

PLANE PRINT



PLANE PRINT **JETWING**

Modular high-performance EDF Jet or Glider

FUSELAGE EDF	Page 7
FUSELAGE GLIDER	Page 33
Standard WING	Page 46
BIG WING	Page 62



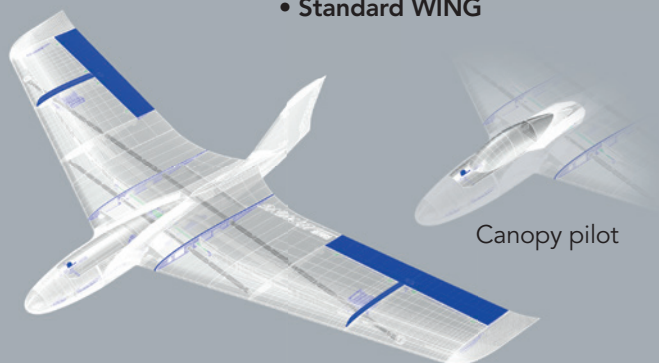
NOTE: Slicing *only*
works with CURA!



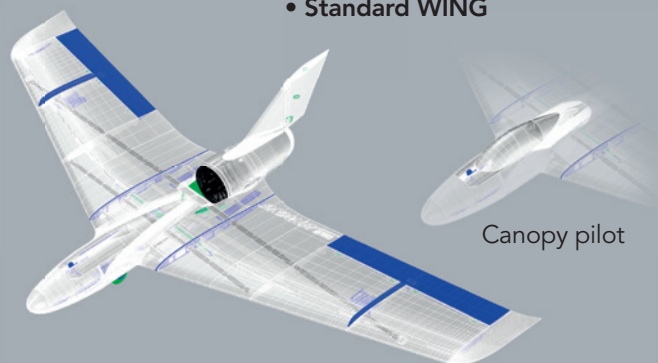
You can find the STL data
at **www.planeprint.com**

Modular system – 4 kits, many possibilities ...

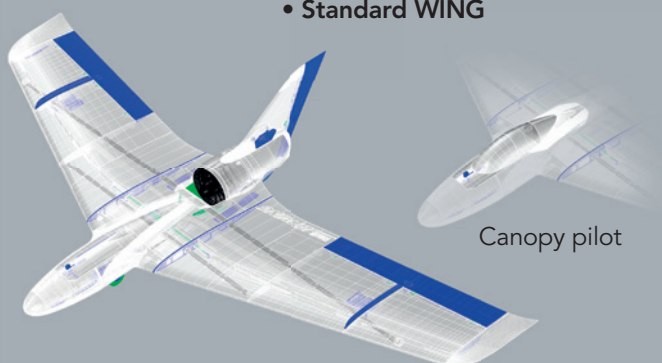
- FUSELAGE GLIDER version
- Standard WING



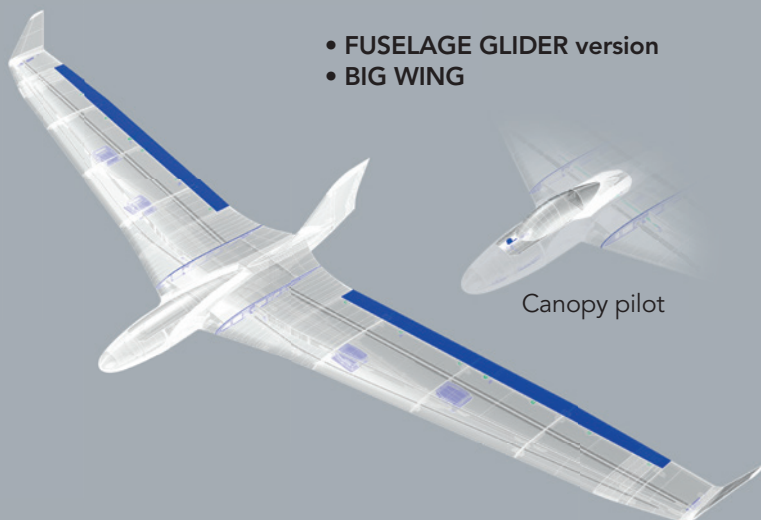
- FUSELAGE EDF version
- Standard WING



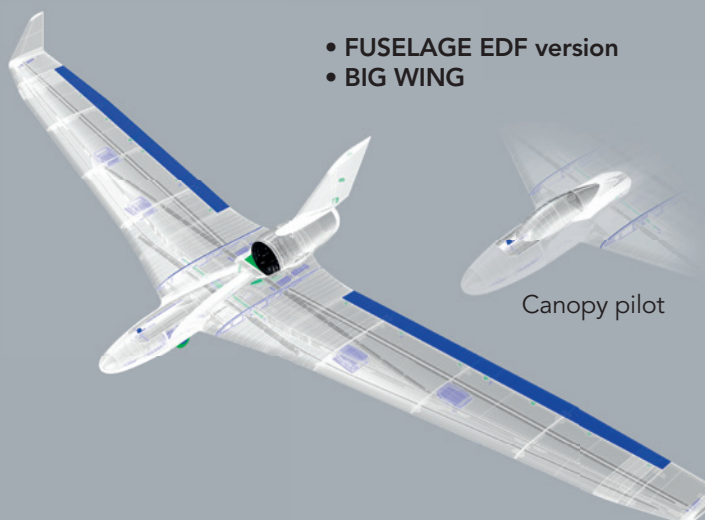
- FUSELAGE EDF Rudder version
- Standard WING



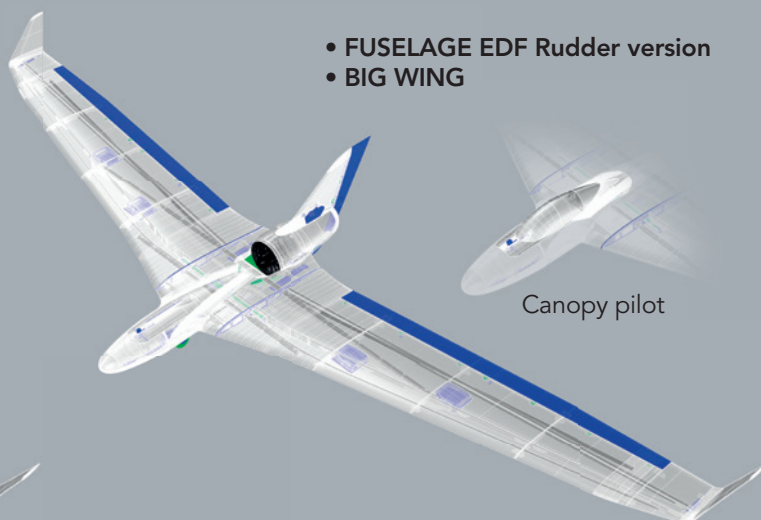
- FUSELAGE GLIDER version
- BIG WING



- FUSELAGE EDF version
- BIG WING



- FUSELAGE EDF Rudder version
- BIG WING



Required accessoires – basic equipment

- some tapping screws Ø2 mm
- CA super glue (liquid and liquid medium)
- CA activator
- Self-adhesive Velcro tape

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



Tools

Cutter knife, small Philips screwdriver, Sandpaper, Metal saw

Required accessoires – FUSELAGE EDF

- LW-PLA (**cannot be replaced by PLA!**), ~200 grams
- PLA oder bether **Tough PLA**, ~70 grams
- TPU A95, ~20 grams
- Metal screw 3*20mm with self-locking nut, 1 piece
- Carbon tube Ø8*1000mm, Ø8*480mm, Ø8*340mm
- Rod connection, 1 piece (for Rudder version only)
- Velcro strap
- Carbon rod Ø2mm or Steel wire Ø1mm for Servo Linkage

Required accessoires – FUSELAGE GLIDER

- LW-PLA (**cannot be replaced by PLA!**), ~200 grams
- PLA oder bether **Tough PLA**, ~40 grams
- Carbon tube Ø8*1000mm*, Ø8*480mm*, Ø8*340mm
- * if you already have these tubes for FUSELAGE EDF, you can use them.
- Steel wire Ø1mm*200mm for Servo Linkage (for tow version only)

Required accessoires – Standard WING

- LW-PLA (**cannot be replaced by PLA!**), ~320 grams
- PLA oder bether **Tough PLA**, ~90 grams
- TPU A95, ~10 grams
- Rod connection, 2 pieces
- Servo extension cable 400mm, 2 pieces (a soldered servo cable extension is better)
- Carbon rod or Steel wire for Servo Linkage

Required accessoires – BIG WING

- LW-PLA (**cannot be replaced by PLA!**), ~500 grams
- PLA oder bether **Tough PLA**, ~120 grams
- TPU A95, ~10 grams
- Carbon tube Ø6*1000mm, 3 pieces
- Carbon fiber strips (flat profile) 1*6*1000mm*, 4 pieces
- Rod connection, 4 pieces
- Servo extension cable 400mm, 2 pieces and 600mm, 2 pieces (a soldered servo cable extension is better)
- Carbon rod or Steel wire for Servo Linkage

* If you can't get such profiles you can also use two 0.5*6*1000, 1*5*1000, several carbon rods Ø1mm or hardwood strips.

RC Components

ENGINE 4S EDF 70 MM – FMS or Wemotec Mini Fan, Stream Fan (We use the FMS from Pichler)
ATTENTION: the drive should provide a maximum thrust of 1.8 Kg. If you want to use a 5S or 6S drive, be aware that the JETWING will be overpowered and fly accordingly carefully and dosed! Note: With some EDF the motor cables must be extended a little!

BEC-CONTROLLER suitable for your EDF (Make sure to use sufficiently dimensioned plug connections!)

RECEIVER 4 Channel (Standard WING), 6 Channel (BIG WING)

BATTERY 4S LiPo-Akku, 3000 - 4000 mAh (Maximum dimensions: 140*40*40 mm, ideal weight 390g) or a receiver battery for the GLIDER VERSION

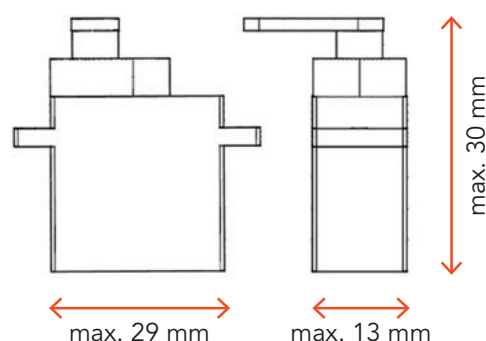
SERVOS WINGS 2 pieces like Corona 939MG, or equivalent (Standard WING)
The servos should definitely have metal gears and a torque of min. 2.5 kg/cm, for 5S or 6S drive 4 kg/cm!

4 pieces like Corona DS-239MG, or equivalent
(BIG WING or Standard WING (FREE TUNING PARTS version))

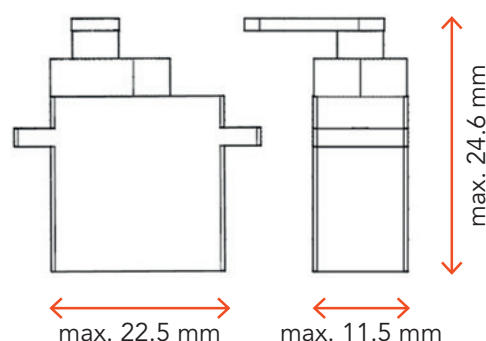
SERVO RUDDER 1 piece like Corona 939MG, 929MG or equivalent

SERVO TOW COUPLING 1 piece like Corona 939MG, 929MG or equivalent

Maximum dimensions **Wing Servos**:

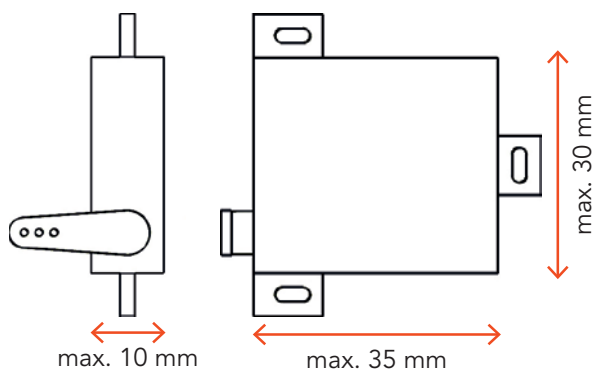


Maximum dimension **Rudder Servo**:



Maximum dimensions **Wing Servos**

BIG WING or **Standard WING**
(You find this Wing version in the FREE TUNING PARTS on our website):



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
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.

Here we show you how to make adjustments from a standard CURA profile.

For this model we need only 3 (P1, P4, P5), easy to create profiles.

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.

It is **essential for the necessary stability** of the JETWING that 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 65%. **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. Our STL files are provided with indelible copyright watermarks that can be verified at any time.

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

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.

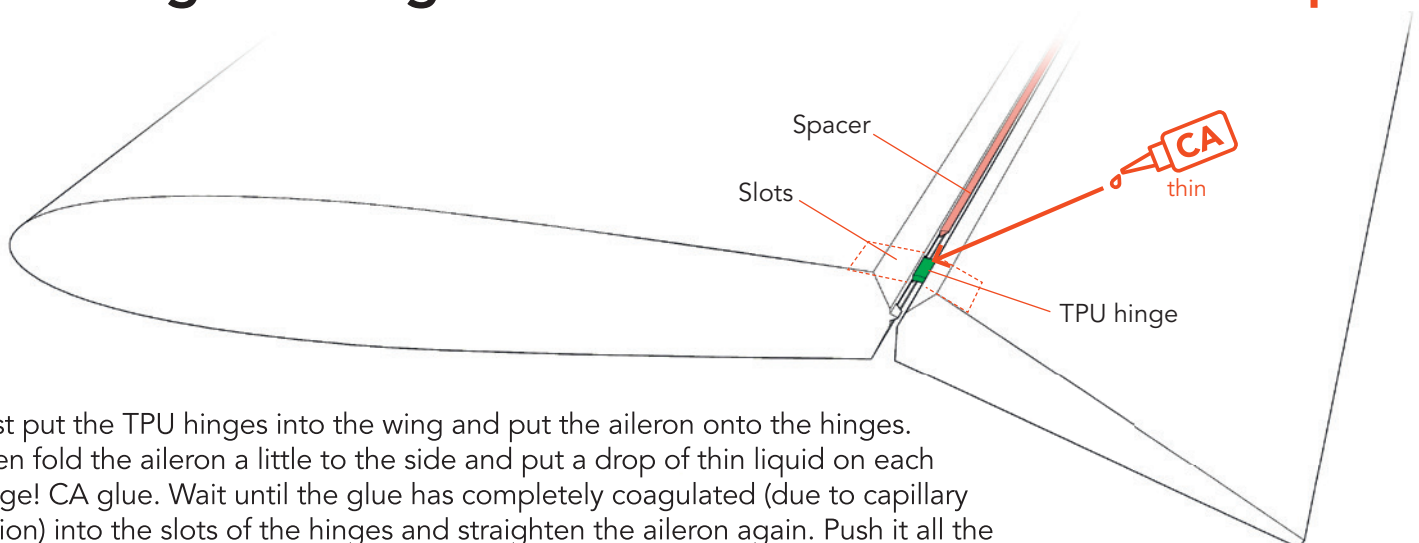
Use medium viscosity CA glue, thinner glue would run down the parts too easily.

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.

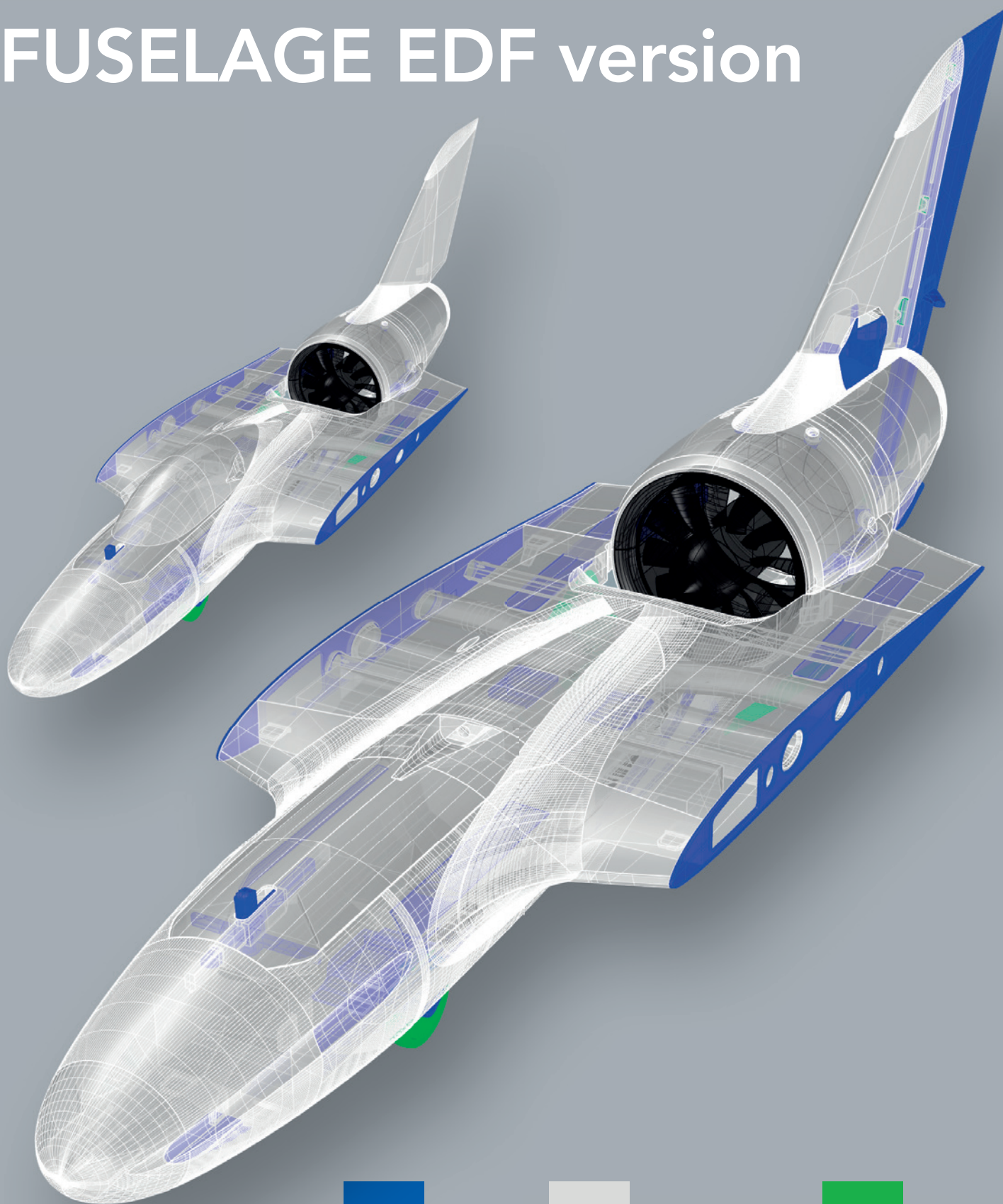


Installing the hinges – rudder/elevator/aileron/flaps

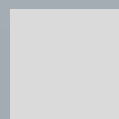


First put the TPU hinges into the wing and put the aileron onto the hinges. Then fold the aileron a little to the side and put a drop of thin liquid on each hinge! CA glue. Wait until the glue has completely coagulated (due to capillary action) into the slots of the hinges and straighten the aileron again. Push it all the way to the wing, printed spacers provide the correct distance. Now spray some activator spray on each hinge to cure the CA glue. Repeat on the other side of the hinges. **Do not use too much glue and test if each hinge holds well.**

FUSELAGE EDF version



PLA



LW-PLA



TPU

PROFILE P1_FULLBODY **PLA or Tough PLA**

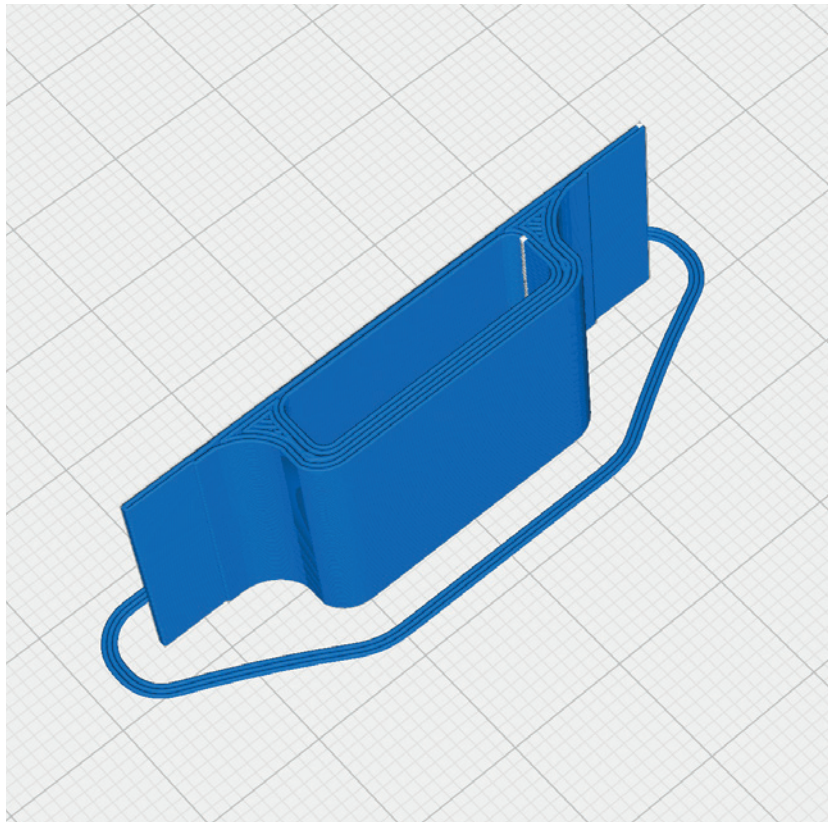
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Battery mount_p1_J.stl

MATERIAL PLA, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required

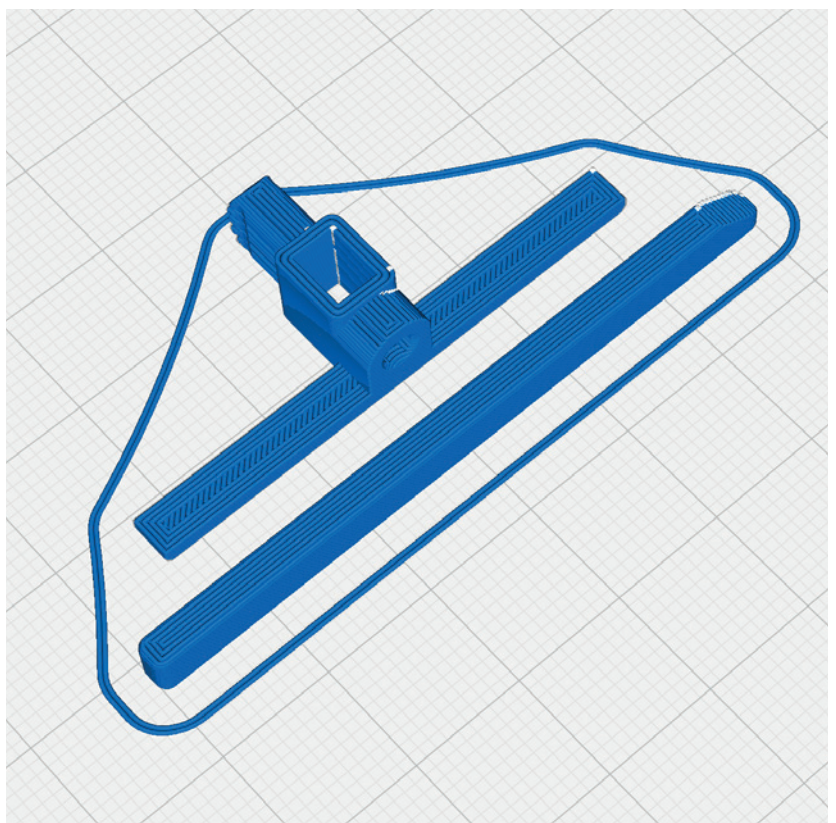


Canopy lock_p1_J.stl or Canopy lock tapping screw_p1_J.stl

MATERIAL PLA, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY **PLA or Tough PLA**

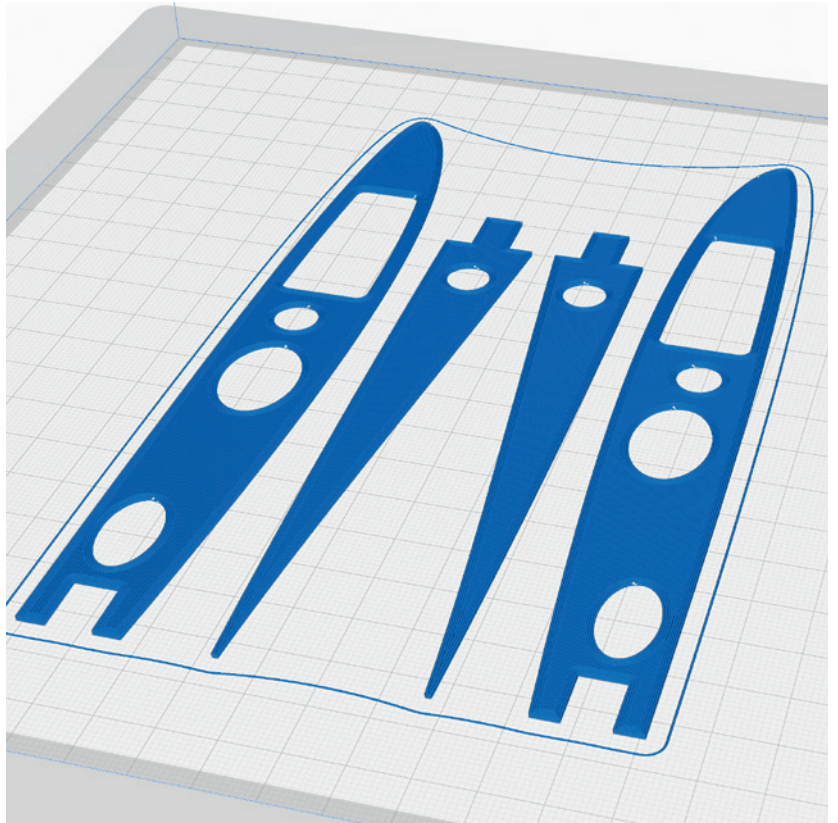
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Fuselage protector 1_p1_J.stl

MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

None required

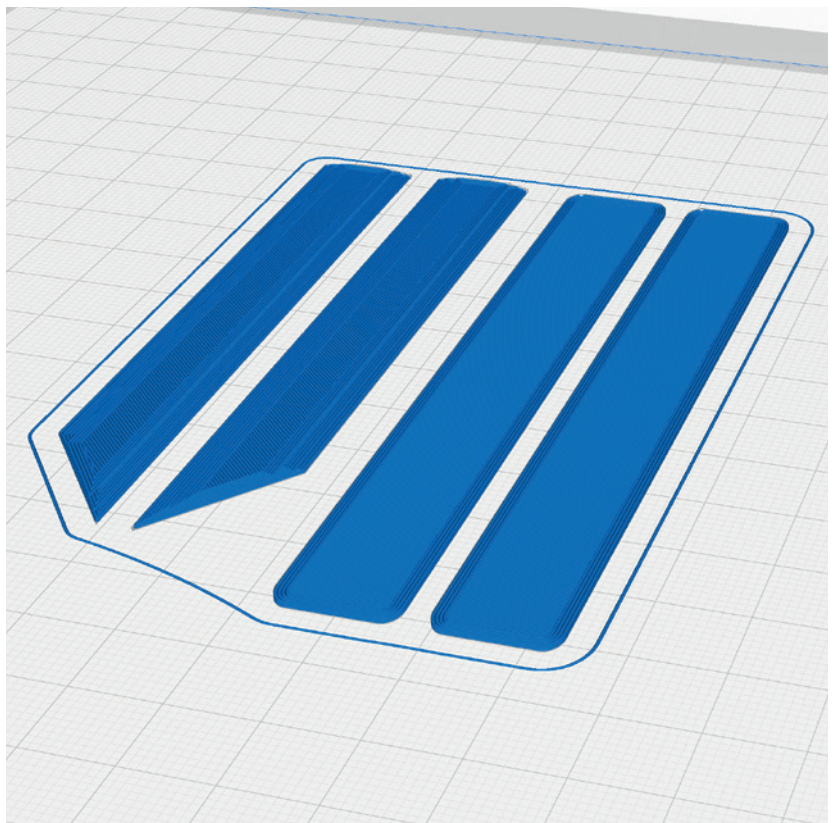


Fuselage protector 2_p1_J.stl

MATERIAL PLA, Weight: ~ 5 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY **PLA or Tough PLA**

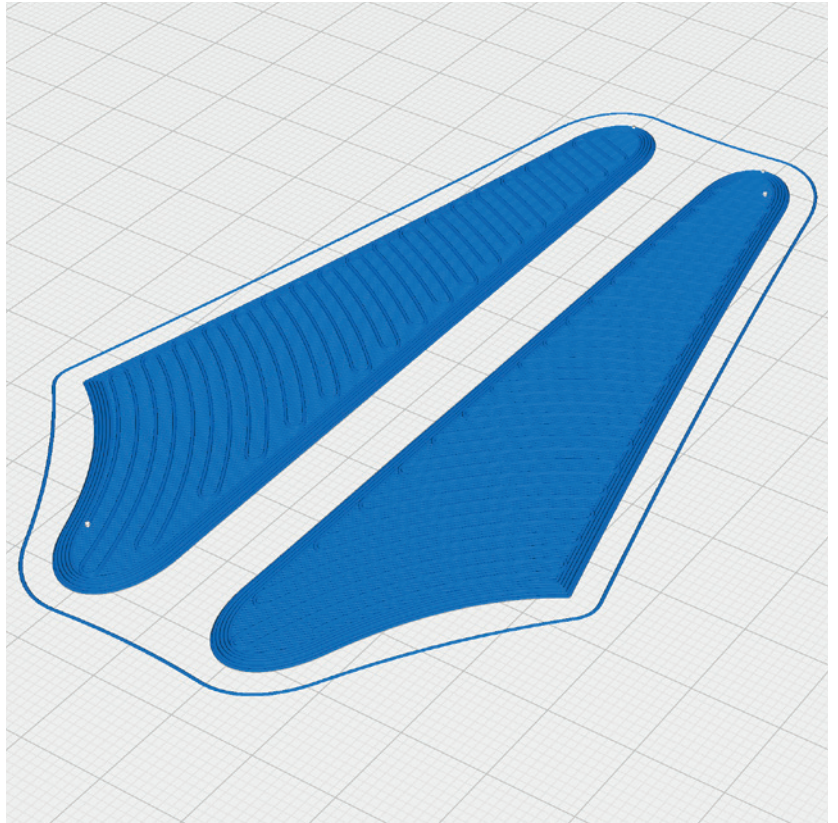
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Handling surfaces_p1_J.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

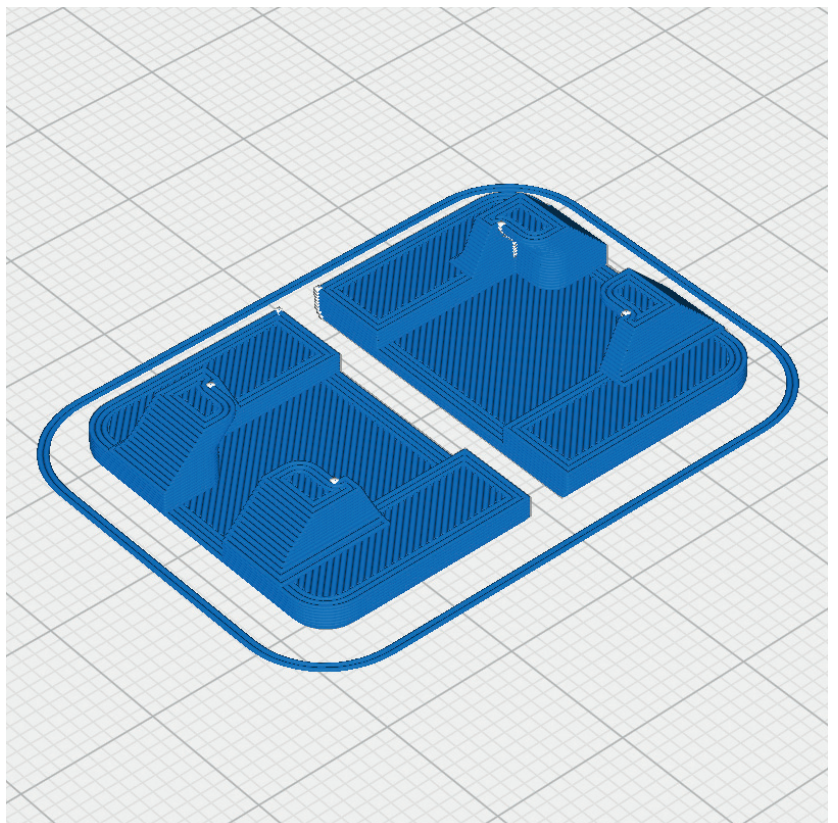


Tension plate_p1_J.stl

MATERIAL PLA, Weight: ~ 2 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!

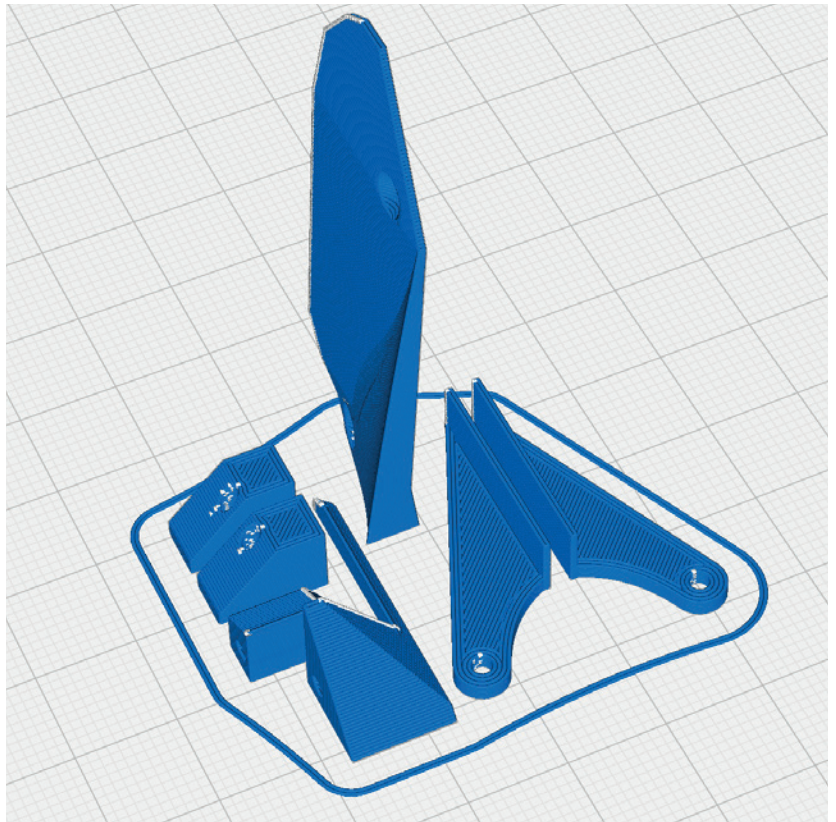
Rudder Parts_p1_J.stl

MATERIAL PLA, Weight: ~ 5 g

ADDITIONAL SETTINGS

None required

Print this STL if you want to build the **rudder with vector function** (folder RUDDER VERSION).

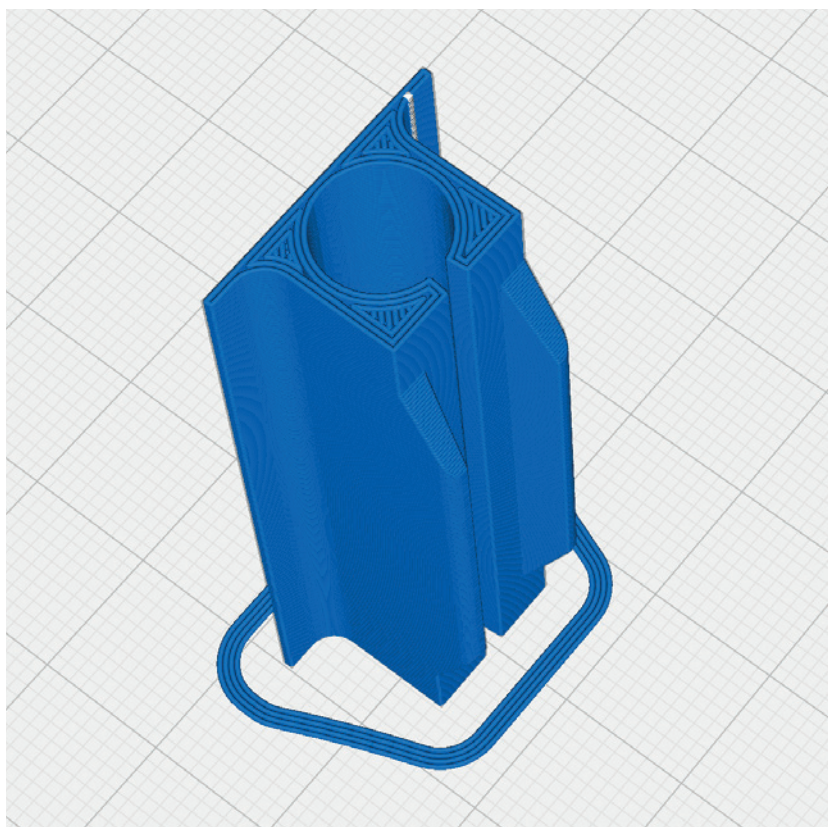
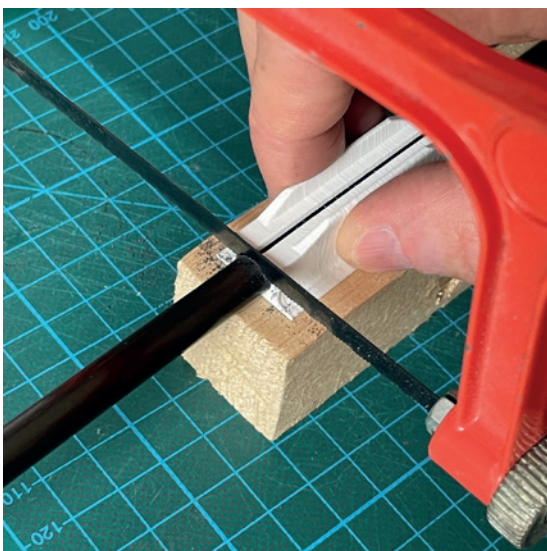


Carbon tool_p1_J.stl

MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

None required



PROFILE P2_HOLLOWBODY **PLA or Tough PLA**

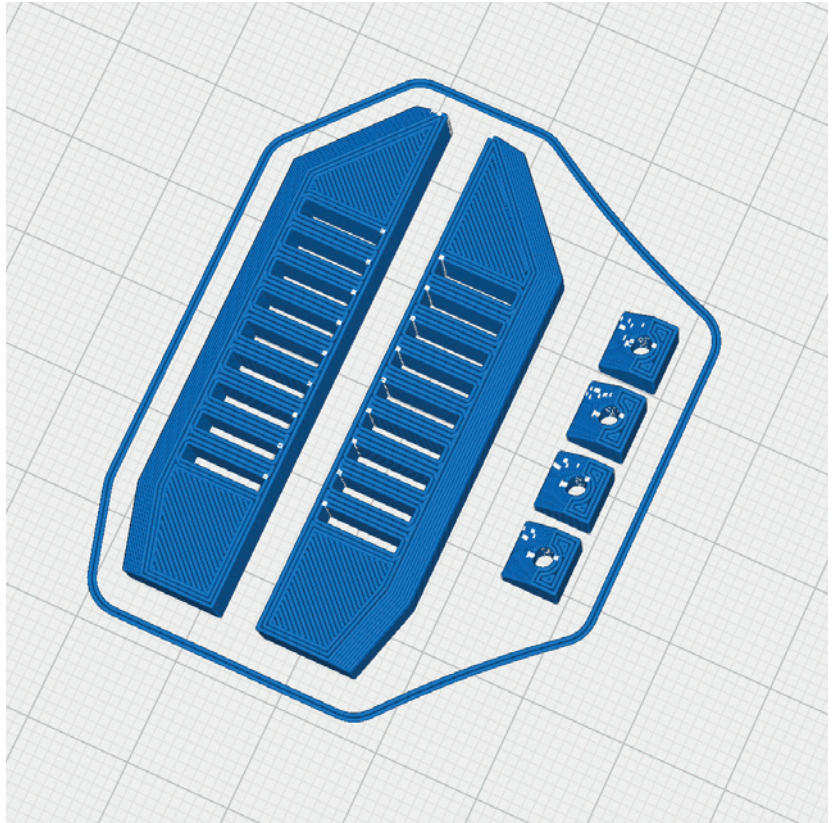
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

EDF-parts FMS_p2_J.stl
EDF-parts Wemotec_p2_J.stl

MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

None required



Skid wheel back_p2_J.stl

MATERIAL PLA, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required

If you want to build the version
without wheels, take instead the STL
[Skid Glider back_p2_J.stl](#)



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!

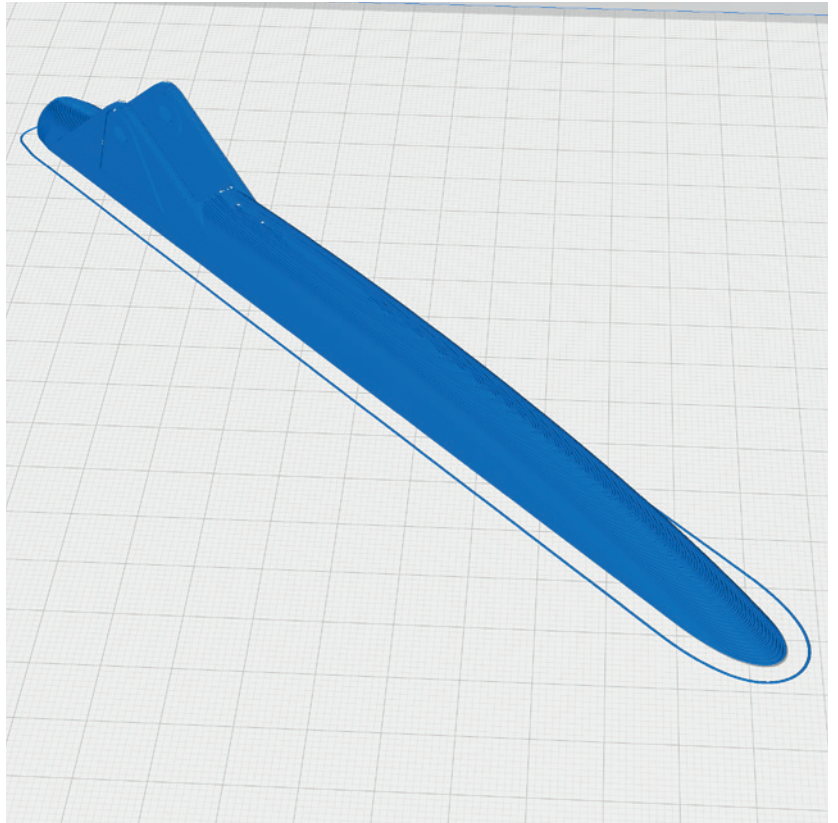
Skid wheel front_p2_J.stl

MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

- Wall Line Count: 3

If you want to build the version without wheels, take instead the STL [Skid Glider front_p2_J.stl](#)



PROFILE P3_SURFACE TPU

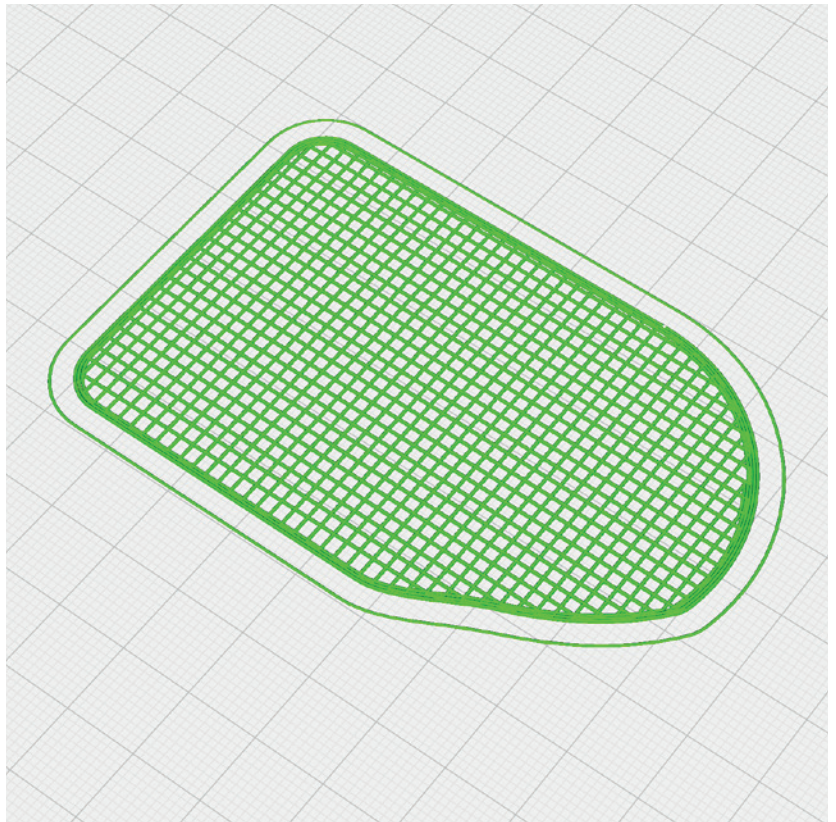
The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).
Please note the additional settings for the individual parts!

TPU-Mesh left_p3_J.stl
TPU-Mesh right_p3_J.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required



PROFILE P4_FLEX TPU A95

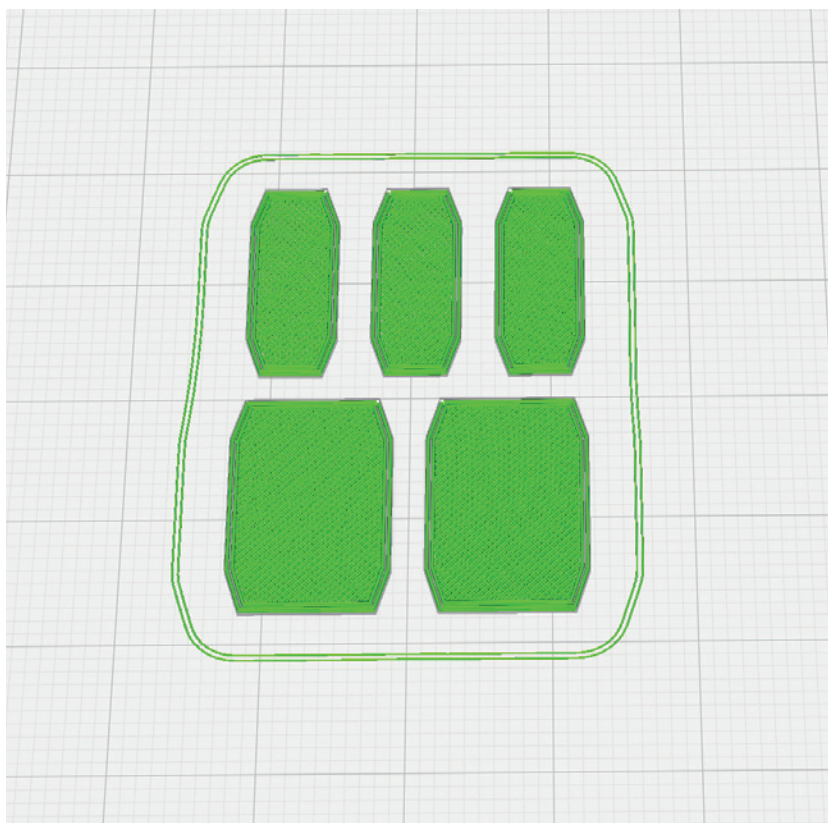
Hinges rudder_p4_J.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required

Print this STL if you want to build
the **rudder with vector function**
(folder RUDDER VERSION).



