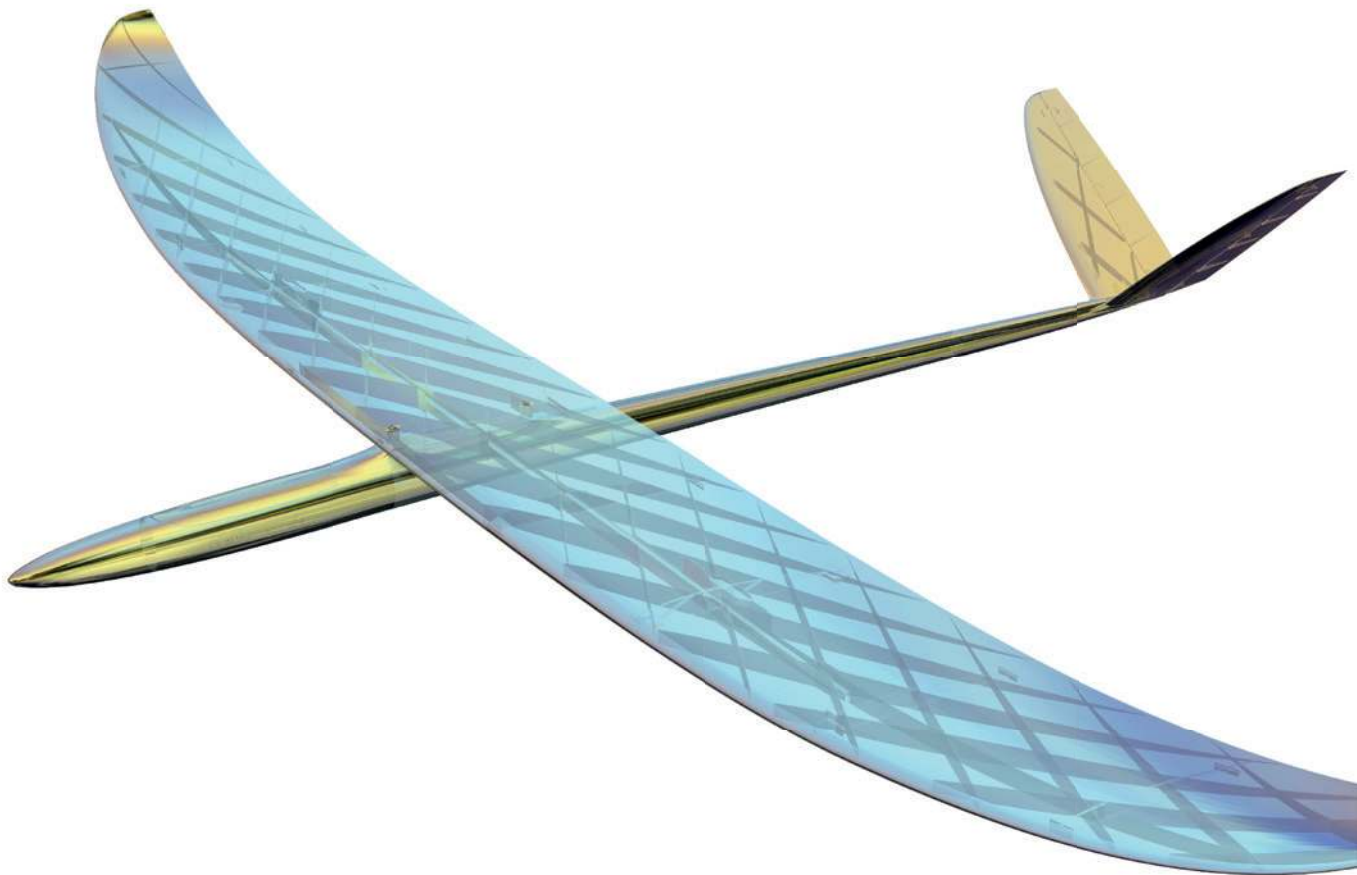


**PLANE
PRINT.com**

very light 3d printable rc planes



RISE

Glider version and **Motor/Spoiler upgrade Kit**



NOTE: Slicing **only**
works with CURA!



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

PRINTING THE PARTS – PRINTING PROFILES

You may wonder why this 3D model is exclusive to CURA?

The most important thing with small RC model airplanes is always the **size to weight ratio**. The lighter a model is, the better its flight characteristics and also the flight time is significantly increased.

With our **unique design process**, we manage to offer weight-relevant parts in a **true 1-wall printing** process for both the outer skin and the filling. This allows us to save weight while maintaining the necessary stability.

Here we show you how to make adjustments from a standard CURA profile. **For this model we need only 4, easy to create profiles.**

It is important to follow the instructions from PLANEPRINT.com to slice the part correctly.

However, it can be useful to perfect your 3D printing by making some additional settings depending on the printer and filament used.

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

PROFILE P1_fullbody
PROFILE P2_hollowbody
PROFILE P3_surface
PROFILE P4_flex

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

IMPORTANT FOR THE 1-WALL-PRINT!

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.



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!

PROFILE P1_FULLBODY normal PLA

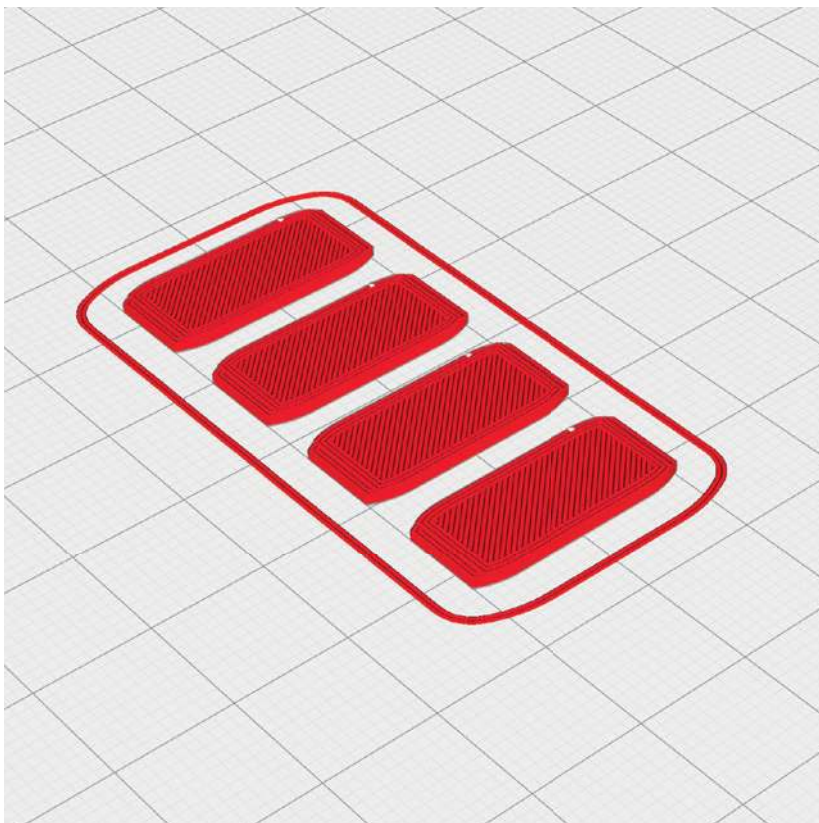
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Interconnects_profile1_rise.stl

MATERIAL PLA, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required

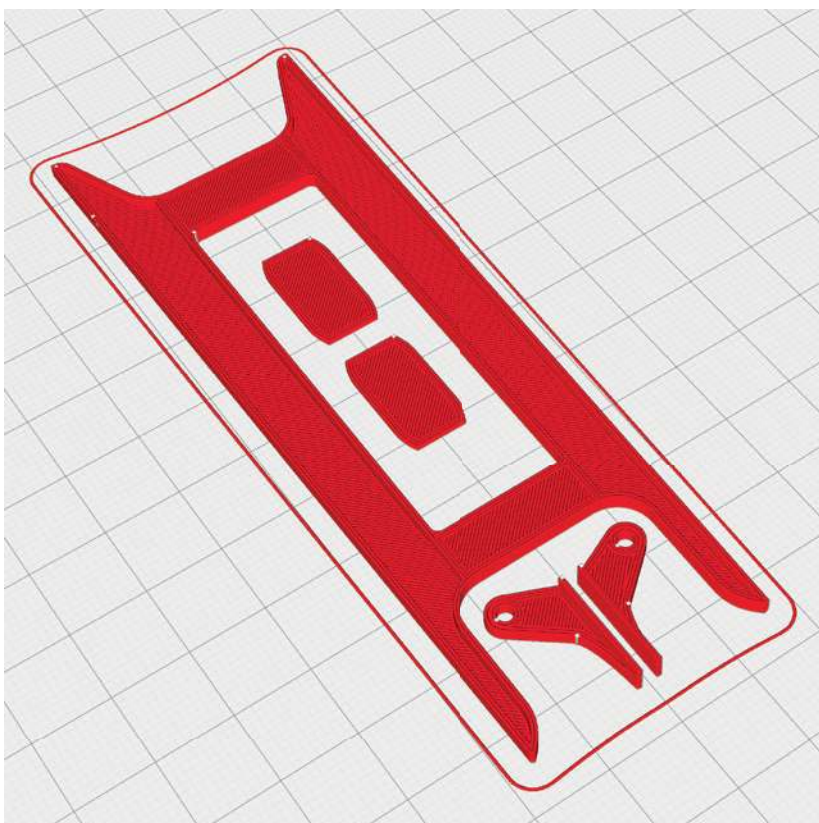


Parts_profile1_rise.stl

MATERIAL PLA, ~ 4 g

ADDITIONAL SETTINGS

None required



There are several versions to choose from:

