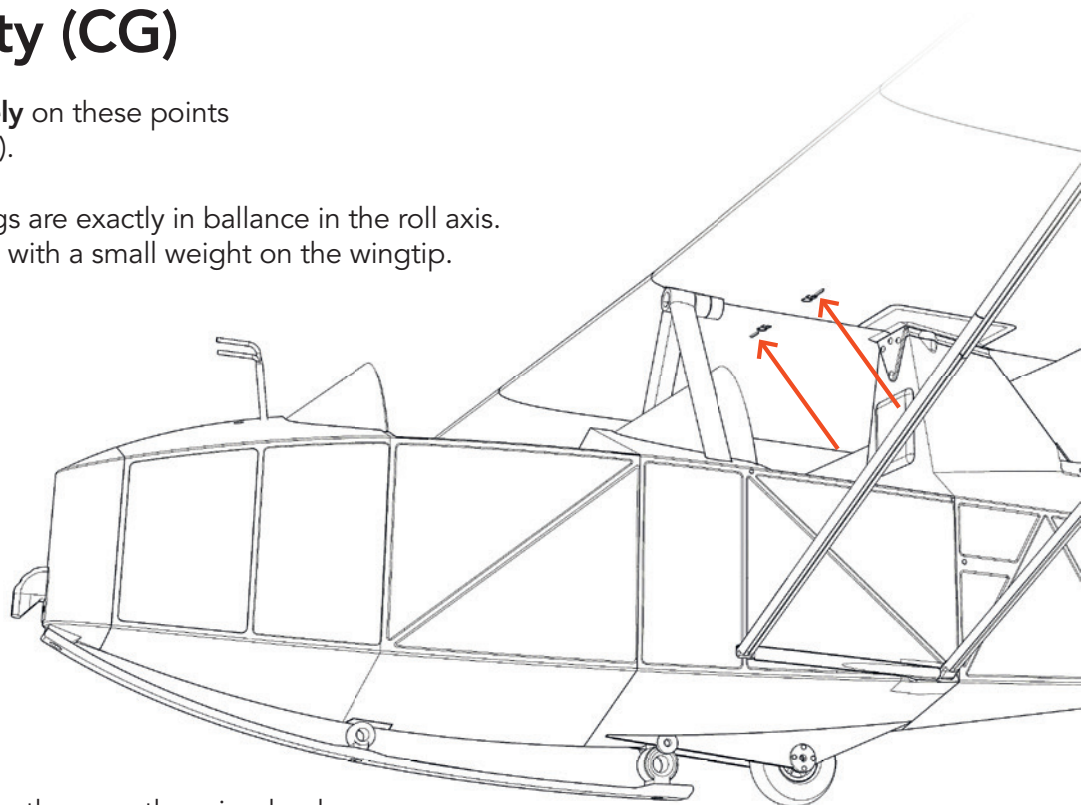
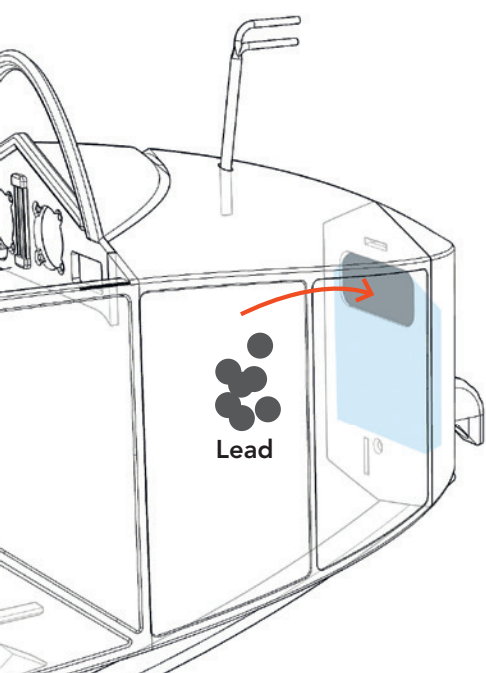
FLIGHT WEIGHT 1260 grams (glider version)/1450 grams (EDF version)



Center of Gravity (CG)

The aircraft must balance **precisely** on these points (64 mm behind the leading edge).