PROFILE P4_FLEX TPU A95

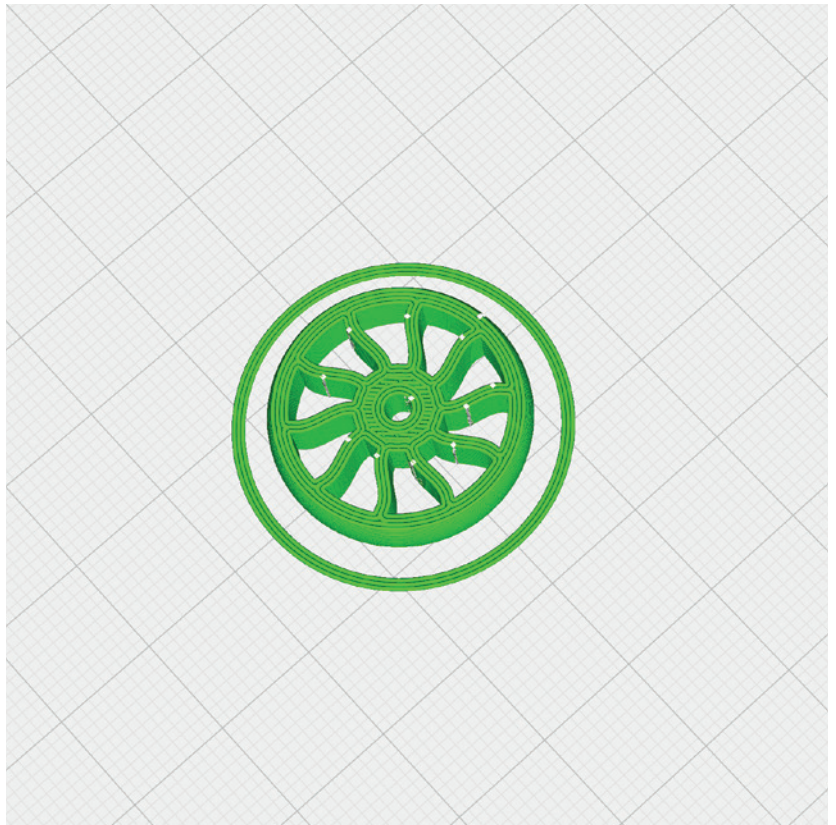
The following parts must be sliced with the PROFILE P4_FLEX.
Please note the additional settings for the individual parts!

Wheel back_p4_J.stl

MATERIAL TPU A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

- Infill Density 100 %



Wheel front_p4_J.stl

MATERIAL TPU A95, Weight: ~ 4 g

ADDITIONAL SETTINGS

- Infill Density 100 %



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!

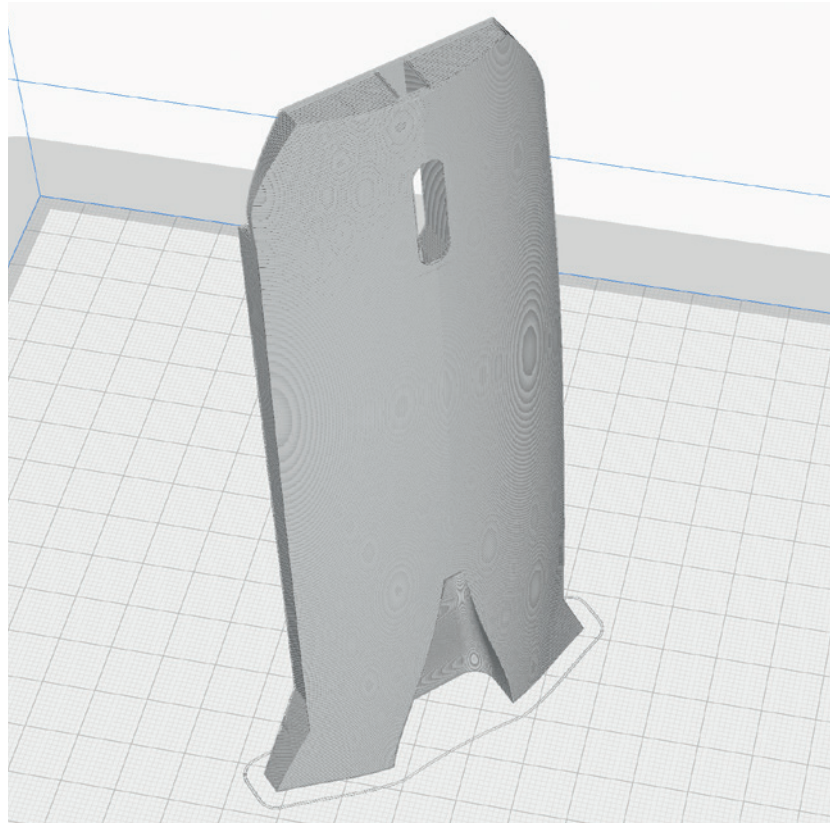
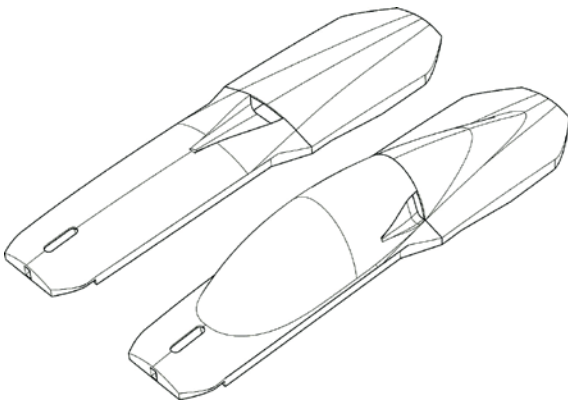
Canopy 1_p5_J.stl or Canopy pilot 1_p5_J.stl

MATERIAL LW-PLA, ~ 11 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



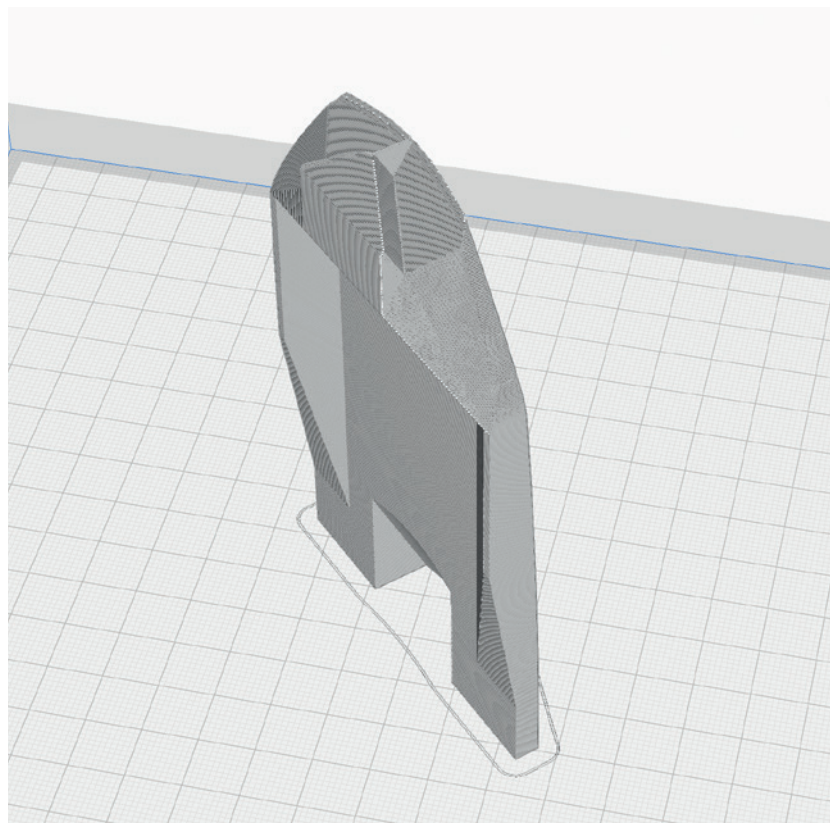
Canopy 2_p5_J.stl or Canopy pilot 2_p5_J.stl

MATERIAL LW-PLA, ~ 9 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!

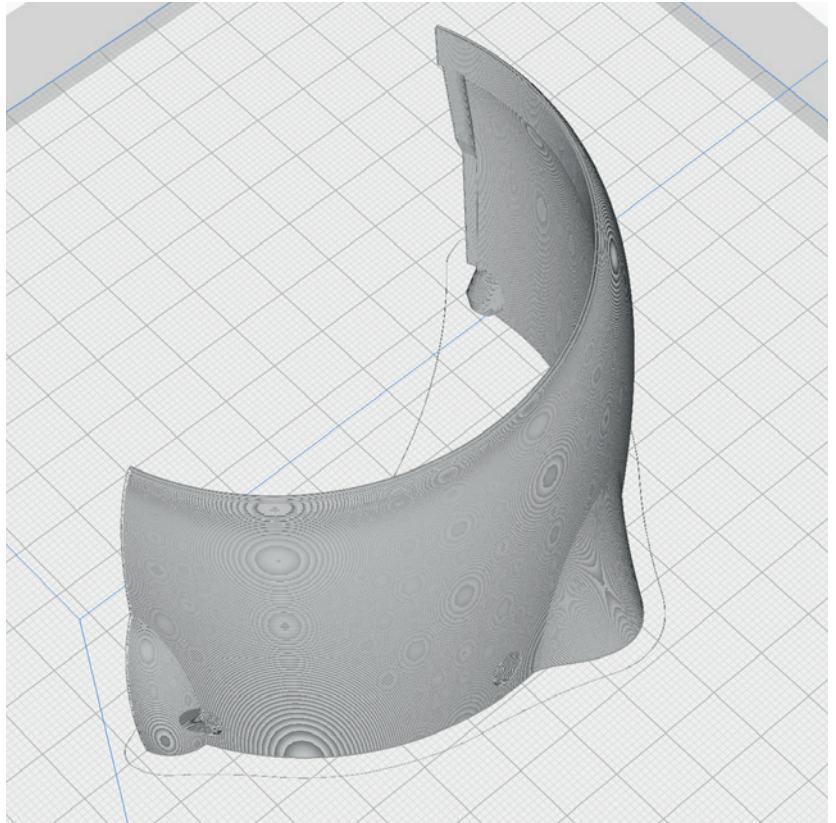
EDF-Cover FMS 1_p5_J.stl or EDF-Cover Wemotec_p5_J.stl

MATERIAL LW-PLA, ~ 8 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



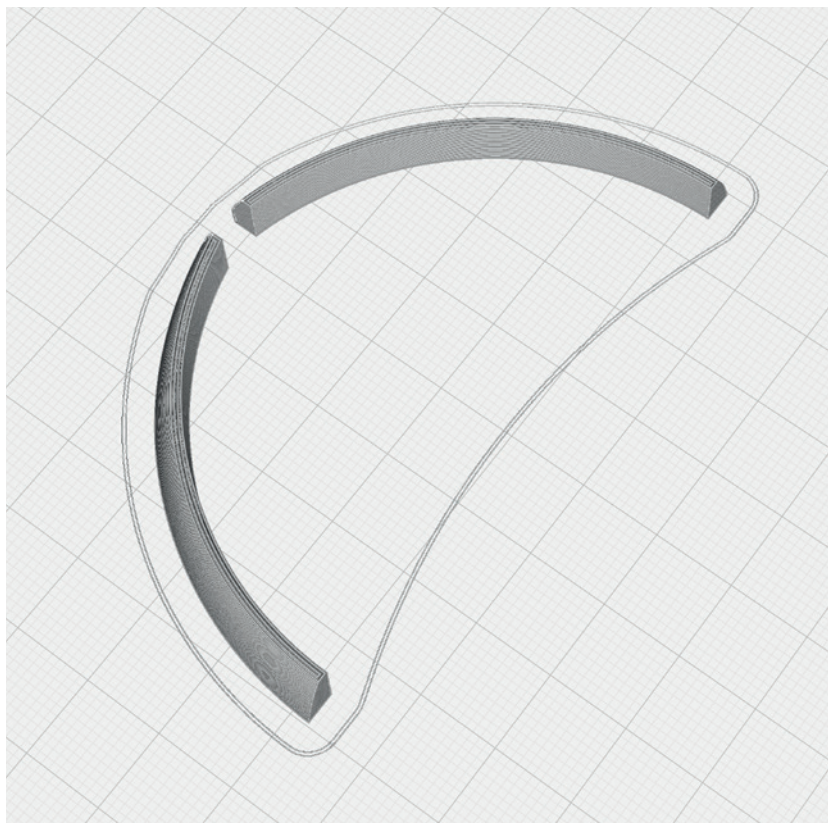
EDF-Cover FMS 2_p5_J.stl

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!

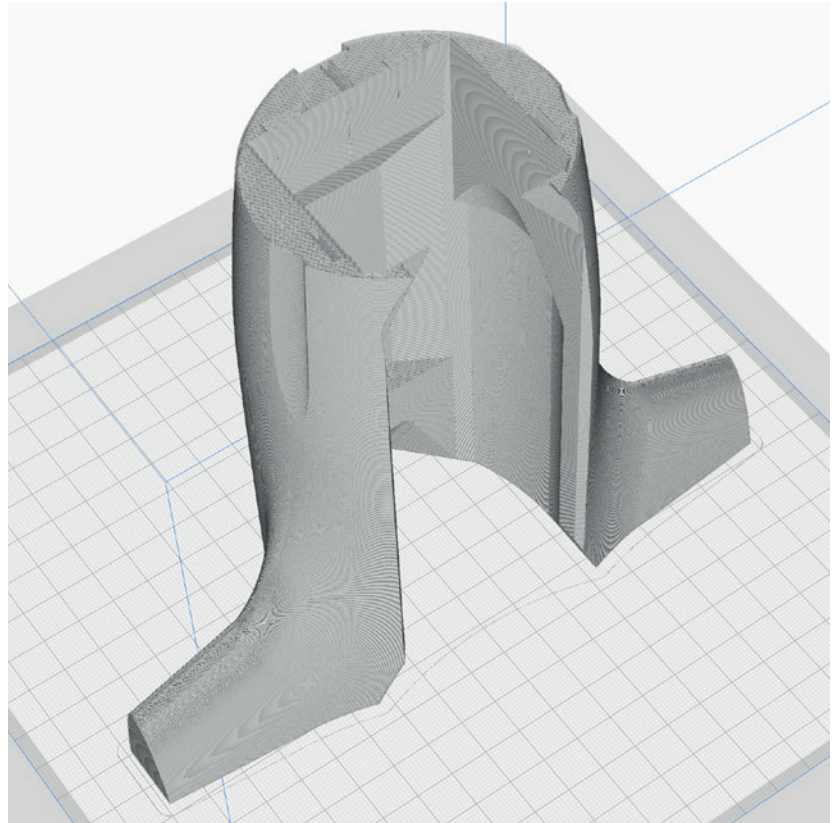
Fuselage 1_p5_J.stl

MATERIAL LW-PLA, ~ 33 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



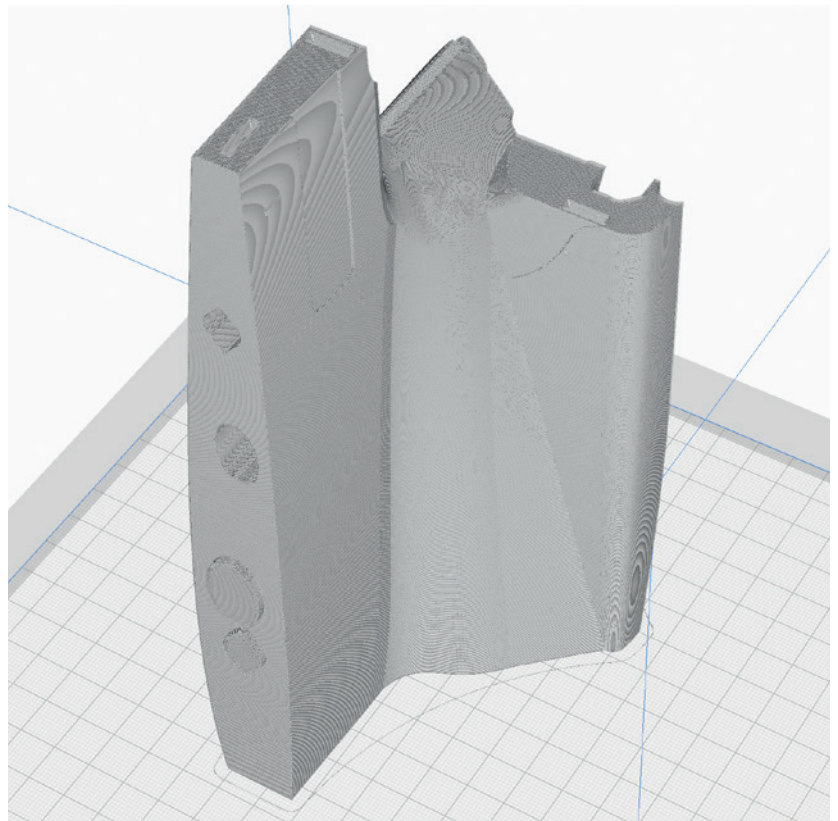
Fuselage 2 left_p5_J.stl Fuselage 2 right_p5_J.stl

MATERIAL LW-PLA, ~ 35 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!

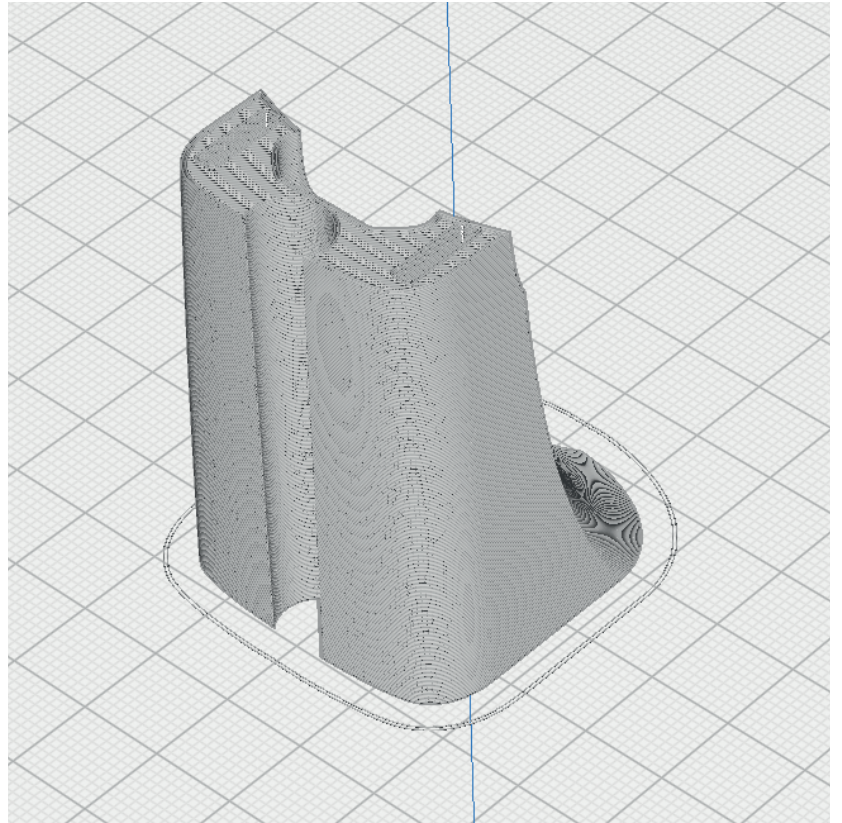
Fuselage 2 part_p5_J.stl

MATERIAL LW-PLA, ~ 5 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



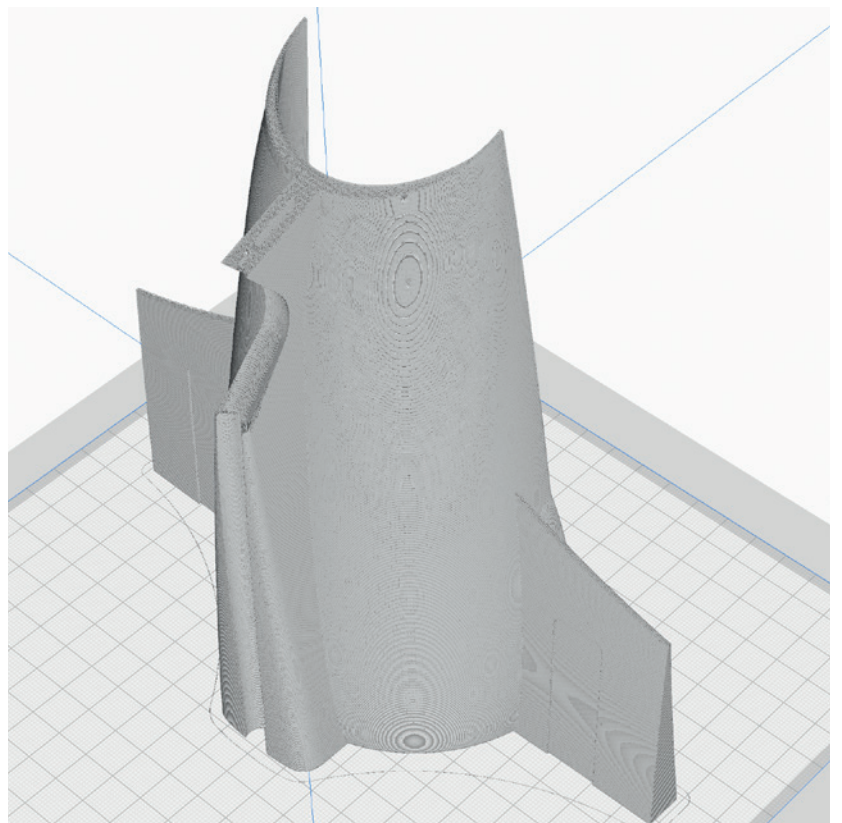
Fuselage 3_p5_J.stl

MATERIAL LW-PLA, ~ 28 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!

Fuselage 4 Part1_p5_J.stl

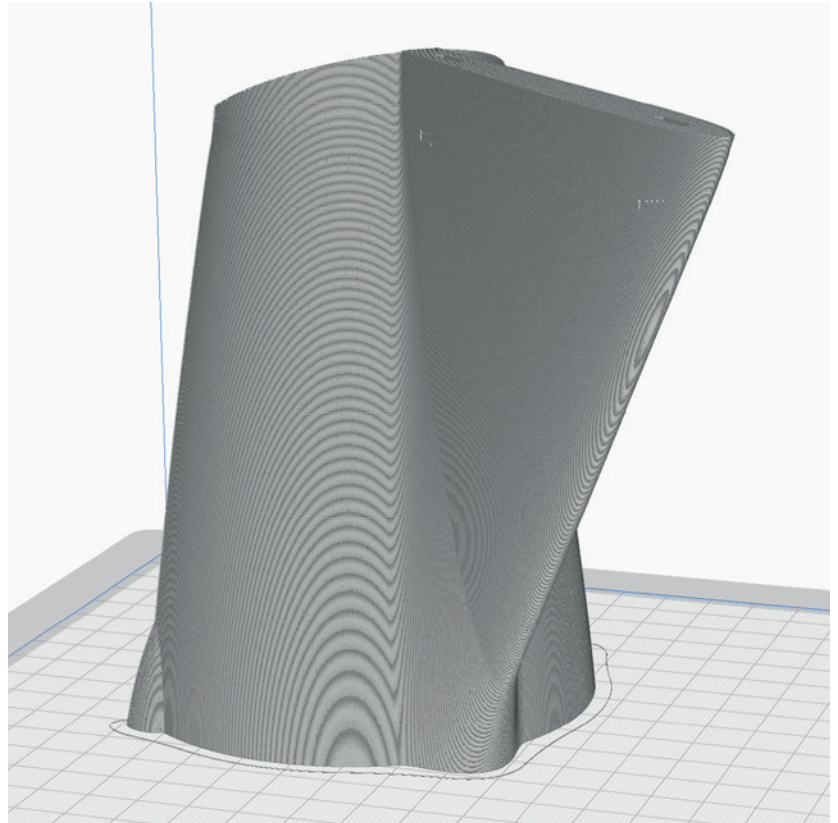
MATERIAL LW-PLA, ~ 24 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

This version is **without** rudder. If you want to build the rudder with vector function use the STL in the folder RUDDER VERSION.



Fuselage 4 part2_p5_J.stl

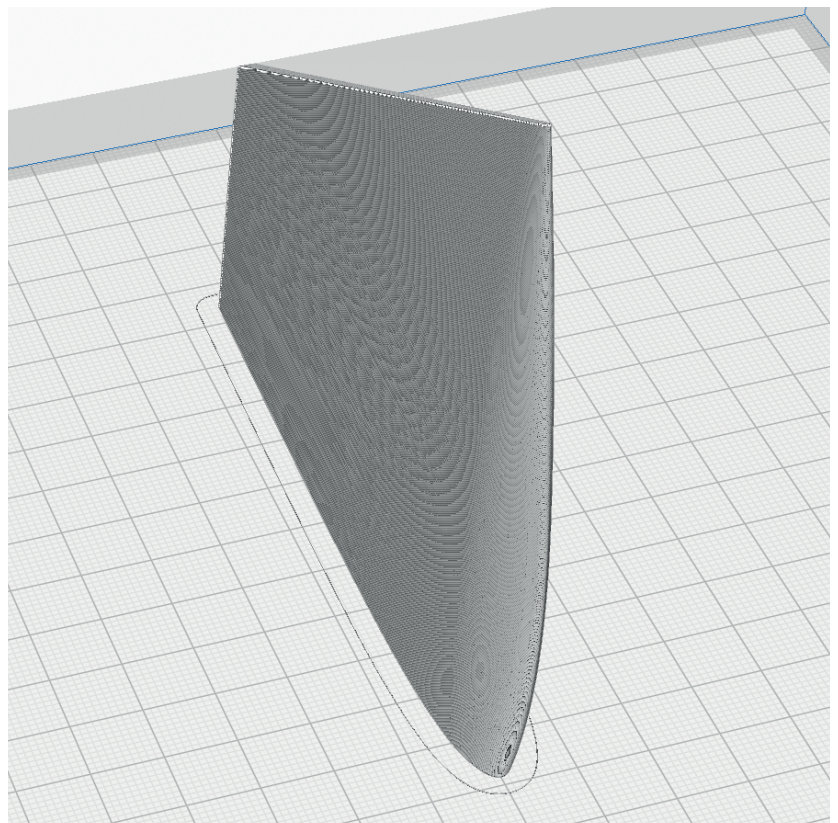
MATERIAL LW-PLA, ~ 8 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

This version is **without** rudder. If you want to build the rudder with vector function use the STL in the folder RUDDER VERSION.



PROFILE P5_GYROID Light-Weight LW-PLA/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!

Fuselage 4 Rudder_p5_J.stl

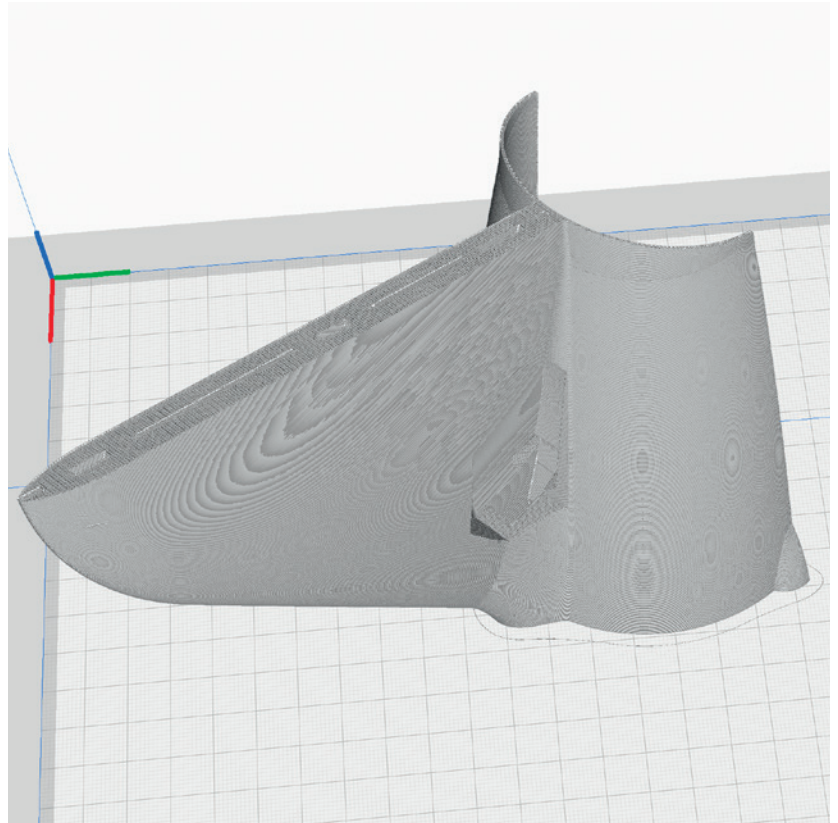
MATERIAL LW-PLA, ~ 26 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

Print this STL if you want to build the **rudder with vector function** (folder RUDDER VERSION).



Rudder 1_p5PLA_J.stl

MATERIAL PLA, ~ 10 g*

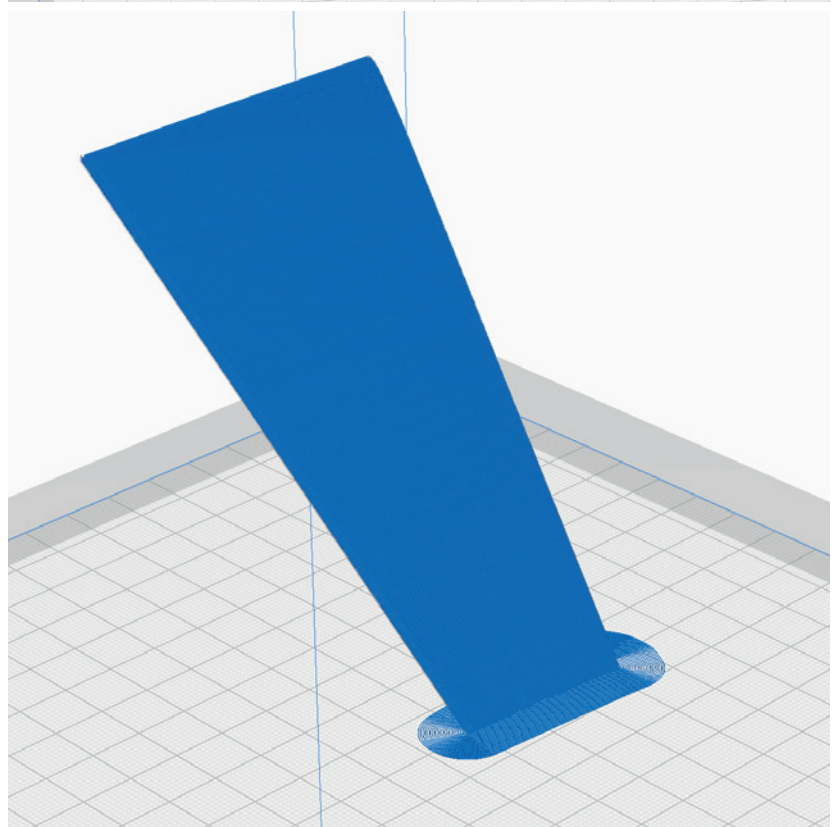
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Flow 100 %
- set Brim
- Retract settings for normal PLA

Print this STL if you want to build the **rudder with vector function** (folder RUDDER VERSION).



PROFILE P5_GYROID Light-Weight LW-PLA/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!

Rudder 2_p5PLA_J.stl

MATERIAL PLA, ~ 4 g*

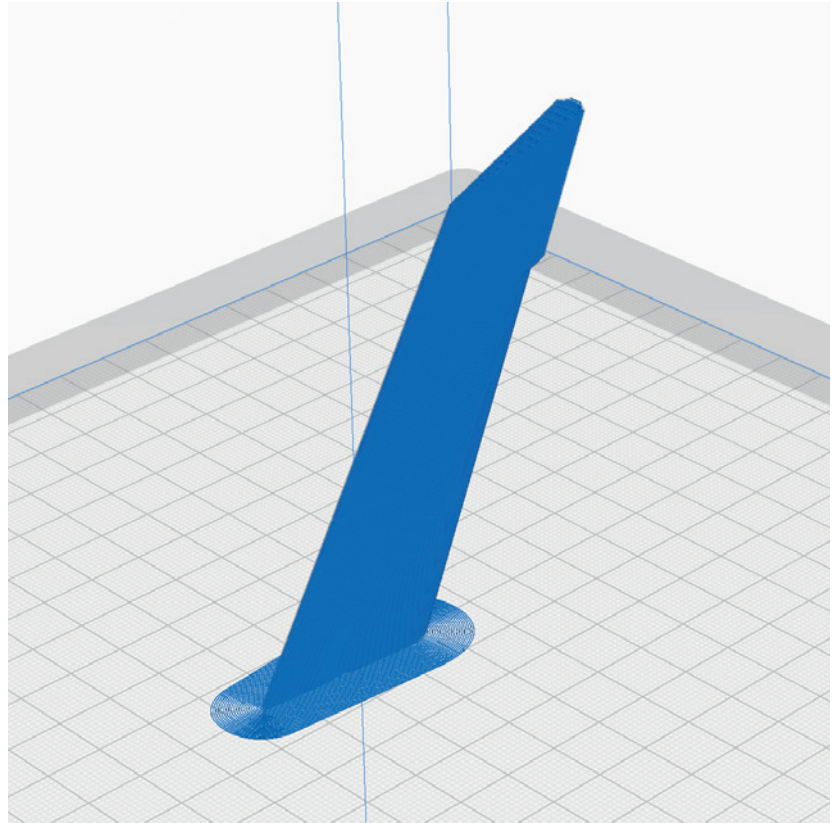
*Weighed (approximate guideline)

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Flow 100 %
- set Brim
- Retract settings for normal PLA

Print this STL if you want to build the **rudder with vector function** (folder RUDDER VERSION).



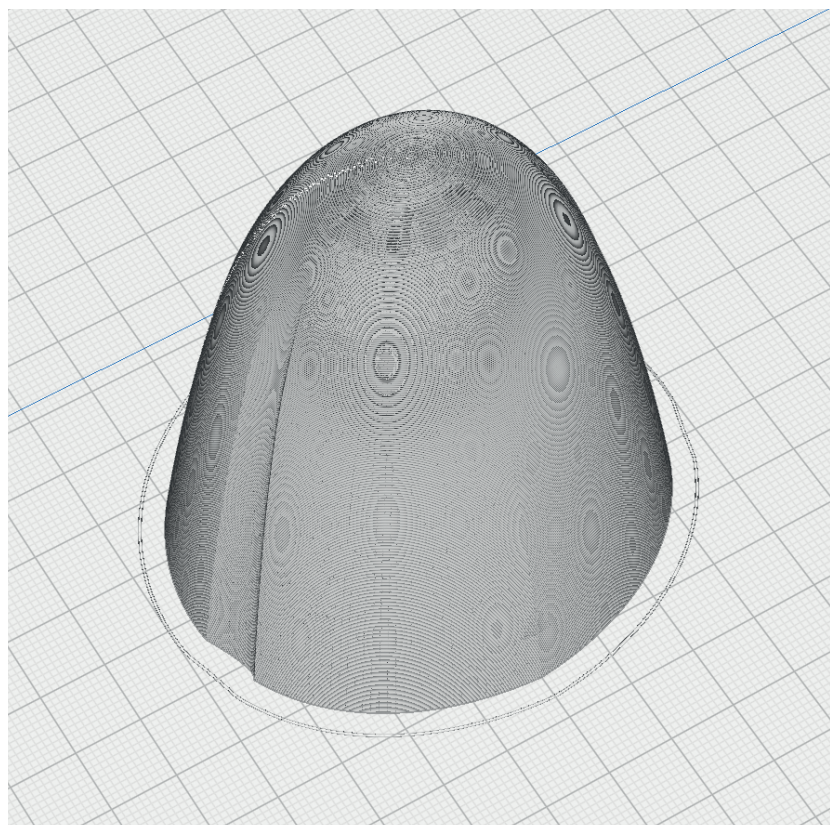
Nose_p5_J.stl

MATERIAL LW-PLA, ~ 12 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- set Brim



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!

Interconnects_p1_J.stl

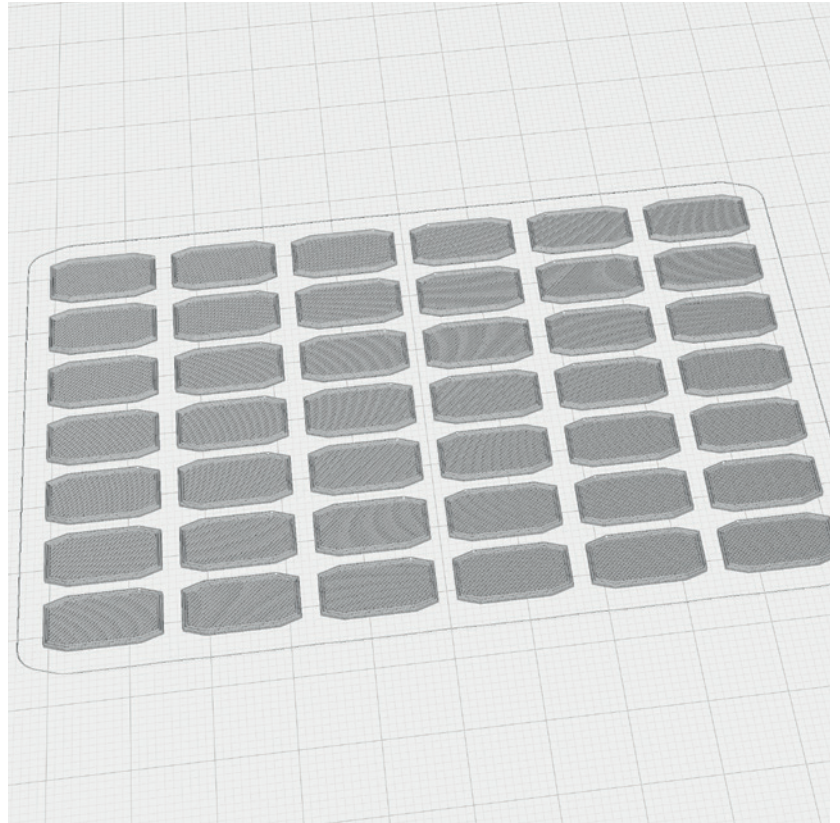
MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

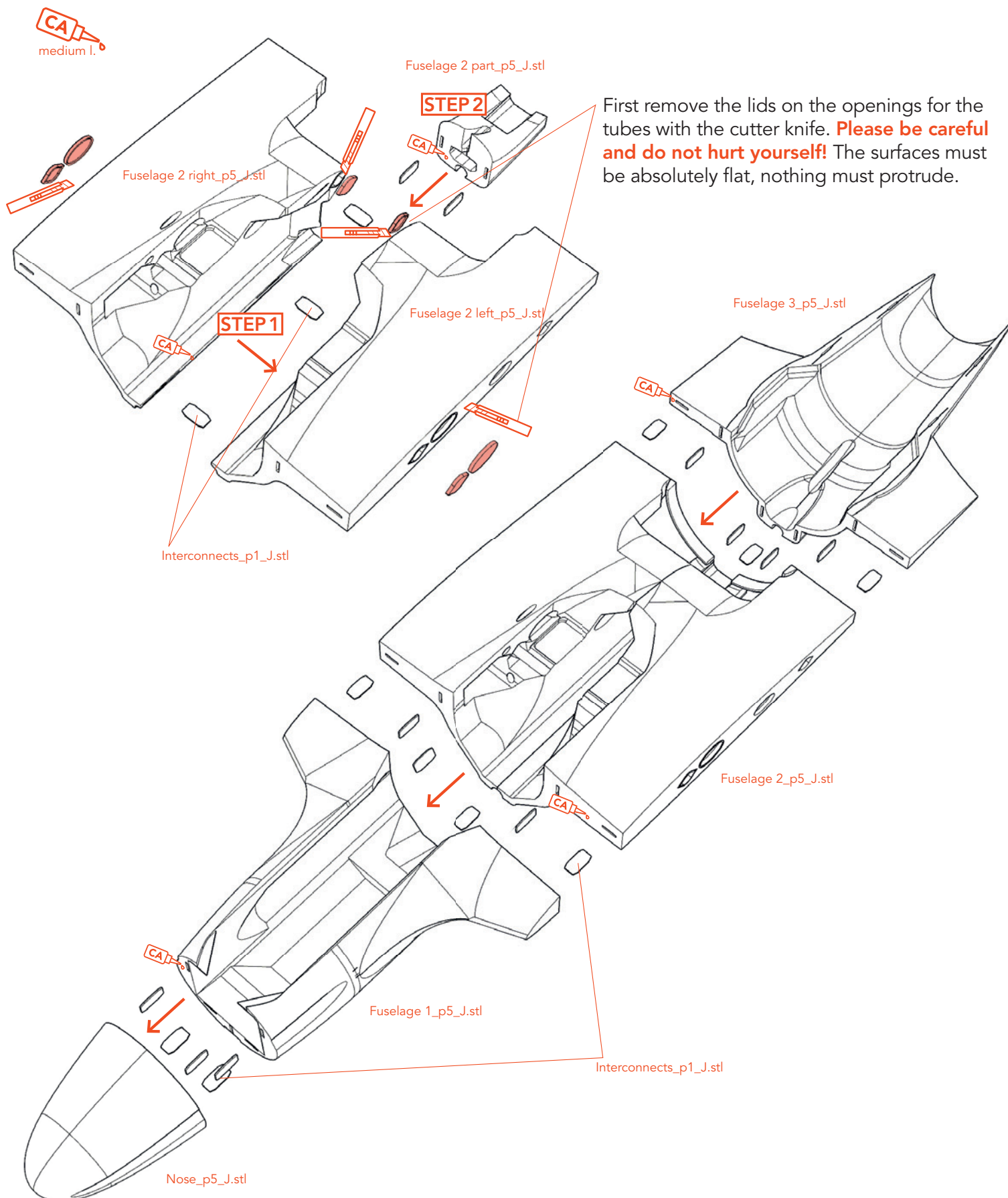
None required

You can also print the interconnects with PROFILE_1.



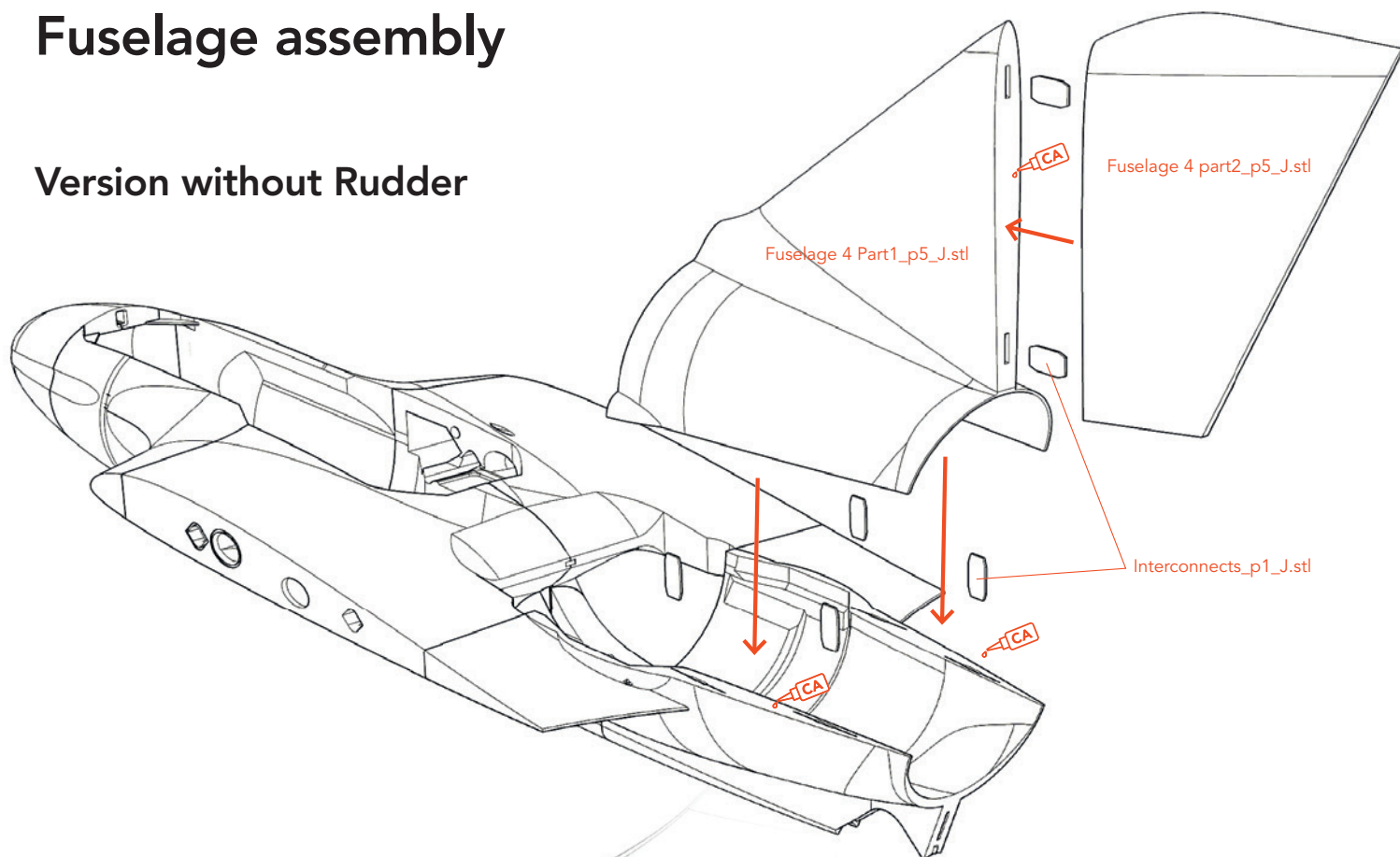
ASSEMBLING MANUAL FUSELAGE EDF

Follow the instructions „Glueing the parts“ on page 6.