PROFILE P1_FULLBODY normal PLA

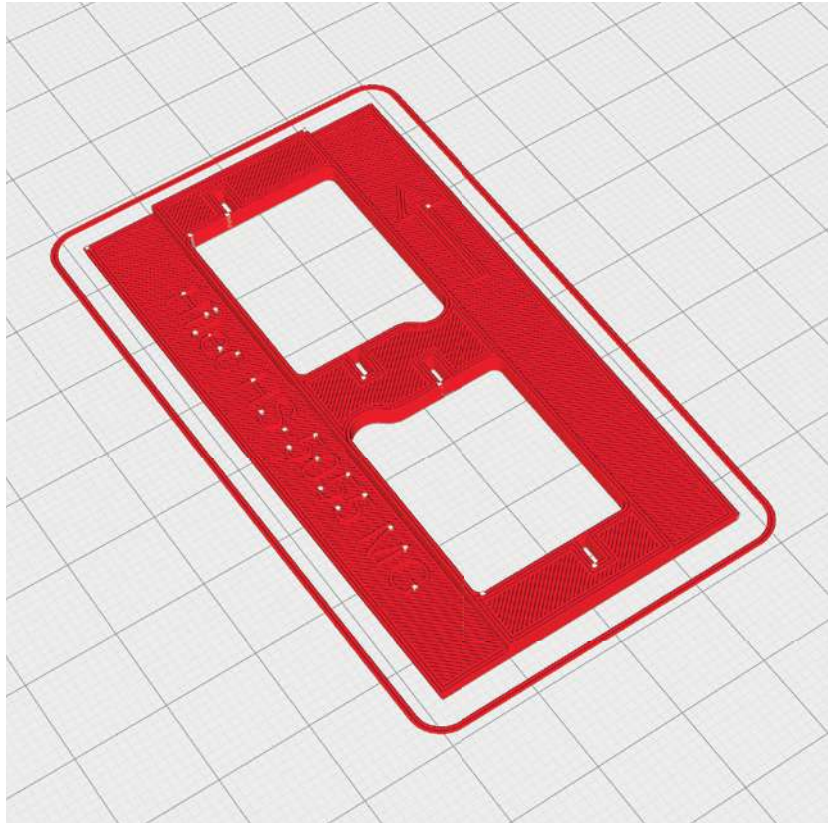
The following parts must be sliced with the PROFILE P1_FULLBODY.
Please note the additional settings for the individual parts!

Servomount_xxx_profile1_rise.stl

MATERIAL PLA, ~ 3 g

ADDITIONAL SETTINGS

None required

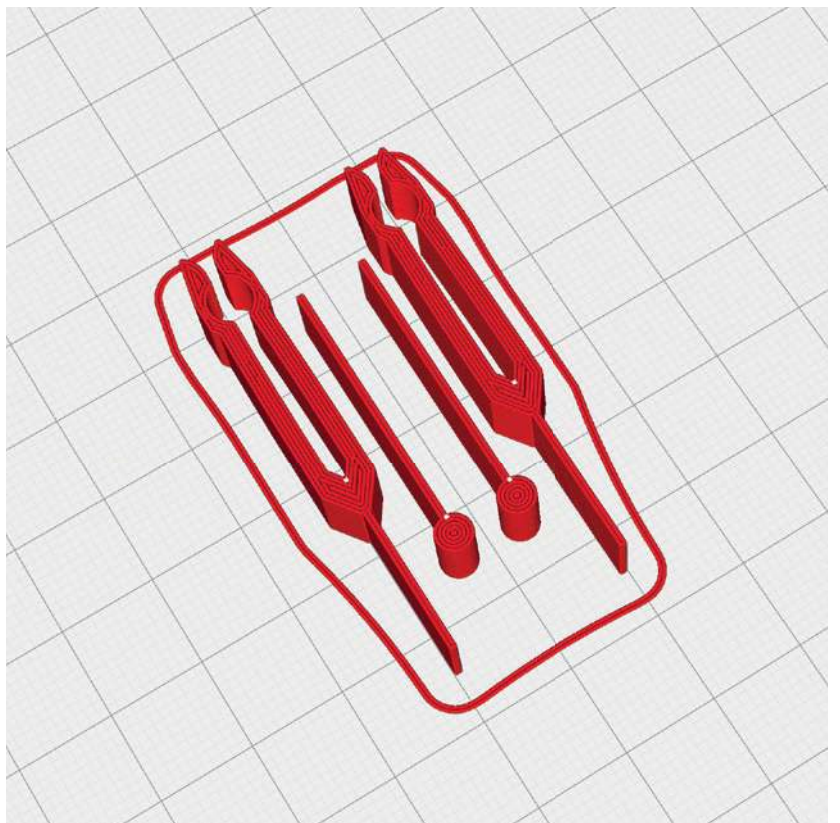


Snap lock_profile1_rise.stl

MATERIAL PLA, ~ 4 g

ADDITIONAL SETTINGS

- Wall Line Count: 6



PROFILE P2_HOLLOWBODY normal PLA

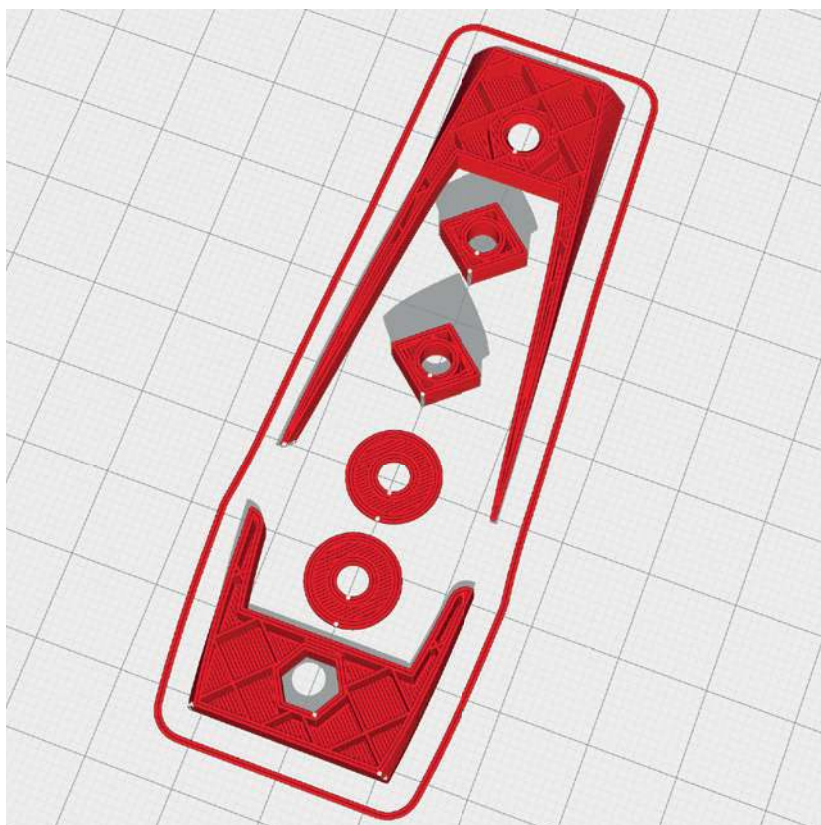
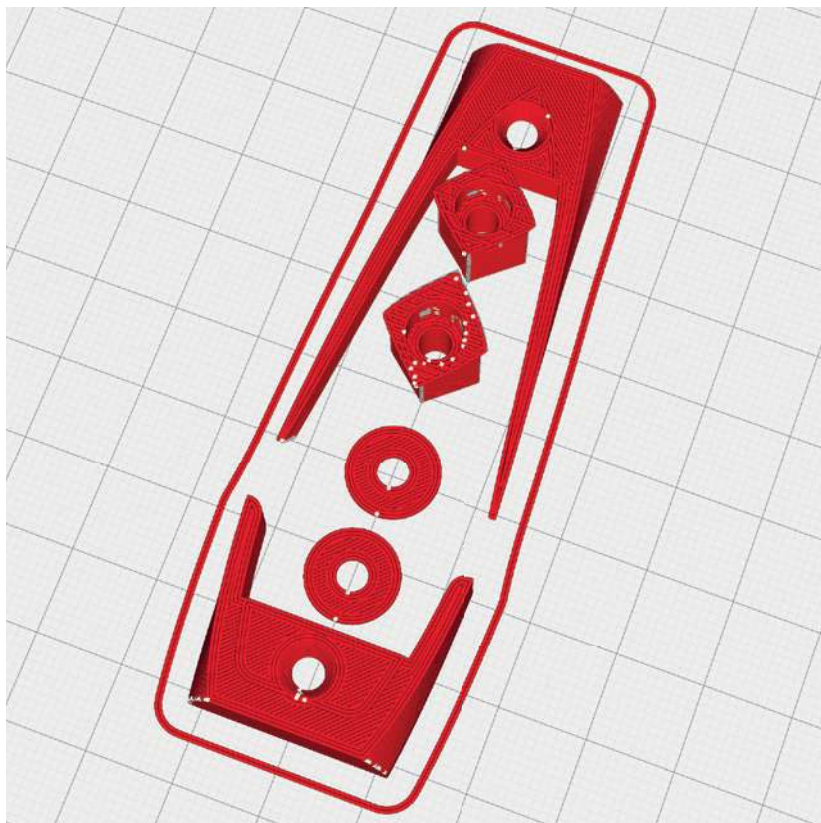
The following parts must be sliced with the PROFILE P2_HOLLOWBODY.
Please note the additional settings for the individual parts!