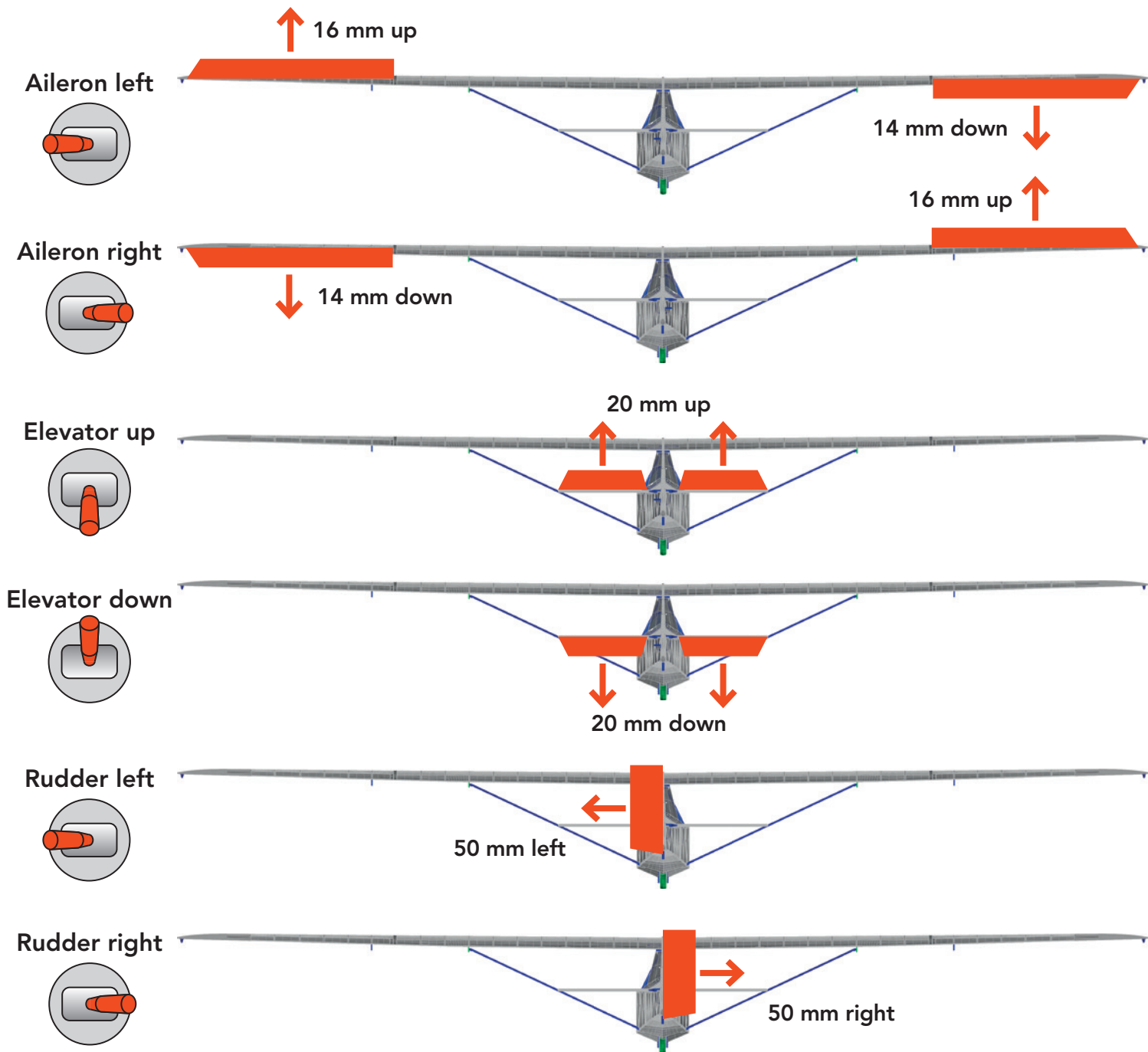
Do not forget to check if the wings are exactly in balance in the roll axis. If one wing is heavier, correct this with a small weight on the wingtip.



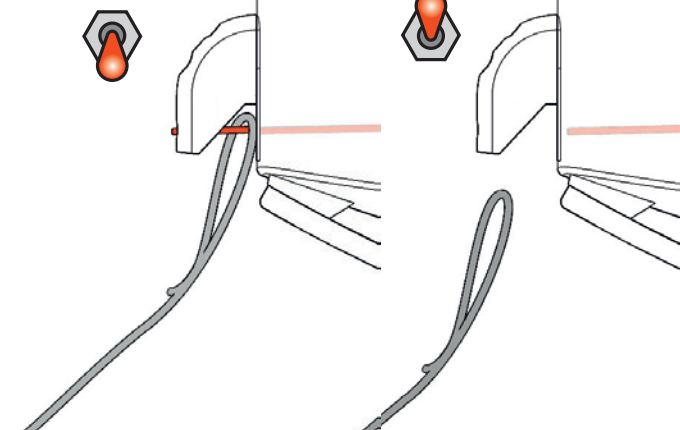
In the nose there is a lead chamber with which you can influence the CG.

Settings for flying

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

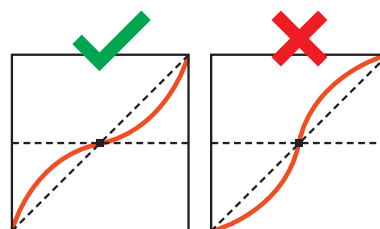


Tow coupling



Expo setting

AILERON 30 % **ELEVATOR** 30 % **RUDDER** 20 %



(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