Fuselage assembly

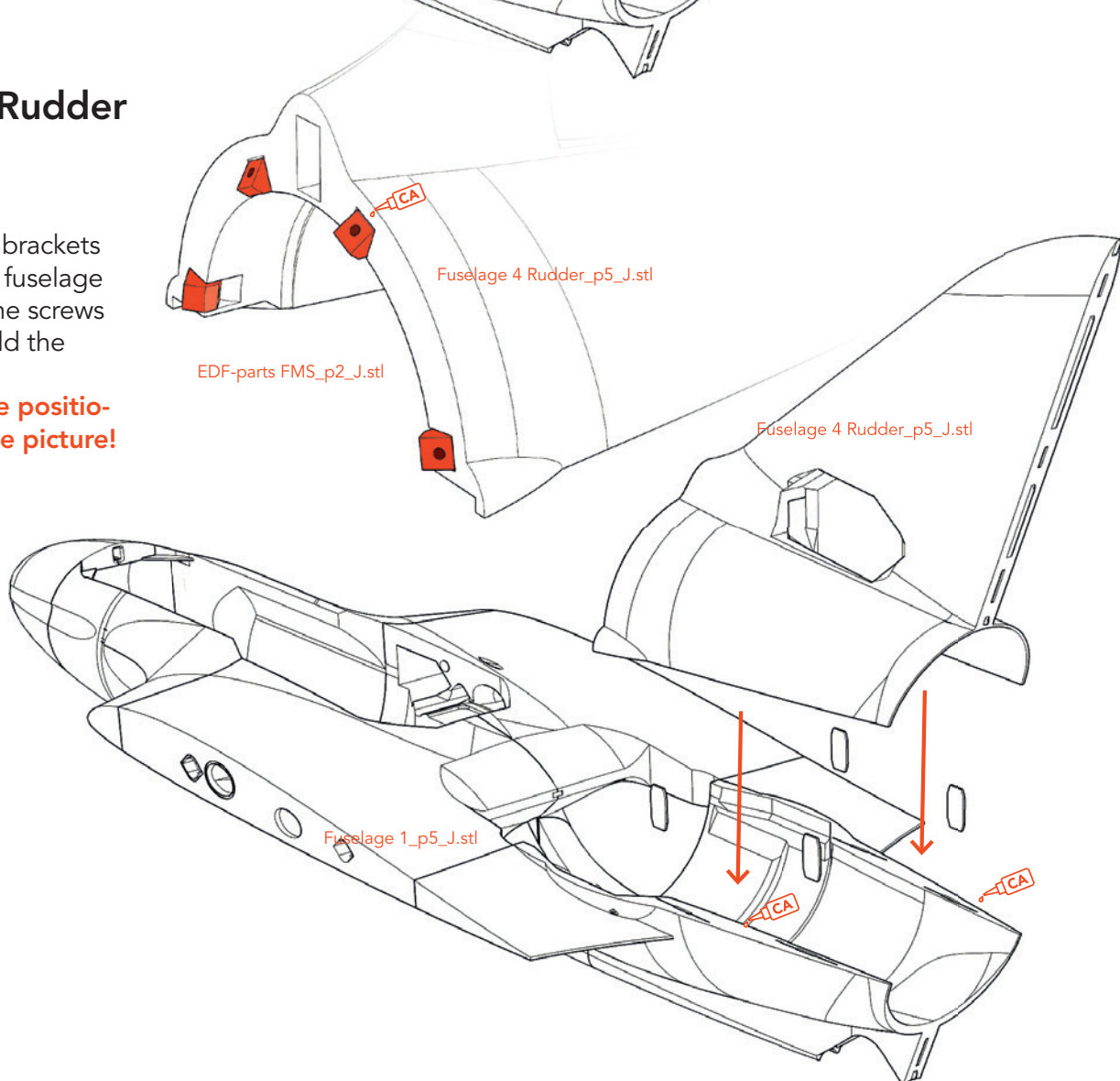
Version without Rudder

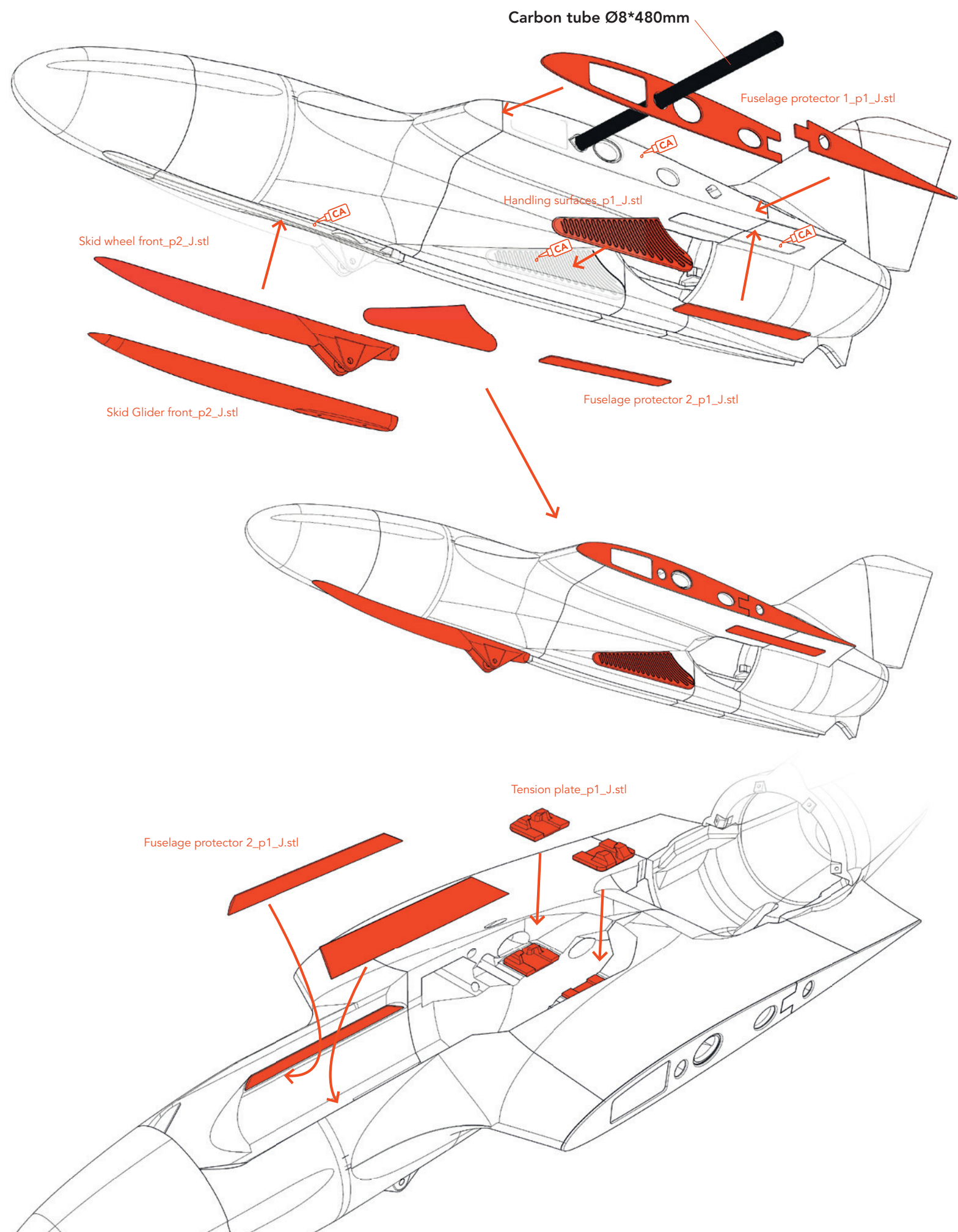


Version with Rudder

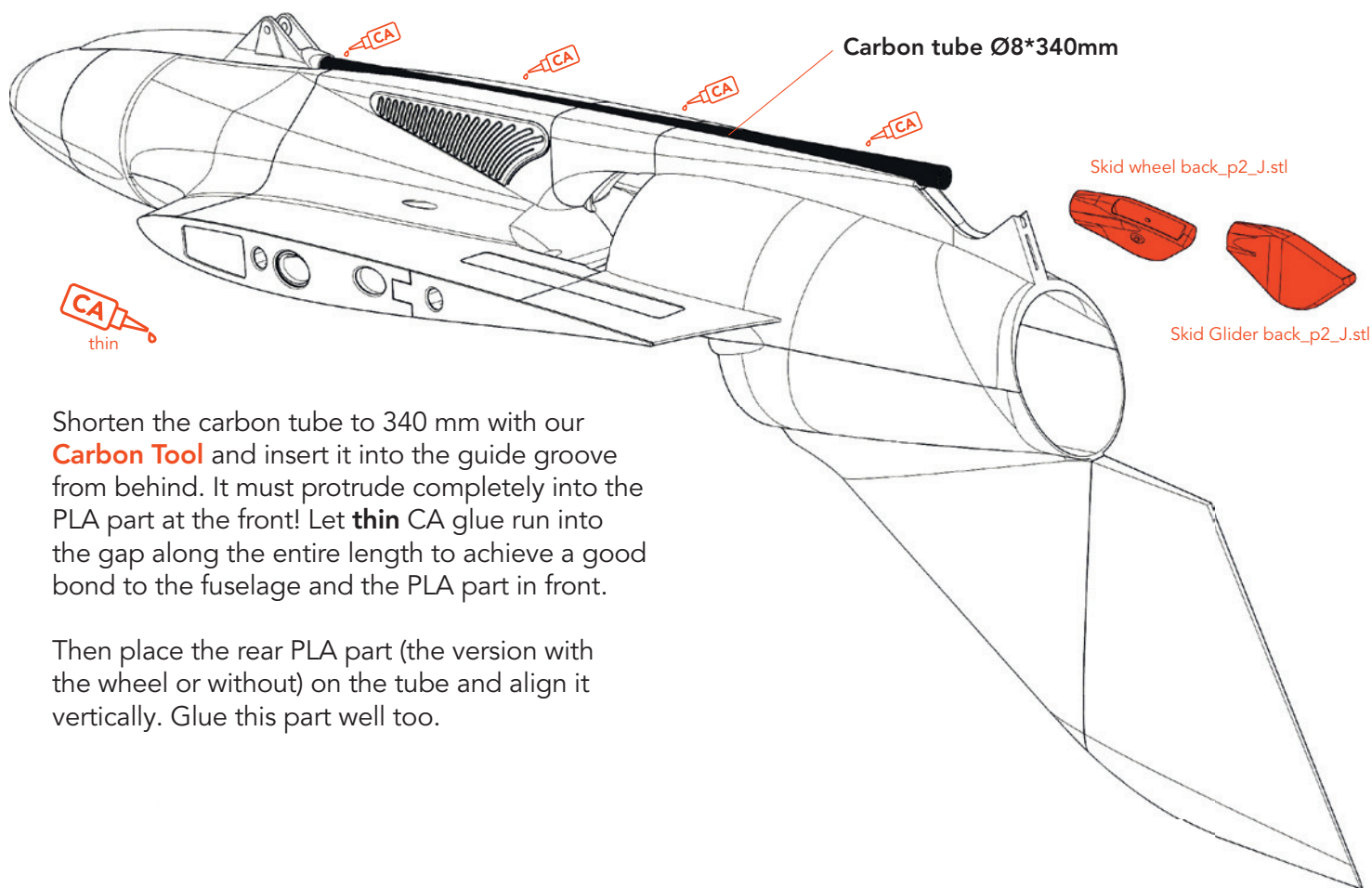
Before you glue the brackets for the EDF cover in fuselage 4, you should turn the screws in and out again (hold the brackets with pliers).

Pay attention to the positioning as shown in the picture!



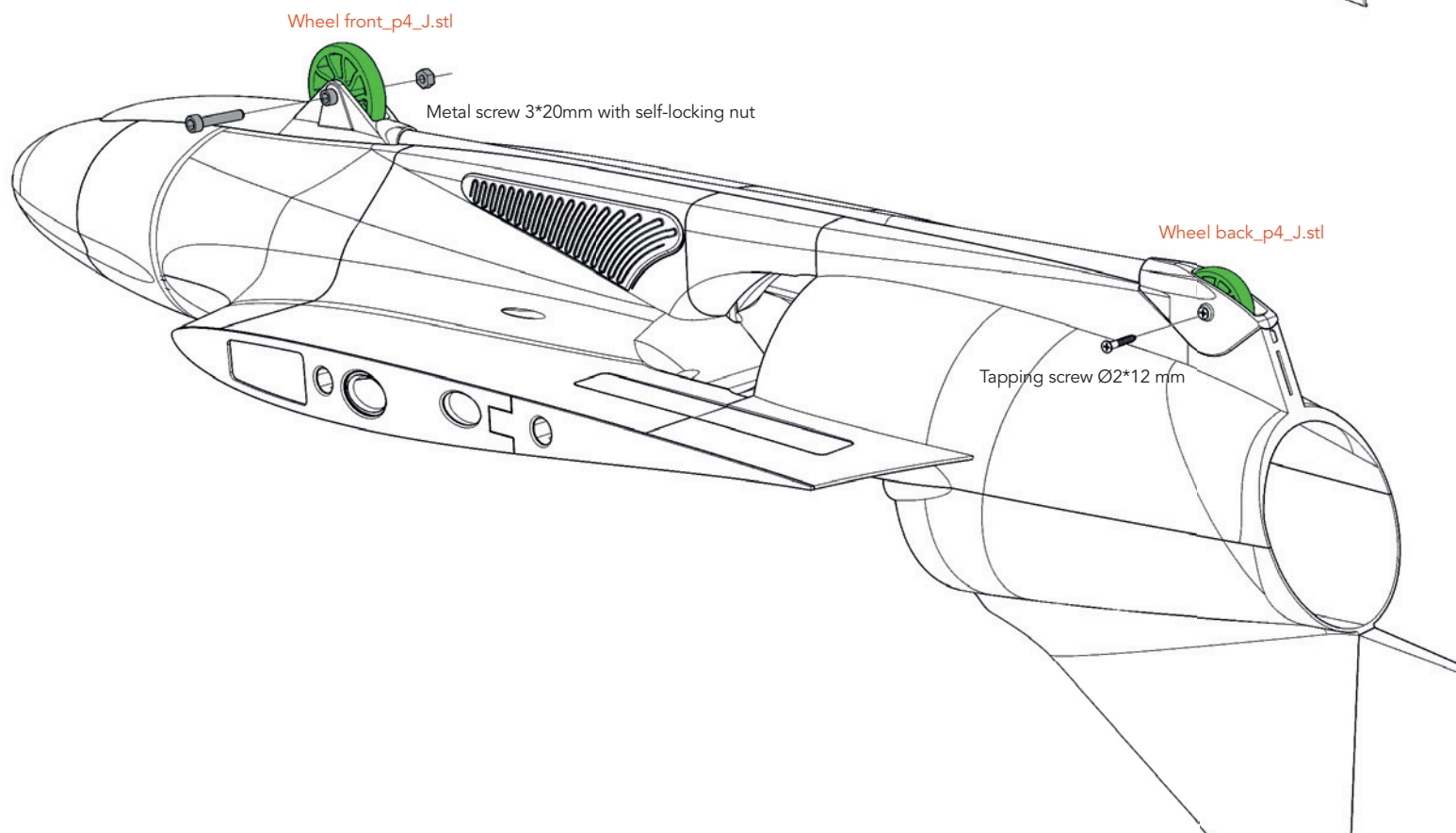


Gear assembly



Shorten the carbon tube to 340 mm with our **Carbon Tool** and insert it into the guide groove from behind. It must protrude completely into the PLA part at the front! Let **thin** CA glue run into the gap along the entire length to achieve a good bond to the fuselage and the PLA part in front.

Then place the rear PLA part (the version with the wheel or without) on the tube and align it vertically. Glue this part well too.



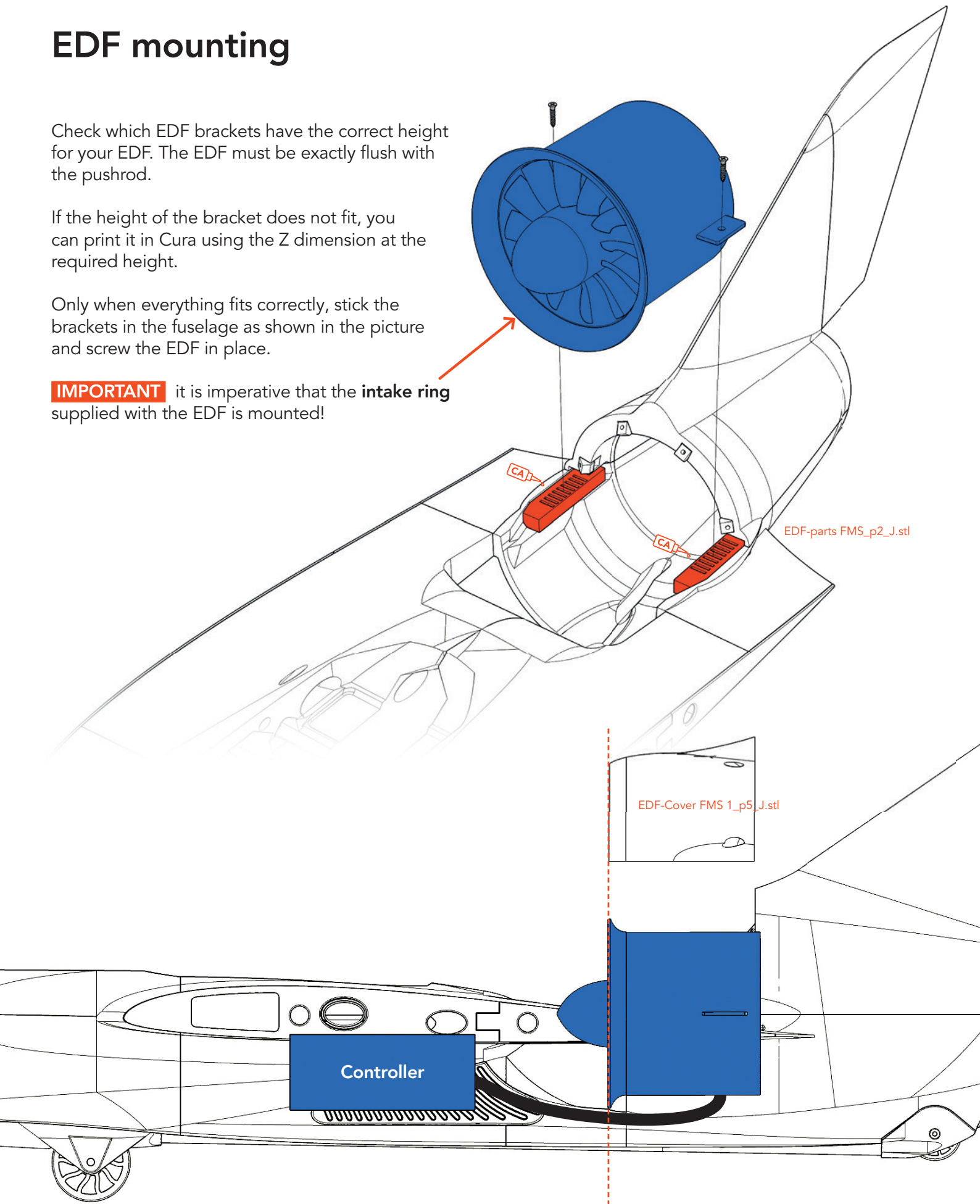
EDF mounting

Check which EDF brackets have the correct height for your EDF. The EDF must be exactly flush with the pushrod.

If the height of the bracket does not fit, you can print it in Cura using the Z dimension at the required height.

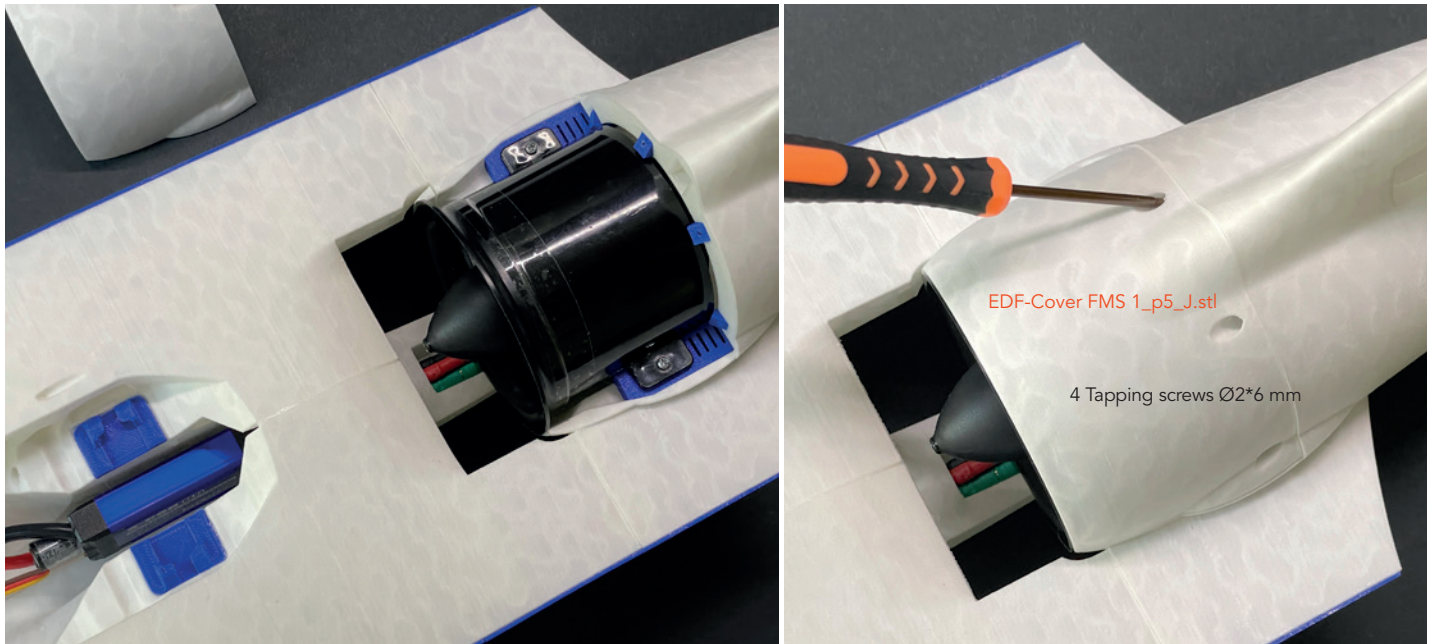
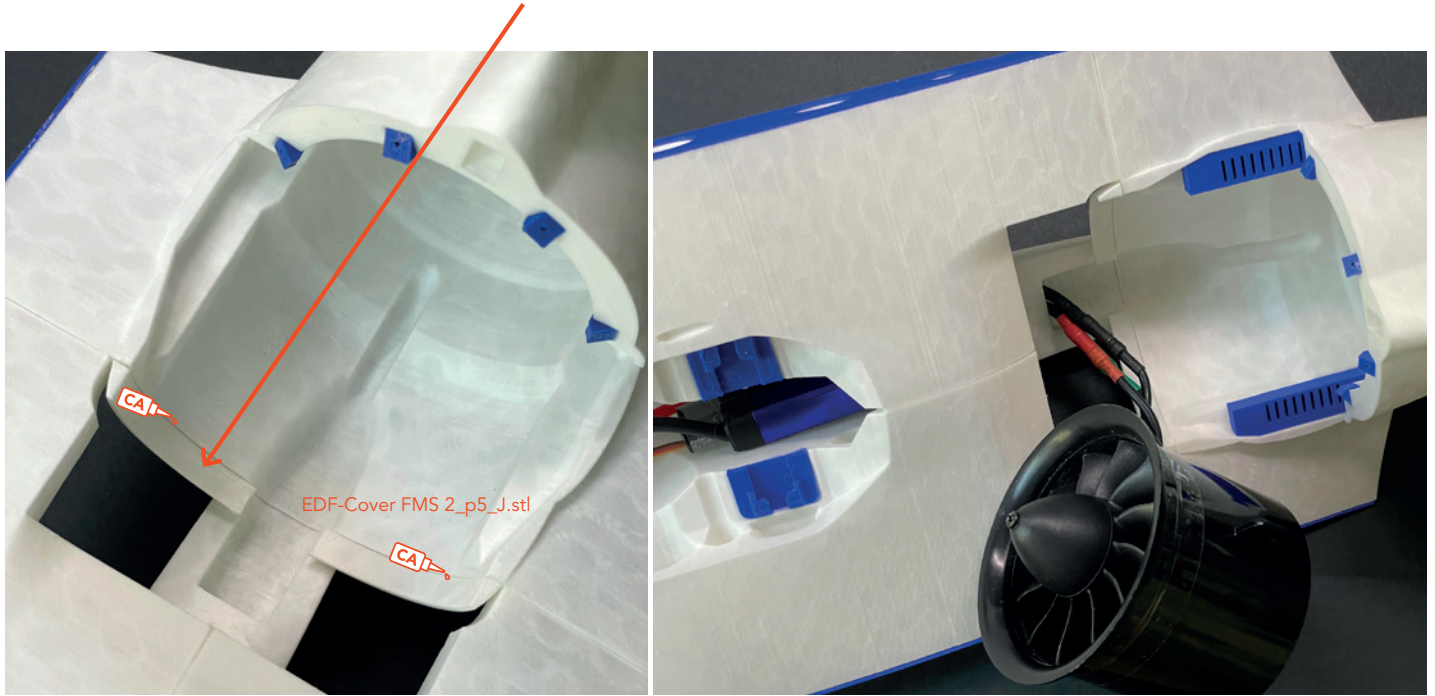
Only when everything fits correctly, stick the brackets in the fuselage as shown in the picture and screw the EDF in place.

IMPORTANT it is imperative that the **intake ring** supplied with the EDF is mounted!



EDF mounting

For the EDF from FMS, these parts are glued here:



NOTE Before mounting the EDF cover, pour **a little** thin CA glue into the screw holes and spray activator on it. This stabilizes this area.

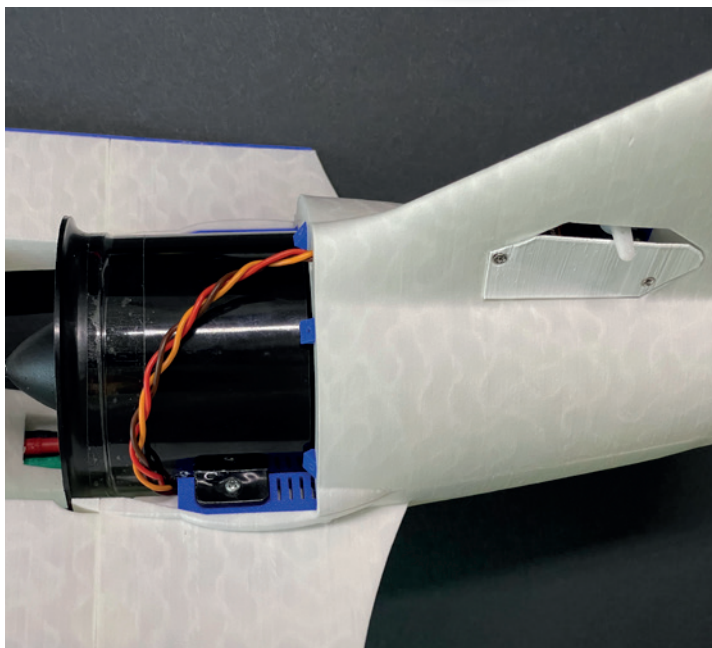
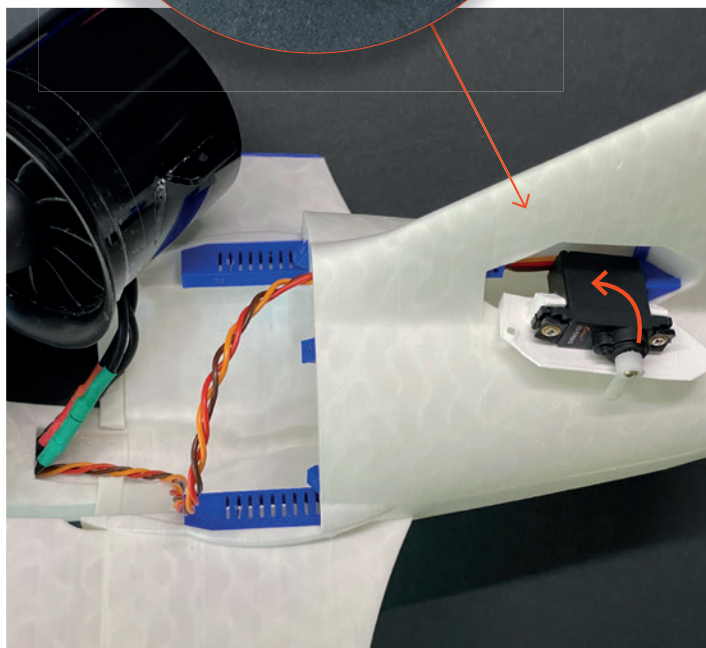
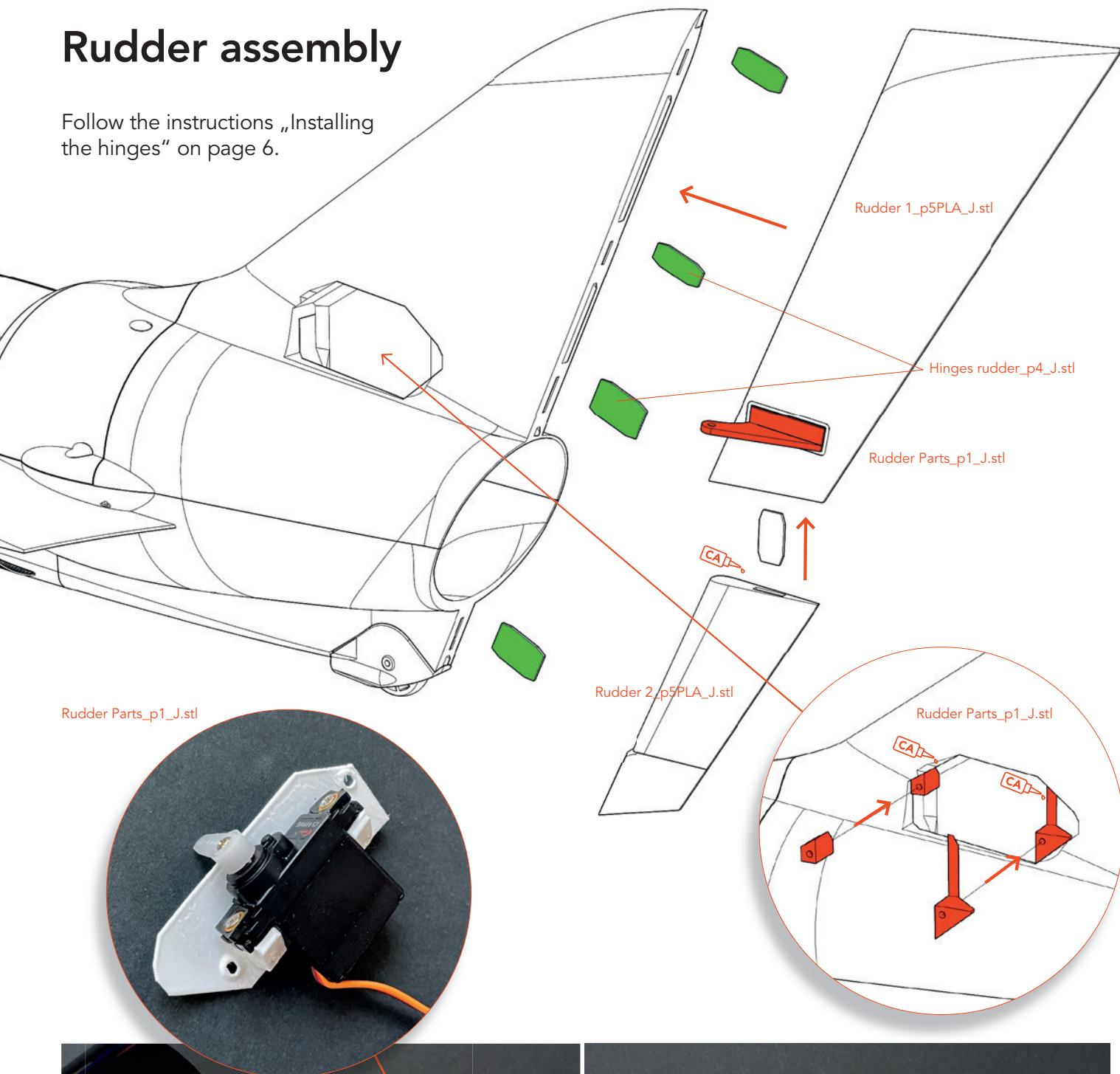


If you plan to launch from the ground, you should glue the TPU mesh to the lower intake openings of the EDF.

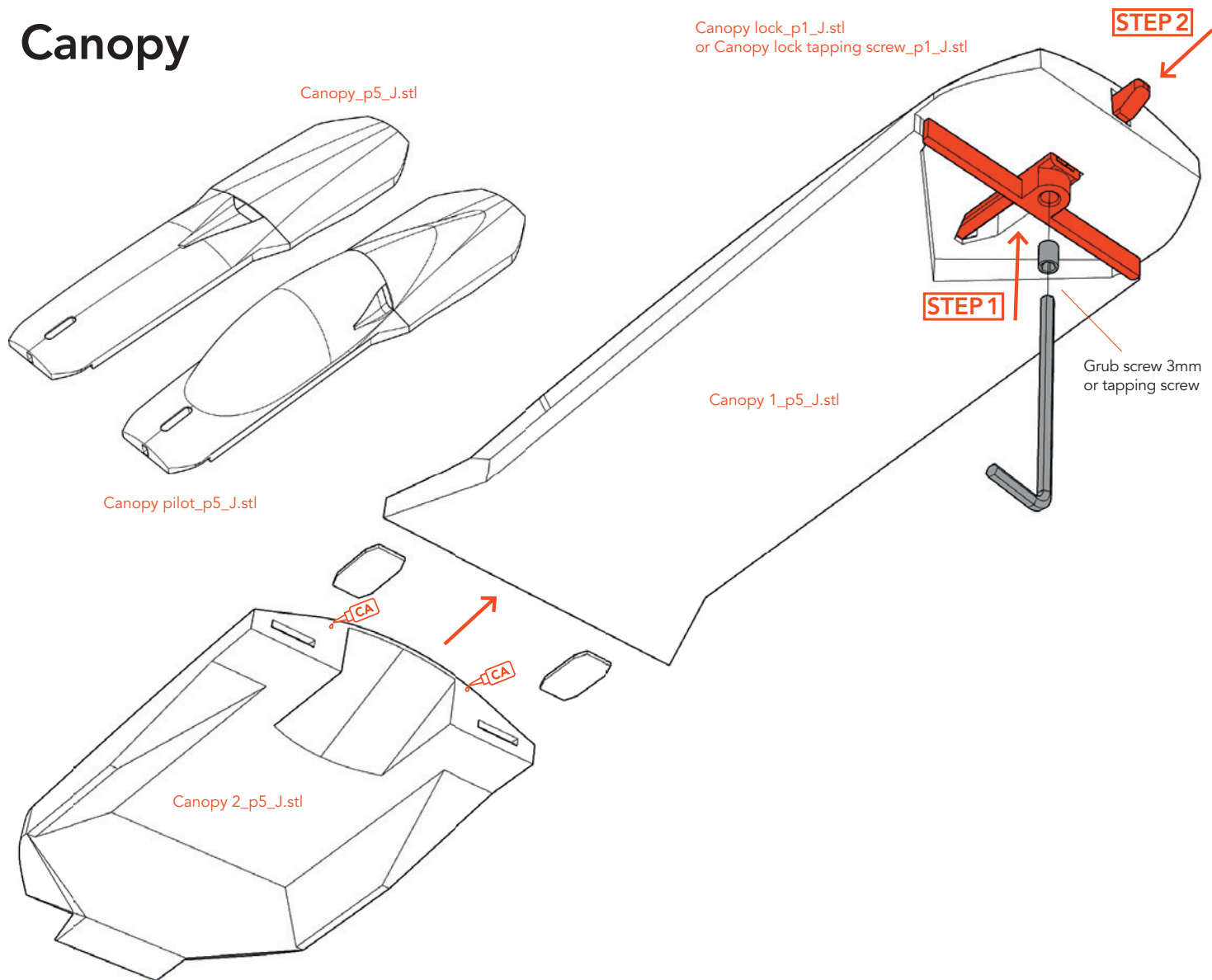
This will prevent dirt and small stones from being sucked in.

Rudder assembly

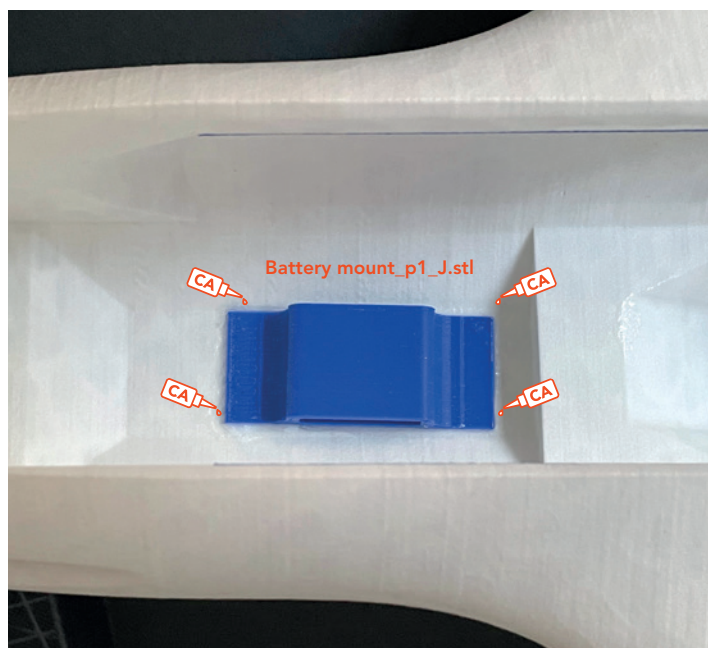
Follow the instructions „Installing the hinges“ on page 6.

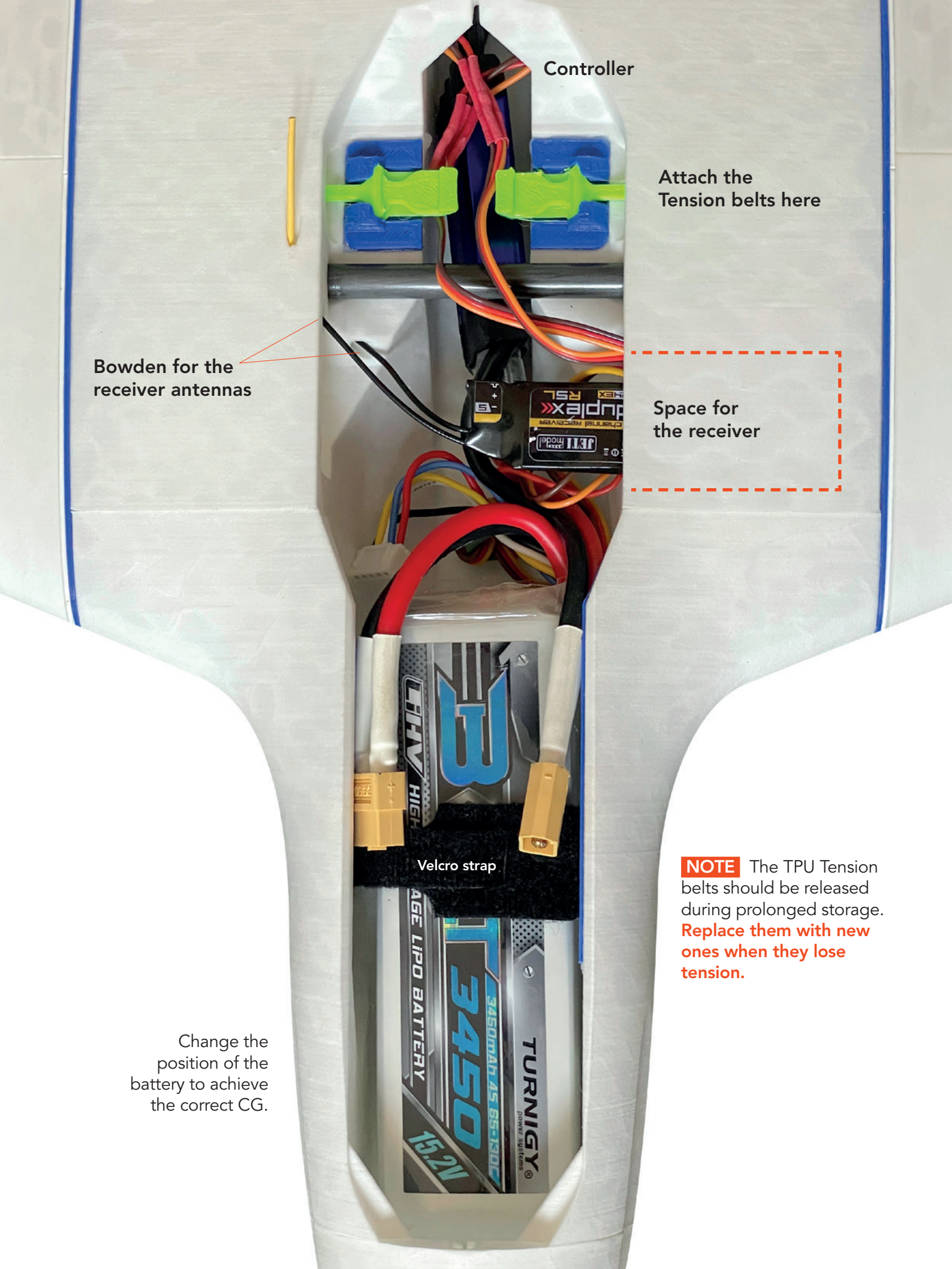


Canopy



RC Components – Battery mount





Controller

Attach the
Tension belts here

Bowden for the
receiver antennas

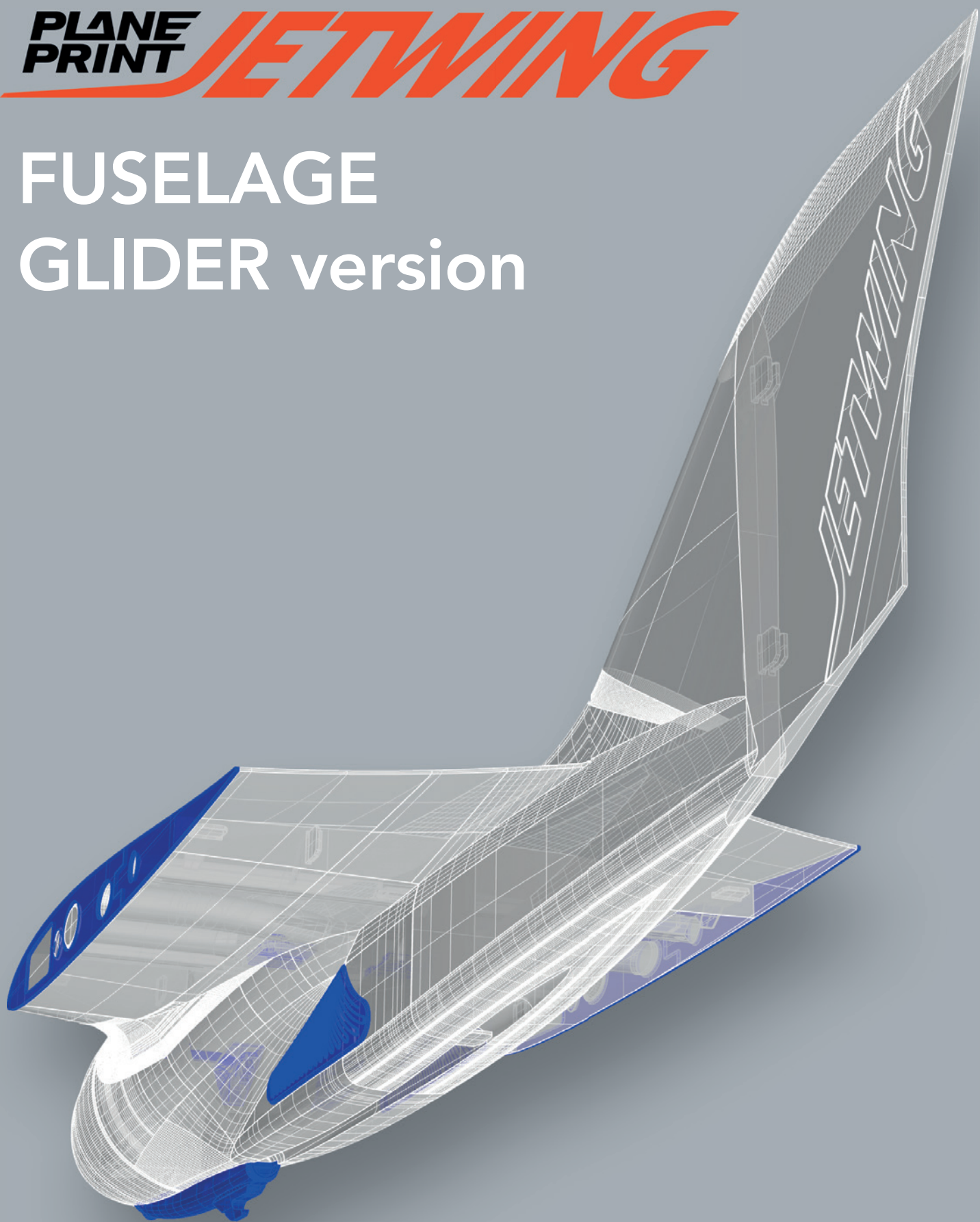
Space for
the receiver

Velcro strap

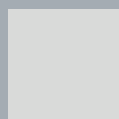
Change the
position of the
battery to achieve
the correct CG.

NOTE The TPU Tension
belts should be released
during prolonged storage.
**Replace them with new
ones when they lose
tension.**

FUSELAGE GLIDER version



PLA



LW-PLA



TPU

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!