Wingmount_profile2_rise.stl

MATERIAL PLA, ~ 4 g

ADDITIONAL SETTINGS

None required



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Canopy LW_profile3_rise.stl

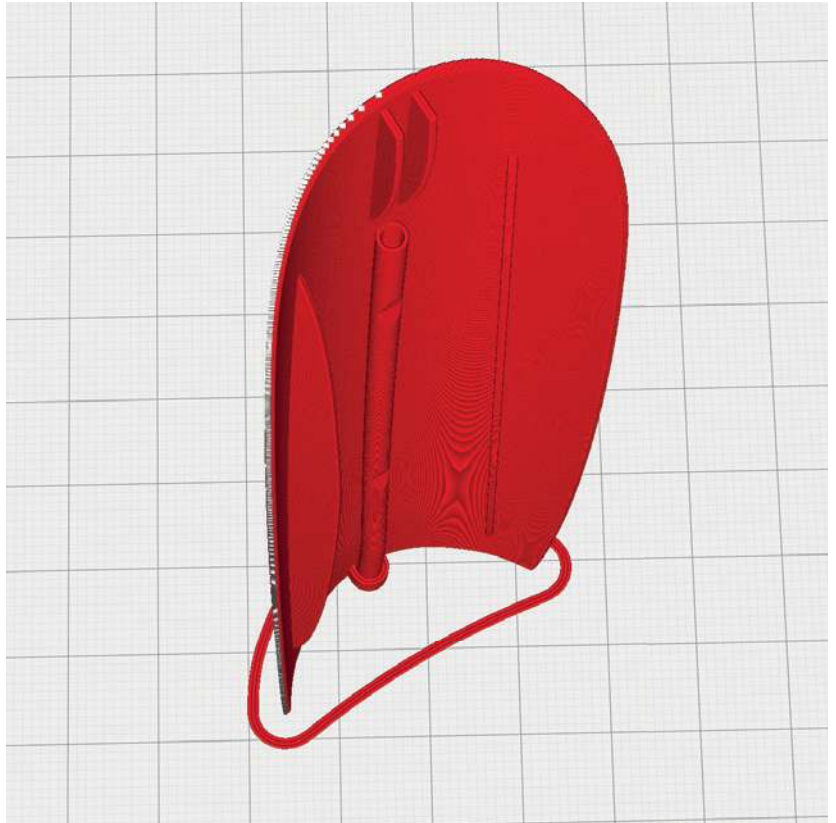
MATERIAL LW-PLA, ~ 7 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Fuselage1 LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 30 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Fuselage2 LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 34 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Fuselage3 LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 29 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Fuselage4 LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 25 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Fuselage5 LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 18 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Fuselage6 LW_profile3_rise.stl

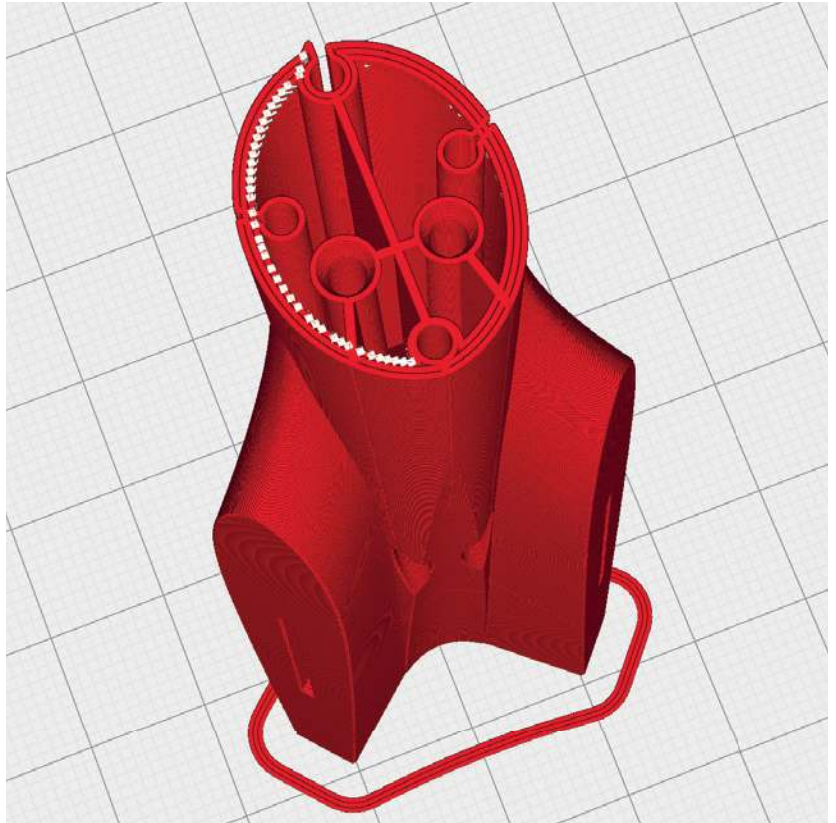
MATERIAL LW-PLA, ~ 8 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Fan +30 %
- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Nose LW_profile3_rise.stl

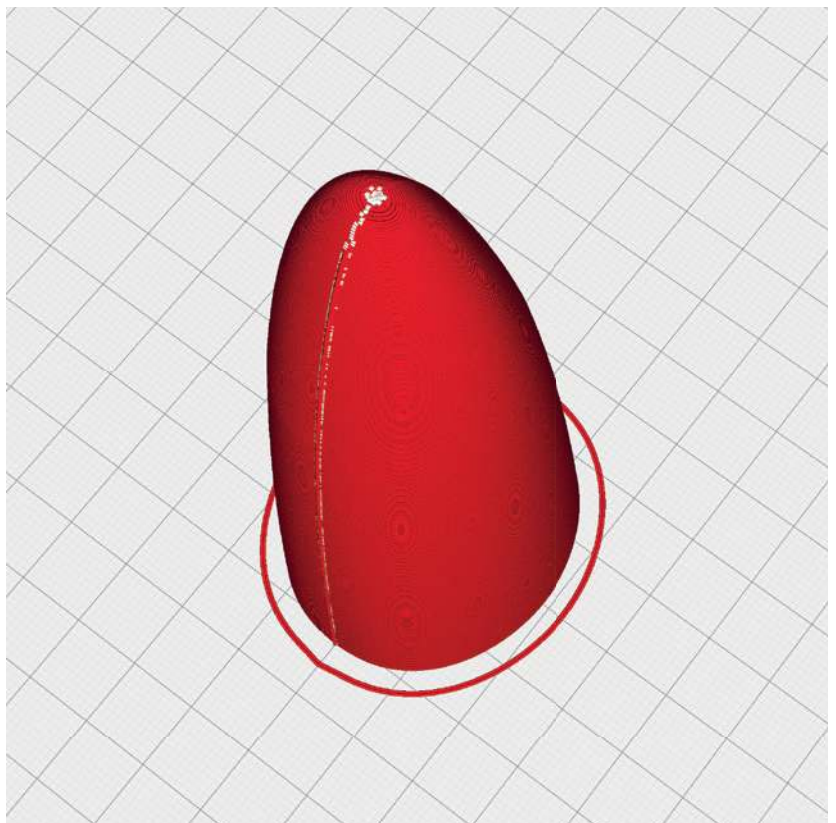
MATERIAL LW-PLA, ~ 11 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

V-tail-left LW_profile3_rise.stl

V-tail-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 20 g*

*Display in Cura. The actual weight is then 60% of this.

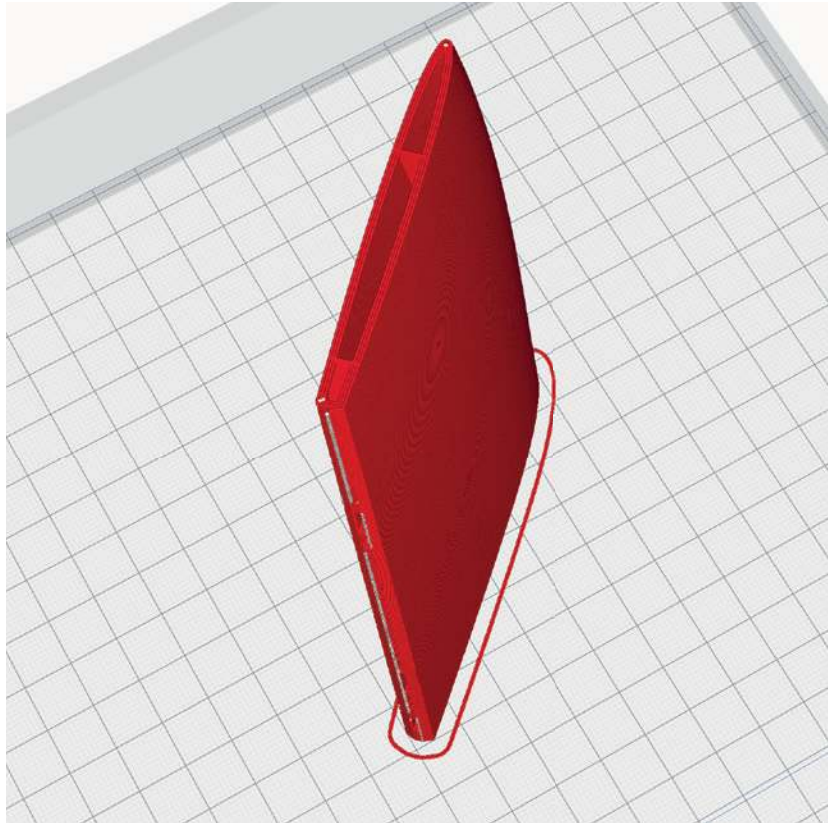
ADDITIONAL SETTINGS

left: • Z Seam Position **left**

right: • Z Seam Position **right**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



V-tail2-left LW_profile3_rise.stl

V-tail2-right LW_profile3_rise.stl

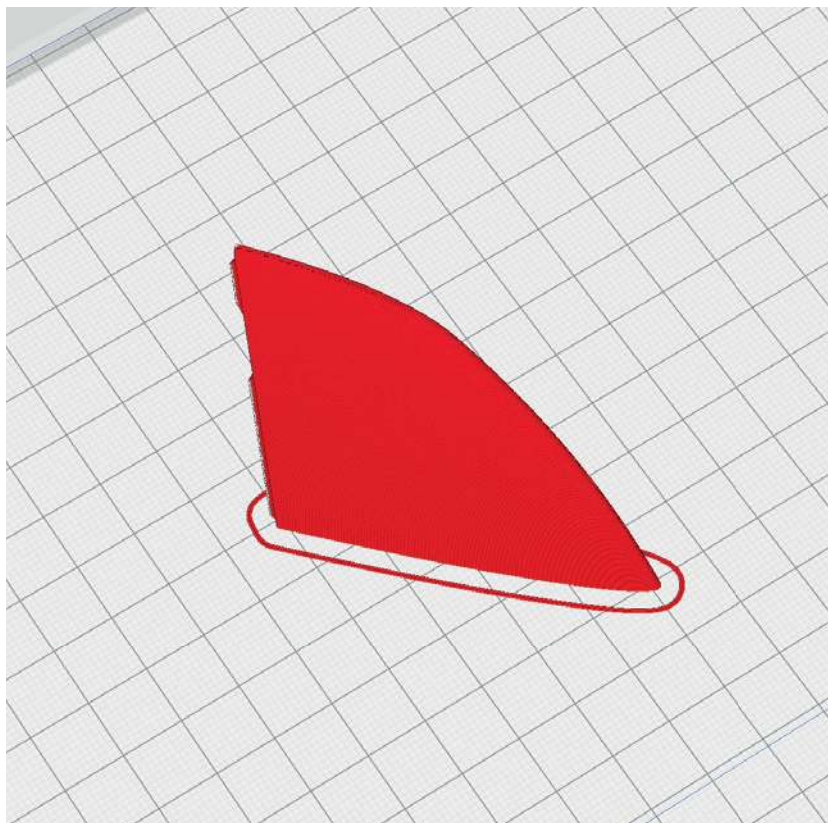
MATERIAL LW-PLA, ~ 5 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

V-tail3-left LW_profile3_rise.stl
V-tail3-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 11 g*

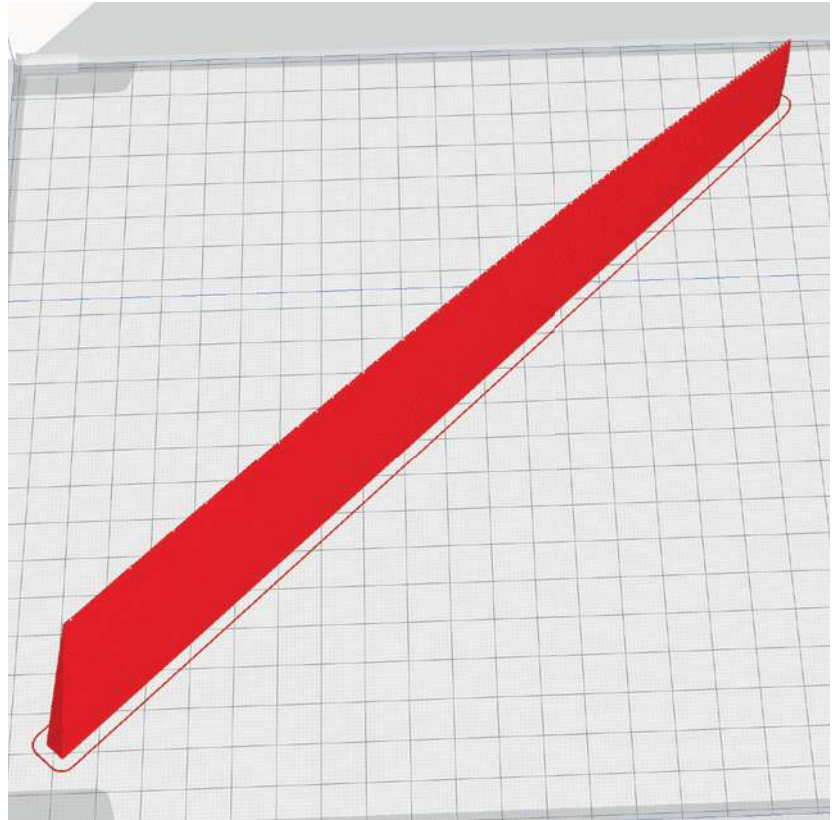
*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **right**
right: • Z Seam Position **left**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Wing1-left LW_profile3_rise.stl
Wing1-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 70 g*

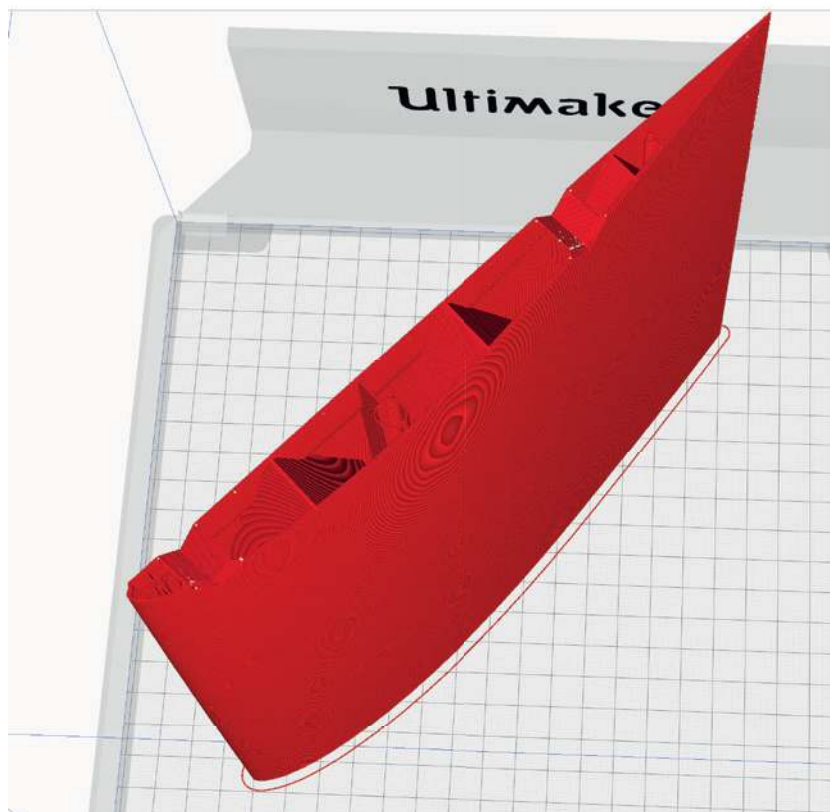
*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **right**
right: • Z Seam Position **left**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Wing2-left LW_profile3_rise.stl
Wing2-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 68 g*