Canopy lock_p1_J.stl or
Canopy lock tapping screw_p1_J.stl

MATERIAL PLA, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required

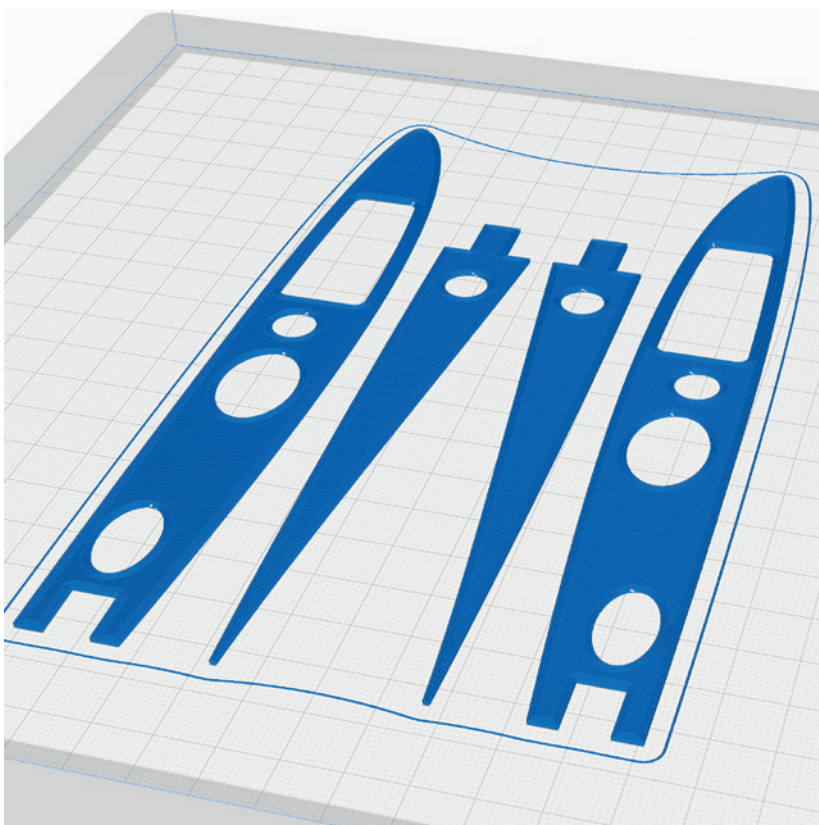


Fuselage protector_p1_J.stl

MATERIAL PLA, Weight: ~ 9 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY PLA or Tough PLA

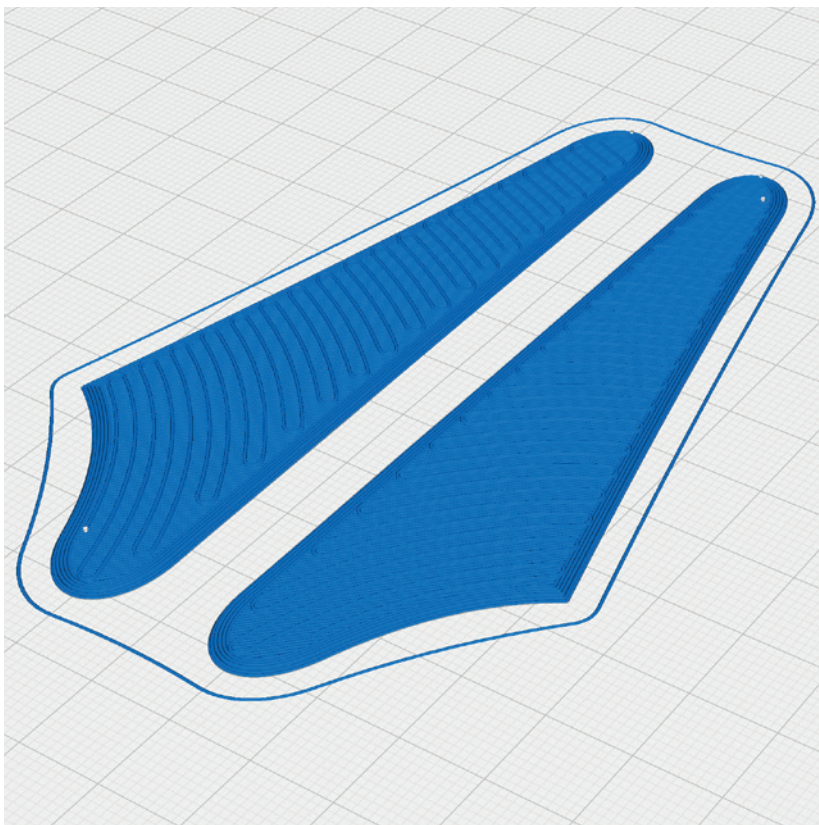
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Handling surfaces_p1_J.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

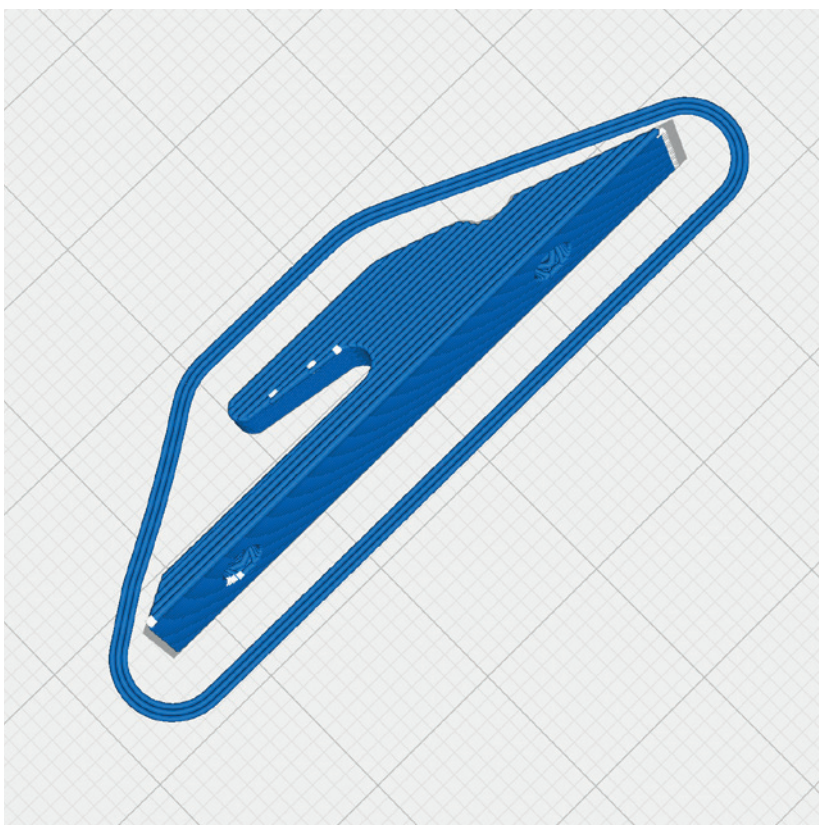


Hook_p1_J.stl

MATERIAL PLA, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY PLA or Tough PLA

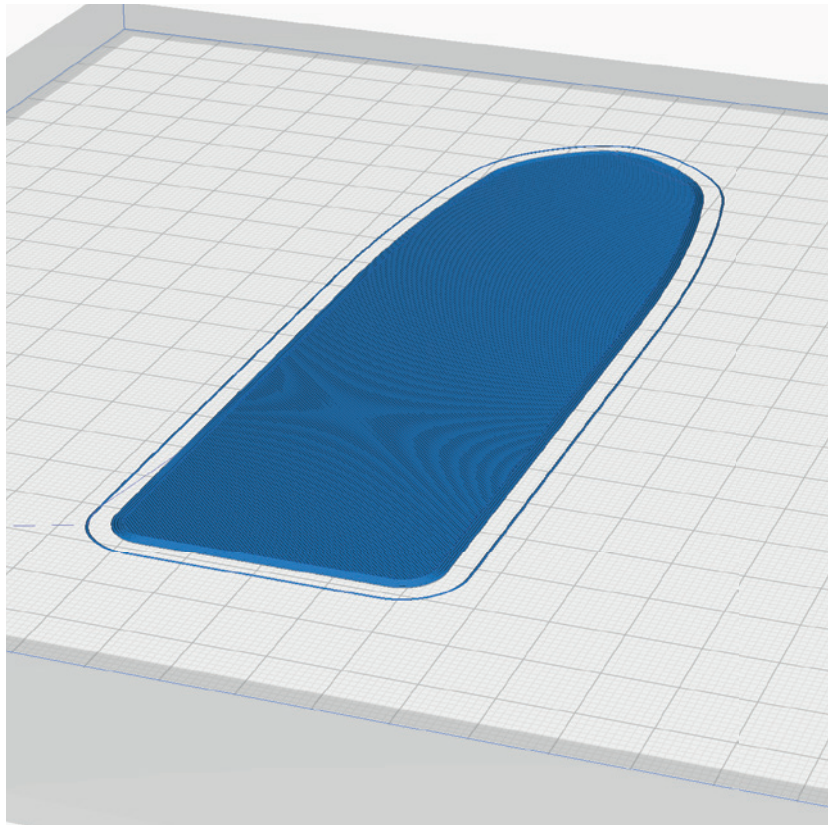
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Battery plate_p1.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

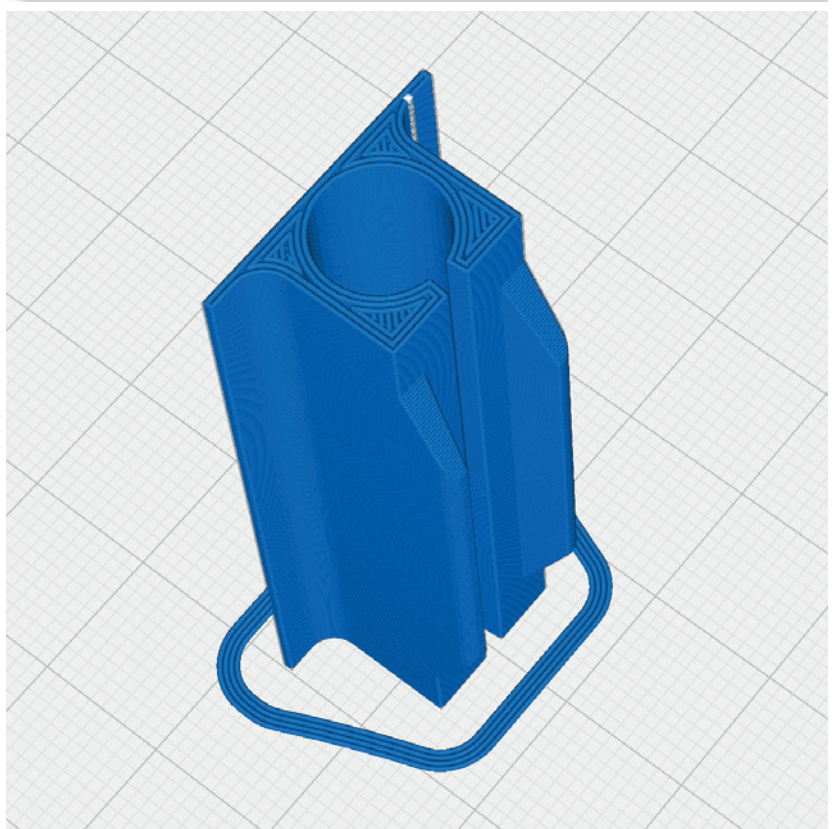
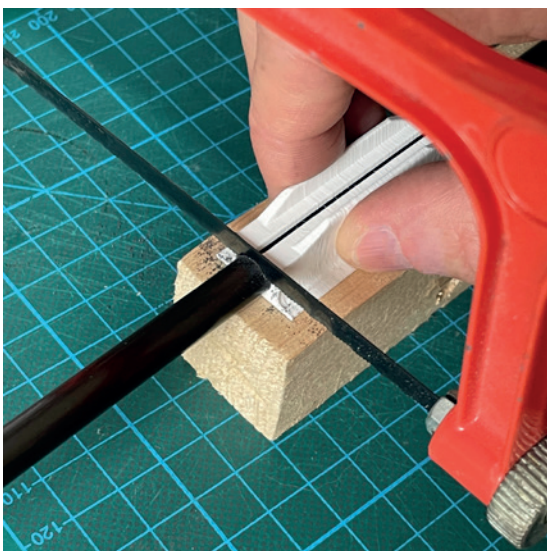


Carbon tool_p1_J.stl

MATERIAL PLA, Weight: ~ 6 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!

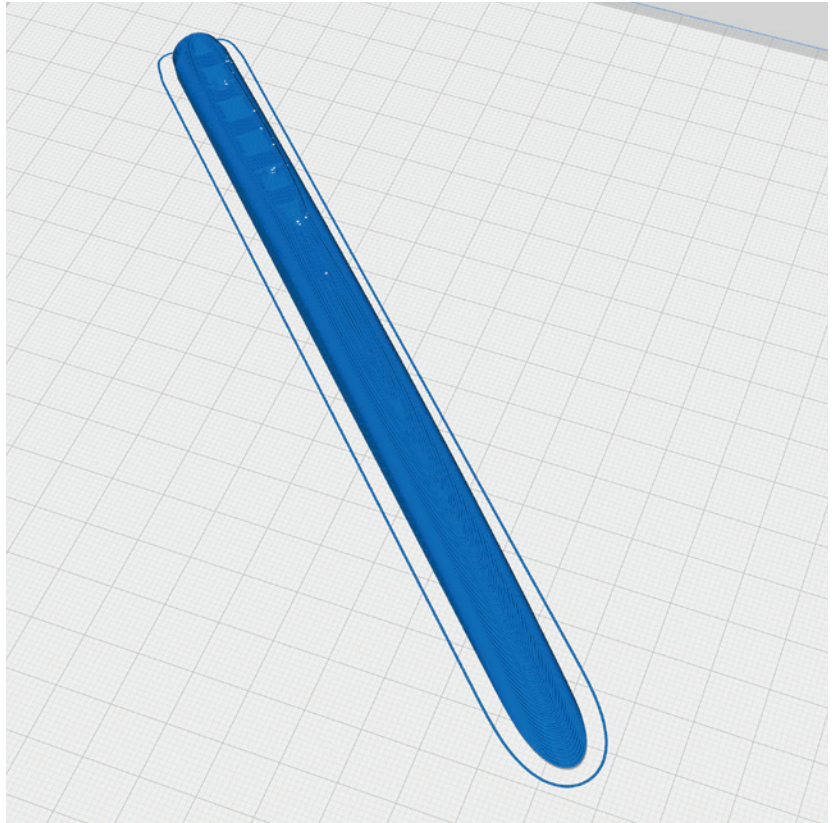
Skid Glider front_p2_J.stl
or **Skid Tow_p2_J.stl**

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required

If you want to build the **version with Tow coupling**, take instead the STL **Skid Tow_p2_J.stl**



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!

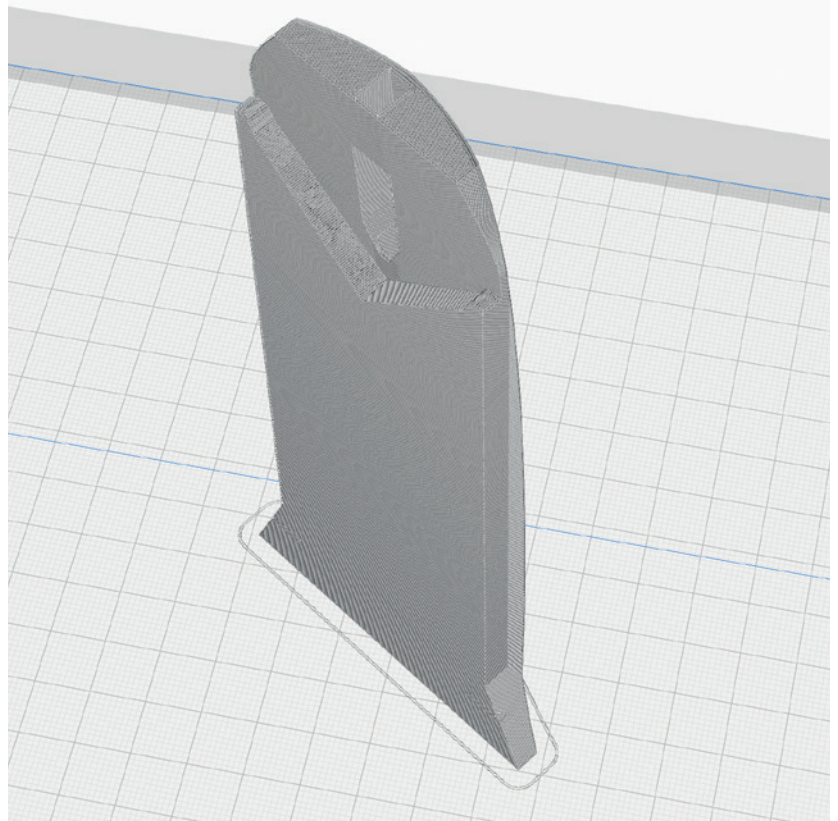
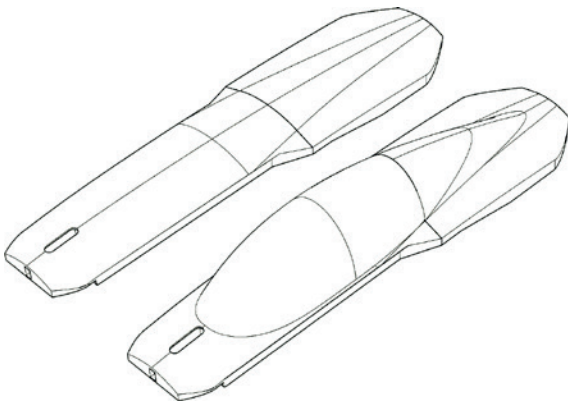
Canopy flat 1_p5_J.stl or Canopy pilot 1_p5_J.stl

MATERIAL LW-PLA, ~ 9 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



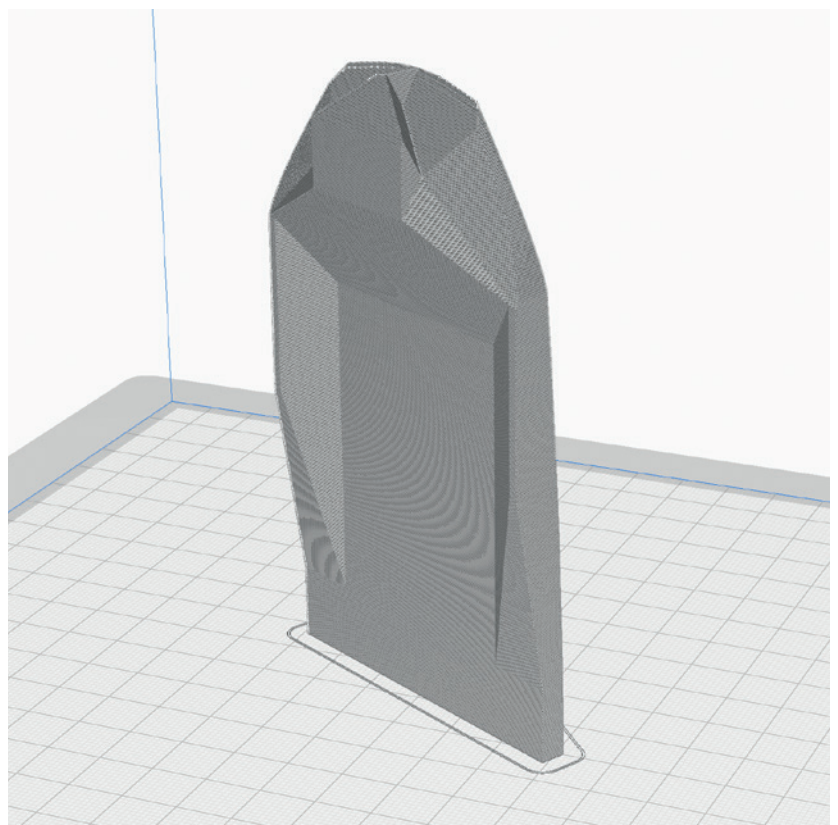
Canopy flat 2_p5_J.stl or Canopy pilot 2_p5_J.stl

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!

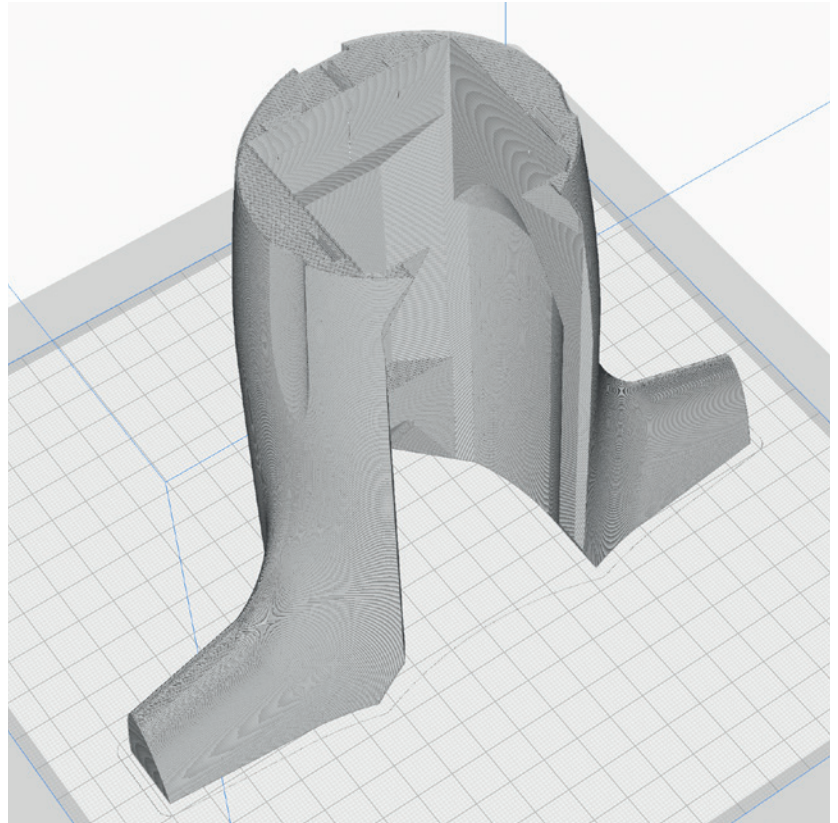
Fuselage 1_p5_J.stl

MATERIAL LW-PLA, ~ 33 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



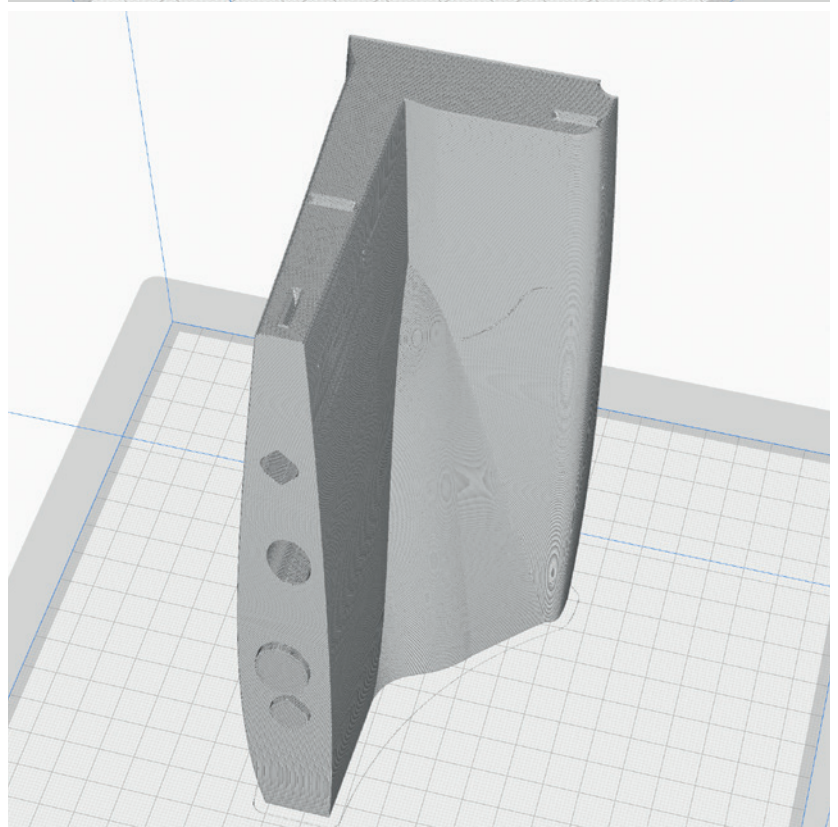
Fuselage 2 Glider left_p5_J.stl Fuselage 2 Glider right_p5_J.stl

MATERIAL LW-PLA, ~ 45 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!

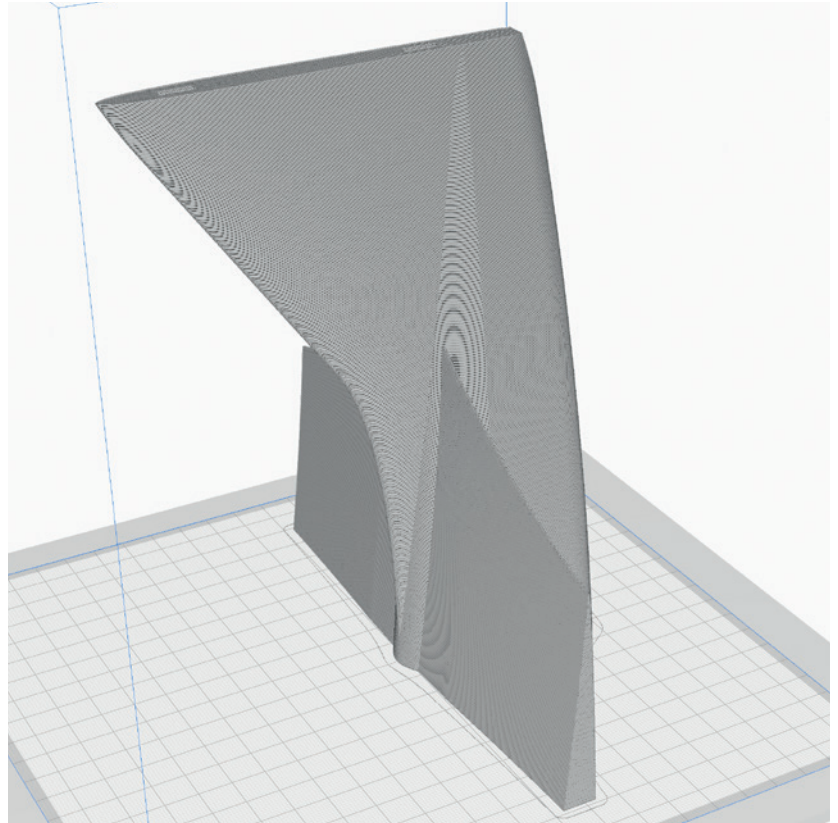
Fuselage 3 Glider_p5_J.stl

MATERIAL LW-PLA, ~ 39 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



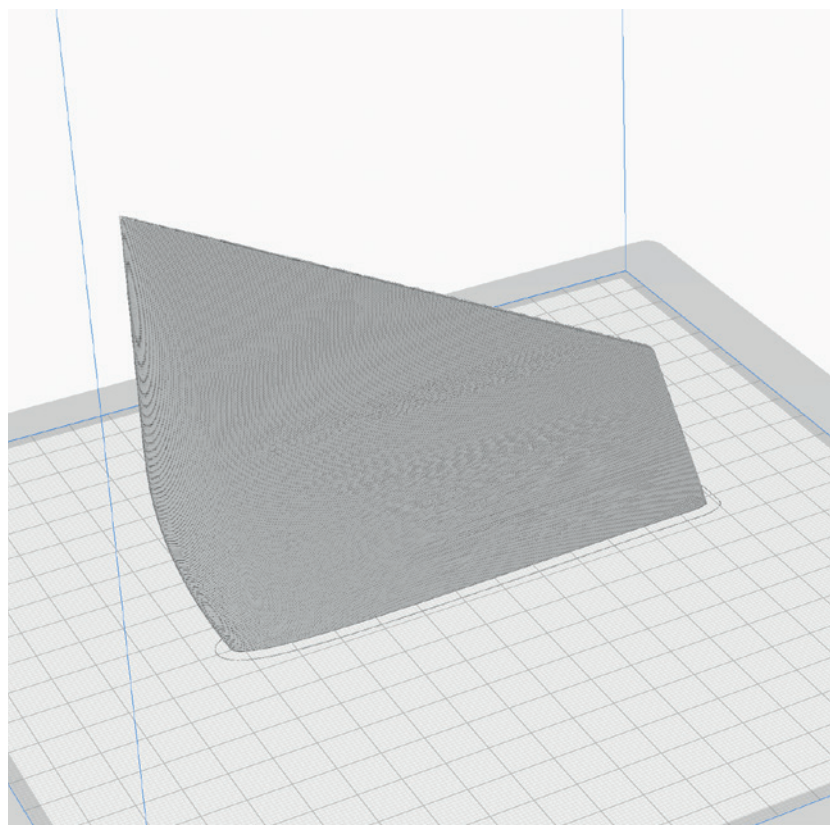
Fuselage 4 Glider_p5_J.stl or Fuselage 4+decal Glider_p5_J.stl

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!

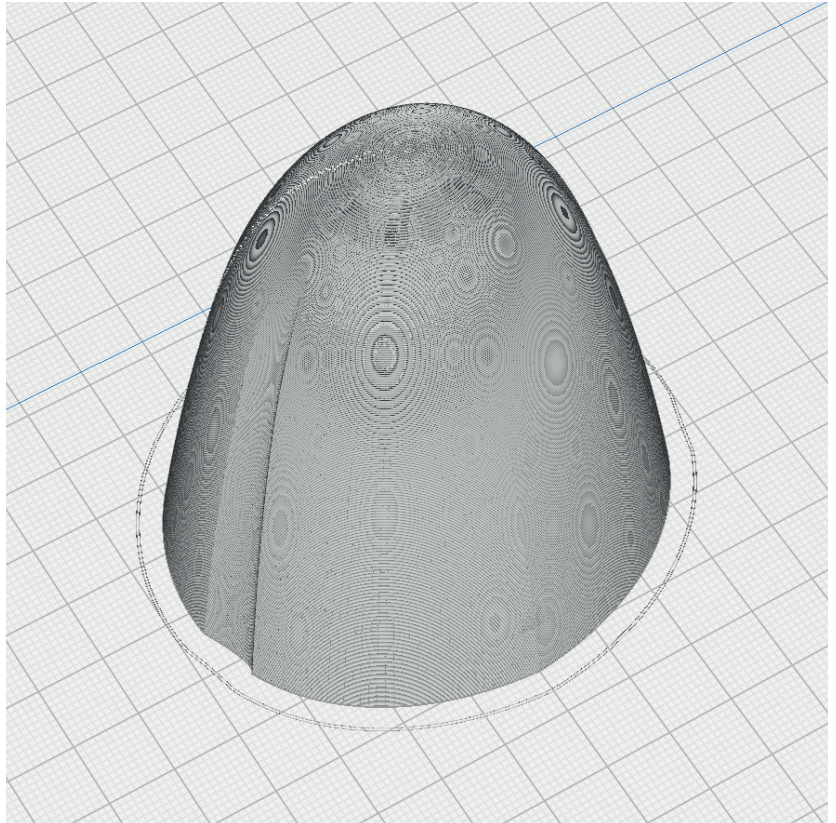
Nose_p5_J.stl

MATERIAL LW-PLA, ~ 12 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- set Brim



Interconnects_p1_J.stl

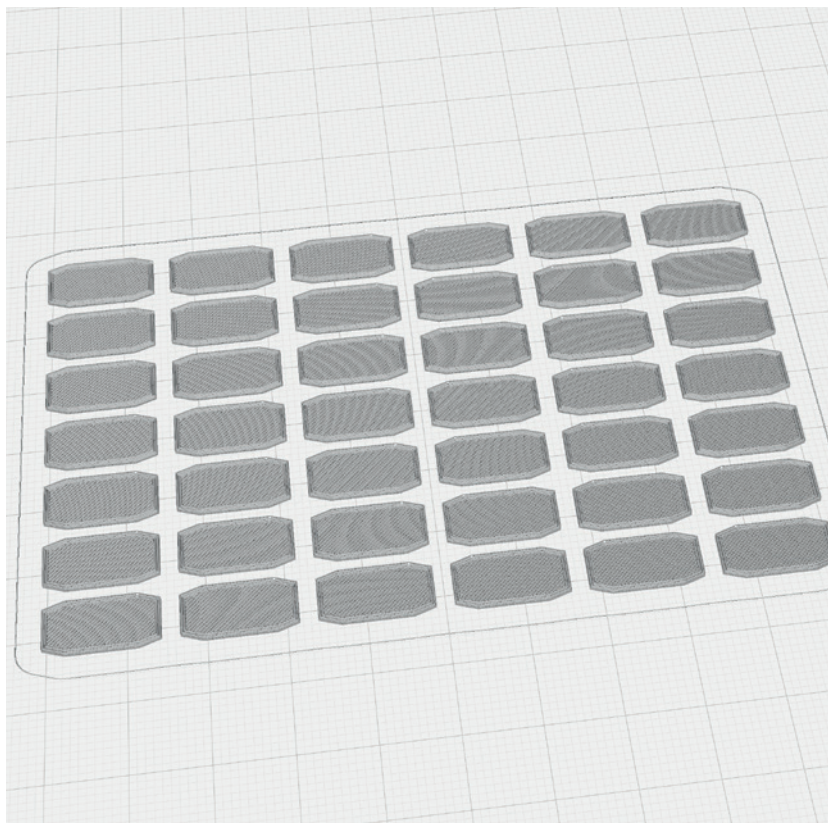
MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

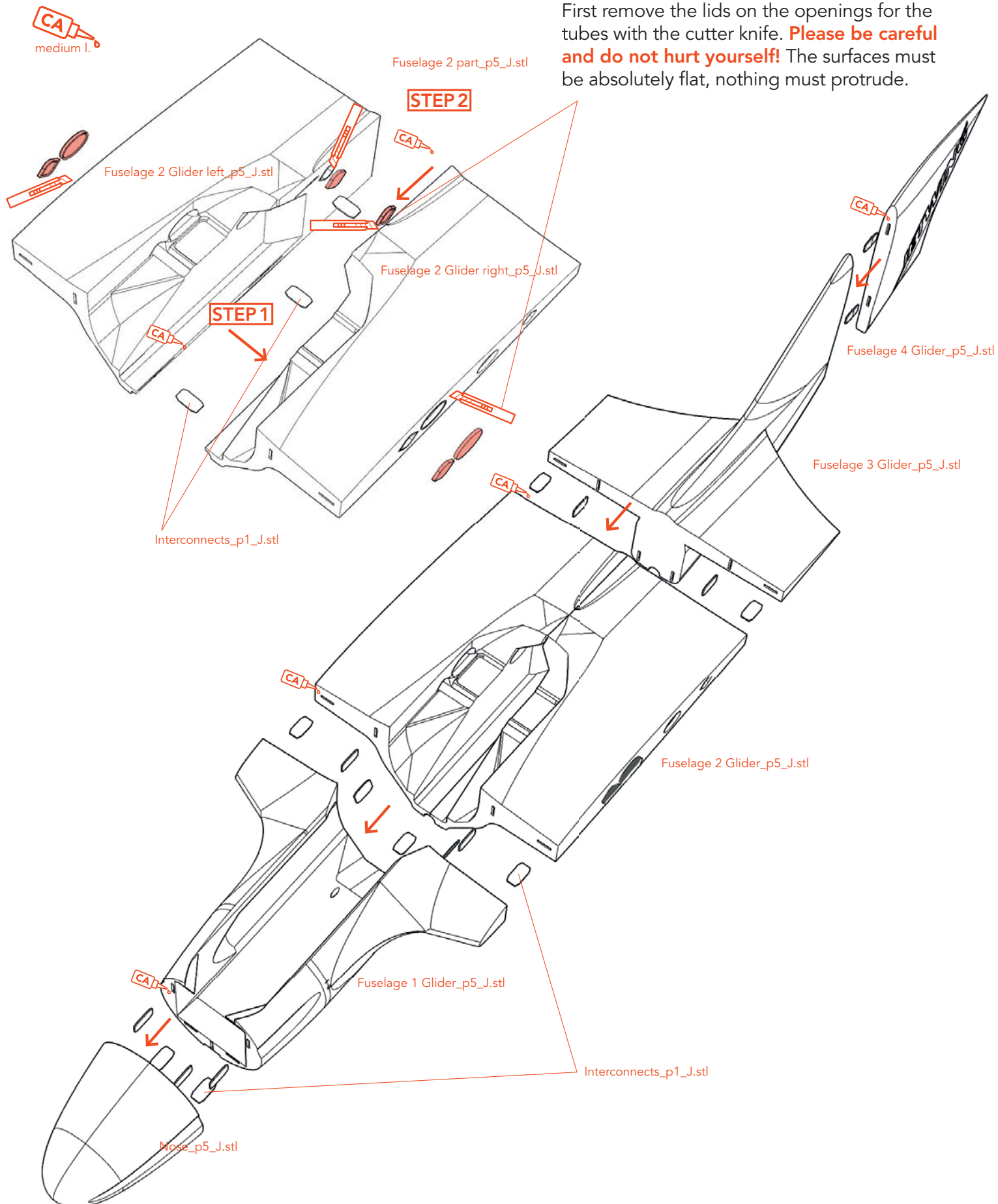
None required

You can also print the interconnects with PROFILE_1.



ASSEMBLING MANUAL FUSELAGE GLIDER

Follow the instructions „Glueing the parts“ on page 6.



Carbon tube Ø8*480mm

Fuselage protector 1_p1_J.stl

Handling surfaces_p1_J.stl

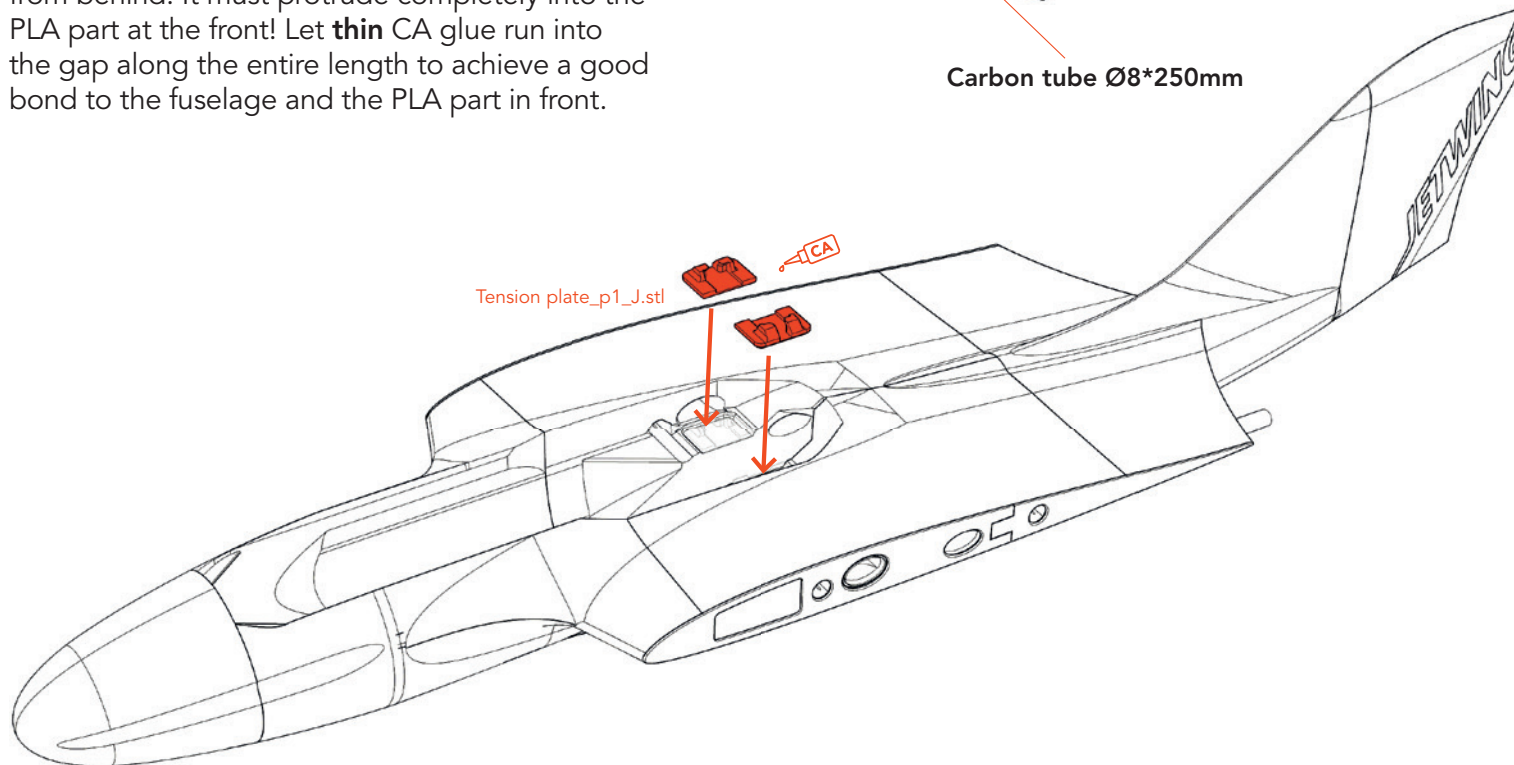
Skid Glider_p2_J.stl



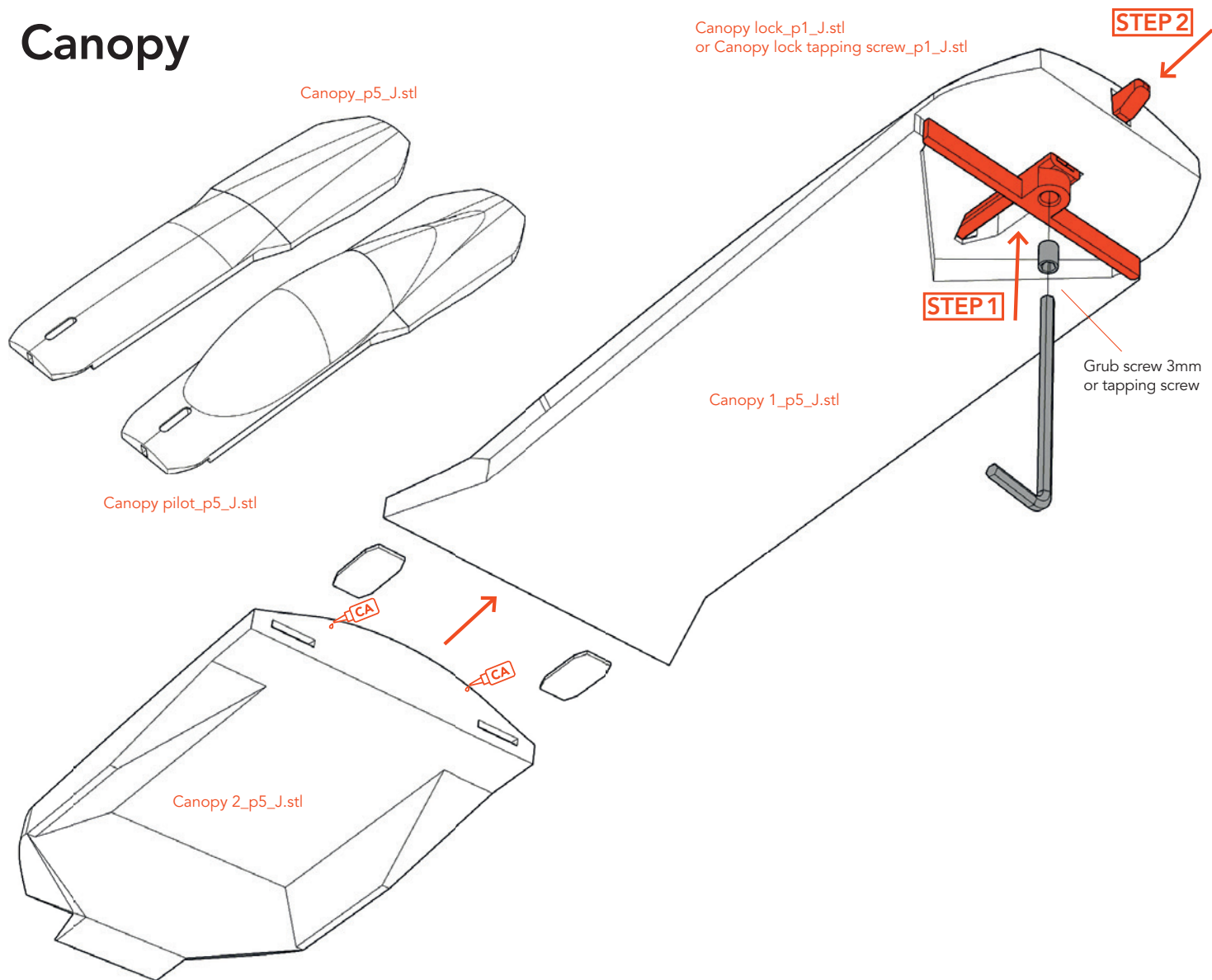
Shorten the carbon tube to 250 mm with our **Carbon Tool** and insert it into the guide groove from behind. It must protrude completely into the PLA part at the front! Let **thin** CA glue run into the gap along the entire length to achieve a good bond to the fuselage and the PLA part in front.

Carbon tube Ø8*250mm

Tension plate_p1_J.stl

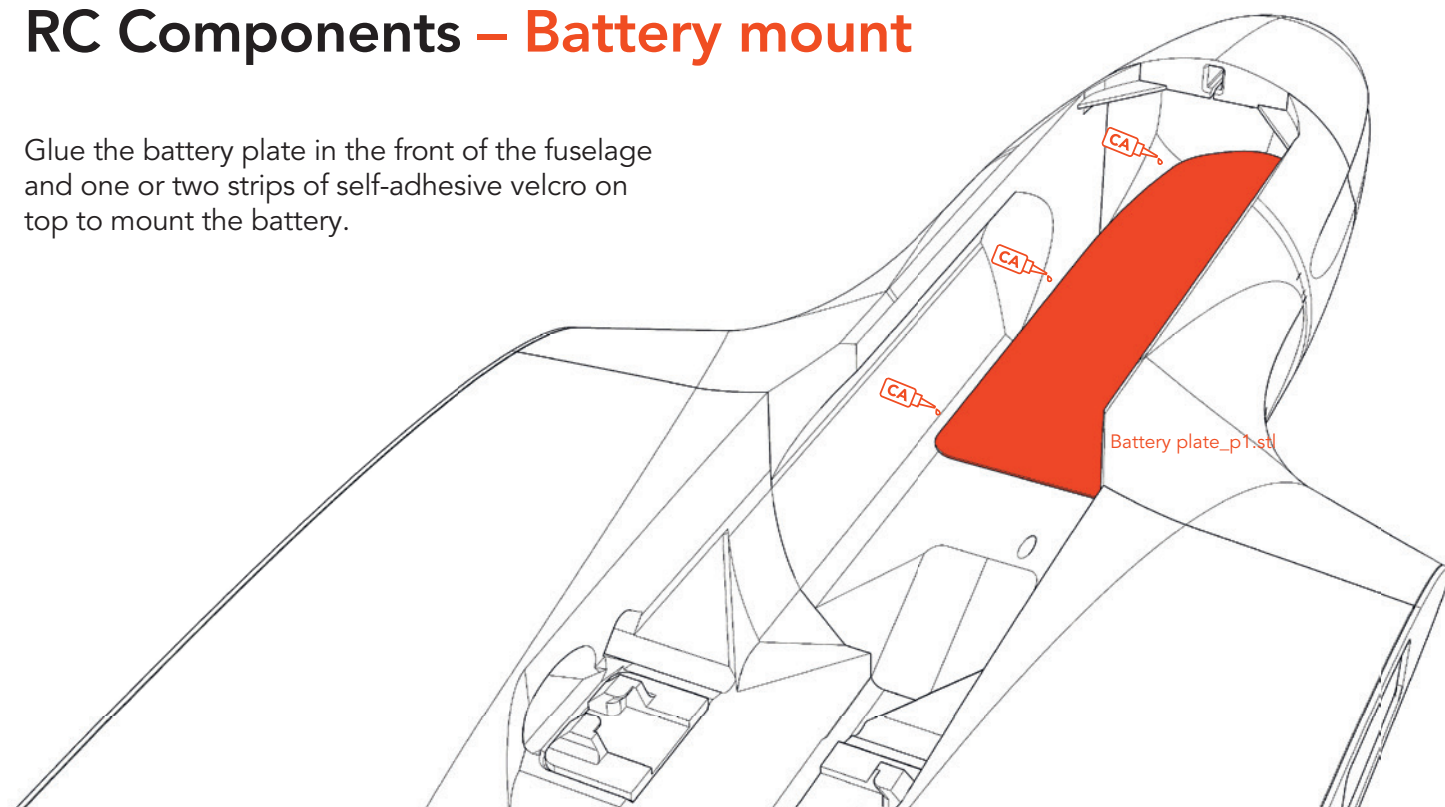


Canopy



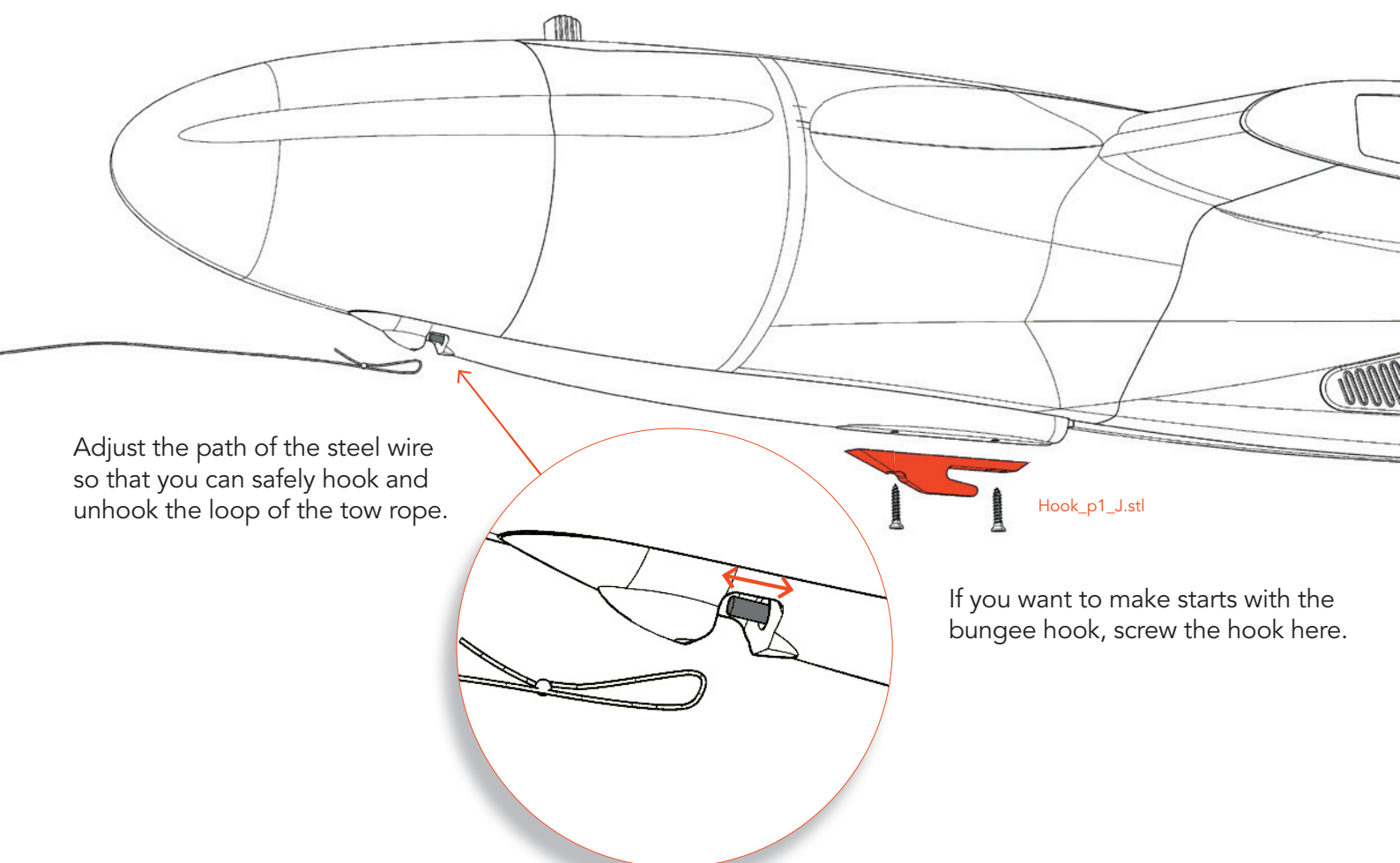
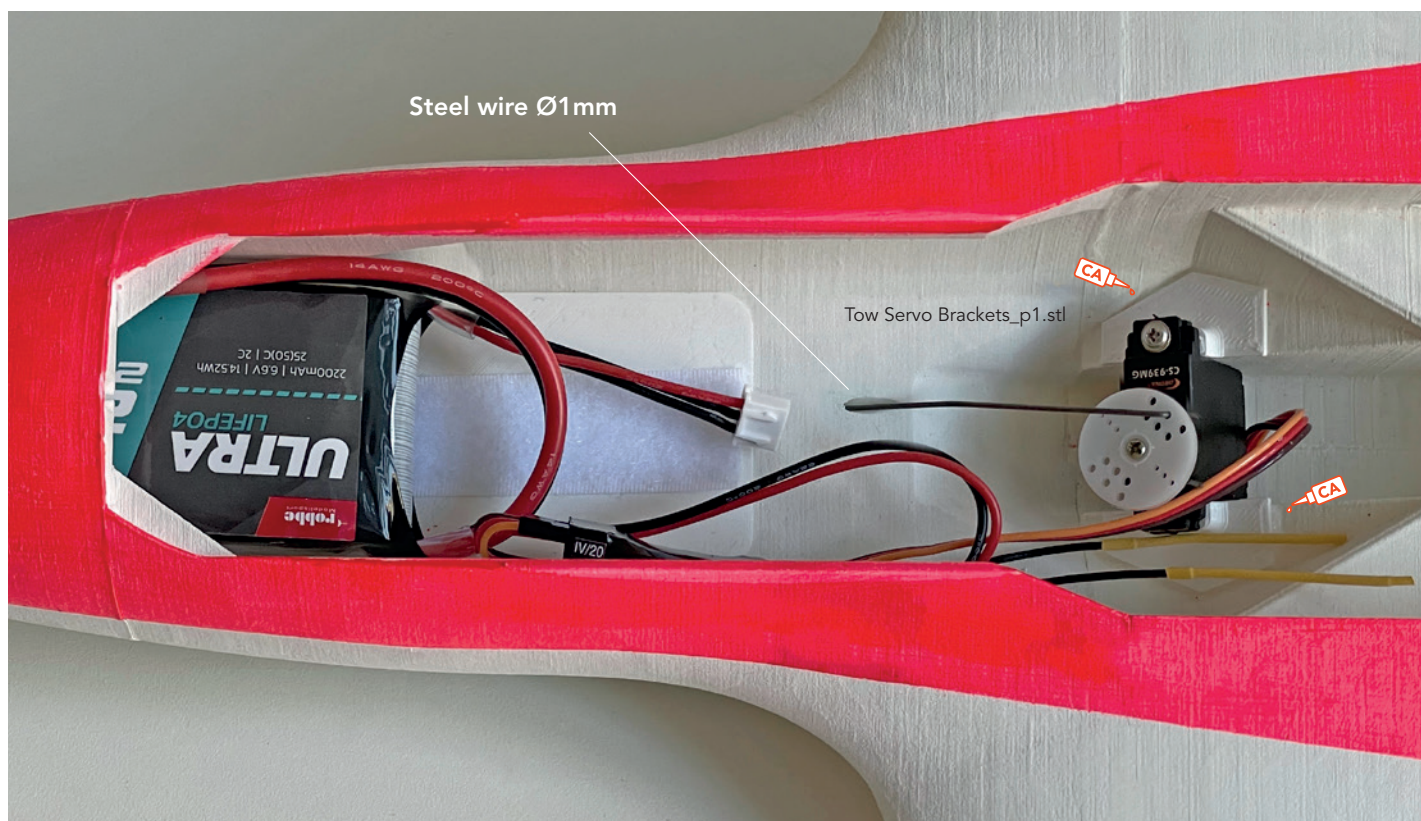
RC Components – Battery mount

Glue the battery plate in the front of the fuselage and one or two strips of self-adhesive velcro on top to mount the battery.