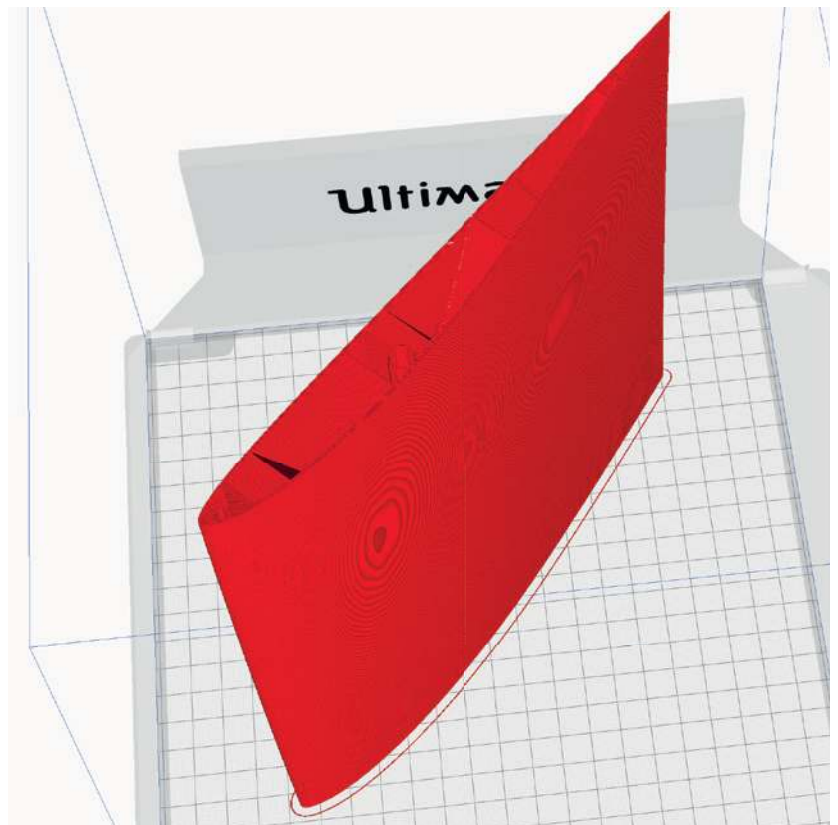
*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **right**
right: • Z Seam Position **left**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Wing3-left LW_profile3_rise.stl
Wing3-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 63 g*

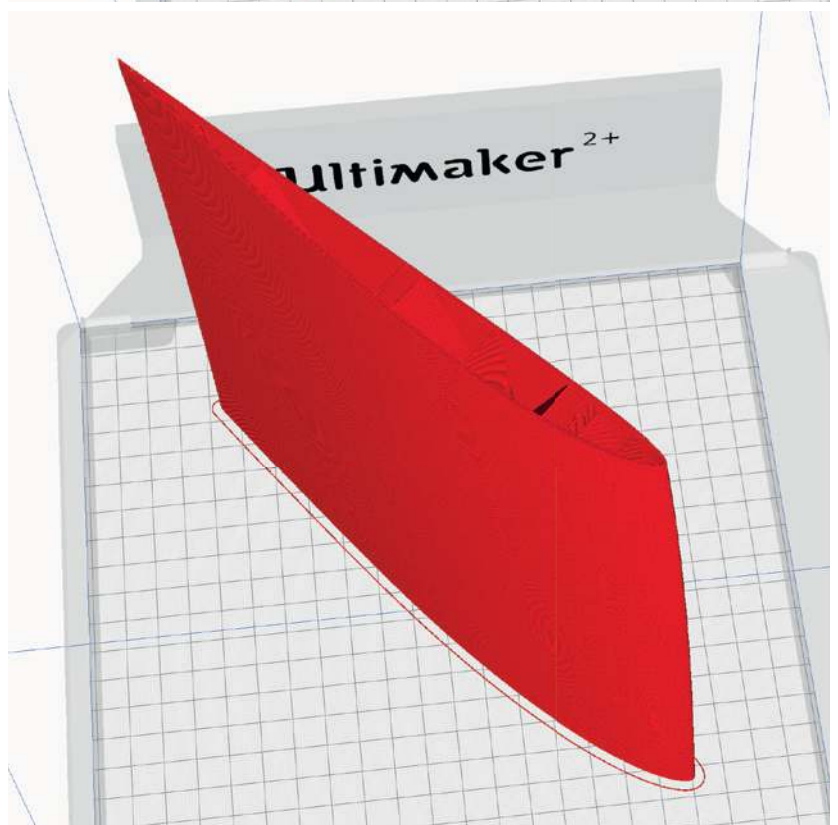
*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **left**
right: • Z Seam Position **right**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Wing4-left LW_profile3_rise.stl
Wing4-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 52 g*

*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **left**
right: • Z Seam Position **right**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



Wing5-left LW_profile3_rise.stl
Wing5-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 63 g*

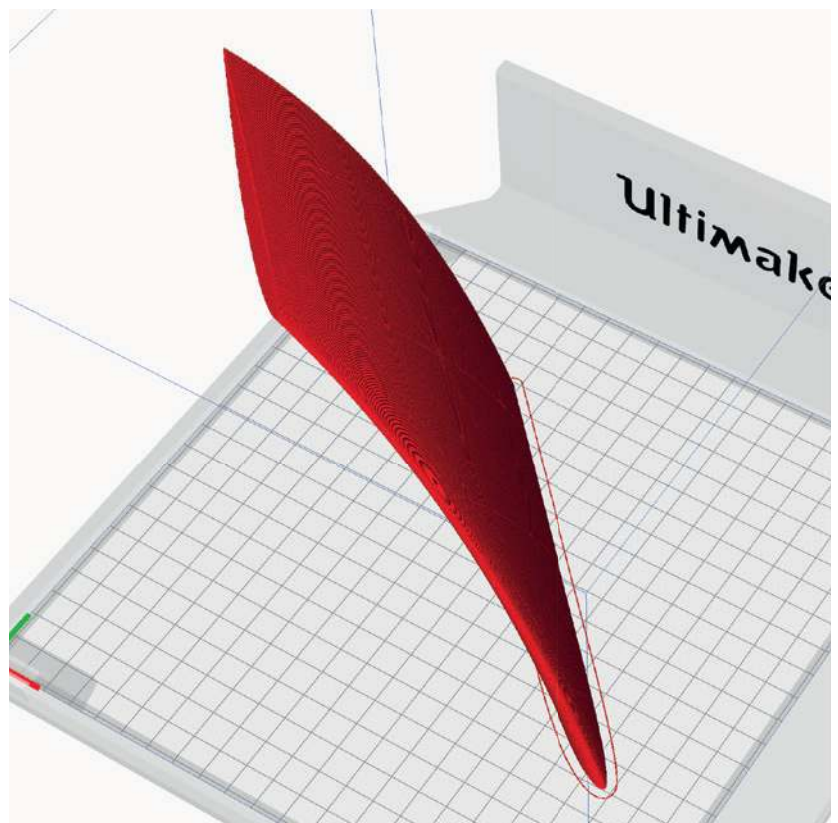
*Display in Cura. The actual weight is then 60% of this.

ADDITIONAL SETTINGS

left: • Z Seam Position **left**
right: • Z Seam Position **right**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

PLEASE NOTE In profile P3_SURFACE, there should not be more than one STL on the buildplate at the same time, otherwise slicing errors can occur! Depending on your printer, a brim may not be required.

Winglet-left LW_profile3_rise.stl
Winglet-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 5 g*

*Display in Cura. The actual weight is then 60% of this.

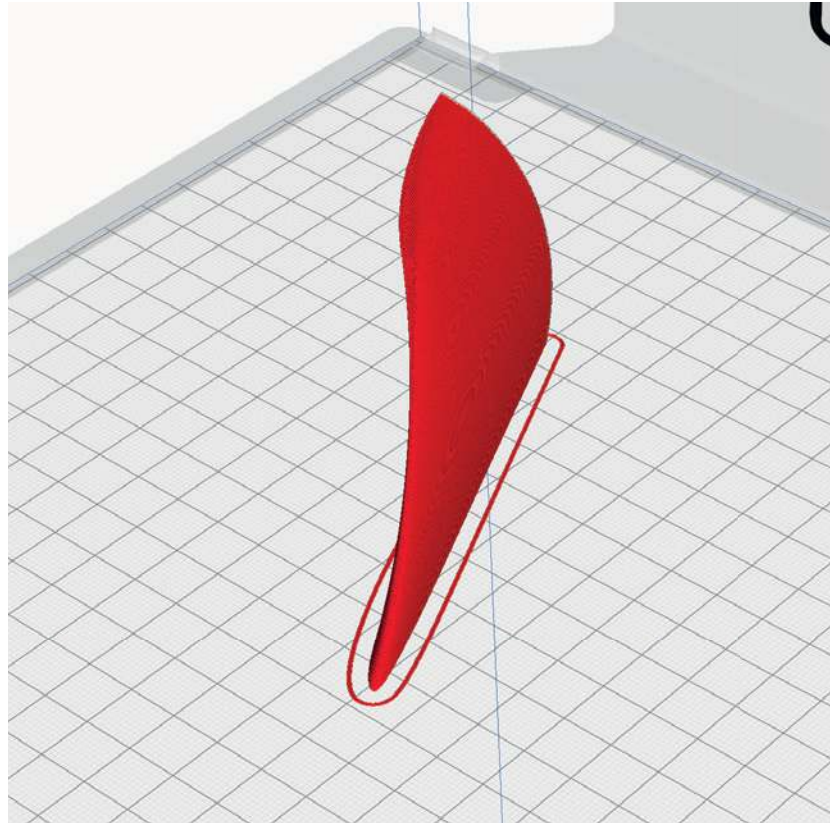
ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

Wing2 left: • Z Seam Position right

Wing2 right: • Z Seam Position left

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).



PROFILE P4_FLEX TPU A95

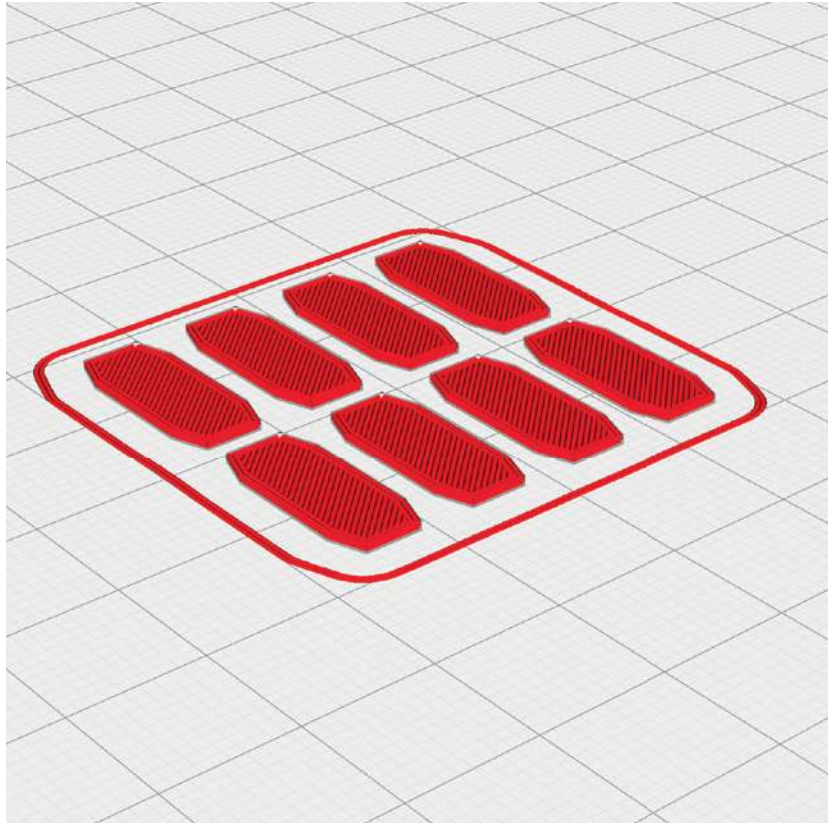
The following parts must be sliced with the PROFILE P4_FLEX.
Please note the additional settings for the individual parts!

N_Hinges_profile4_rise.stl

MATERIAL TPU ~ A95, Weight: ~ 1 g

ADDITIONAL SETTINGS

None required



This parts are only required for the Motor/Spoiler upgrade Kit!

PROFILE P1_FULLBODY normal PLA

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

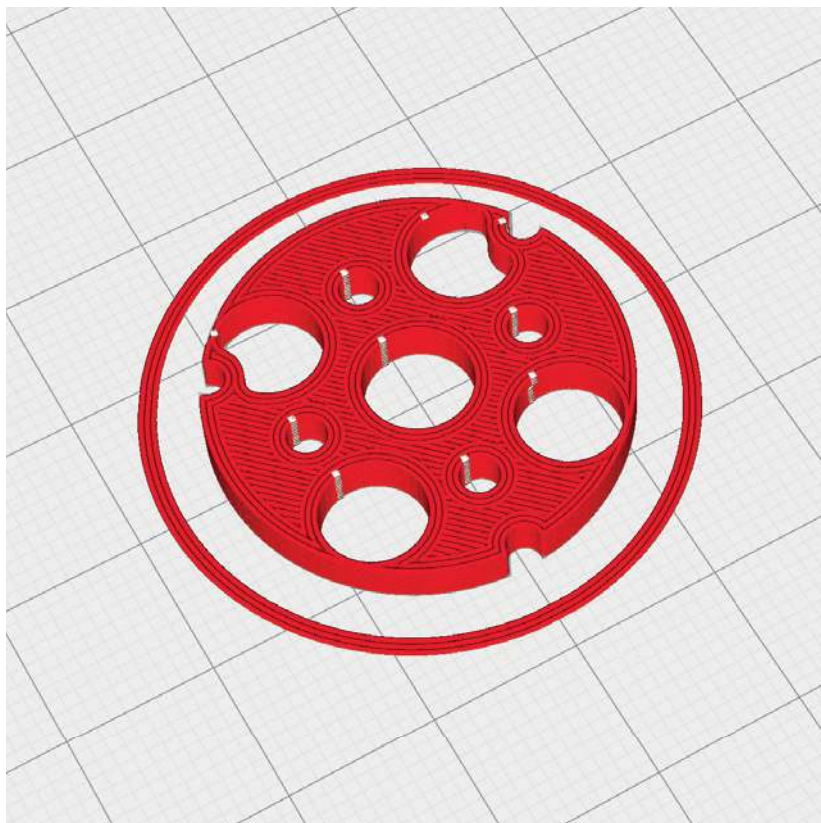
Motormount 16_profile1_rise.stl

MATERIAL PLA, ~ 2 g

ADDITIONAL SETTINGS

None required

INFO If your motor has other hole spacing than 16 mm use the file **Motormount undrilled_profile1.stl**

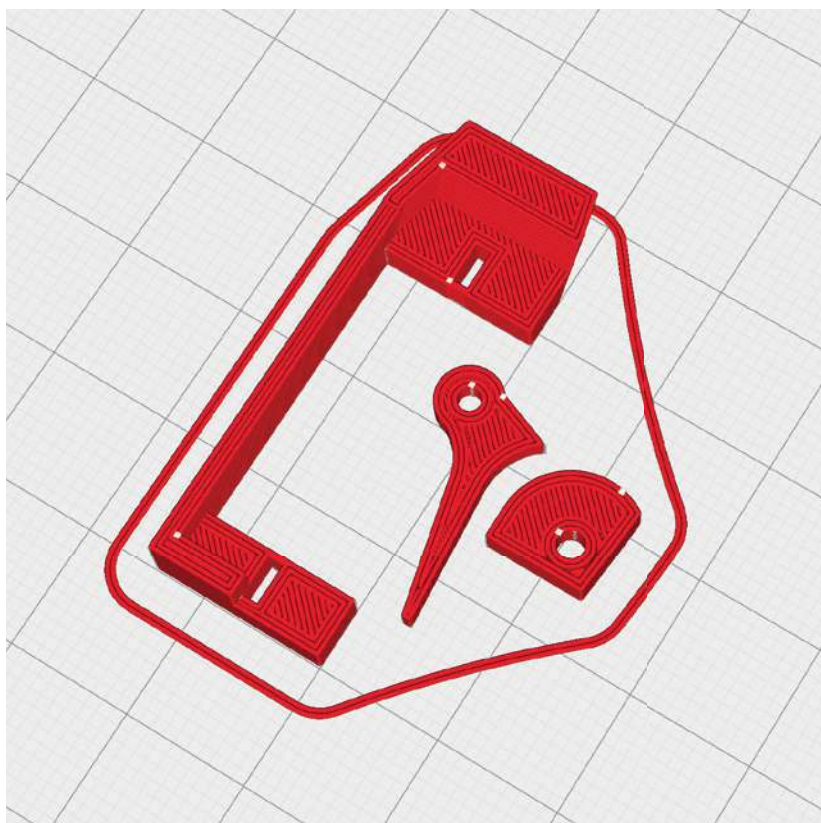


Spoiler mount_profile1_rise.stl

MATERIAL PLA, ~ 2 g

ADDITIONAL SETTINGS

None required



This parts are only required for the Motor/Spoiler upgrade Kit!

PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

Nose motor LW_profile3_rise.stl

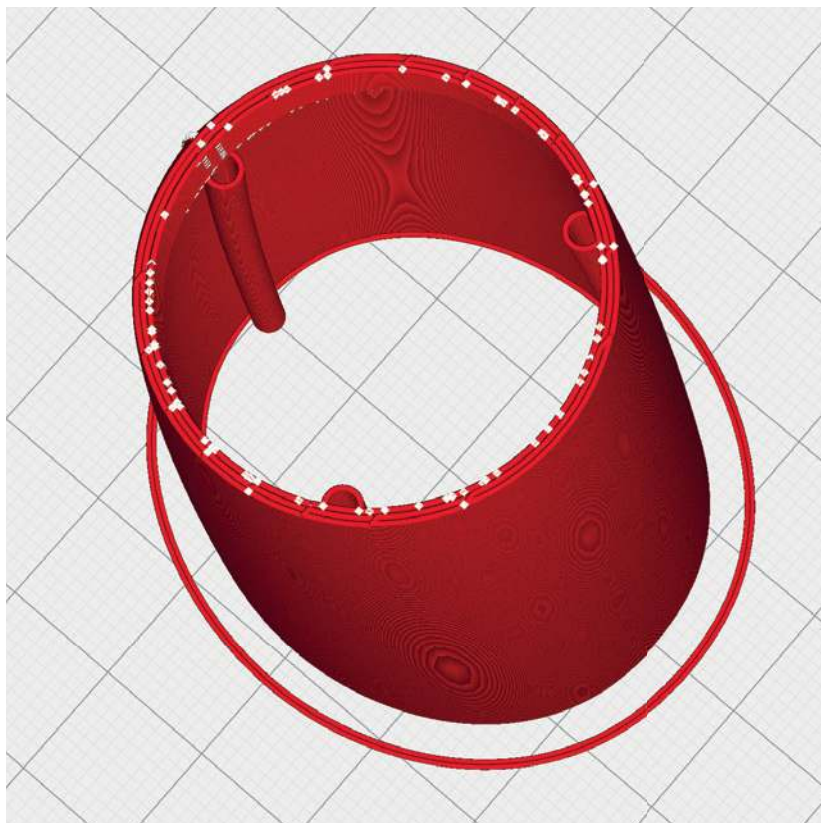
MATERIAL LW-PLA, ~ 10 g*

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).

*Display in Cura. The actual weight is then 60% of this.



Spoiler-left LW_profile3_rise.stl Spoiler-right LW_profile3_rise.stl

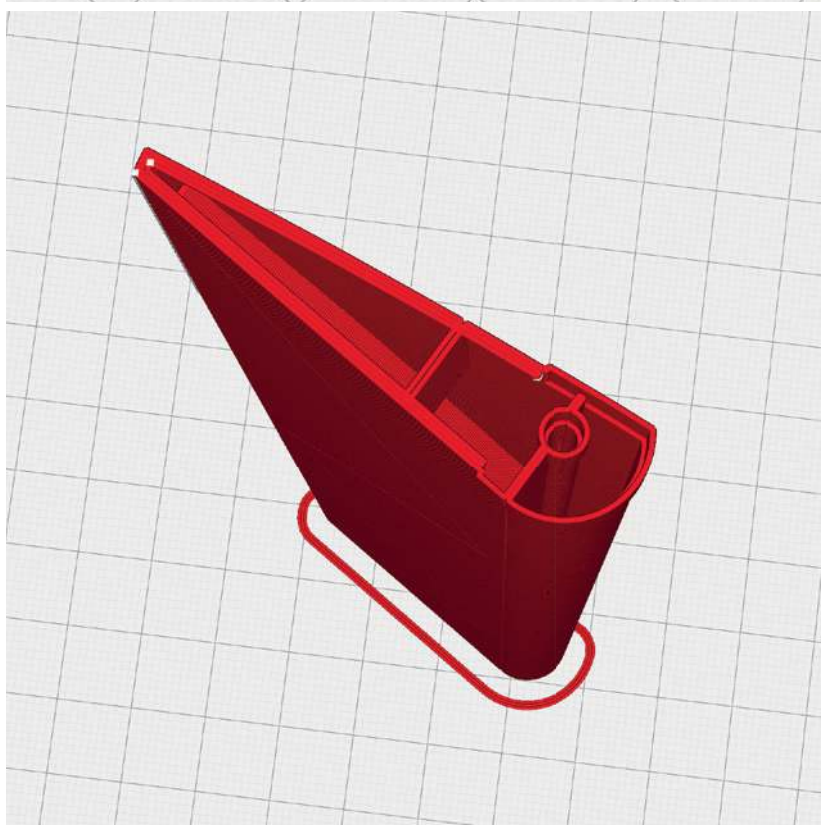
MATERIAL LW-PLA, ~ 10 g*

ADDITIONAL SETTINGS

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).

*Display in Cura. The actual weight is then 60% of this.



This parts are only required for the Motor/Spoiler upgrade Kit!

PROFILE P3_SURFACE Light-Weight LW-PLA

The following parts must be sliced with the PROFILE P3_SURFACE (1-wall-print).

Please note the additional settings for the individual parts!

Wing1 spoiler-left LW_profile3_rise.stl

Wing1 spoiler-right LW_profile3_rise.stl

MATERIAL LW-PLA, ~ 69 g*

ADDITIONAL SETTINGS

left: • Z Seam Position **right**

right: • Z Seam Position **left**

- Setting Profile3_Surface
- Flow 60 % or less
- Higher nozzle temperature

The optimal weight and sufficient strength is achieved with 60 % flow. Increase the temperature until the wall thickness is 0.4 to 0.5 mm. (We print at 250° and 60% flow).

*Display in Cura. The actual weight is then 60% of this.



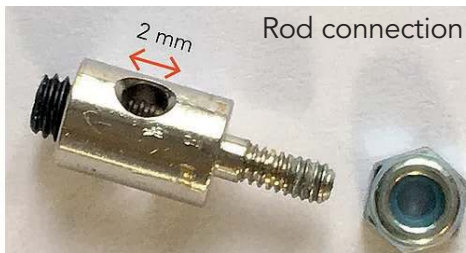
REQUIRED ACCESSOIRES

Filament

- normal PLA about 50 grams
- LW-PLA about 500 grams (**ABSOLUTELY NECESSARY**)
We strongly recommend using white (natural) LW-PLA, which heats up much less in direct sunlight.
- TPU (A95) about 10 grams

Materials

- Socket Head Screw Ø3mm*22mm with nut, 2 pieces
- CA super glue (liquid and liquid medium)
- CA activator
- Carbon tube Ø6*1000mm (inside Ø4mm), 1 piece
- Carbon rod Ø1.2mm*1000, 6 pieces (better plus one as reserve)
- Steel wire Ø1mm, short piece for the servo linkages
- Rod connection, 2 pieces



Tools

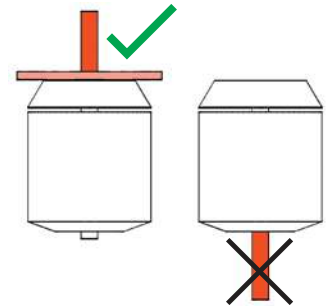
- Cutter knife
- small Philips screwdriver
- needle-nose pliers

RC Components

- ENGINE**
- Topmodel XPower XC2212/18 (our recommendation)
 - or Roxxy C22-20-20 1330kv or comparable motors



Pay attention to the position of the motor shaft



FOLDING PROP 7,5x4

SPINNER Ø 30 mm

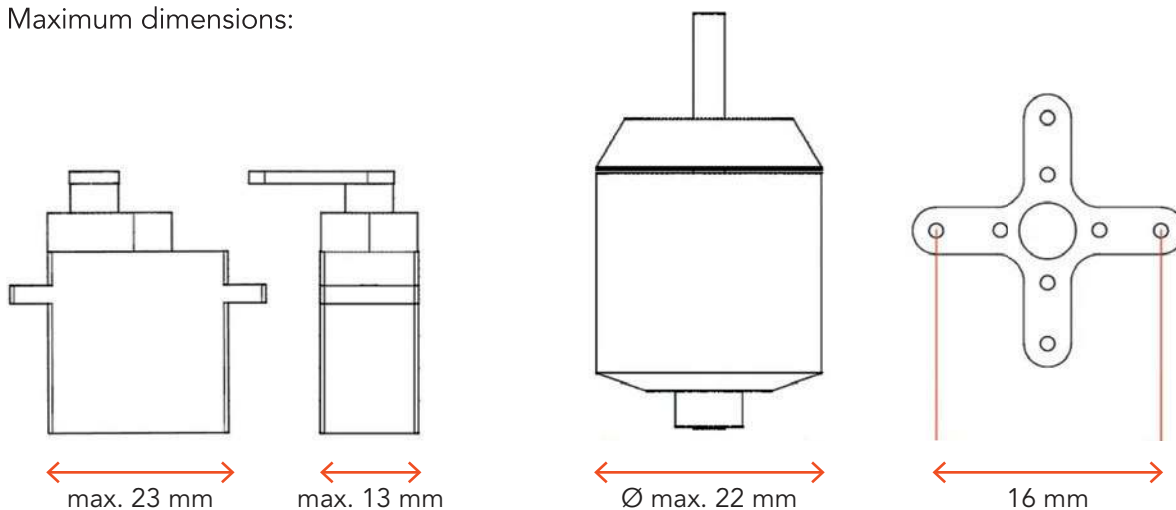
BEC-CONTROLLER min. 15 A (must fit the engine!)