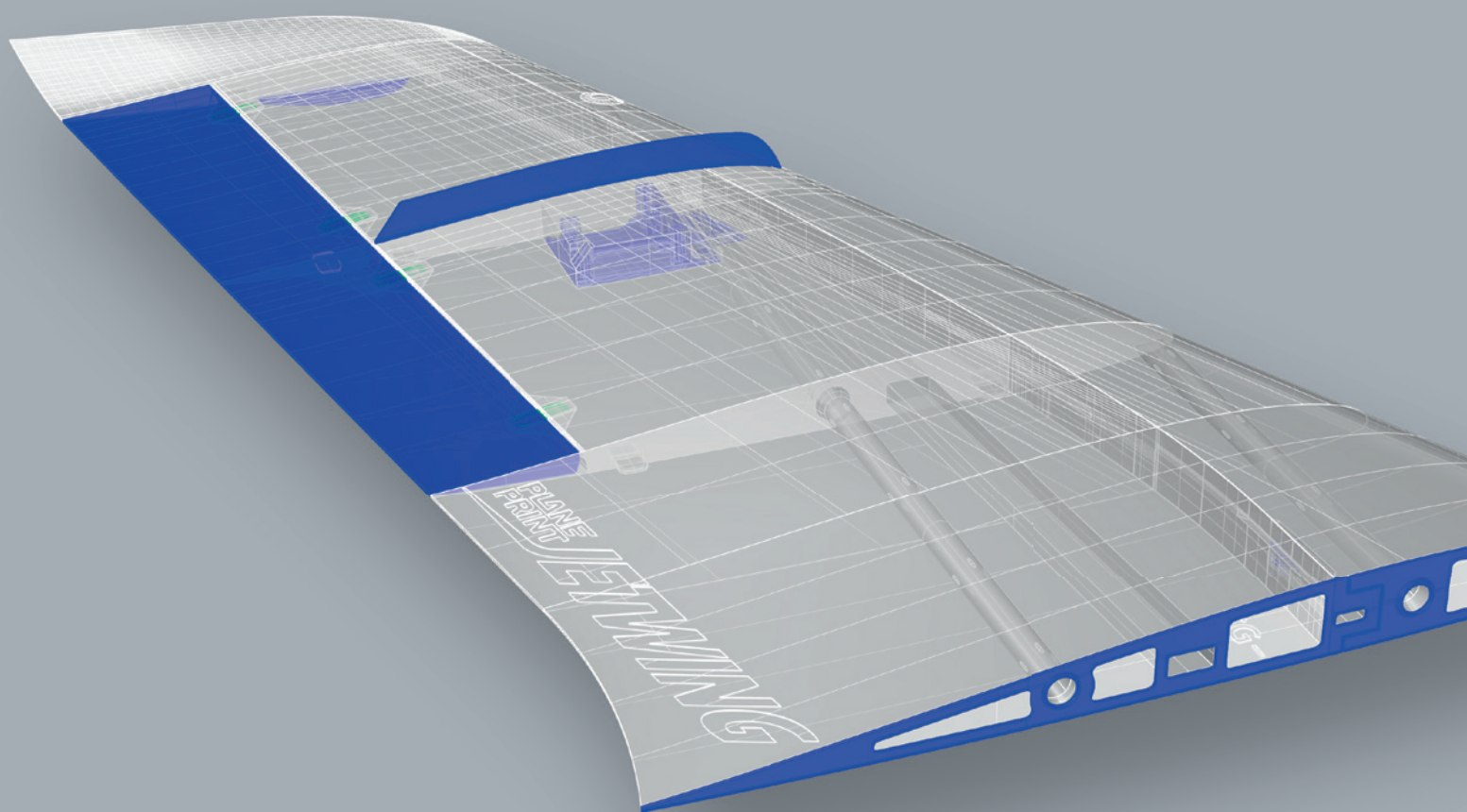


Tow coupling – optionally

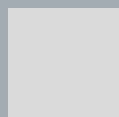
Install the servo for the tow coupling as shown in the picture.



Standard WING



PLA



LW-PLA



TPU

PROFILE P1_FULLBODY **PLA or Tough PLA**

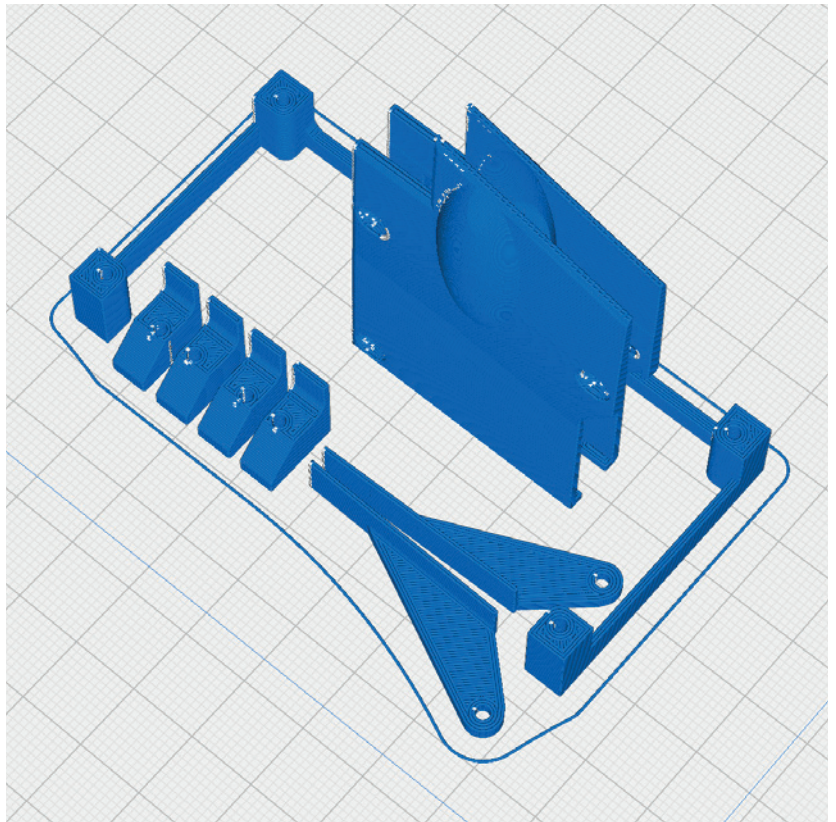
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Aileron Parts_p1_J.stl

MATERIAL PLA, Weight: ~ 15 g

ADDITIONAL SETTINGS

None required

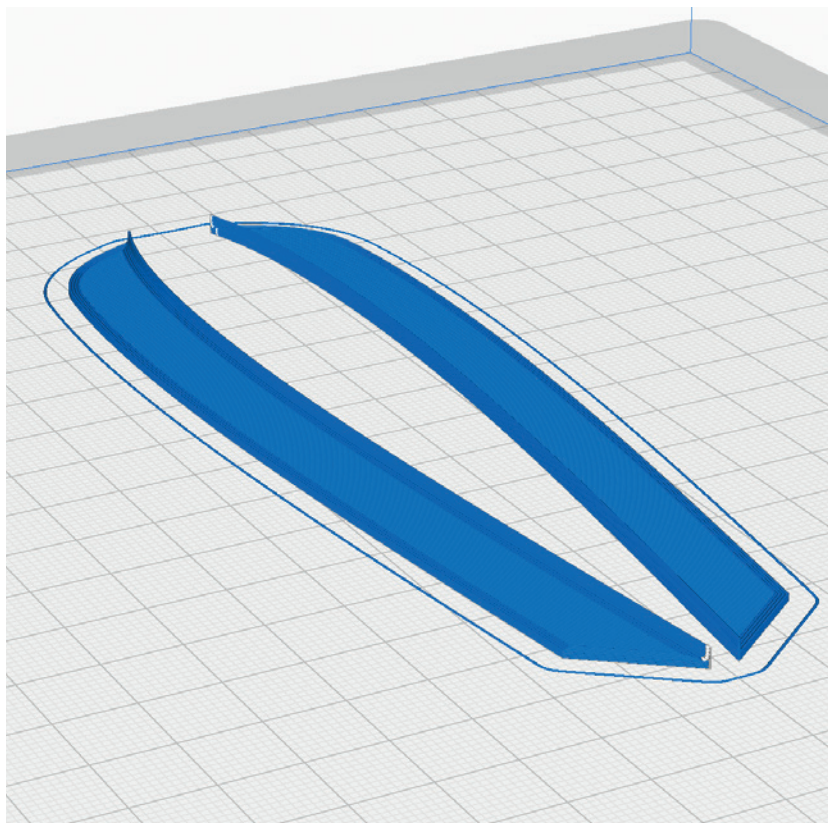


Wing fences_p1_J.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY **PLA or Tough PLA**

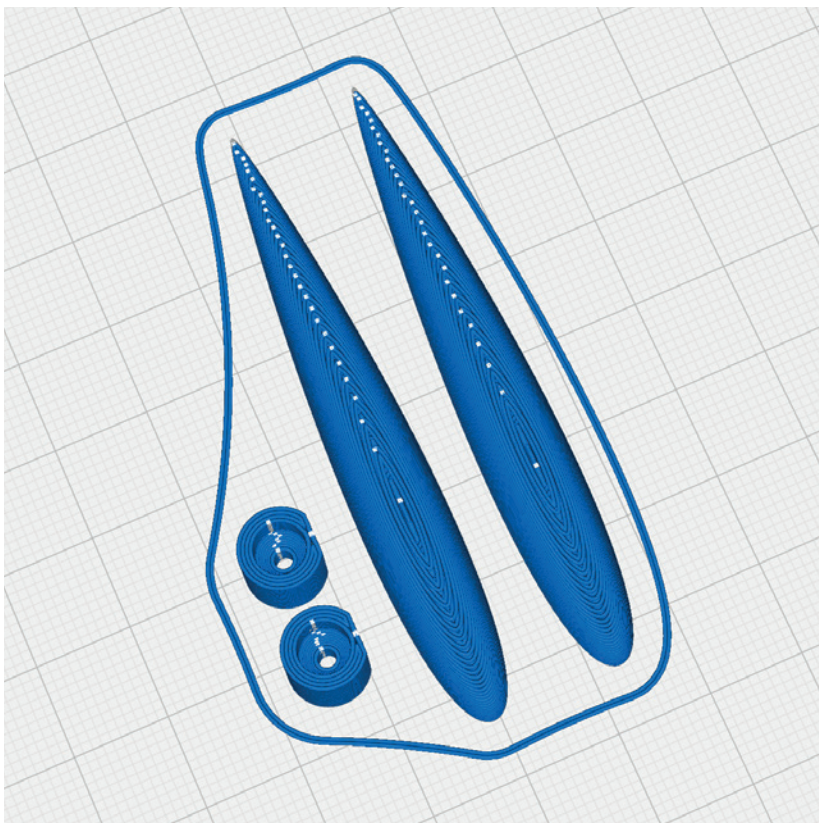
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Wing parts_p1_J.stl

MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

None required

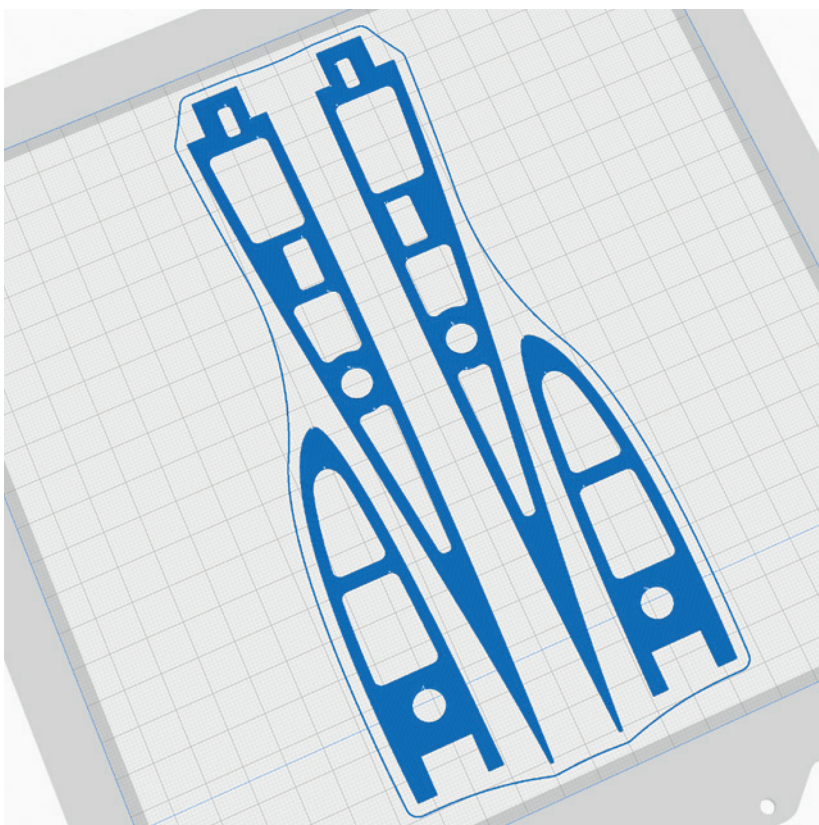


Wing protector_p1_J.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required



PROFILE P5_GYROID normal PLA or Tough PLA!

The following parts must be sliced with the PROFILE P5_GYROID. Please note the additional settings for the individual parts! These parts must be printed with normal or Tough PLA.

Aileron 1 left_p5PLA_J.stl
Aileron 1 right_p5PLA_J.stl

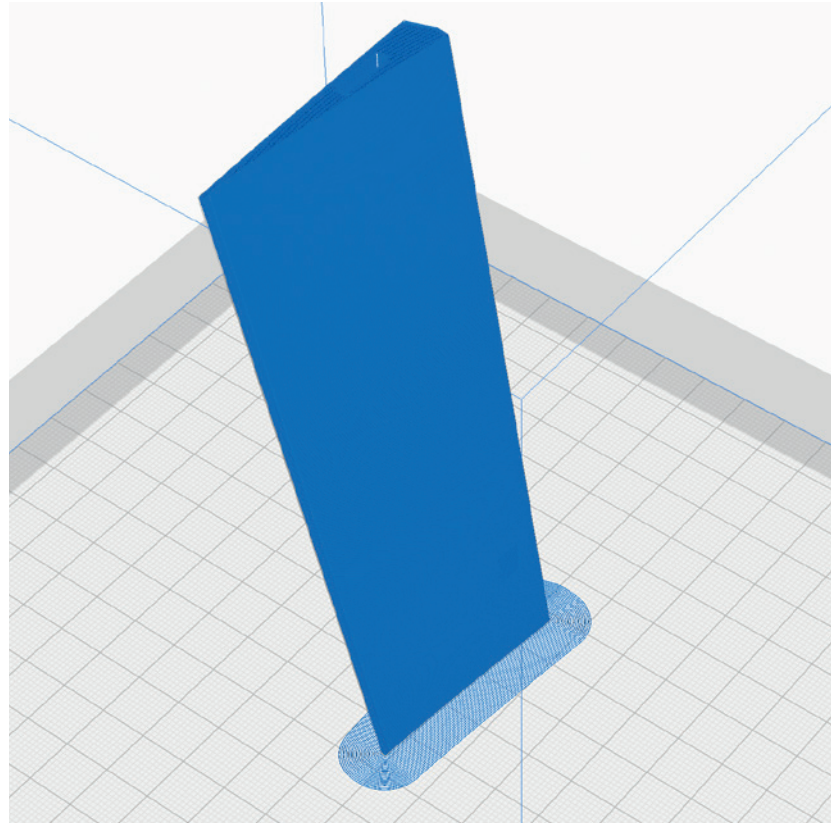
MATERIAL PLA, ~ 12 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Flow 100 %
- set Brim
- Retract settings for normal PLA

IMPORTANT The ailerons must **NOT** be printed with LW-PLA, because at the high speed the JETWING can reach, the bending strength is not sufficient!



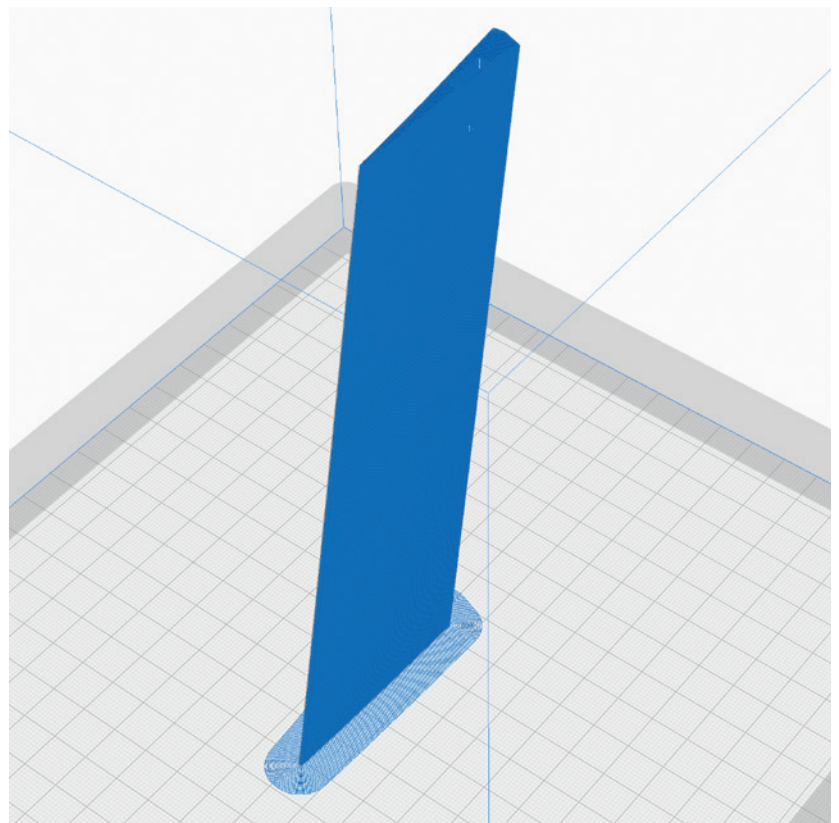
Aileron 2 left_p5PLA_J.stl
Aileron 2 right_p5PLA_J.stl

MATERIAL PLA, ~ 13 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- set Brim
- Retract settings for normal PLA



PROFILE P4_FLEX TPU A95

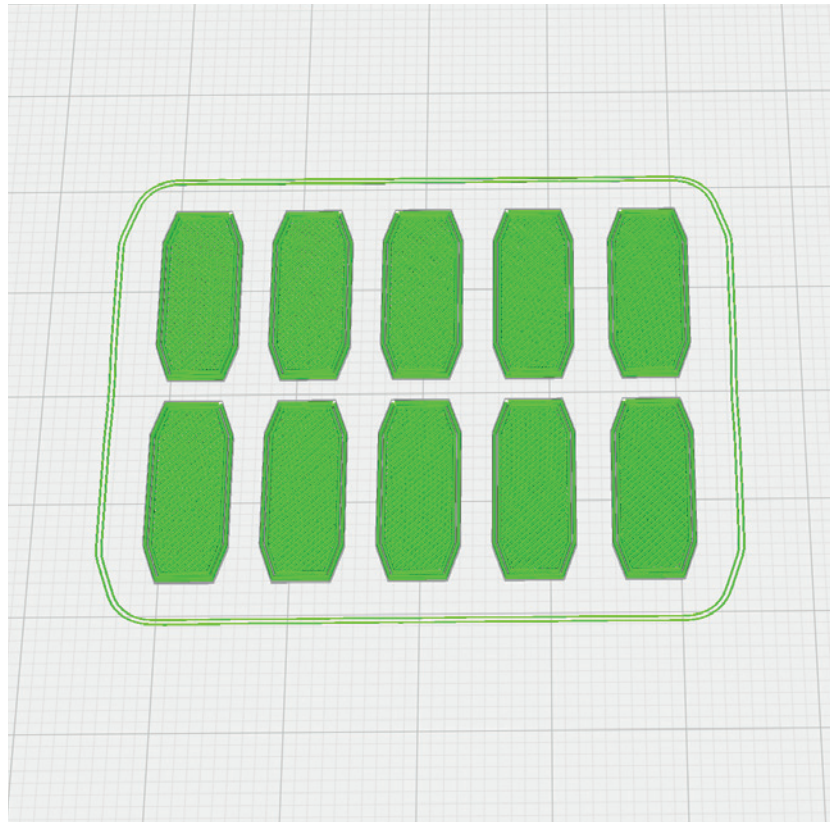
The following parts must be sliced with the PROFILE P4_FLEX.
Please note the additional settings for the individual parts!

Hinges wings_p4_J.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

None required



PROFILE P4_FLEX TPU A95 or VarioShore

The following parts must be sliced with the PROFILE P4_FLEX.
Please note the additional settings for the individual parts!

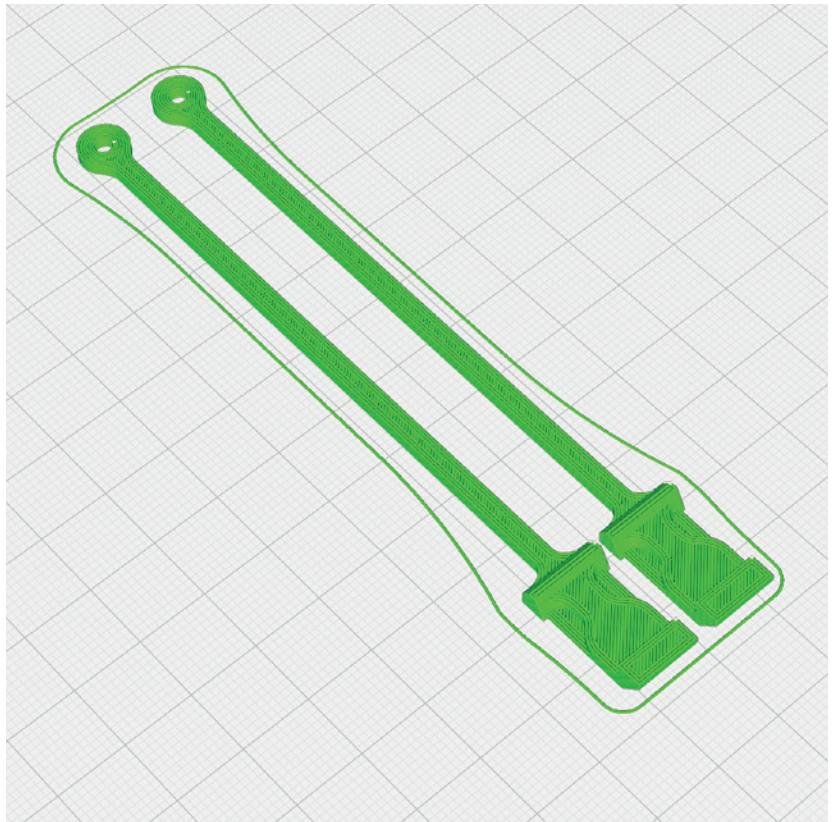
Tension belt TPUA95_p4_J.stl
Tension belt VarioShore_p4_J.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

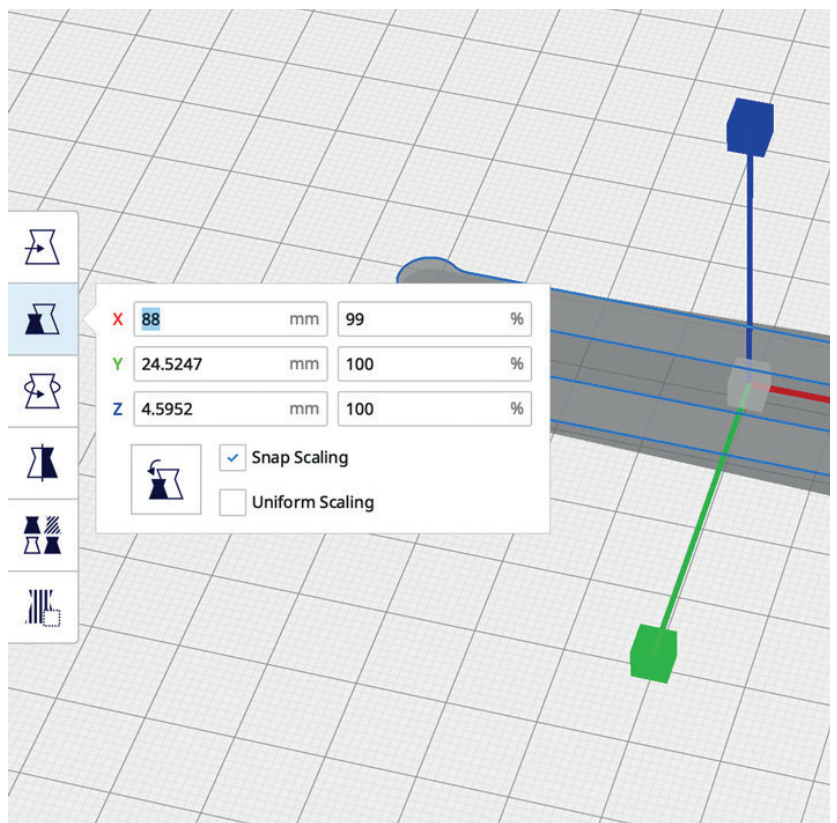
- Infill Density 100 %

INFO: the tension belt made of VarioShore LW-TPU is shorter because the material is more elastic. We recommend the variant made of VarioShore.



INFO Tension belt length

If you want to change them slightly in length, you can simply change the dimension of the X-axis in Cura (Uniform scaling must NOT be selected).



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!

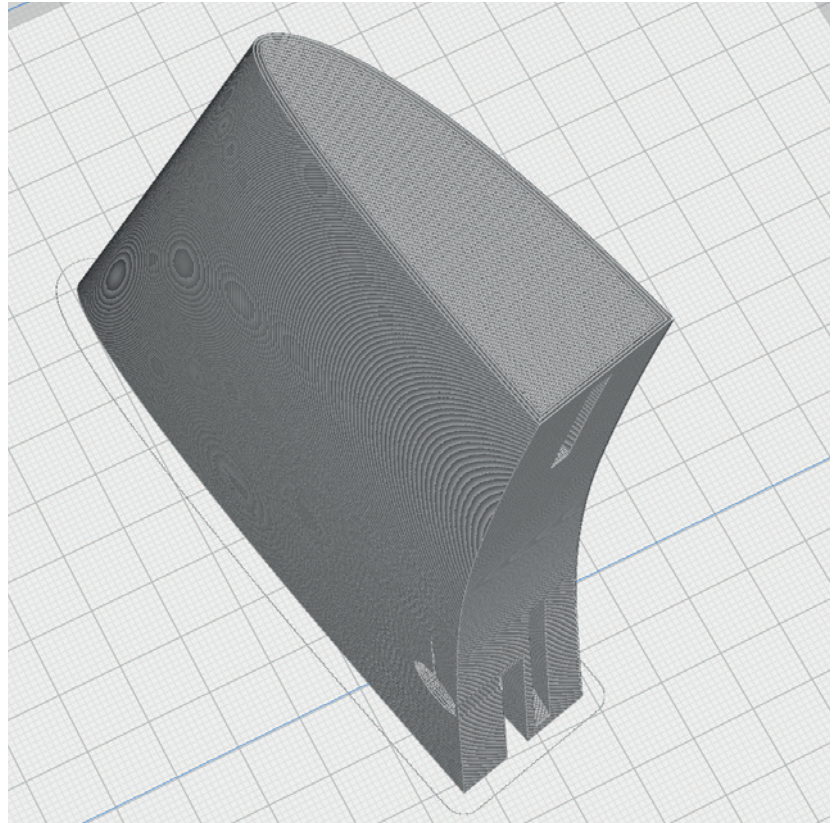
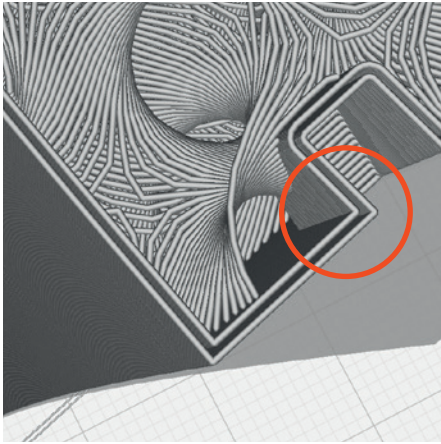
Wing 1 left_p5+_J.stl
Wing 1 right_p5+_J.stl

MATERIAL LW-PLA, ~ 29 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



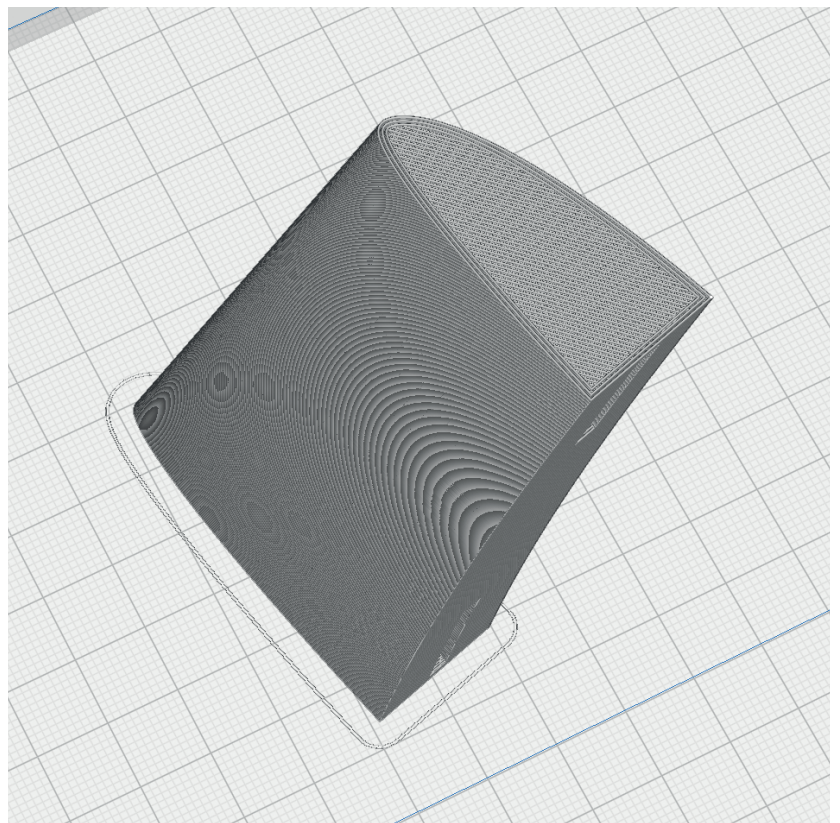
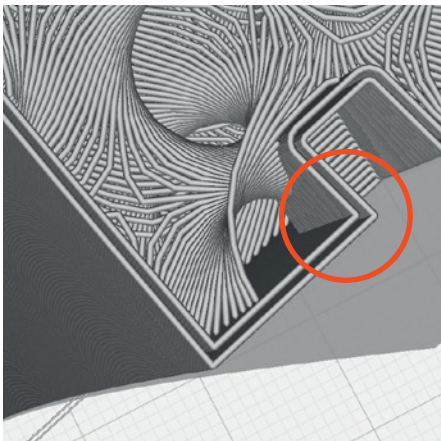
Wing 2 left_p5+_J.stl
Wing 2 right_p5+_J.stl

MATERIAL LW-PLA, ~ 16 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



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!

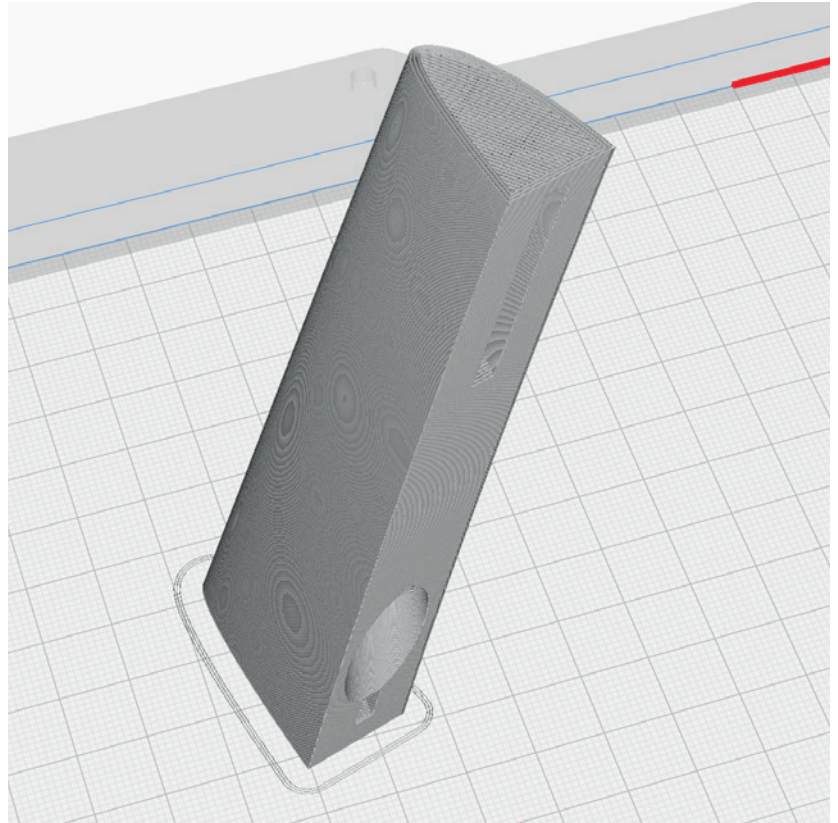
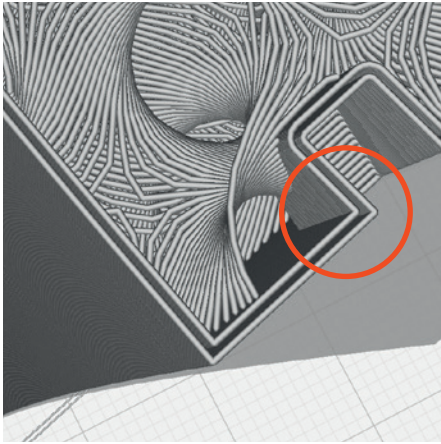
Wing 3 left_p5+_J.stl
Wing 3 right_p5+_J.stl

MATERIAL LW-PLA, ~ 9 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



Wing 4 left_p5_J.stl
Wing 4 right_p5_J.stl

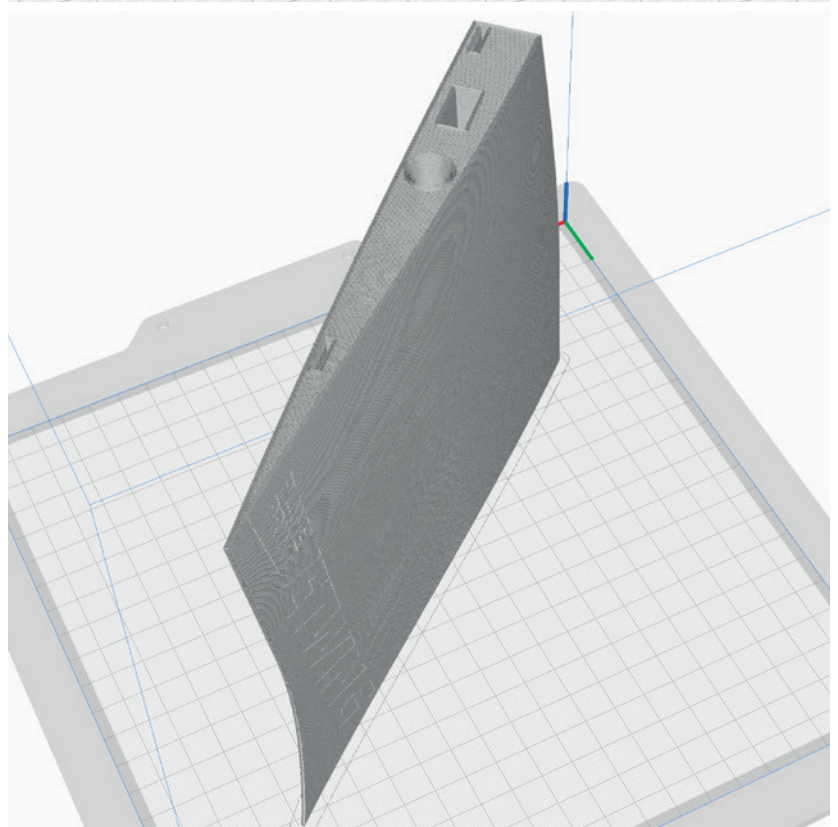
MATERIAL LW-PLA, ~ 38 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wing left: Z Seam Position **Back Right**
- Wing right: Z Seam Position **Back Left**

**Don't forget to set the
Wall Line Count back to 1!**



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!

Wing 5 left_p5_J.stl Wing 5 right_p5_J.stl

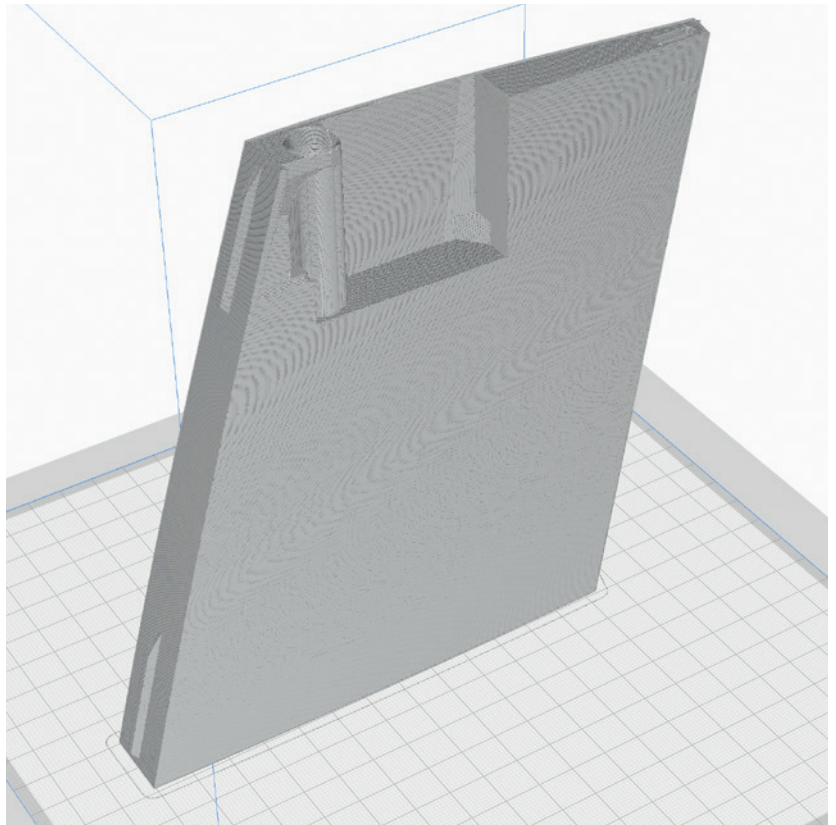
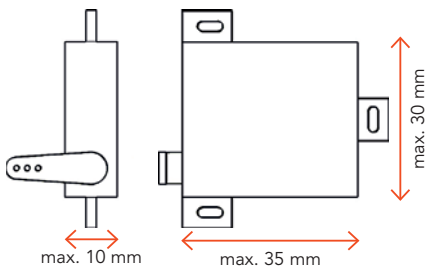
MATERIAL LW-PLA, ~ 30 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

NOTE If you plan to use 10mm wingservos like Corona DS-239MG, print the STL **Wing 5 10mmServo_p5_Jsw.stl**. You can find it for download in the **FREE TUNING PARTS** on our website.



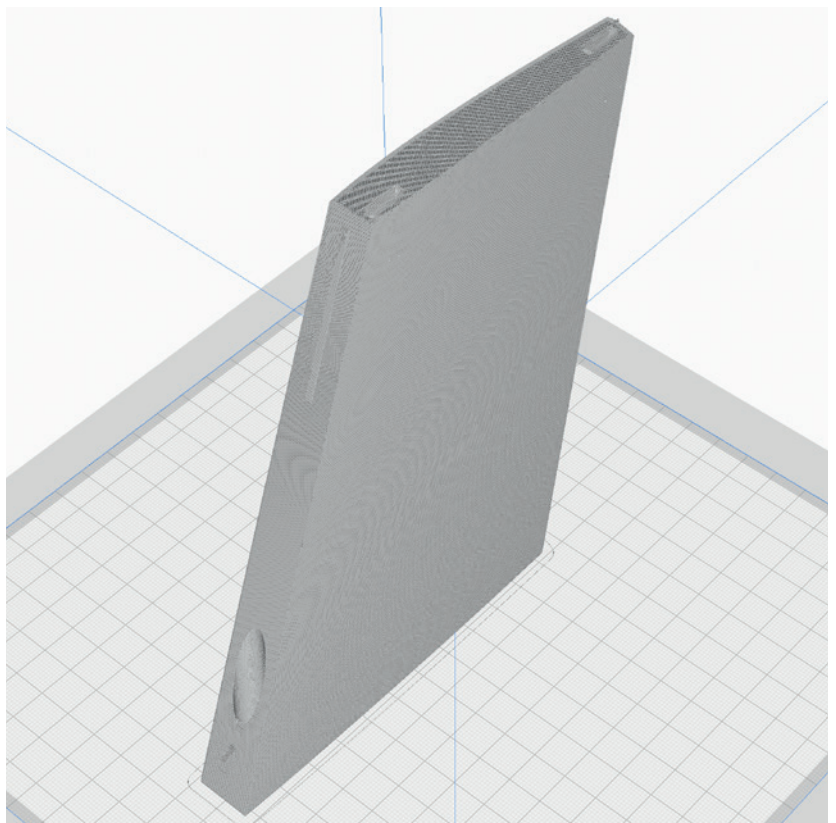
Wing 6 left_p5_J.stl Wing 6 right_p5_J.stl

MATERIAL LW-PLA, ~ 25 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!

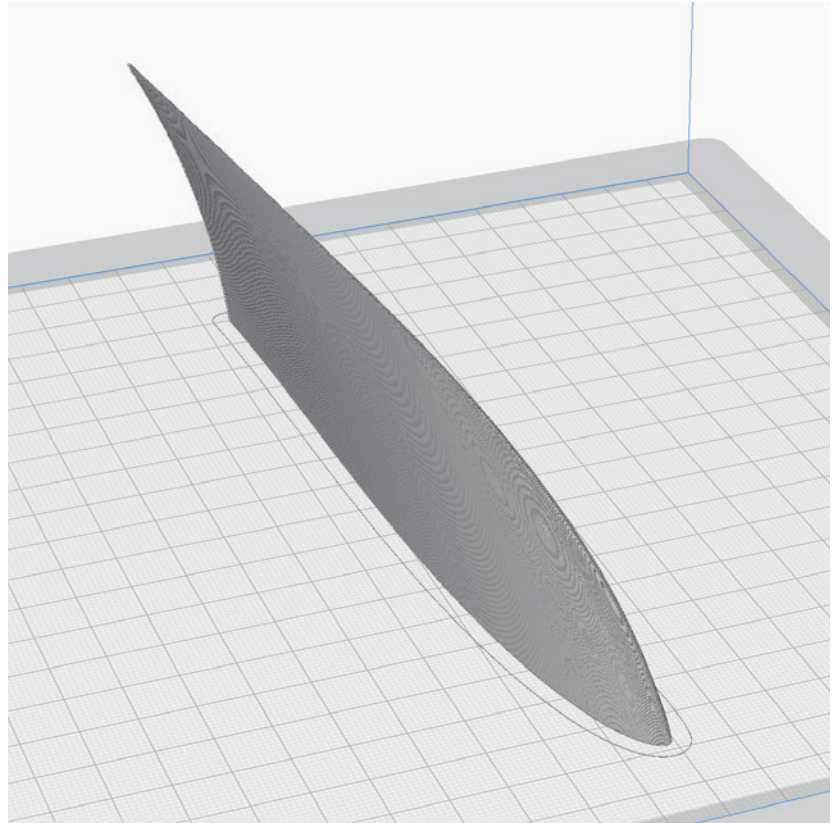
Wingtip left_p5_J.stl Wingtip right_p5_J.stl

MATERIAL LW-PLA, ~ 10 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



Interconnects wing_p1_J.stl

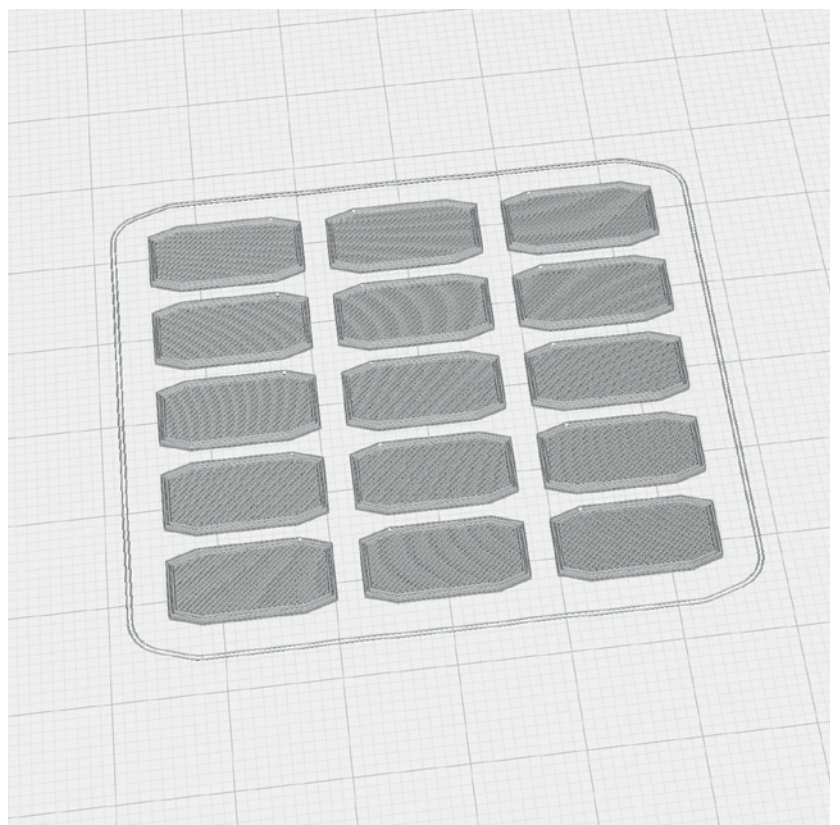
MATERIAL LW-PLA, ~ 2 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required

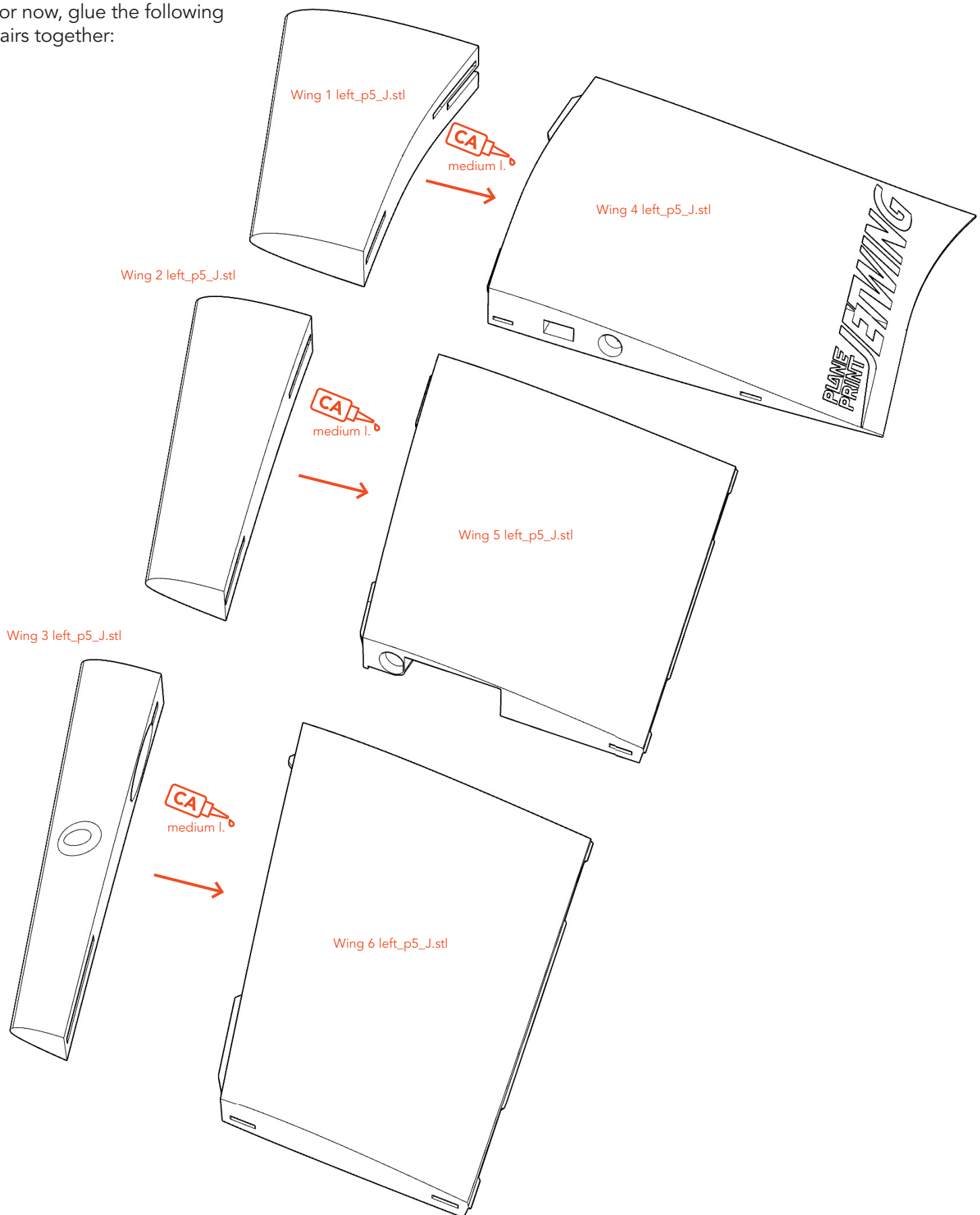
You can also print the interconnects with PROFILE_1.



ASSEMBLING MANUAL **Standard WINGS**

Follow the instructions „Gluing the parts“ on page 6.

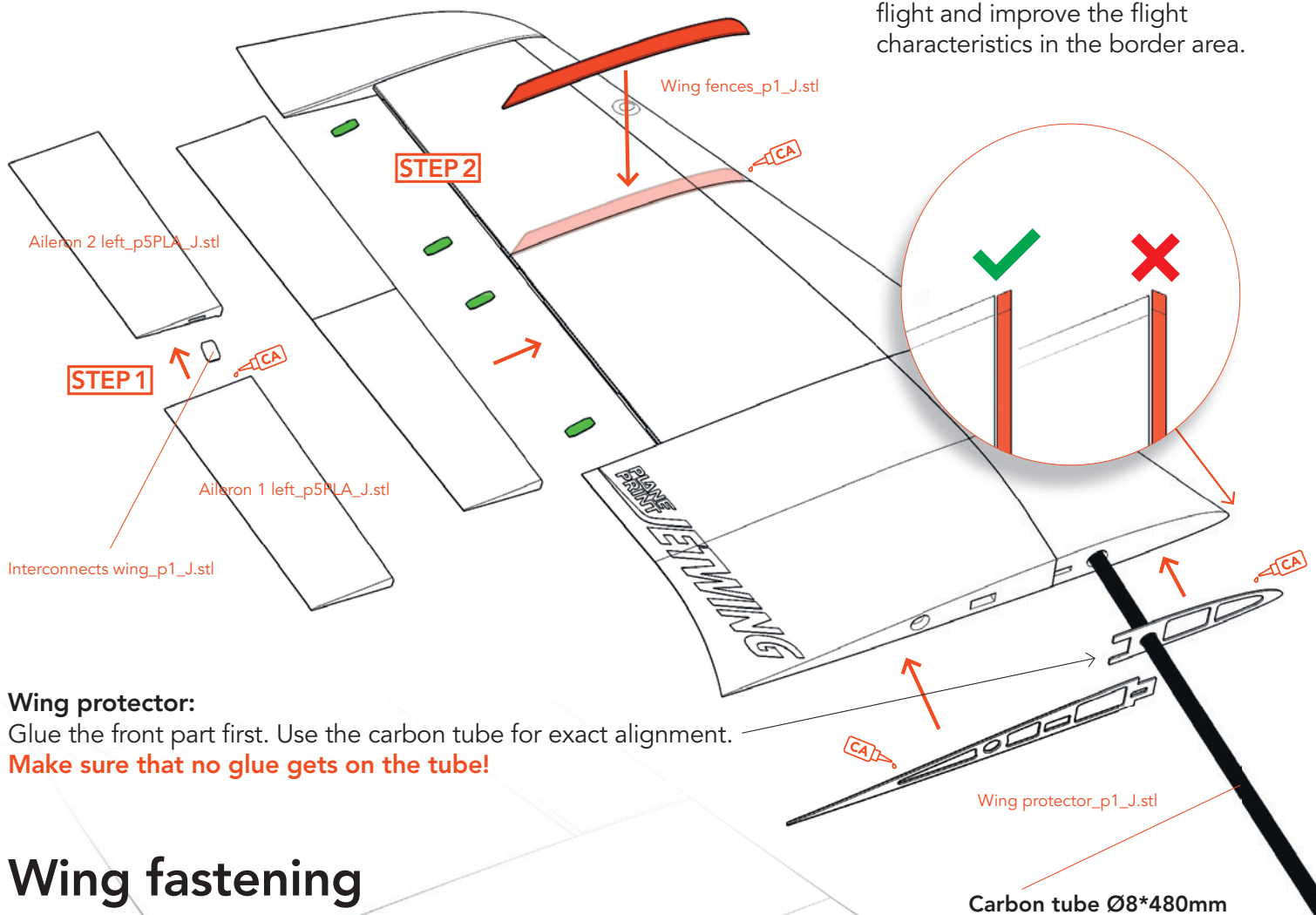
For now, glue the following pairs together:



Aileron assembly

Follow the instructions „Installing the hinges“ on page 6.

Glue the **Wing fences** along the edge between wing 5 and wing 6. They have the function to delay the stall point in slow flight and improve the flight characteristics in the border area.

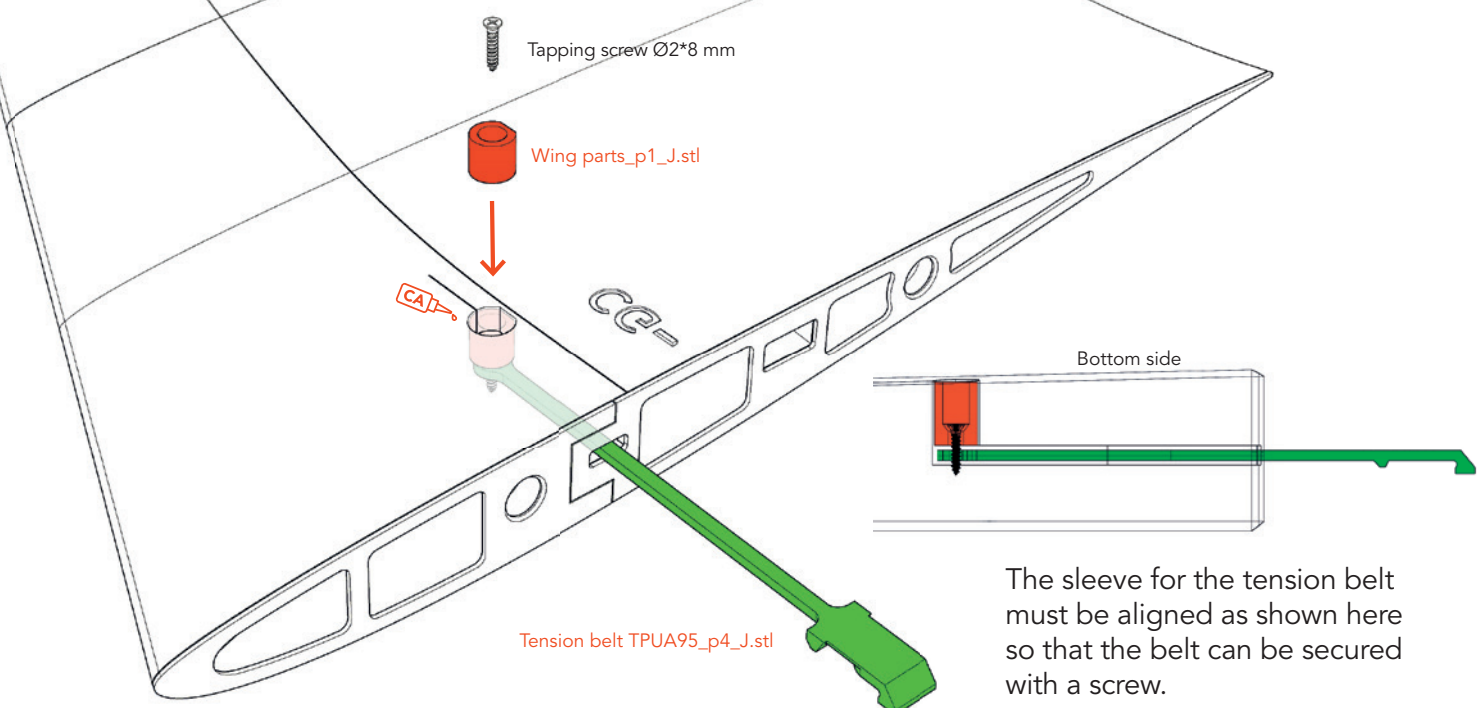


Wing protector:

Glue the front part first. Use the carbon tube for exact alignment.

Make sure that no glue gets on the tube!

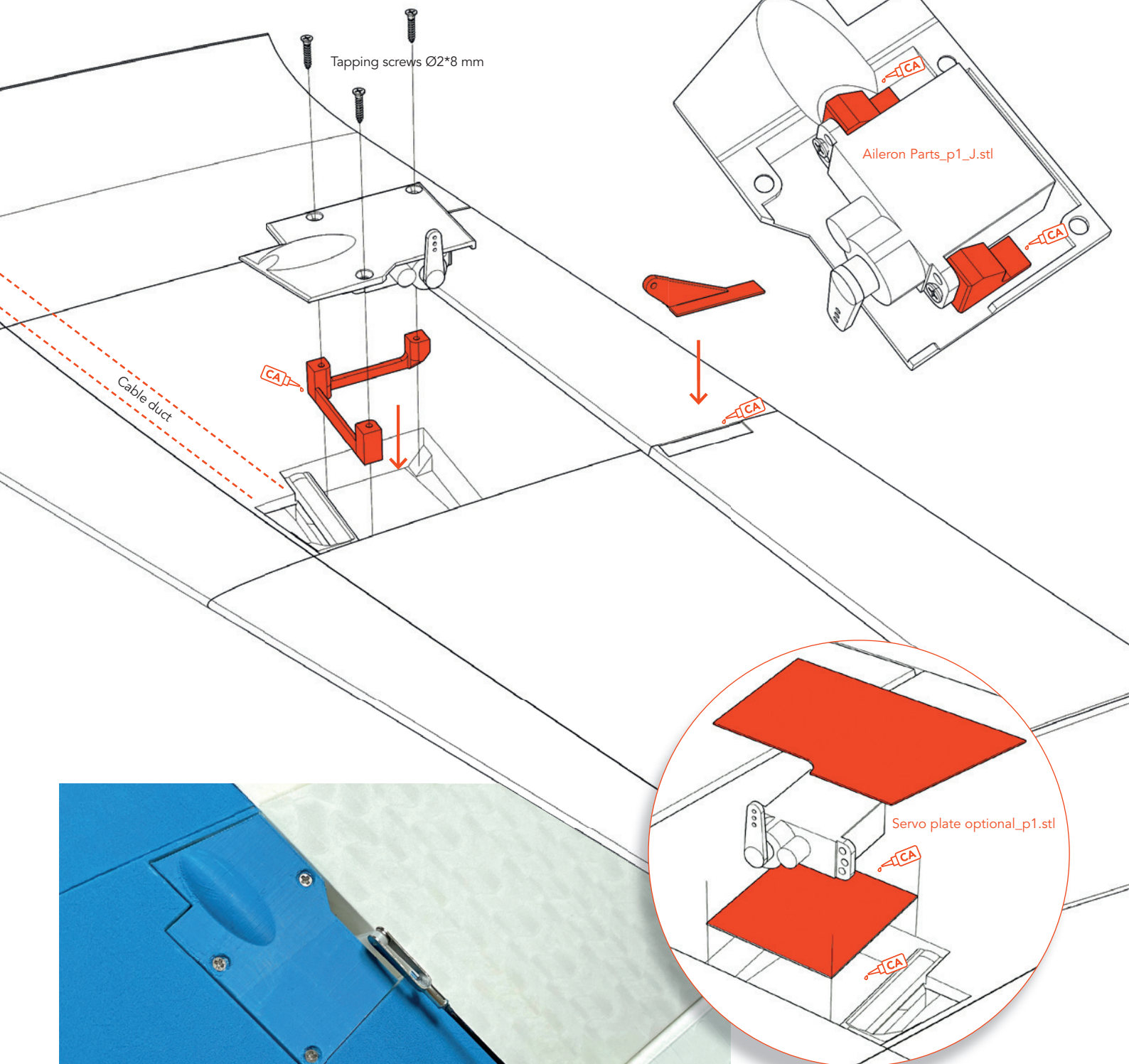
Wing fastening



Aileron Servo mounting

If you use the variant with the 10mm wing servos (FREE TUNING PARTS), see instructions BIG WING on page 79.

Mount the servo as shown here:



Make sure to achieve a stable connection of all glued joints and use strong materials for the linkage! Due to the high flying speed of the JETWING, the parts are heavily loaded.

If you prefer to glue the servo in place, you can use the STL „Servo platte optional_p1.stl“ and attach the servo cover with tape.

Wrap the servo with heat shrink tubing or tape before gluing!

SETTINGS FOR FLYING – Standard WING

After installing the electronics and setting up the transmitter, check that the control surfaces are aligned correctly. Set the transmitter trim to zero. Align all rudders to zero position. Change the position of the moving parts by changing the length of the linkage from the servo arm to the control horn. In-flight adjustments can be made later with the trim.

Setting the servo travel

AILERON up: 12 mm, down: 12 mm

ELEVATOR up: 10 mm, down: 10 mm

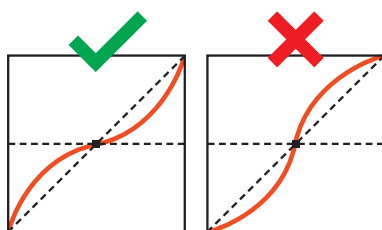
RUDDER (FUSELAGE EDF Rudder Version) left/right: 18 mm

Expo setting

AILERON 40 %

ELEVATOR 30 %

RUDDER 0 %



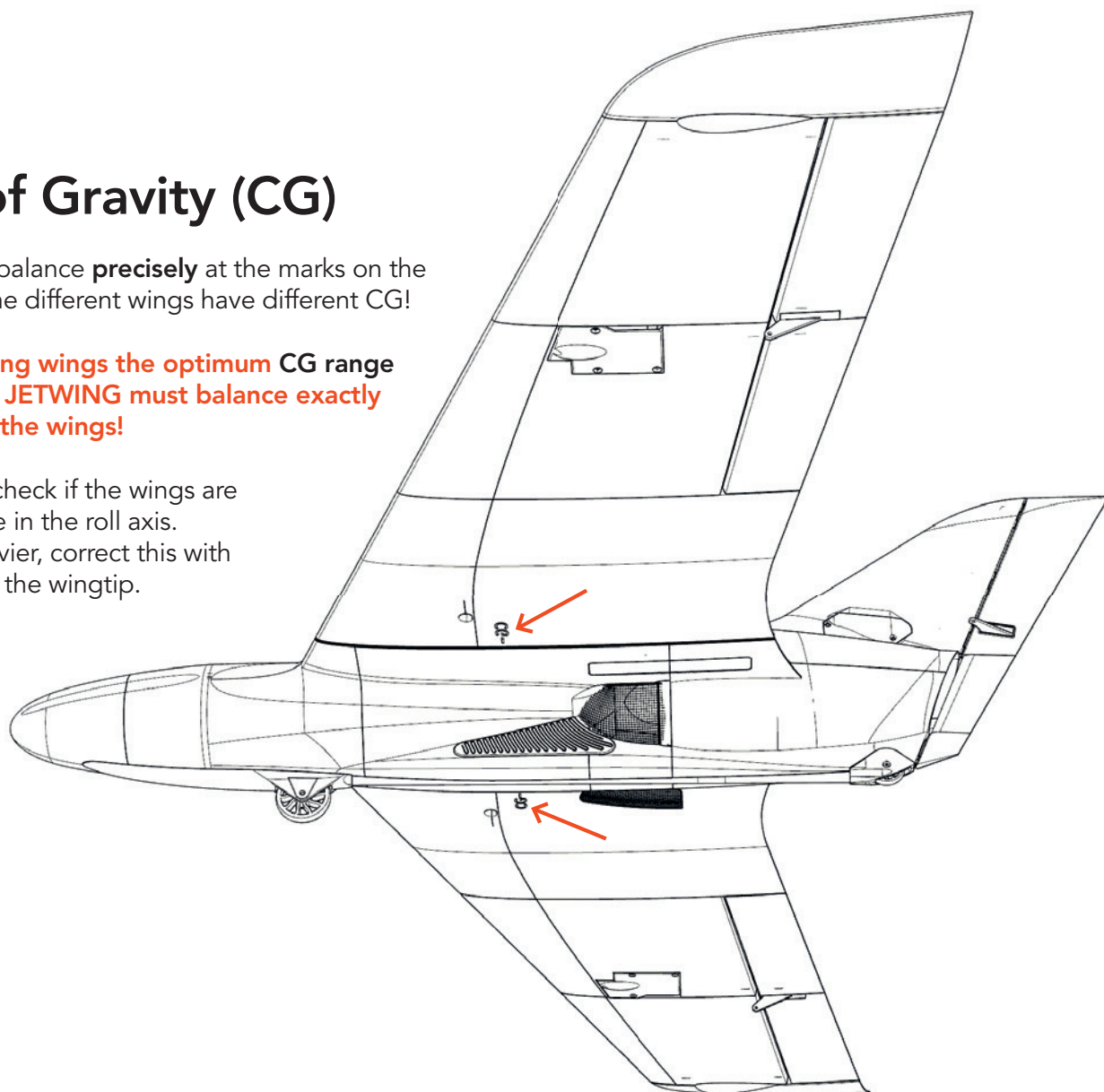
(for some remote controls a minus has to be in front of the number)

Center of Gravity (CG)

The aircraft must balance **precisely** at the marks on the wing. Attention the different wings have different CG!

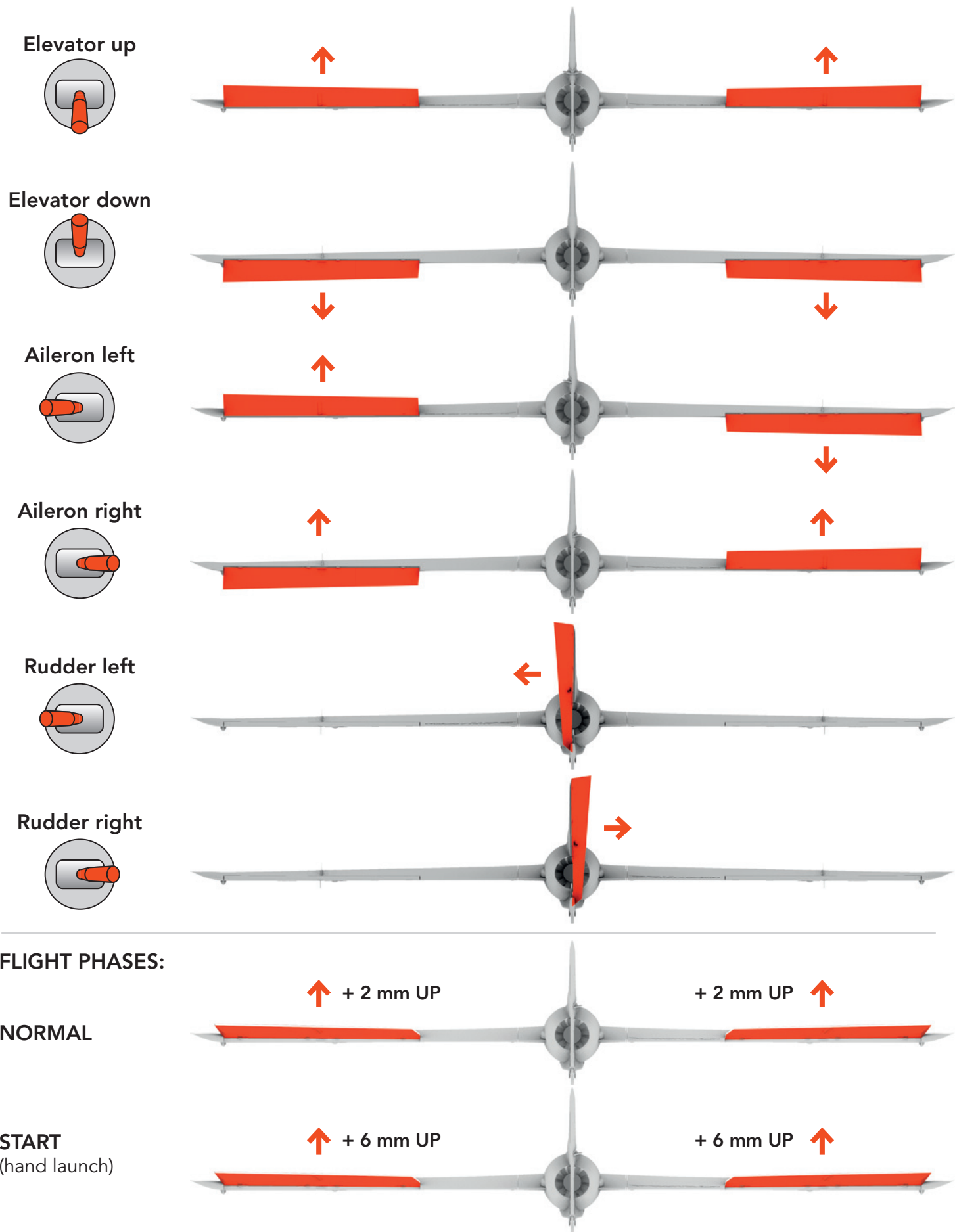
NOTE With flying wings the optimum CG range is very small, the JETWING must balance exactly on the marks on the wings!

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.

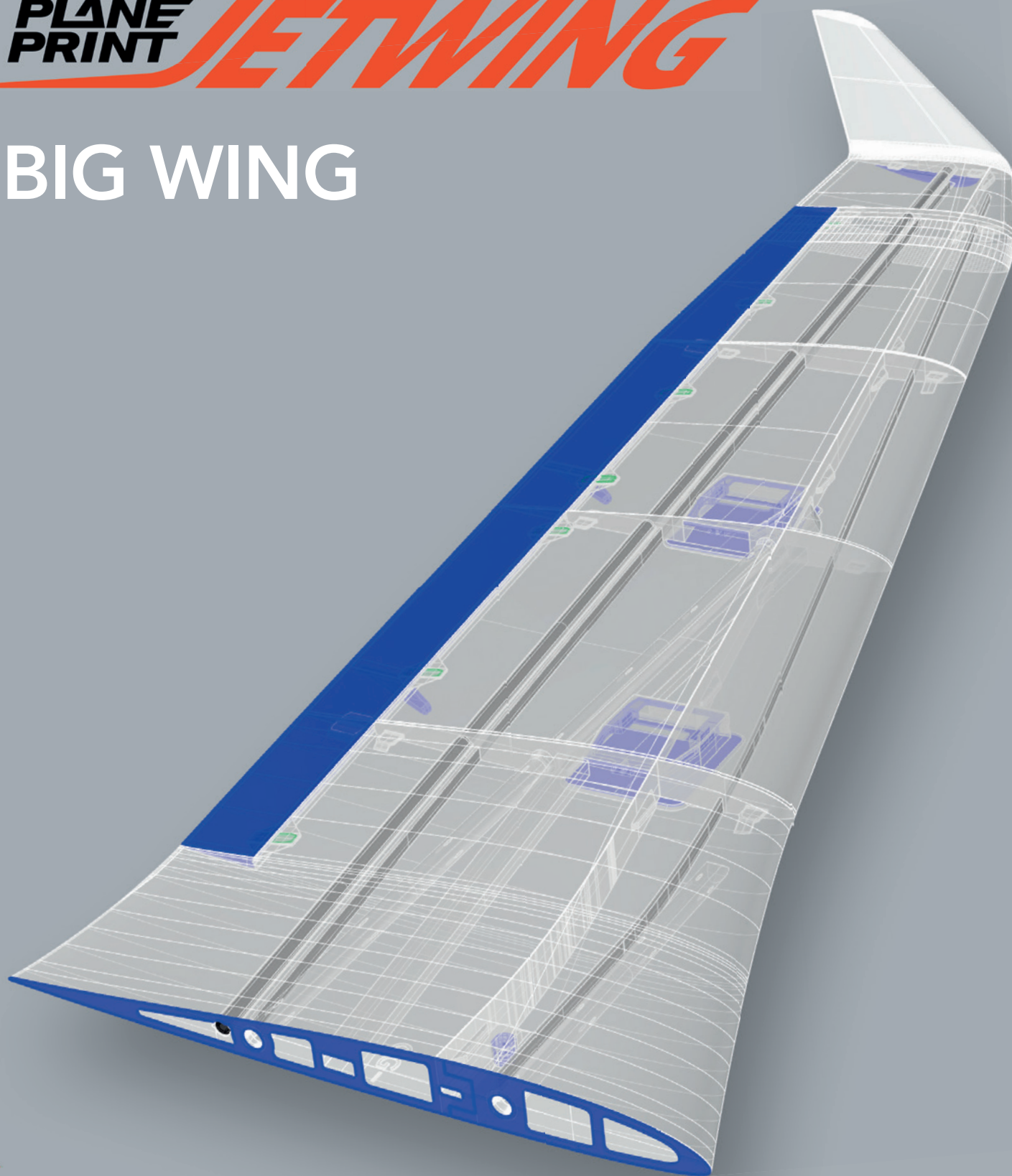


Control Direction Test – Standard WING

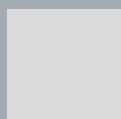
When checking the control directions, look at the aircraft from behind.



BIG WING



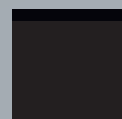
PLA



LW-PLA



TPU



CARBON

PROFILE P1_FULLBODY **PLA or Tough PLA**

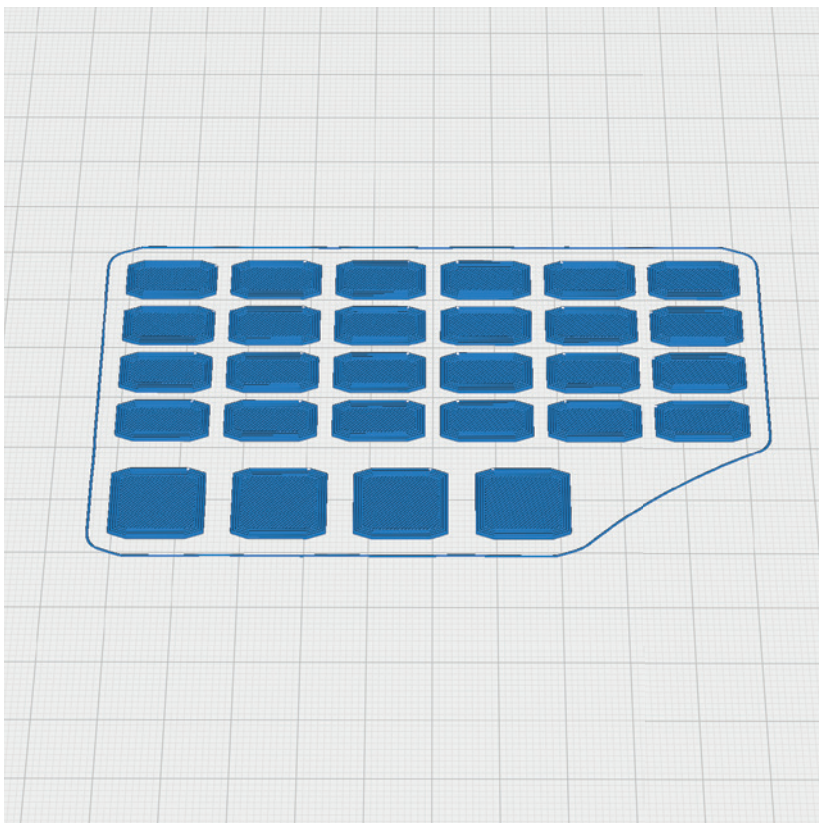
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Interconnects_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 3 g

ADDITIONAL SETTINGS

None required

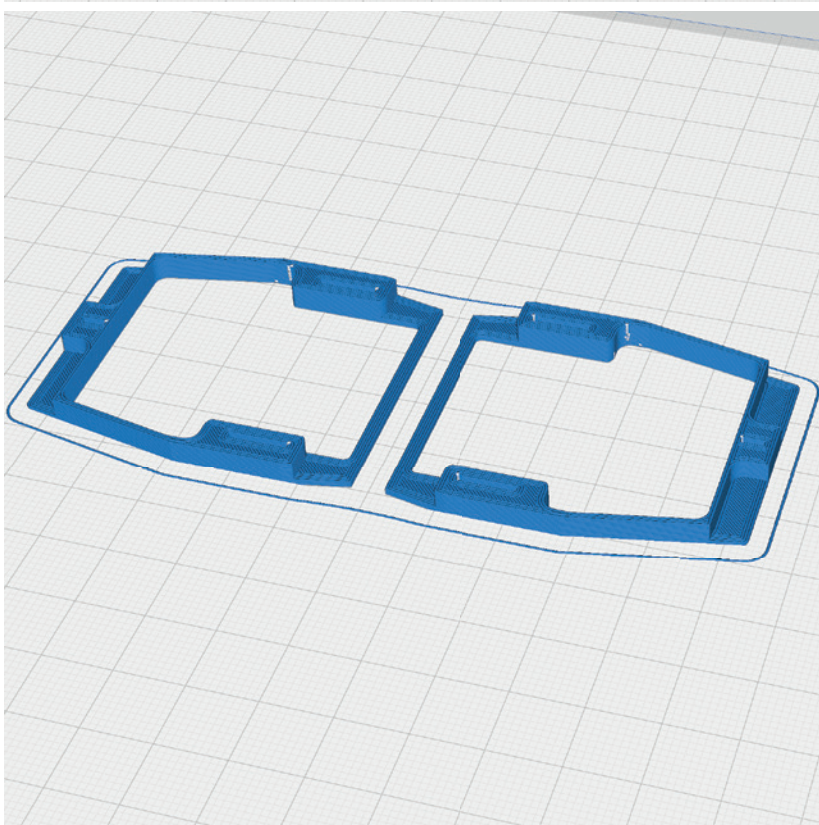


servobrackets_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

- Print this part twice



PROFILE P1_FULLBODY **PLA or Tough PLA**

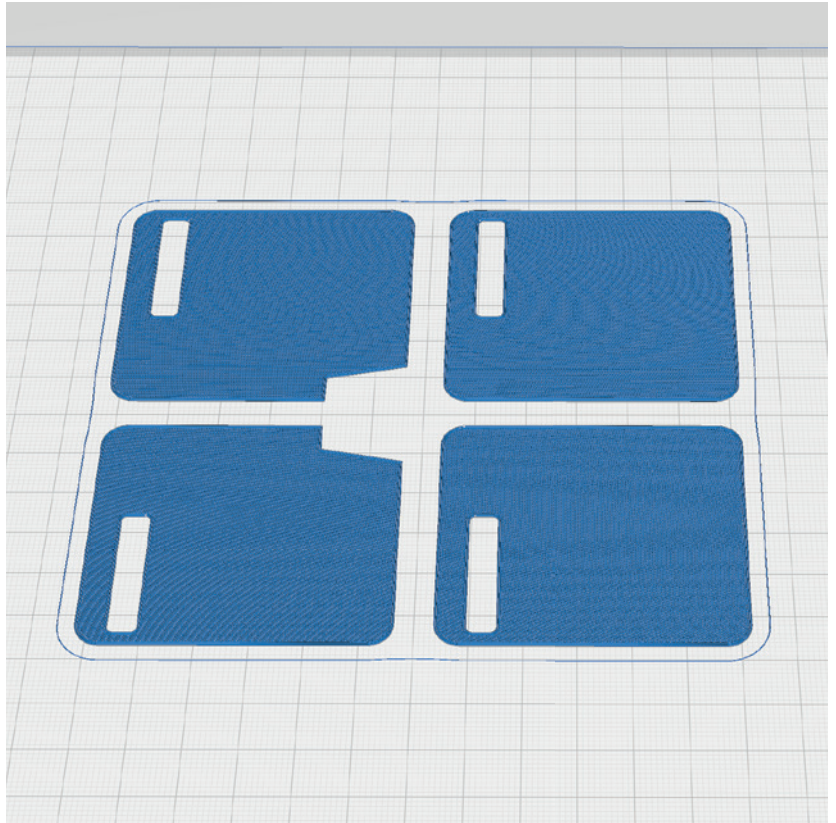
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Servocovers_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 4 g

ADDITIONAL SETTINGS

None required

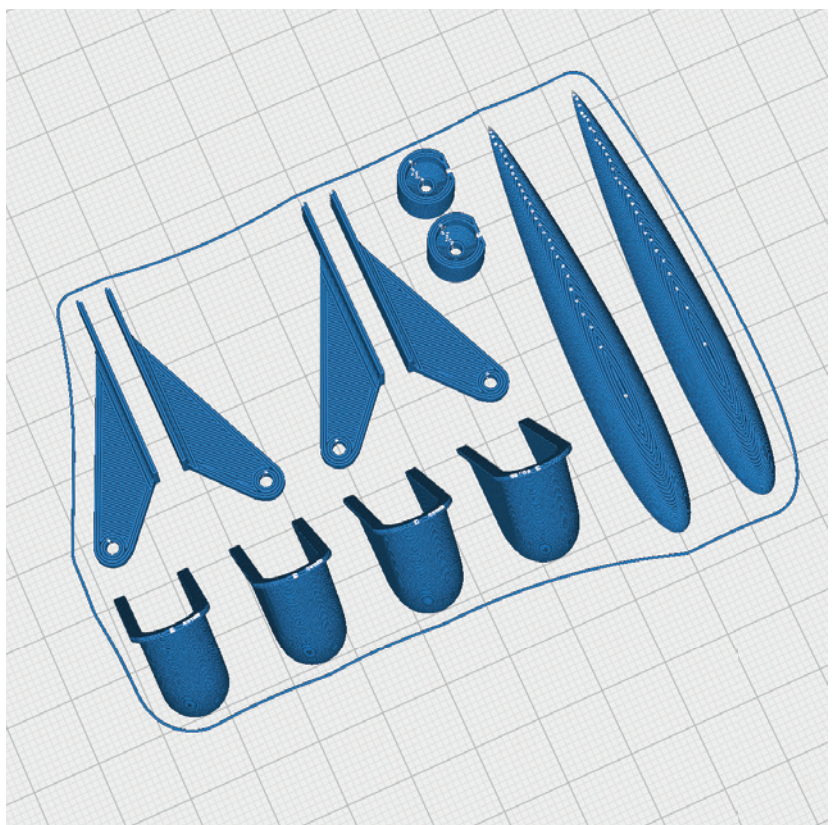


Wing parts_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 13 g

ADDITIONAL SETTINGS

None required



PROFILE P1_FULLBODY **PLA or Tough PLA**

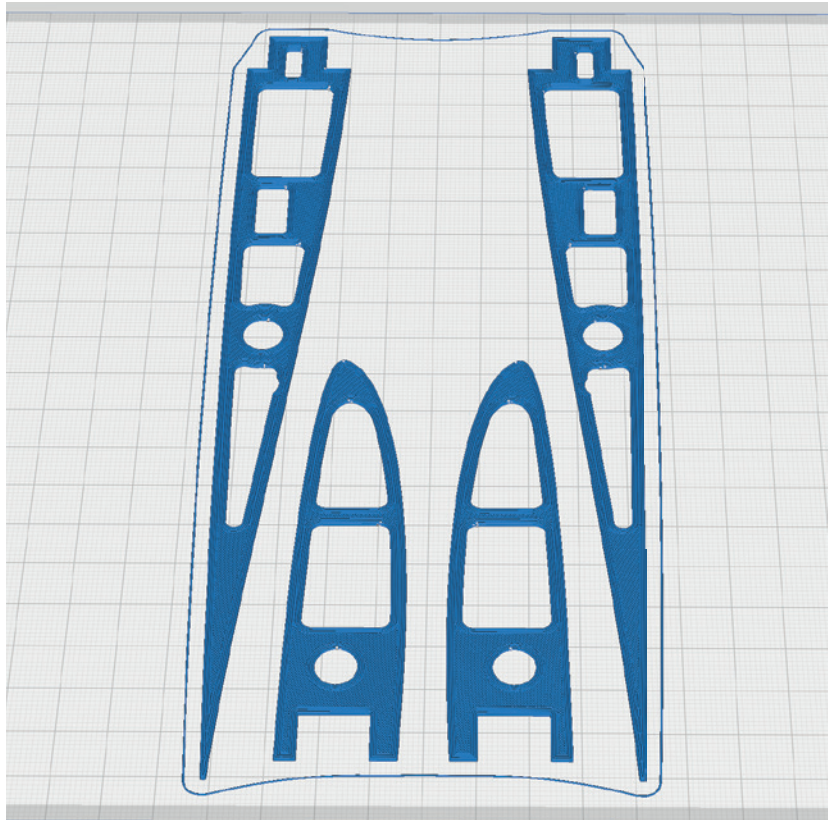
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Wing protector_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 7 g

ADDITIONAL SETTINGS

None required



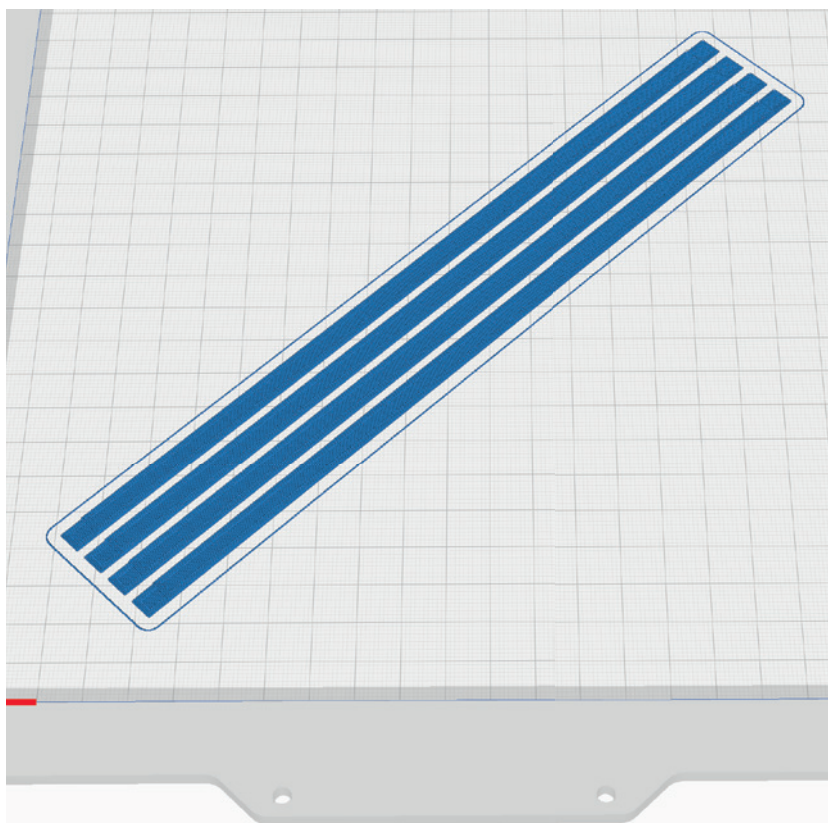
Spar_p1_Jbw.stl

MATERIAL PLA, Weight: ~ 6 g

ADDITIONAL SETTINGS

None required

You only need these spars if you do not have a carbon flat profile available.
This STL must then be printed four times.



PROFILE P5_GYROID PLA or Tough PLA

The following parts must be sliced with the PROFILE P5_GYROID. **Please note the additional settings for the individual parts!**

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

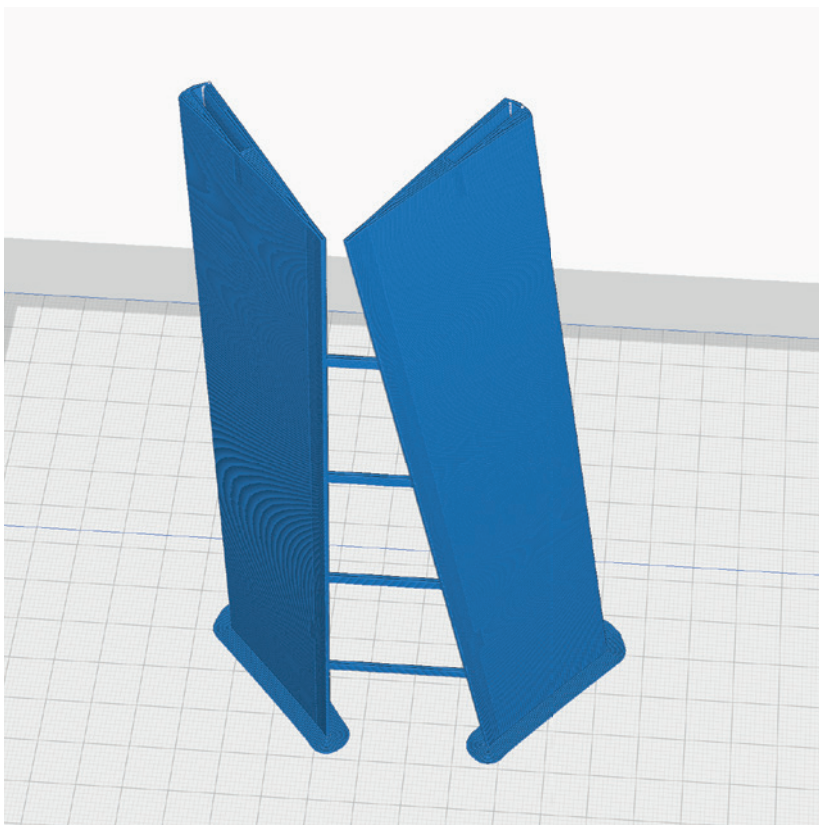
Aileron 1_p5PLA_Jbw.stl

MATERIAL LW-PLA, ~ 23 g

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Retract settings for normal PLA!
- Flow 100 %
- set Brim



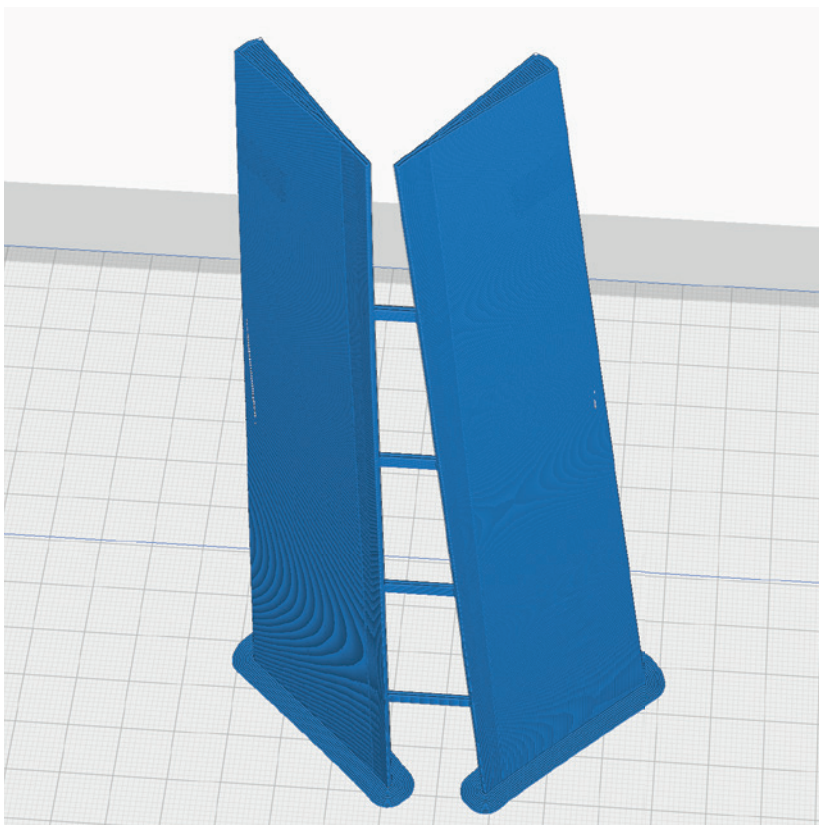
Aileron 2_p5PLA_Jbw.stl

MATERIAL LW-PLA, ~ 20 g

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Retract settings for normal PLA!
- Flow 100 %
- set Brim



PROFILE P5_GYROID PLA or Tough PLA

The following parts must be sliced with the PROFILE P5_GYROID. **Please note the additional settings for the individual parts!**

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

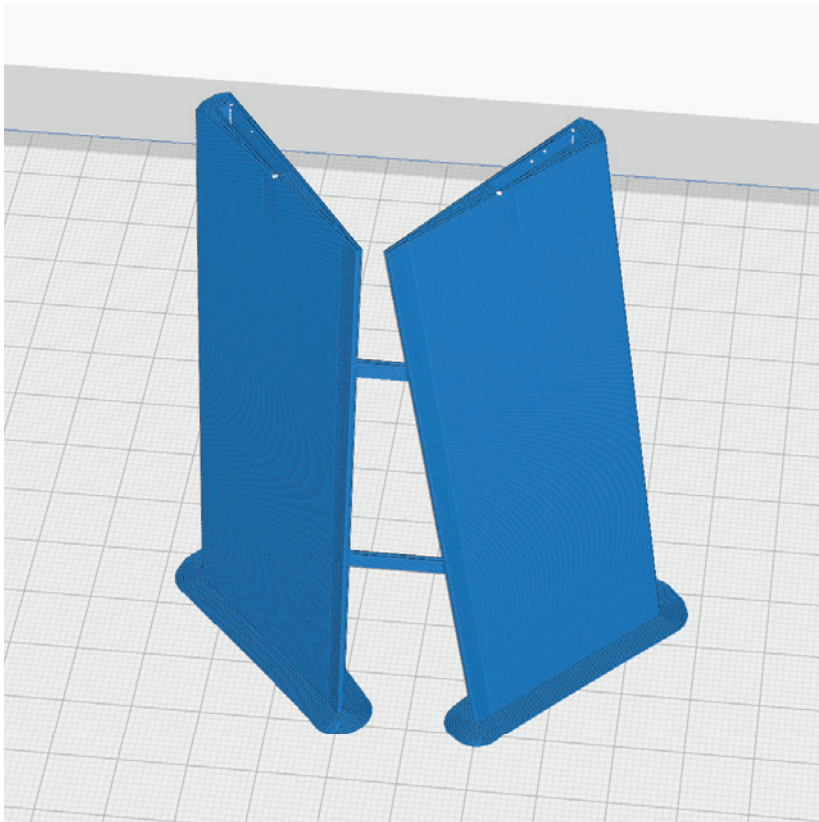
Flap 1_p5PLA_Jbw.stl

MATERIAL LW-PLA, ~ 11 g

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Retract settings for normal PLA!
- Flow 100 %
- set Brim



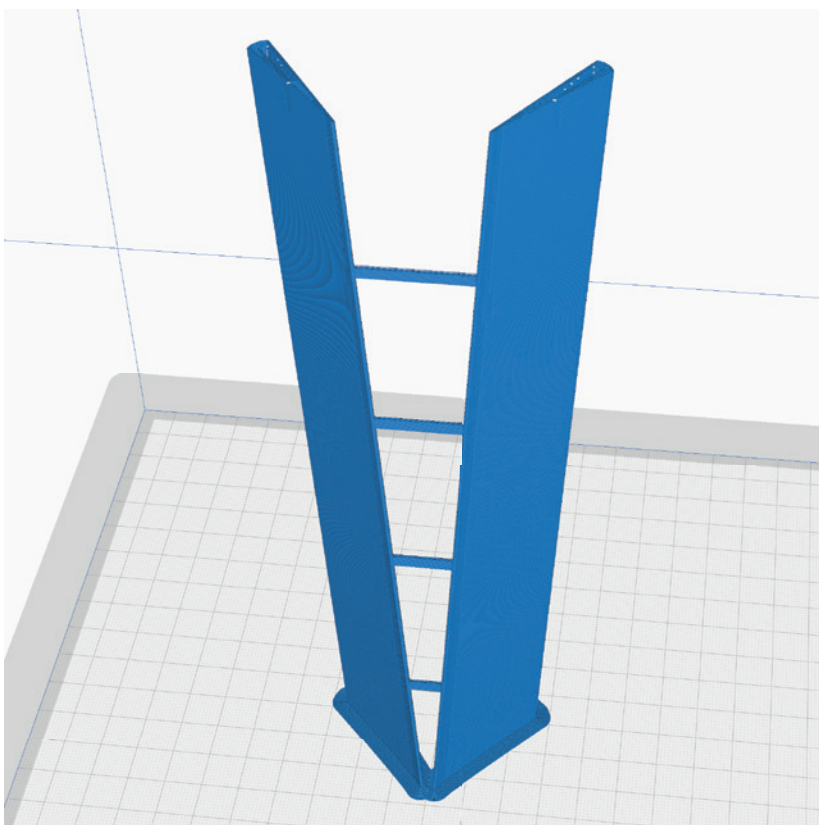
Flap 2_p5PLA_Jbw.stl

MATERIAL LW-PLA, ~ 22 g

ADDITIONAL SETTINGS

These parts must be printed with normal or Tough PLA.

- Retract settings for normal PLA!
- Flow 100 %
- set Brim



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!

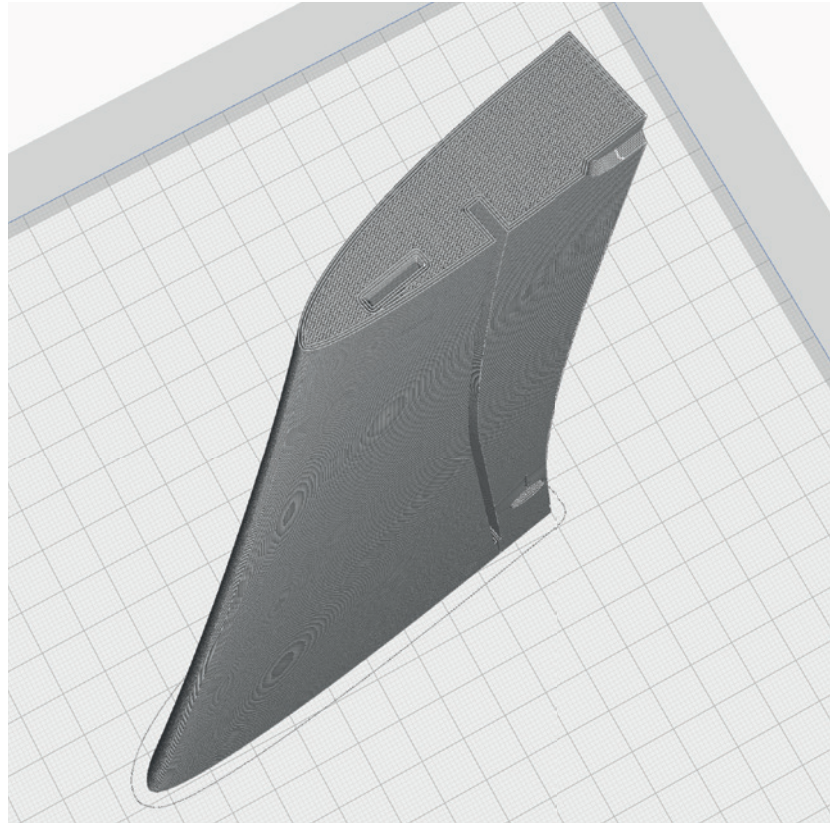
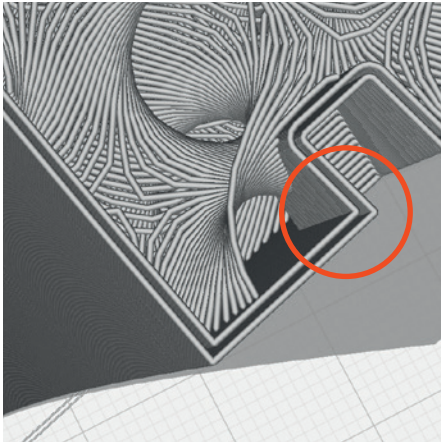
Wing 1 left_p5+_Jbw.stl
Wing 1 right_p5+_Jbw.stl

MATERIAL LW-PLA, ~ 36 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



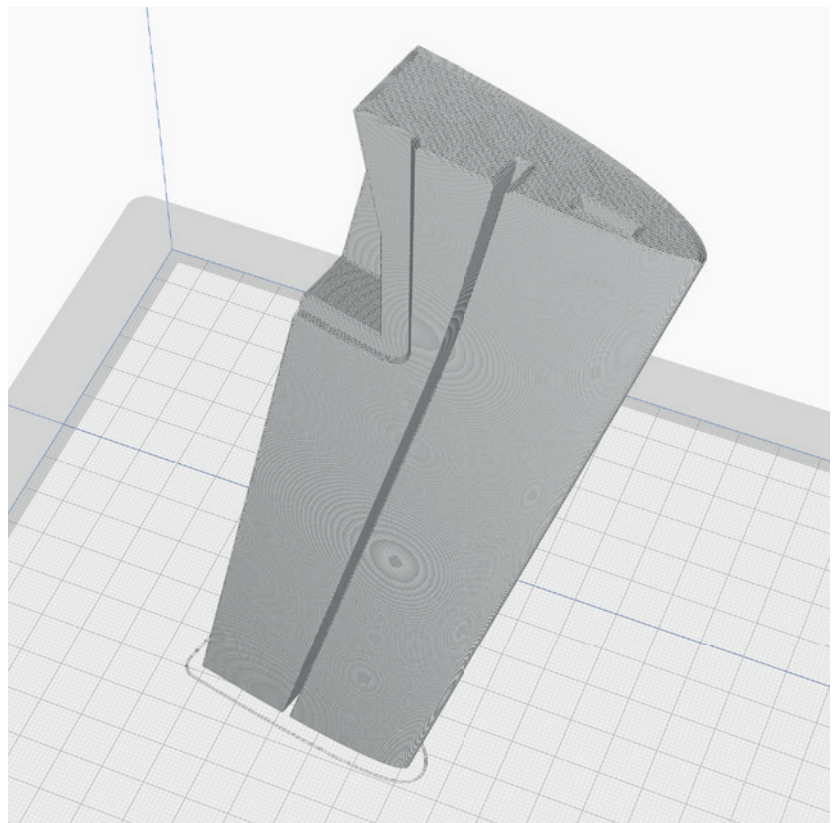
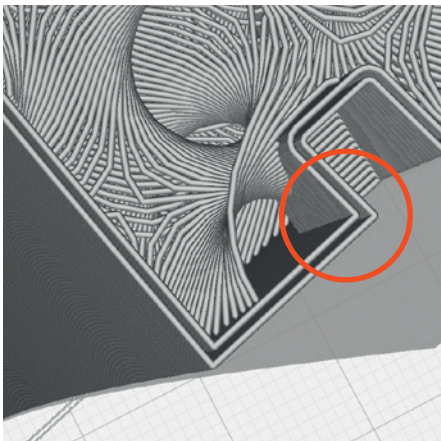
Wing 2 left_p5+_Jbw.stl
Wing 2 right_p5+_Jbw.stl

MATERIAL LW-PLA, ~ 22 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



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!

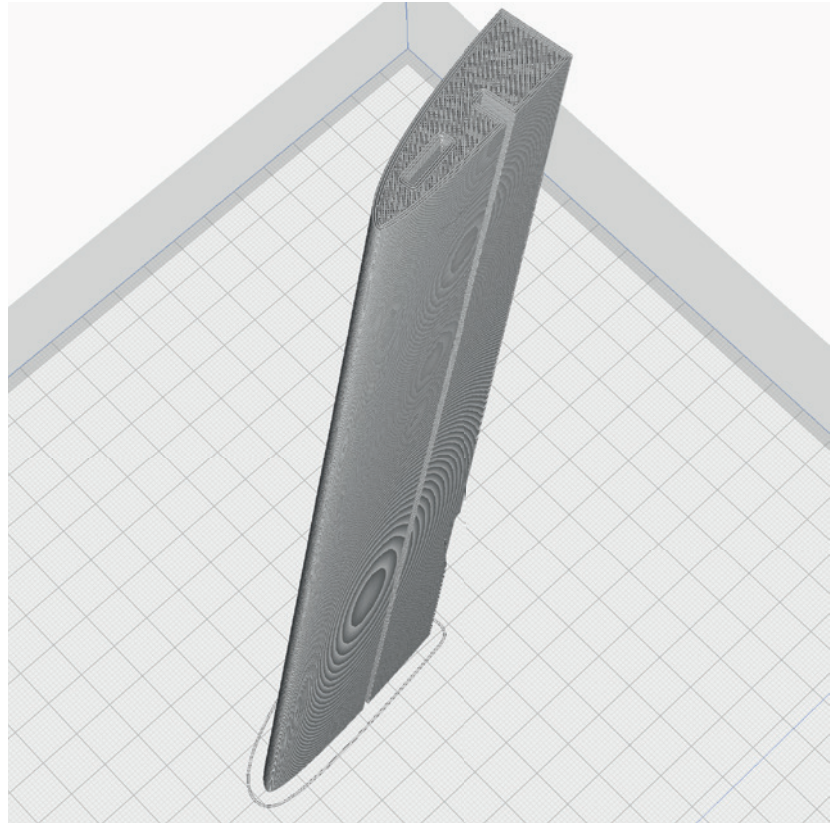
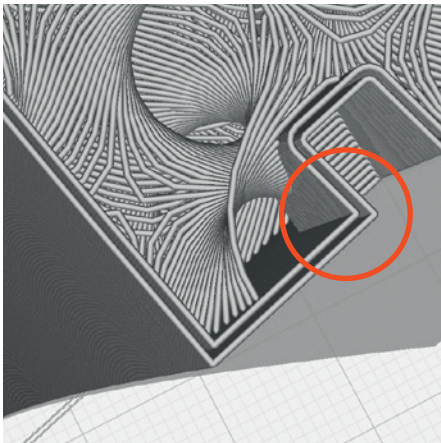
Wing 3 left_p5+_Jbw.stl
Wing 3 right_p5+_Jbw.stl

MATERIAL LW-PLA, ~ 19 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



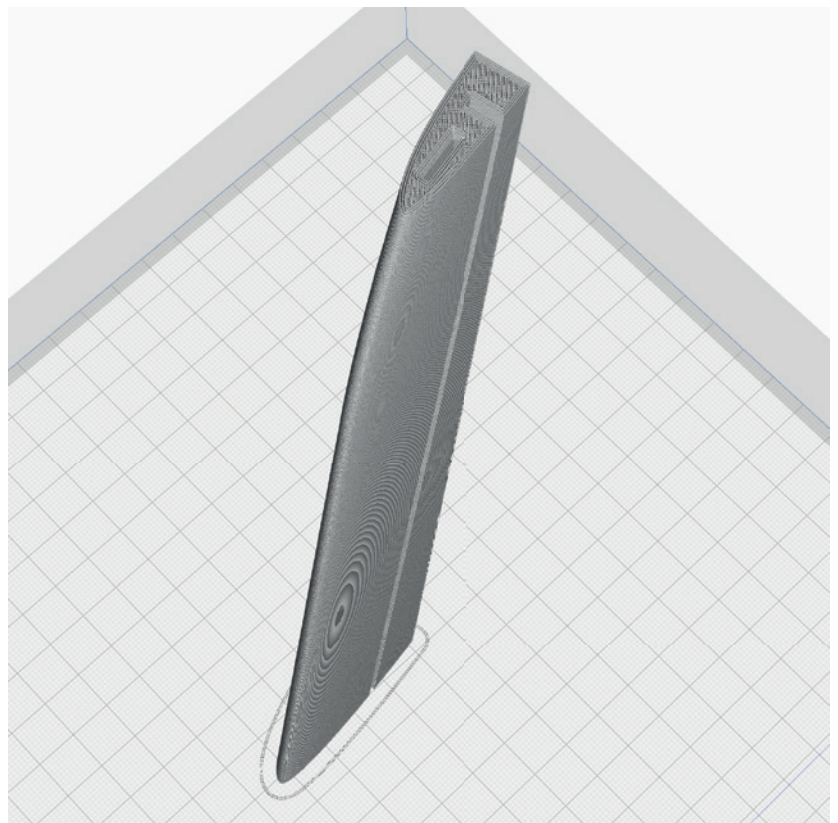
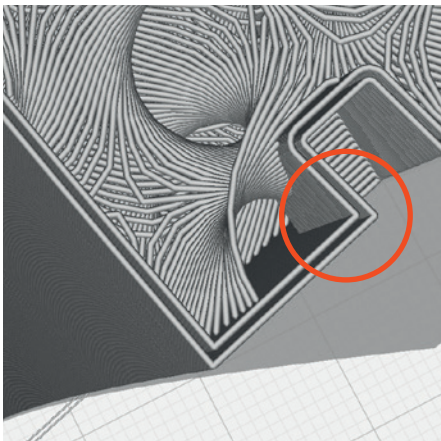
Wing 4 left_p5+_Jbw.stl
Wing 4 right_p5+_Jbw.stl

MATERIAL LW-PLA, ~ 15 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



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!

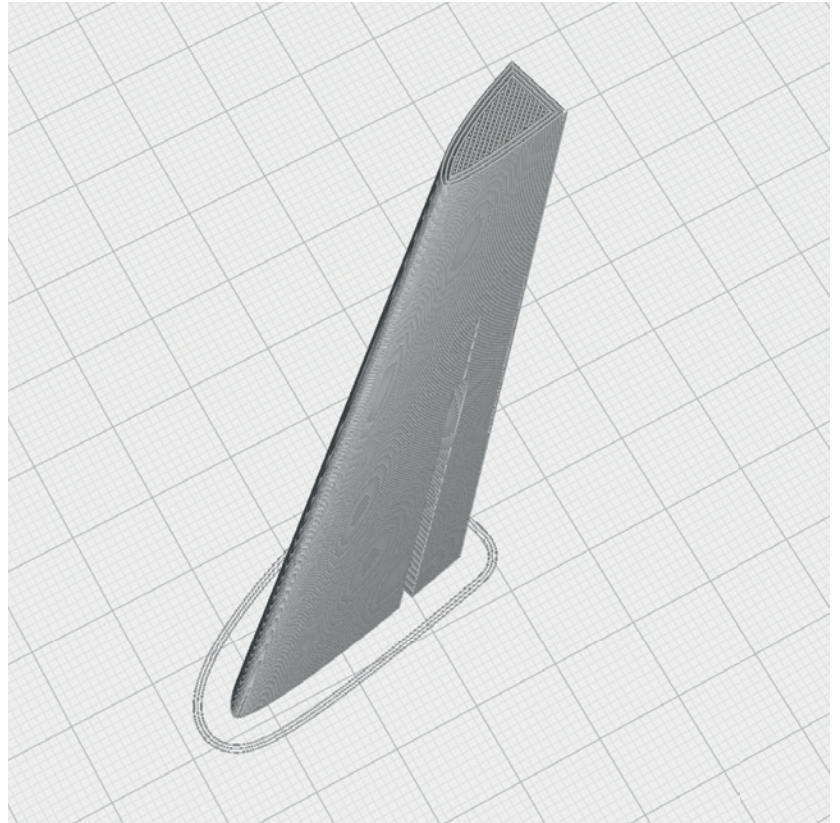
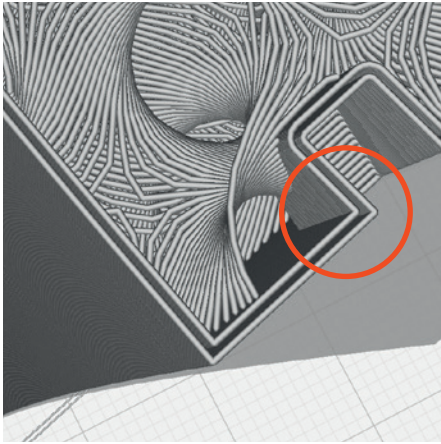
Wing 5 left_p5+_Jbw.stl
Wing 5 right_p5+_Jbw.stl

MATERIAL LW-PLA, ~ 4 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wall Line Count: 2



Wing 6 left_p5_Jbw.stl
Wing 6 right_p5_Jbw.stl

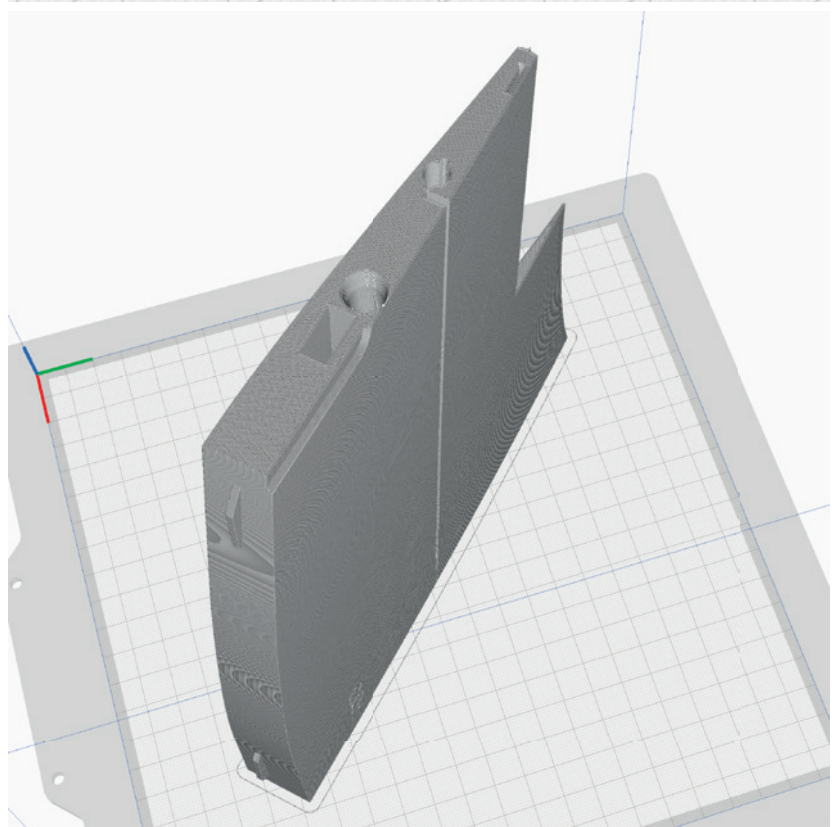
MATERIAL LW-PLA, ~ 42 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

- Wing left: Z Seam Position **Back Left**
- Wing right: Z Seam Position **Back Right**

Don't forget to set the Wall Line Count back to 1!



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!

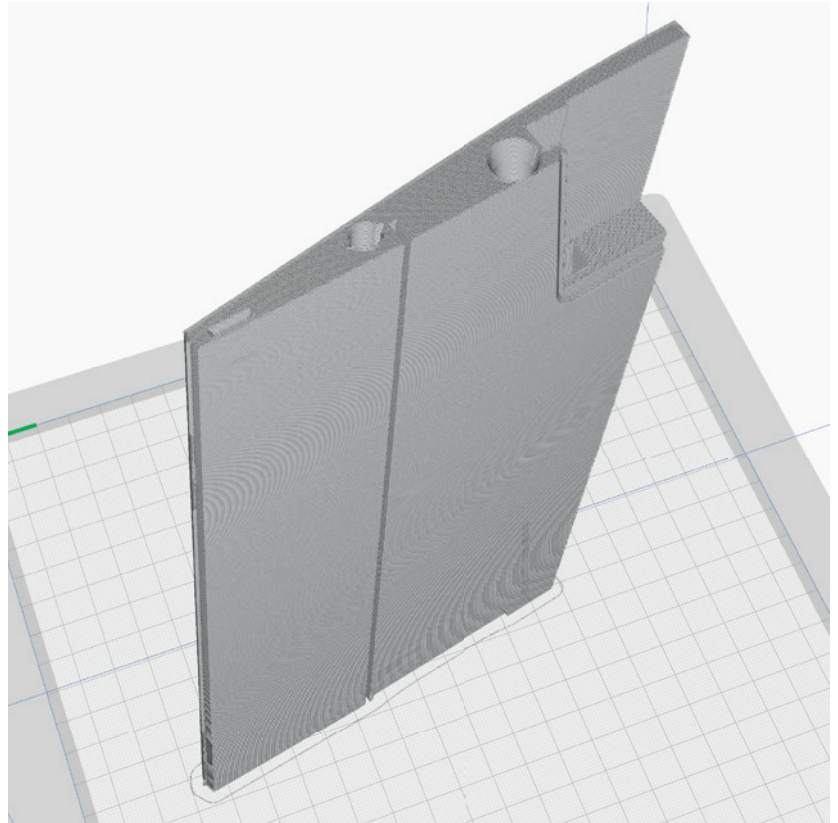
Wing 7 left_p5_Jbw.stl
Wing 7 right_p5_Jbw.stl

MATERIAL LW-PLA, ~ 35 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



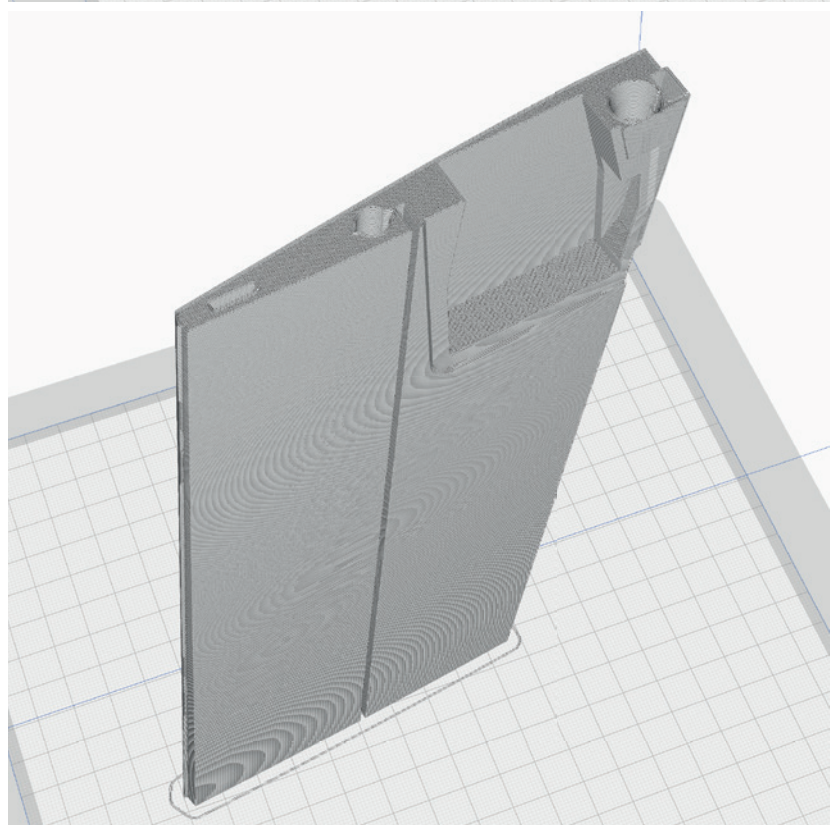
Wing 8 left_p5_Jbw.stl
Wing 8 right_p5_Jbw.stl

MATERIAL LW-PLA, ~ 27 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!

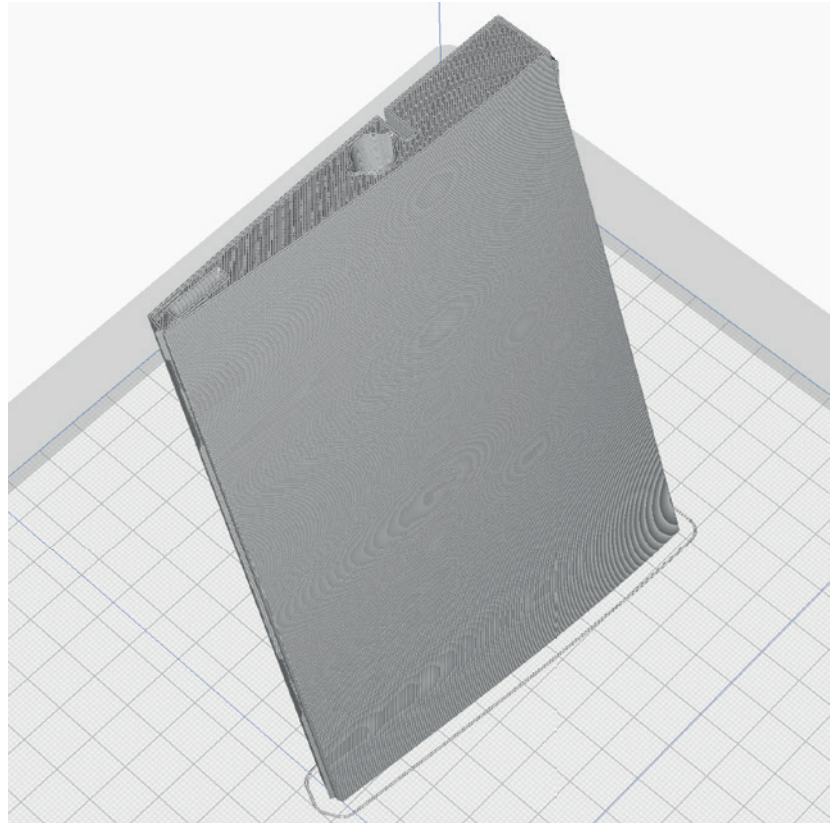
Wing 9 left_p5_Jbw.stl
Wing 9 right_p5_Jbw.stl

MATERIAL LW-PLA, ~ 22 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



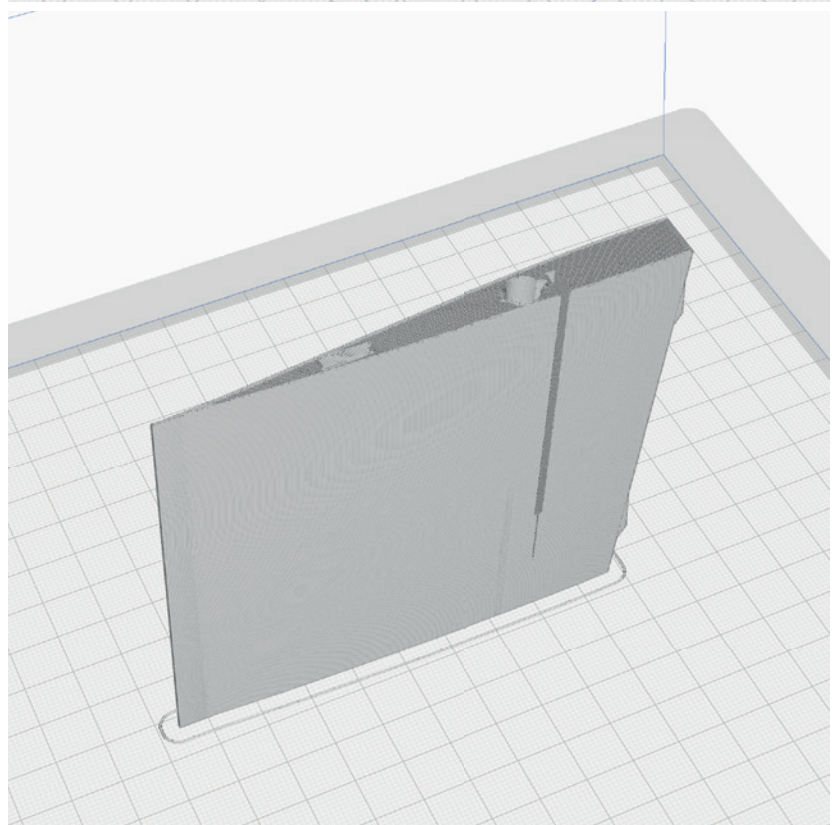
Wing 10 left_p5_Jbw.stl
Wing 10 right_p5_Jbw.stl

MATERIAL LW-PLA, ~ 9 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!

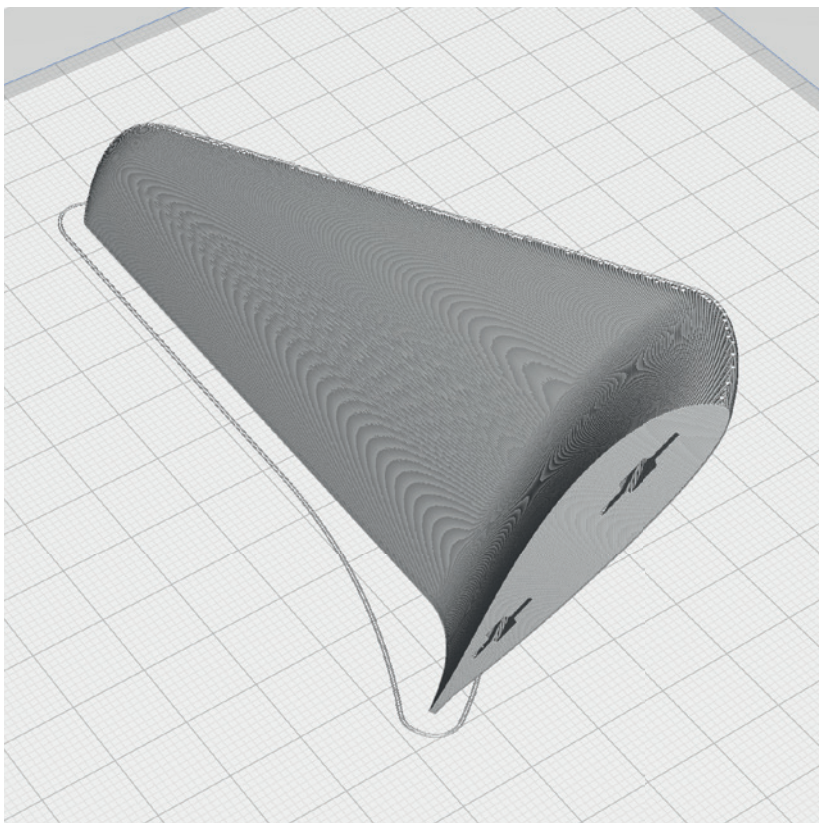
Winglet left_p5_Jbw.stl
Winglet right_p5_Jbw.stl

MATERIAL LW-PLA, ~ 6 g*

*Weighed (approximate guideline)

ADDITIONAL SETTINGS

None required



PROFILE P4_FLEX TPU A95 or VarioShore

The following parts must be sliced with the PROFILE P4_FLEX.
Please note the additional settings for the individual parts!

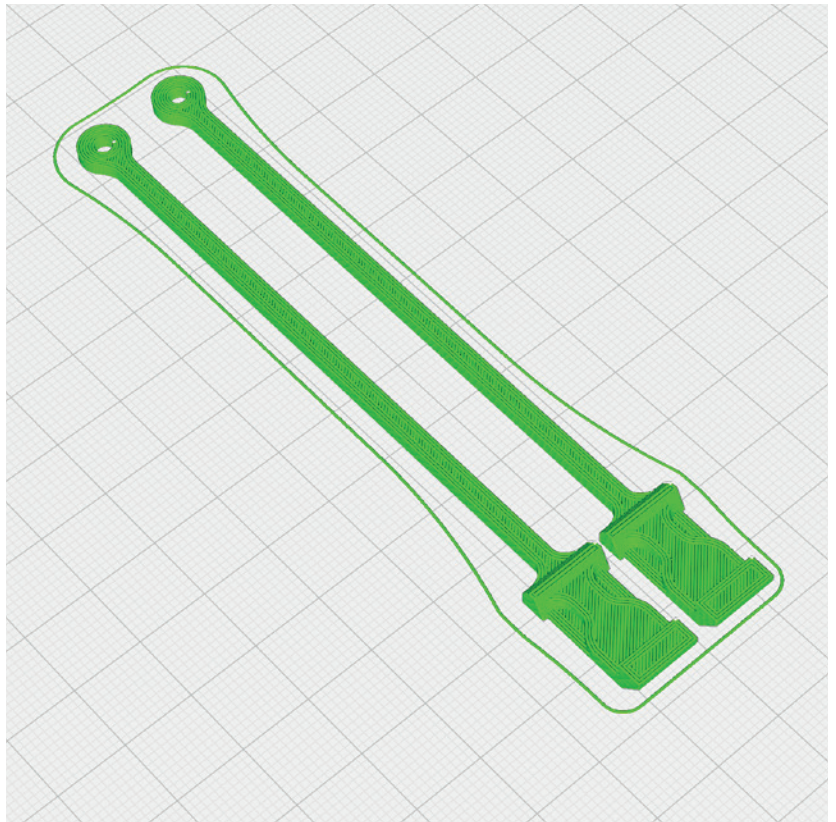
Tension belt TPUA95_p4_J.stl
Tension belt VarioShore_p4_J.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

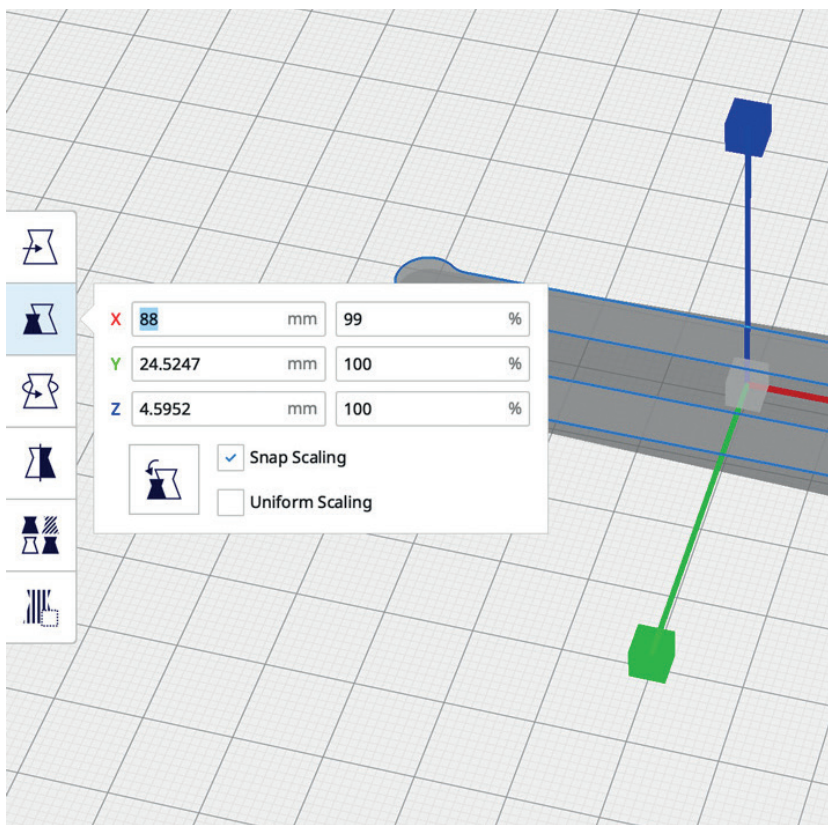
- Infill Density 100 %

INFO: the tension belt made of VarioShore LW-TPU is shorter because the material is more elastic. We recommend the variant made of VarioShore.



INFO Tension belt length

If you want to change them slightly in length, you can simply change the dimension of the X-axis in Cura (Uniform scaling must NOT be selected).



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!

Hinges_p4_Jbw.stl

MATERIAL TPU ~ A95, Weight: ~ 2 g

ADDITIONAL SETTINGS

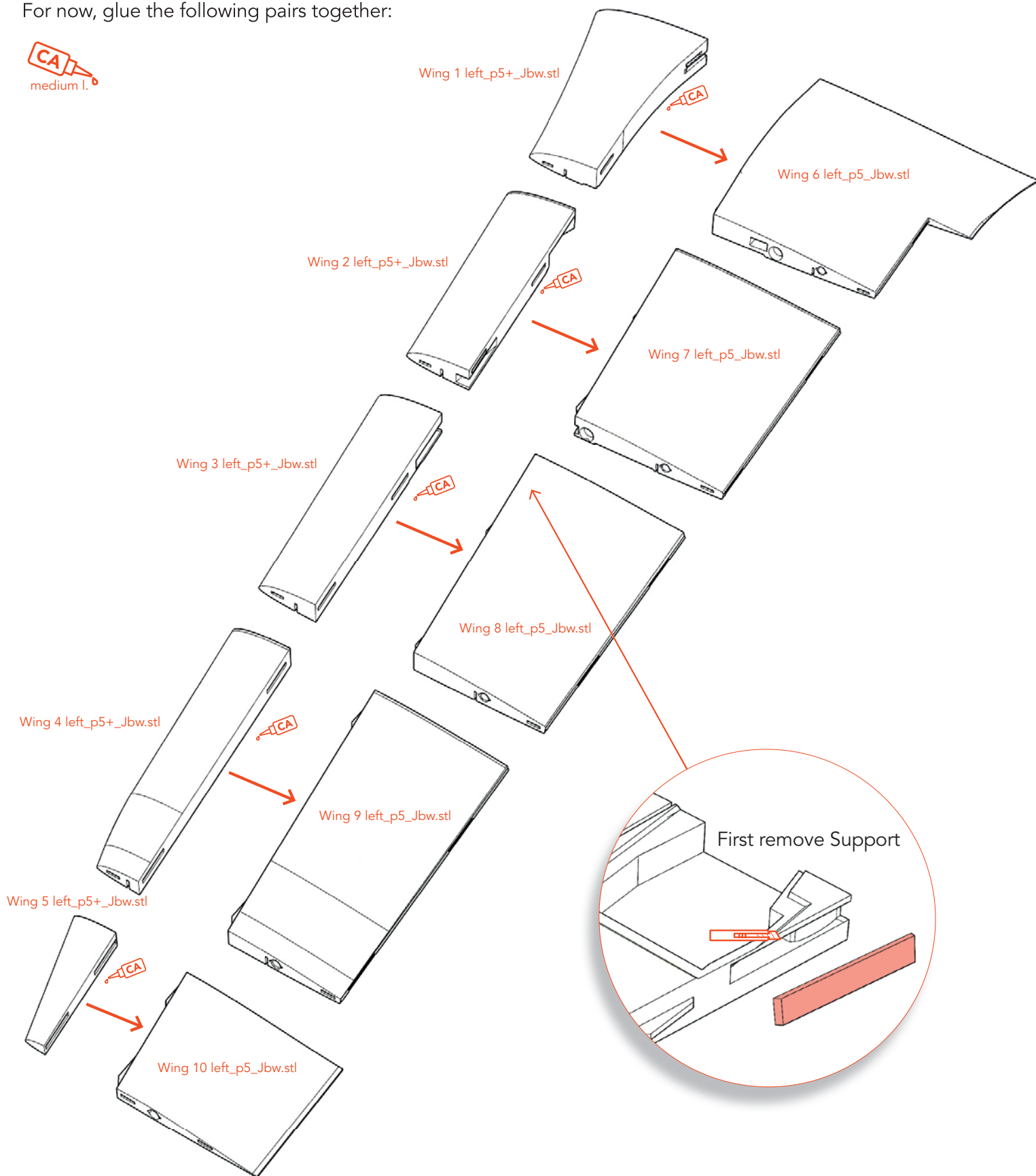
None required



ASSEMBLING MANUAL **BIG WING**

Follow the instructions „Gluing the parts“ on page 6.

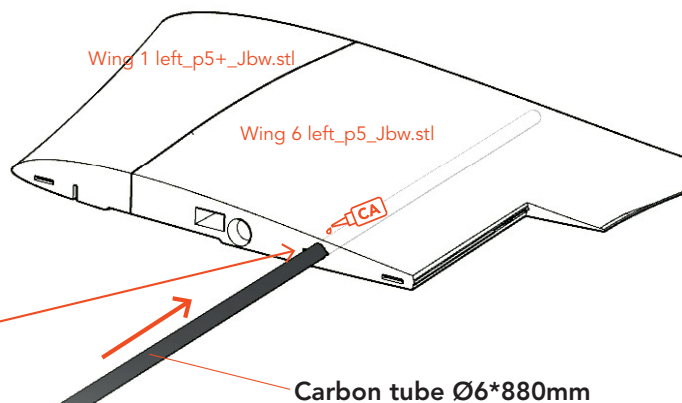
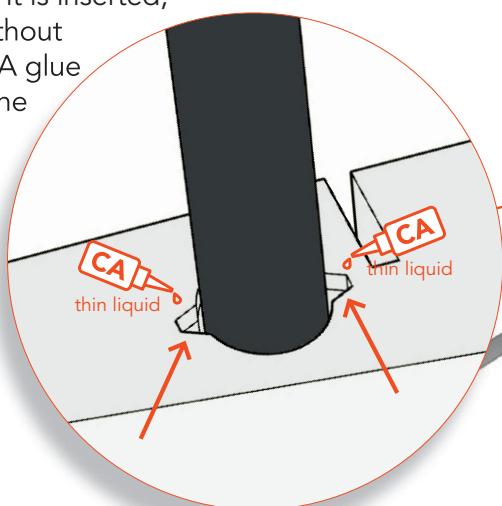
For now, glue the following pairs together:



First glue the carbon tube into the first wing part with thin CA glue.

To ensure that the tube does not stick too early when it is inserted, insert it into the hole without glue and then let thin CA glue run into the two slots. The capillary action will give you a complete bond.

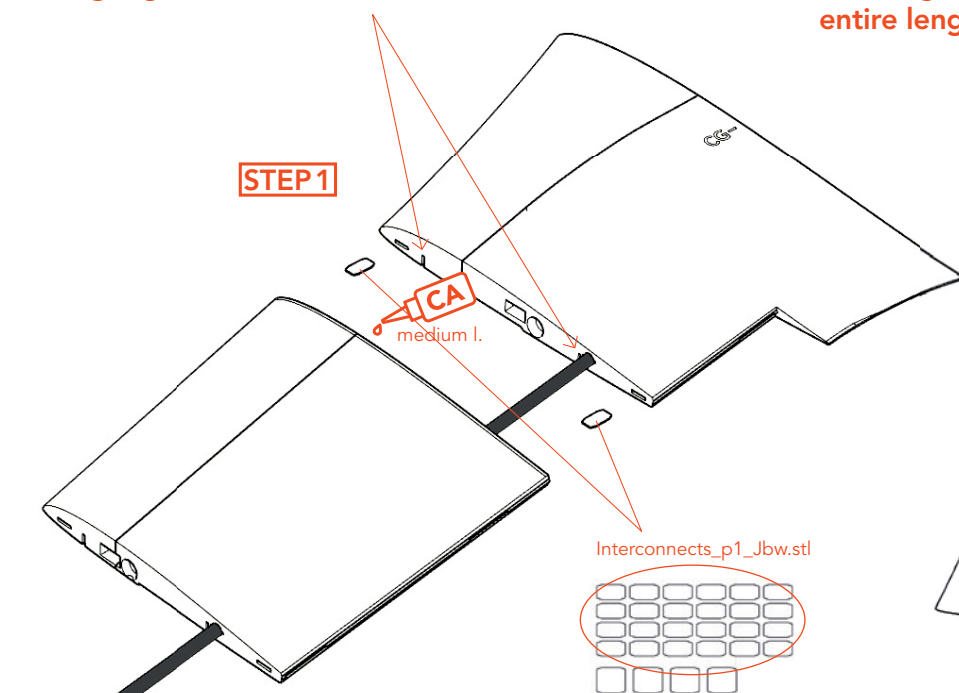
Before gluing the hole to the root rib, close it with adhesive tape so that no glue can leak out!



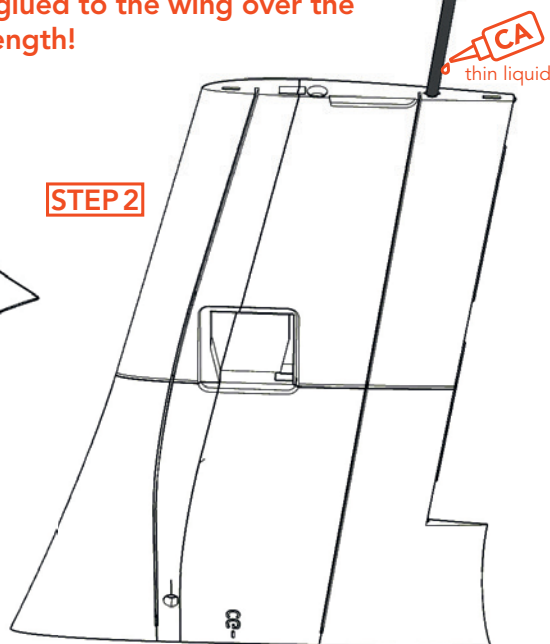
Now glue the second wing part with medium CA glue. Do not apply glue to the carbon tube and make sure that no glue gets into this slots!

Then glue the carbon tube as described above. **For the torsional stability of the wing, it is important that the carbon tube is glued to the wing over the entire length!**

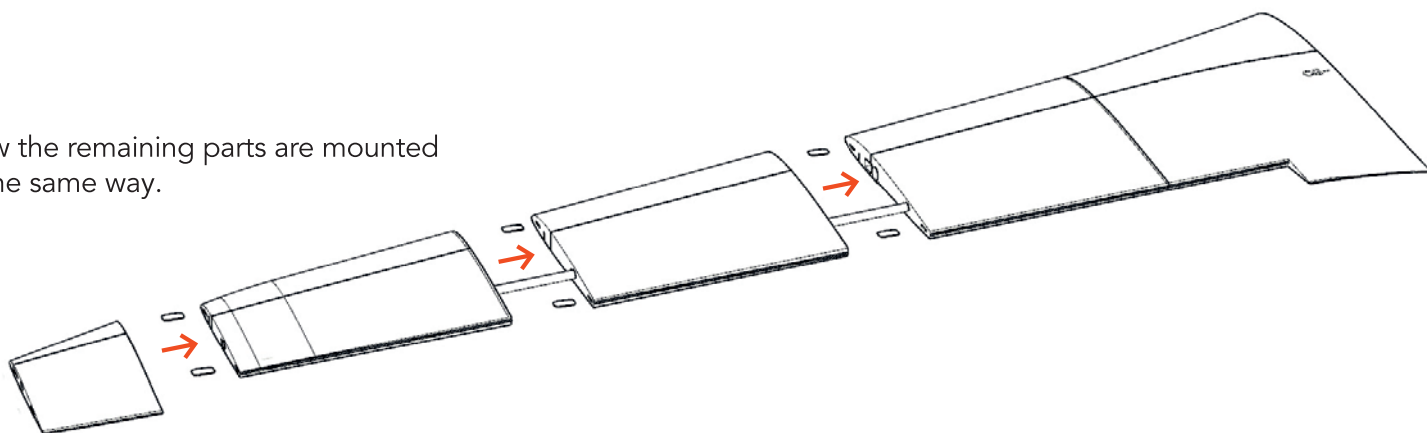
STEP 1



STEP 2



Now the remaining parts are mounted in the same way.



The carbon fiber strips (flat profiles) are important for the stability of the wing. If these are missing, the wing can start to **oscillate at high speeds or in turbulent air**. This is a common effect for flying wings with a large span, and can only be prevented by greater stability.

This is especially important when using the heavier EDF fuselage. With the lighter Glider fuselage these strips would not be absolutely necessary, but even here we recommend to install them.

As described below, you can also use other materials if you can't get these flat profiles in your country.

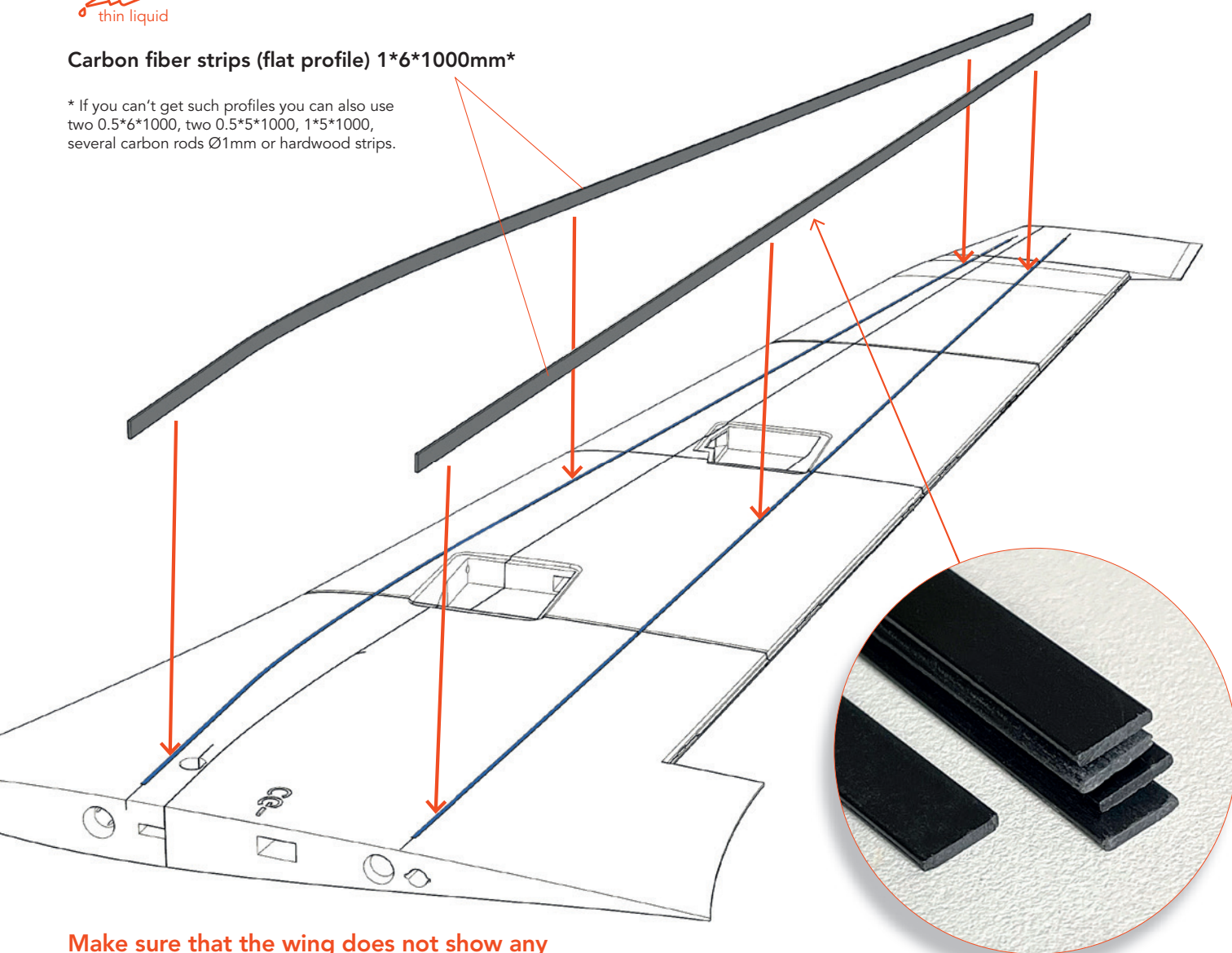
ASSEMBLY Shorten and insert the carbon strips first! into the gaps on the wing. Make sure that they do not protrude above the surface of the wing, if they are a little lower, that's okay. Then apply a generous amount of **thin CA glue along the entire length**. The glue spreads through the capillary effect and bonds the strips to the wing over a large area. **The carbon strips should be degreased and roughened with sandpaper!**

If you don't have carbon strips or similar materials available, print the STL [Spar_p1_Jbw.stl](#) from PLA or better Tough PLA several times and glue it as described.



Carbon fiber strips (flat profile) 1*6*1000mm*

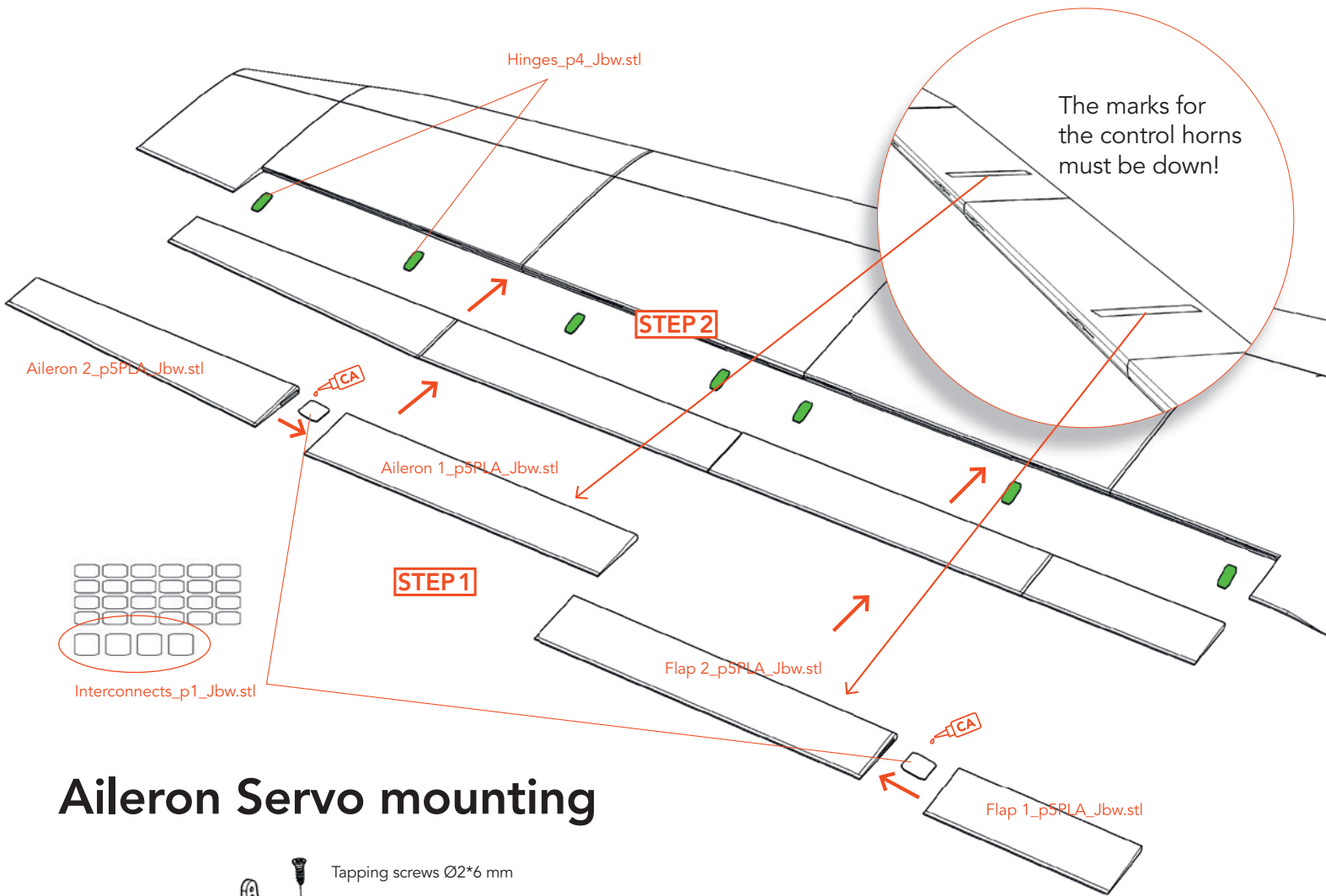
* If you can't get such profiles you can also use two 0.5*6*1000, two 0.5*5*1000, 1*5*1000, several carbon rods Ø1mm or hardwood strips.



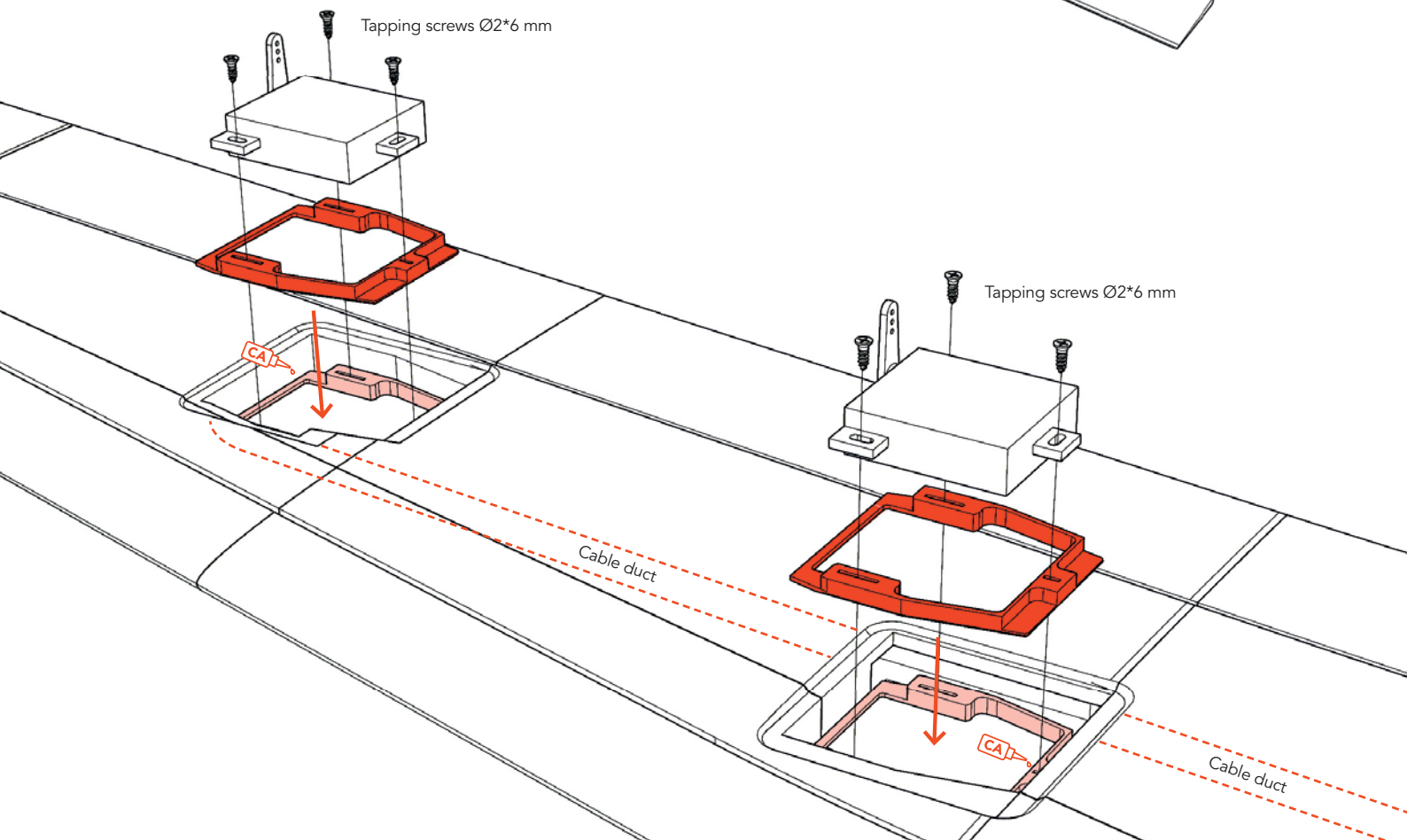
Make sure that the wing does not show any bending or tension during gluing.

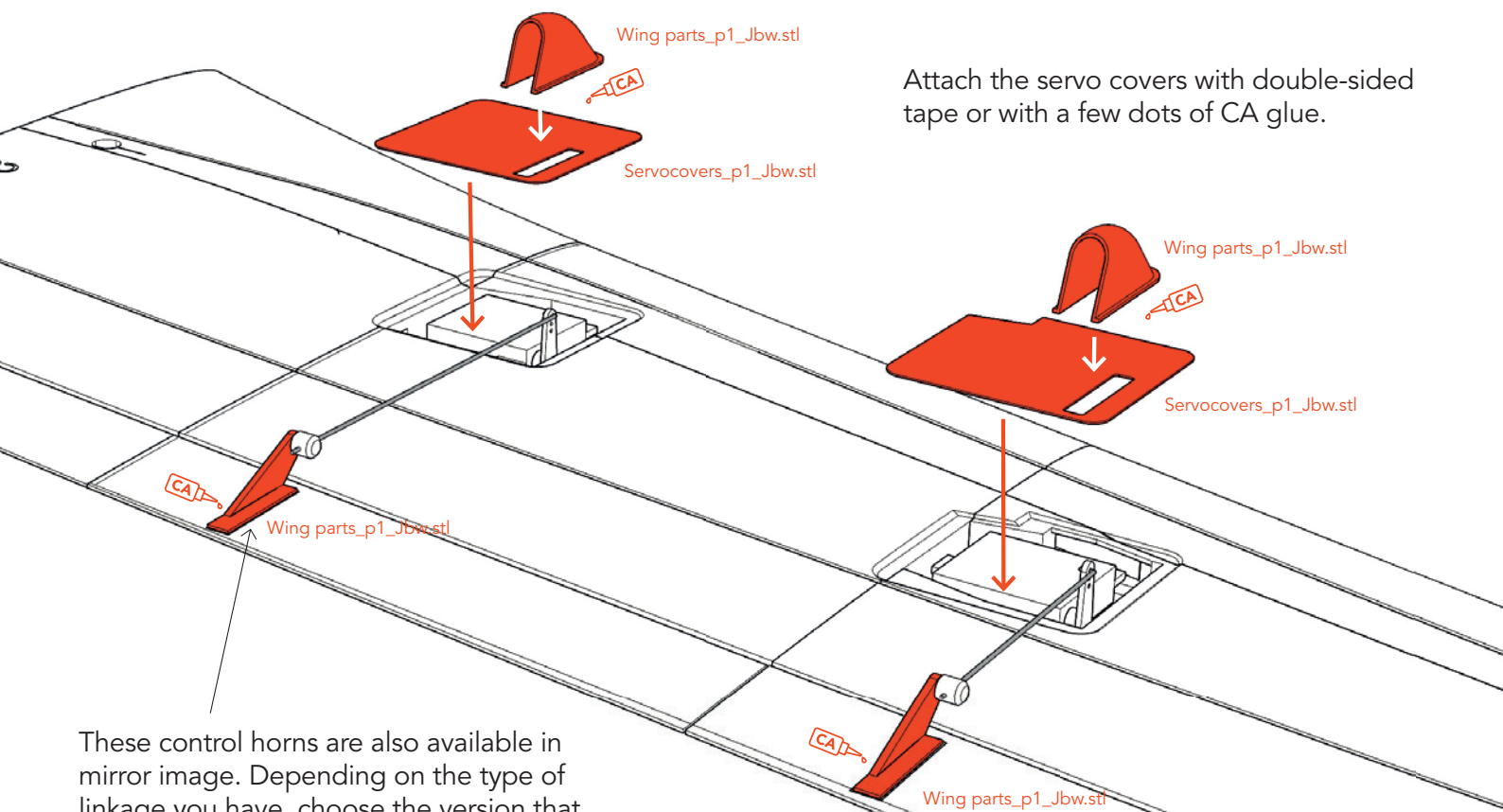
Aileron assembly

Follow the instructions „Installing the hinges“ on page 6.



Aileron Servo mounting





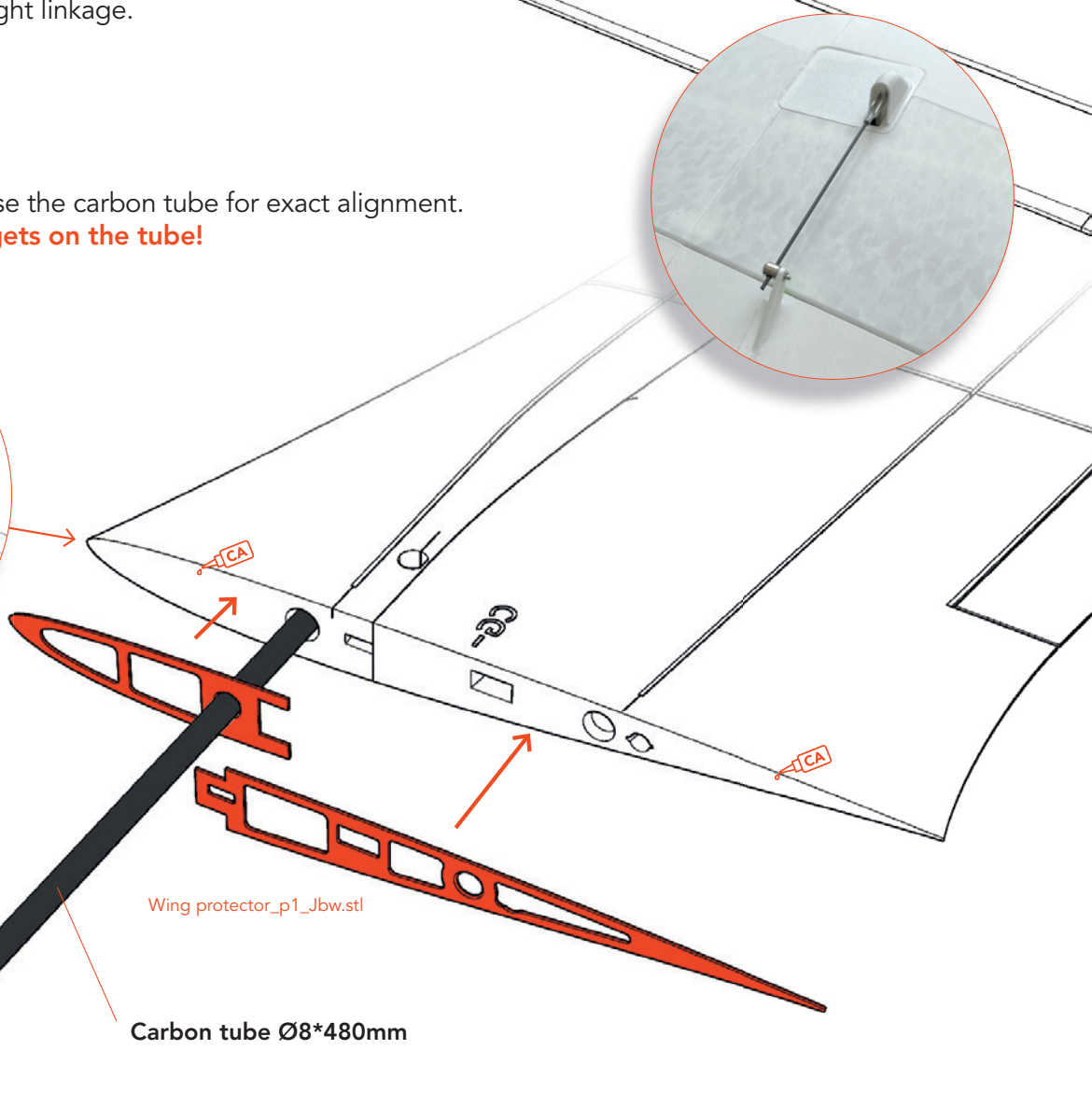
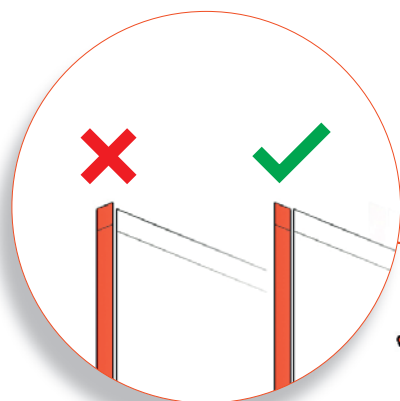
Attach the servo covers with double-sided tape or with a few dots of CA glue.

These control horns are also available in mirror image. Depending on the type of linkage you have, choose the version that is more suitable for a straight linkage.

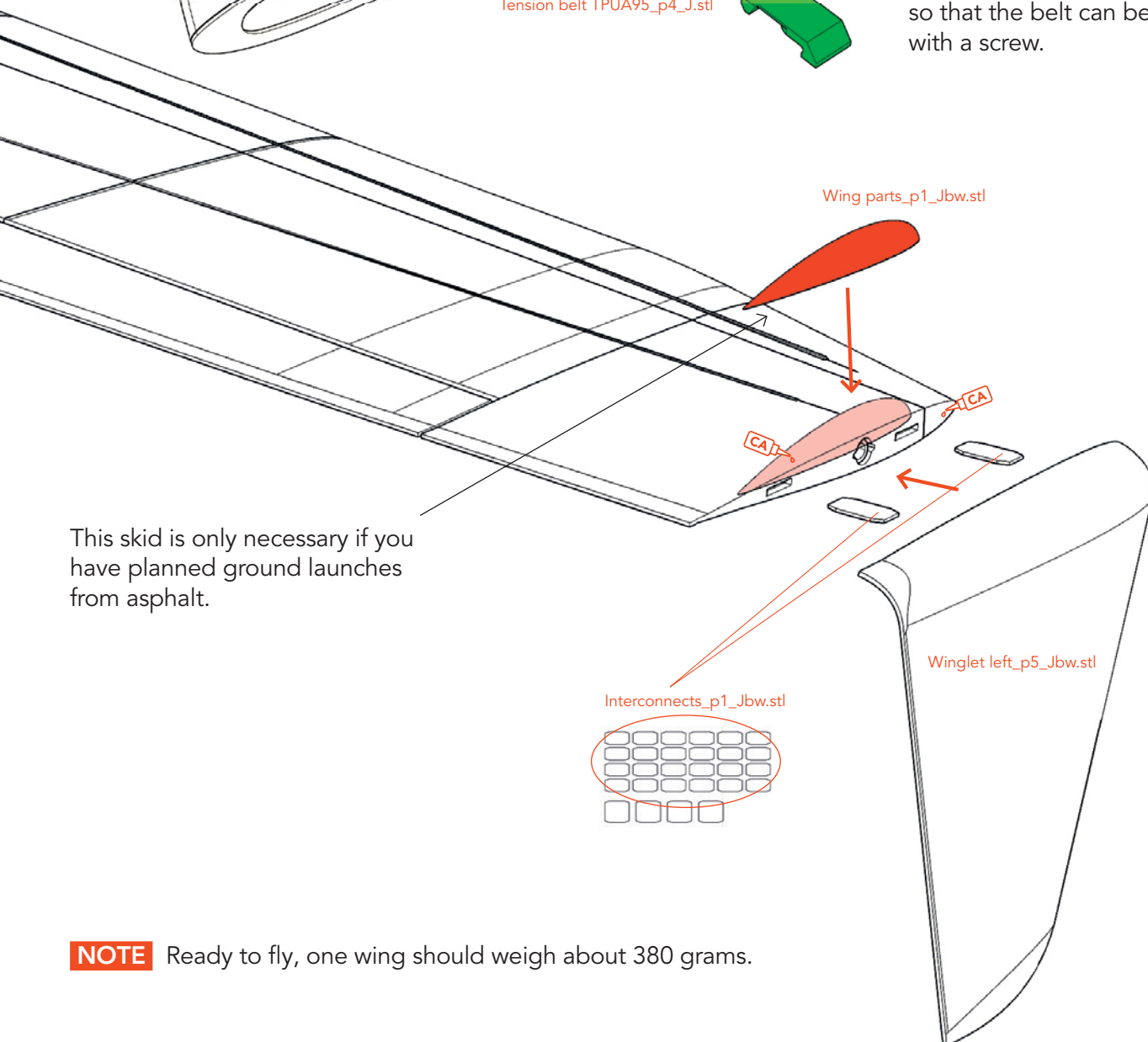
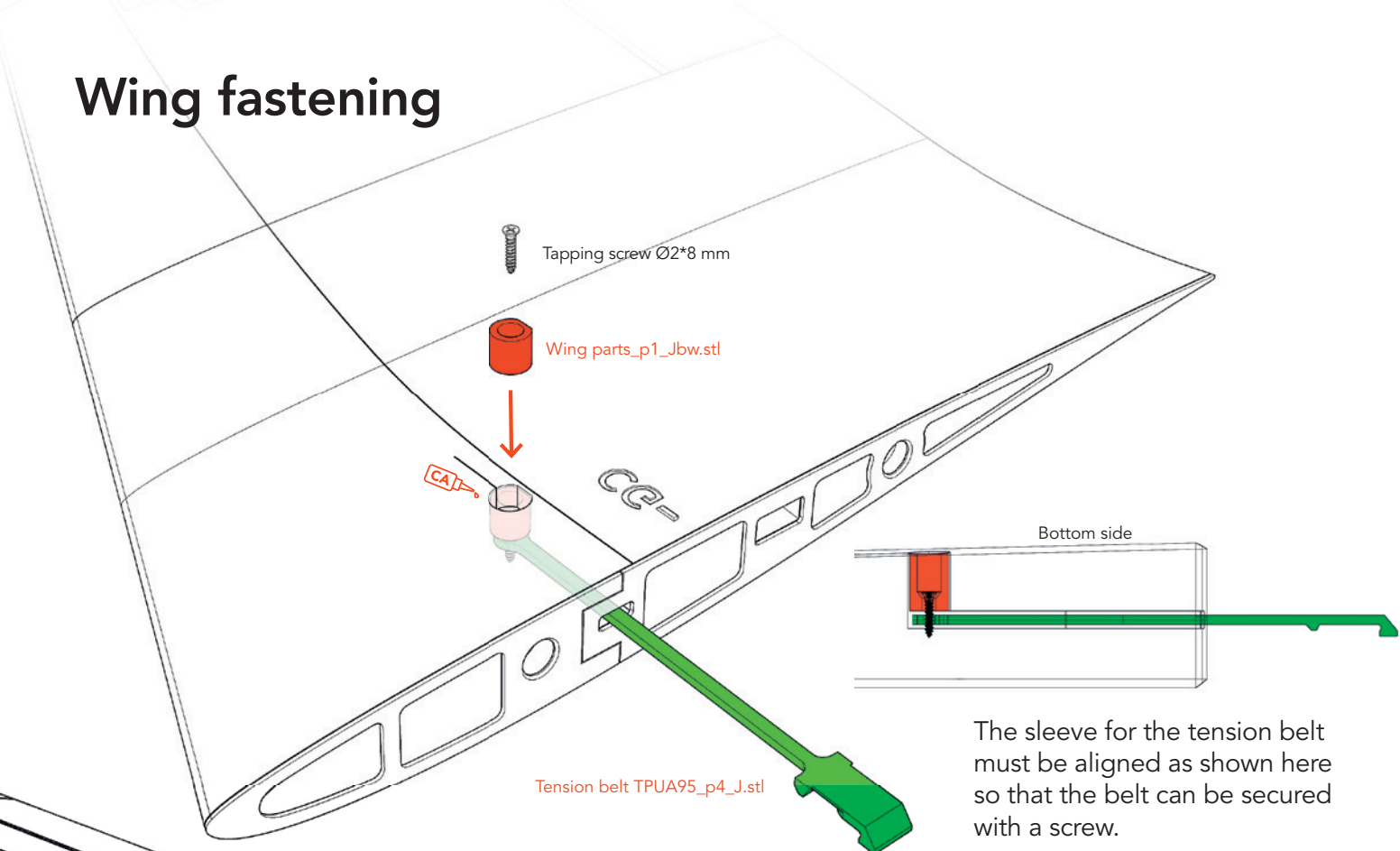
Wing protector:

Glue the front part first. Use the carbon tube for exact alignment.

Make sure that no glue gets on the tube!



Wing fastening



NOTE Ready to fly, one wing should weigh about 380 grams.

SETTINGS FOR FLYING – BIG WING

After installing the electronics and setting up the transmitter, check that the control surfaces are aligned correctly. Set the transmitter trim to zero. Align all rudders to zero position. Change the position of the moving parts by changing the length of the linkage from the servo arm to the control horn. In-flight adjustments can be made later with the trim.

Setting the servo travel

AILERON AILERONS up: 12 mm, down: 12 mm and **FLAPS** up: 6 mm, down: 6 mm (coupled 50 %)

ELEVATOR AILERONS up: 12 mm, down: 12 mm and **FLAPS** up: 6 mm, down: 6 mm (coupled 50 %)

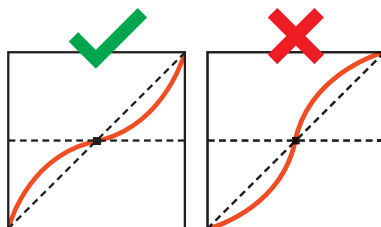
FLAPS up: 6 mm, down: 6 mm **RUDDER** (FUSELAGE EDF Rudder Version) left/right: 18 mm

Expo setting

AILERON 40 %

ELEVATOR 30 %

RUDDER 0 %



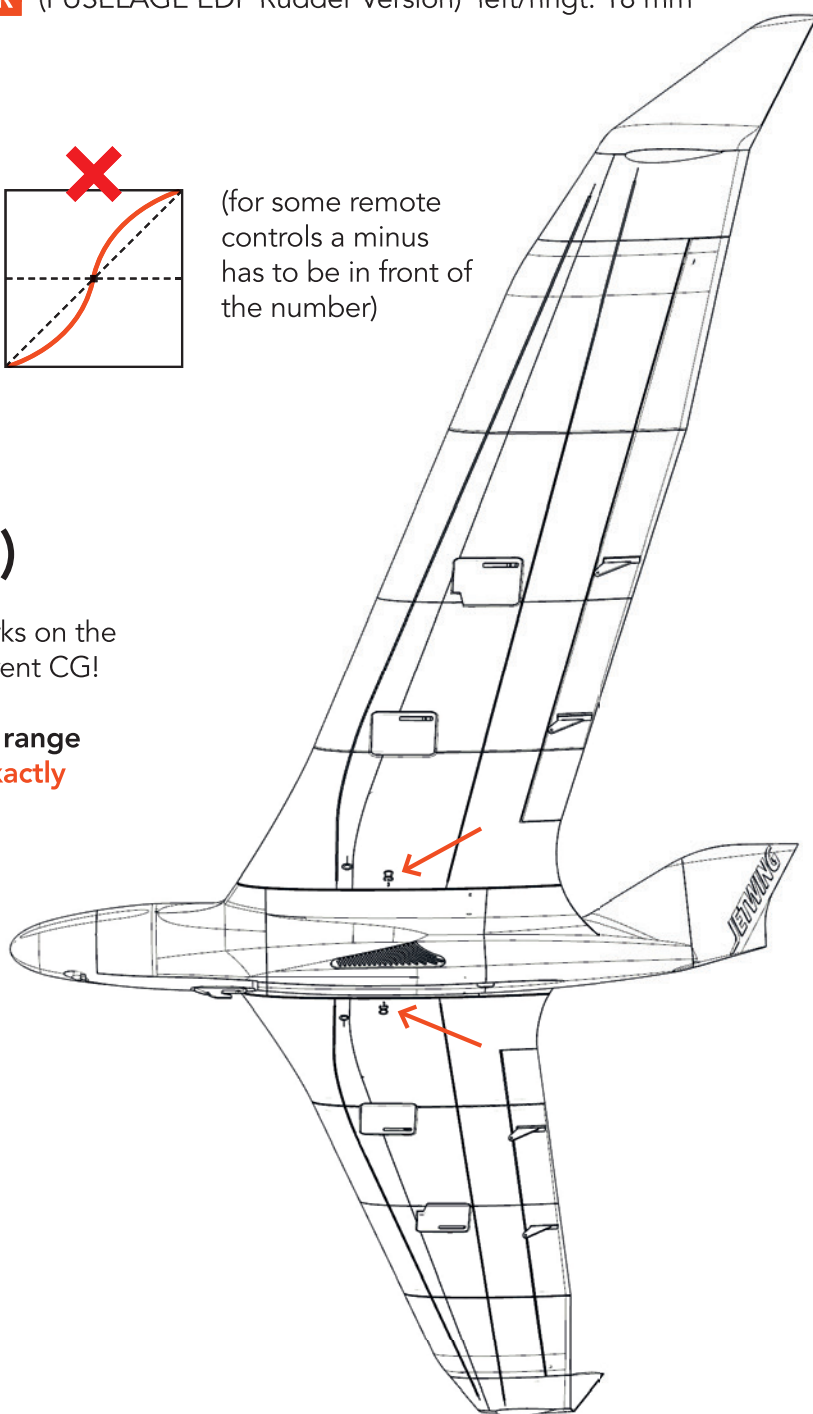
(for some remote controls a minus has to be in front of the number)

Center of Gravity (CG)

The aircraft must balance **precisely** at the marks on the wing. Attention the different wings have different CG!

NOTE With flying wings the optimum CG range is very small, the JETWING must balance exactly on the marks on the wings!

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.



Important info about the stability of the BIG WING

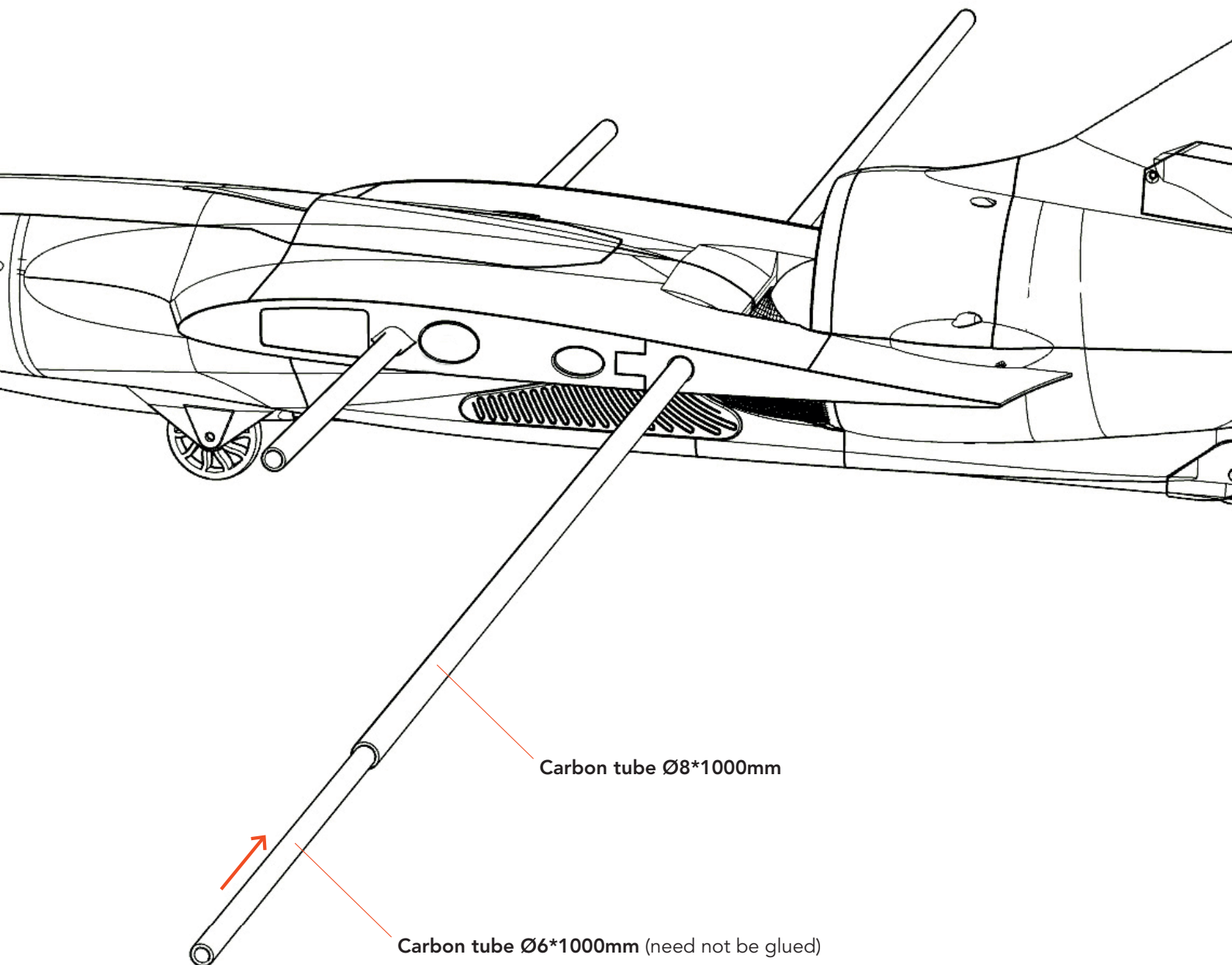
The shopping list for the BIG WING includes a third **carbon tube Ø6mm**.

This should be inserted into the rear Ø8mm plug-in tube of the EDF FUSELAGE. If you want it to be extra strong, you can also glue a carbon rod Ø6*400 mm in the middle of the tube or a hardwood round rod. Due to the higher weight of the EDF FUSELAGE, the characteristic at high speeds is favored that an up and down bobbing of the wings begins.

This is a characteristic of larger flying wings that can only be contained by increased stability. When using the GLIDER FUSELAGE, the additional tube is not necessary, but can still be used.

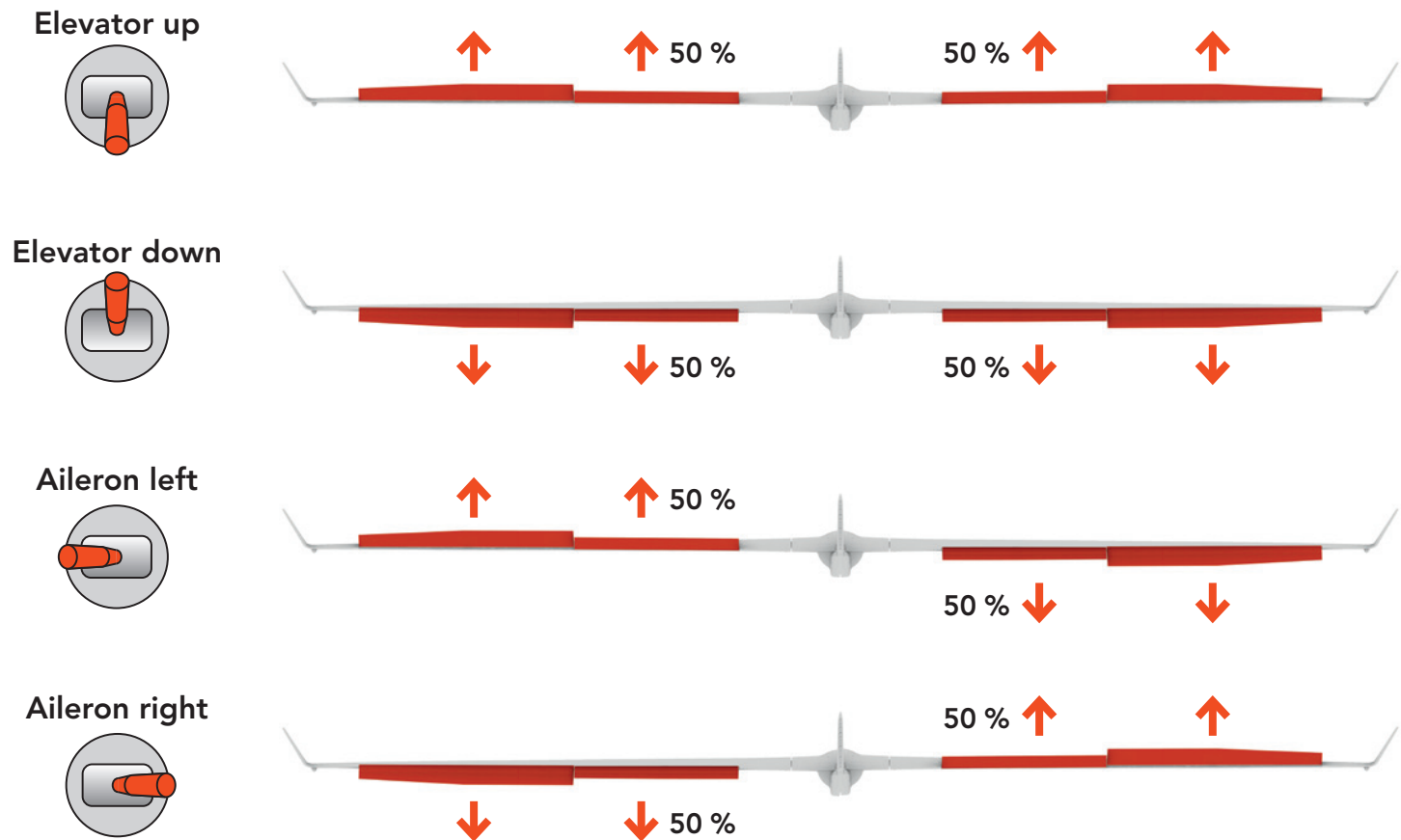
The firmer the main tube, the later the oscillation will start.

NOTE If the JETWING starts to oscillate, simply reduce the speed!

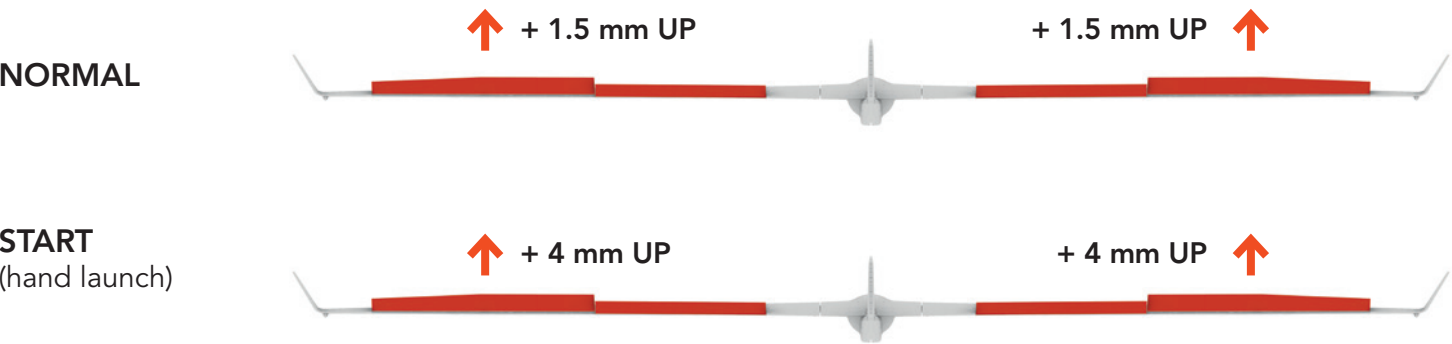


Control Direction Test – BIG WING

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



FLIGHT PHASES:



BUTTERFLY (Brake for landing)

This setting is rather soft, experienced pilots can increase the values to improve the braking effect.

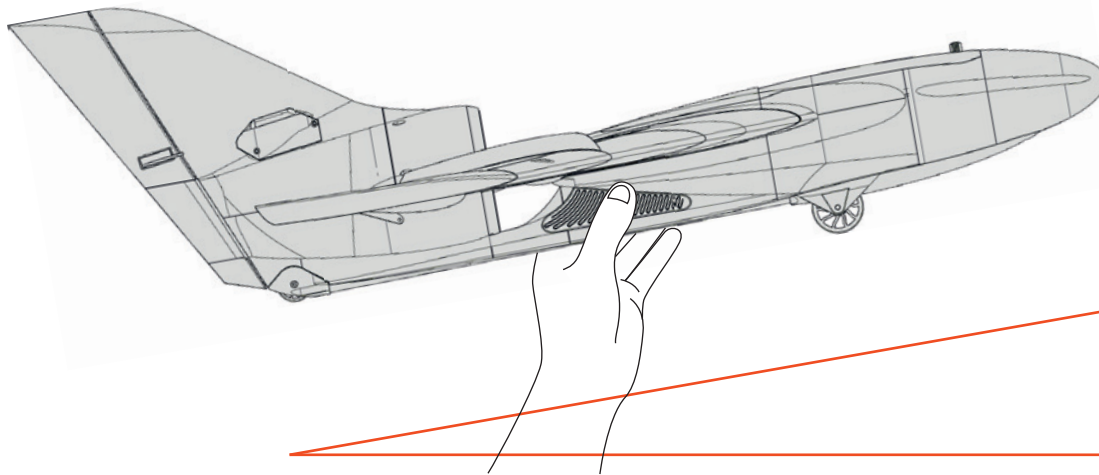


Takeoff from the hand

If you want to take off from the hand, you should **definitely** set a flight phase START via a switch, which you can change to NORMAL at a safe altitude.

Hold the JETWING below the CG at the handling surfaces and throw it upwards by about 10° at 3/4 throttle or full throttle.

Flight phase: **START**



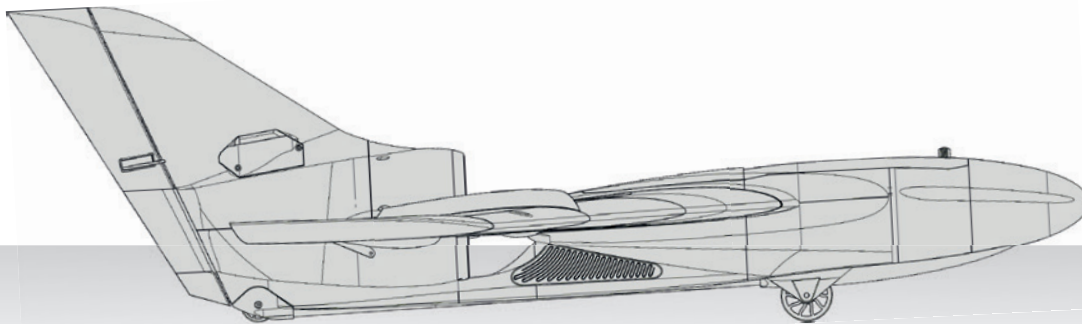
min. 3/4 throttle



~10°

Takeoff from ground

Flight phase: **NORMAL**



Landing

The Jetwing (especially with the short standard wings) **needs a very wide and low approach** because the glide angle is very flat. You should always have enough battery capacity to re-approach once or twice if you approach too fast or too high.

Turn off the EDF **early** and slow down before you start the final turn.

Under no circumstances should you touch down the aircraft too fast, only when it can no longer be held in the air and touches the ground by itself, the ideal landing speed is reached.

Technical specifications

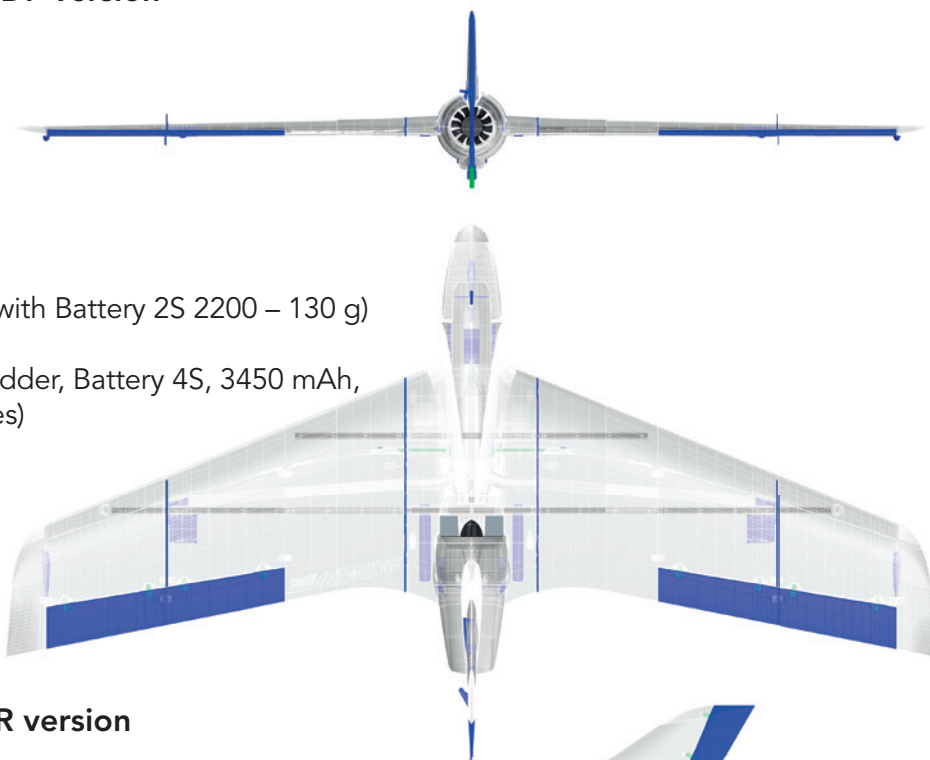
Standard WING with FUSELAGE EDF version

WINGSPAN 1270 mm/50 inches

LENGTH 739 mm/29 inches

WEIGHT

- FUSELAGE GLIDER: from 350 grams (with Battery 2S 2200 – 130 g)
- FUSELAGE EDF: 1020 grams (with Rudder, Battery 4S, 3450 mAh, without Carbon tubes)
- Standard WING: 235 grams (one wing, without Carbon tubes)



BIG WING with FUSELAGE GLIDER version

WINGSPAN 2060 mm/81.1 inches

LENGTH 739 mm/29 inches

WEIGHT 370 grams (one wing with Carbon)



AGE RECOMMENDATION 14+

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

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!

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