RECEIVER Glider: 3 Channel, Motorized version: 5 Channel

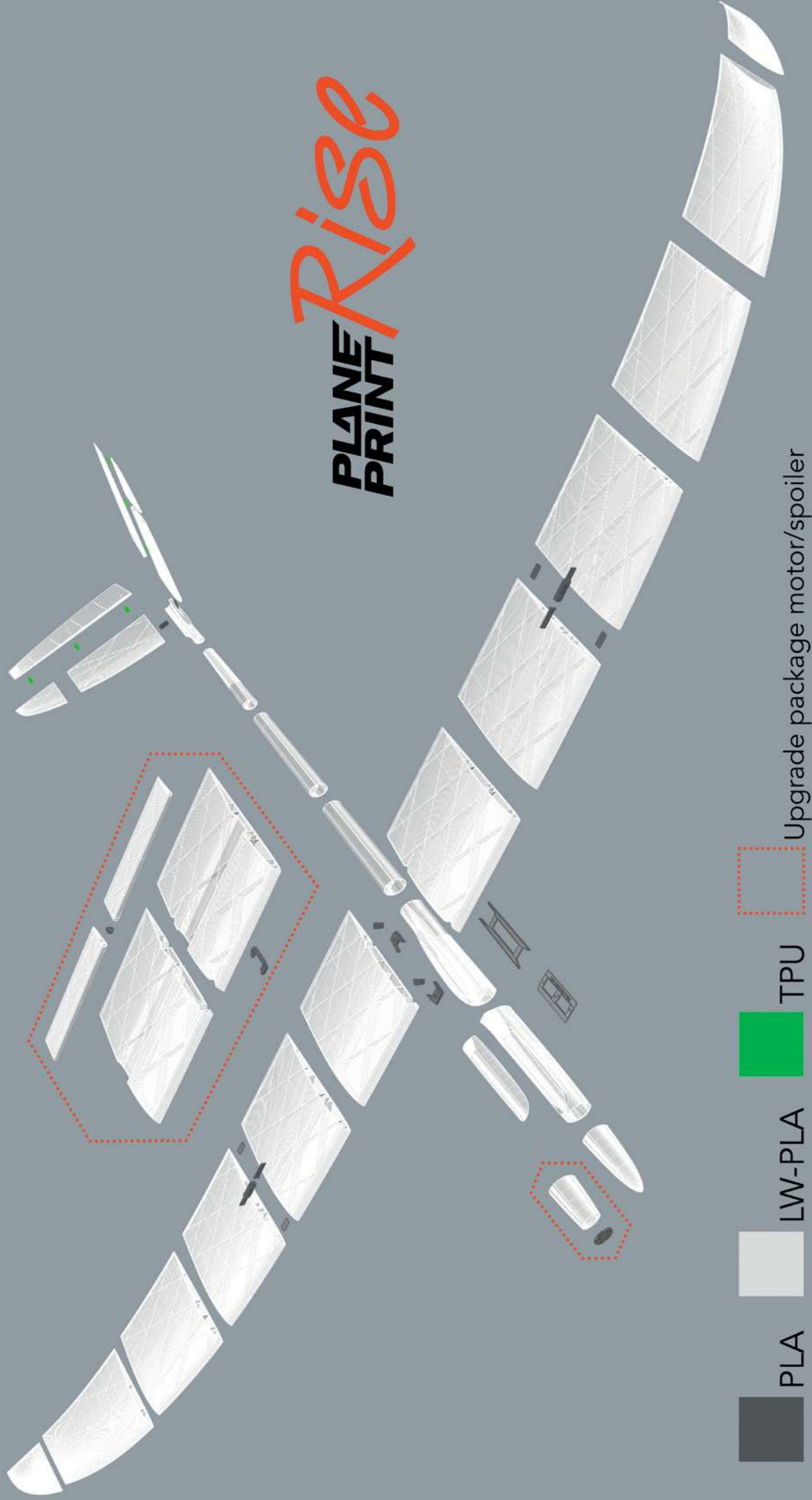
BATTERY 3S Lipo, about 600-1000 MaH

SERVOS Hitec HS-5055MG or (or similar in the same size), 2 or 3 pieces

Maximum dimensions:



PLANE PRINT *Rise*



PLA



LW-PLA



TPU



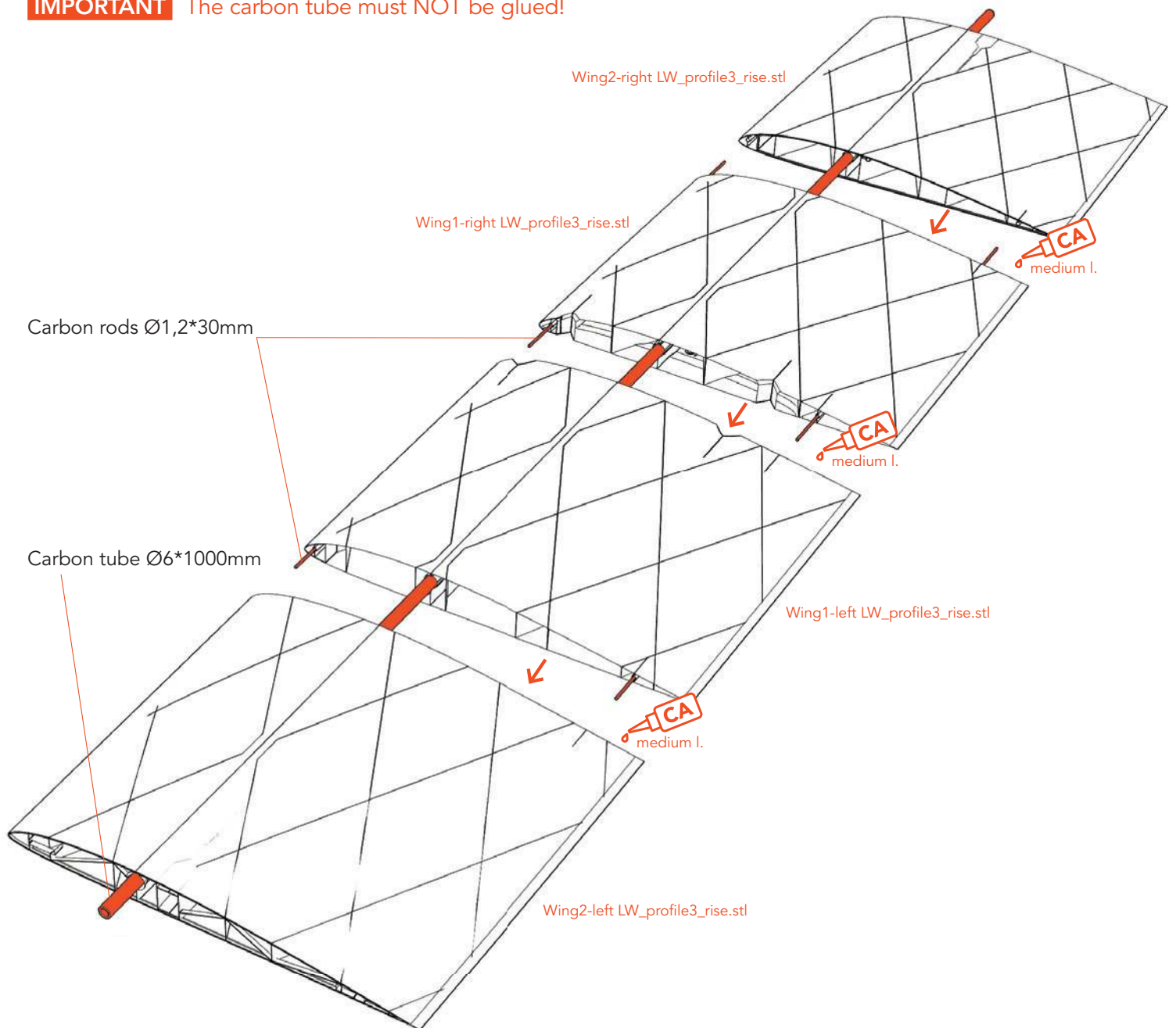
Upgrade package motor/spoiler

ASSEMBLING MANUAL

Wings assembly – Middle part

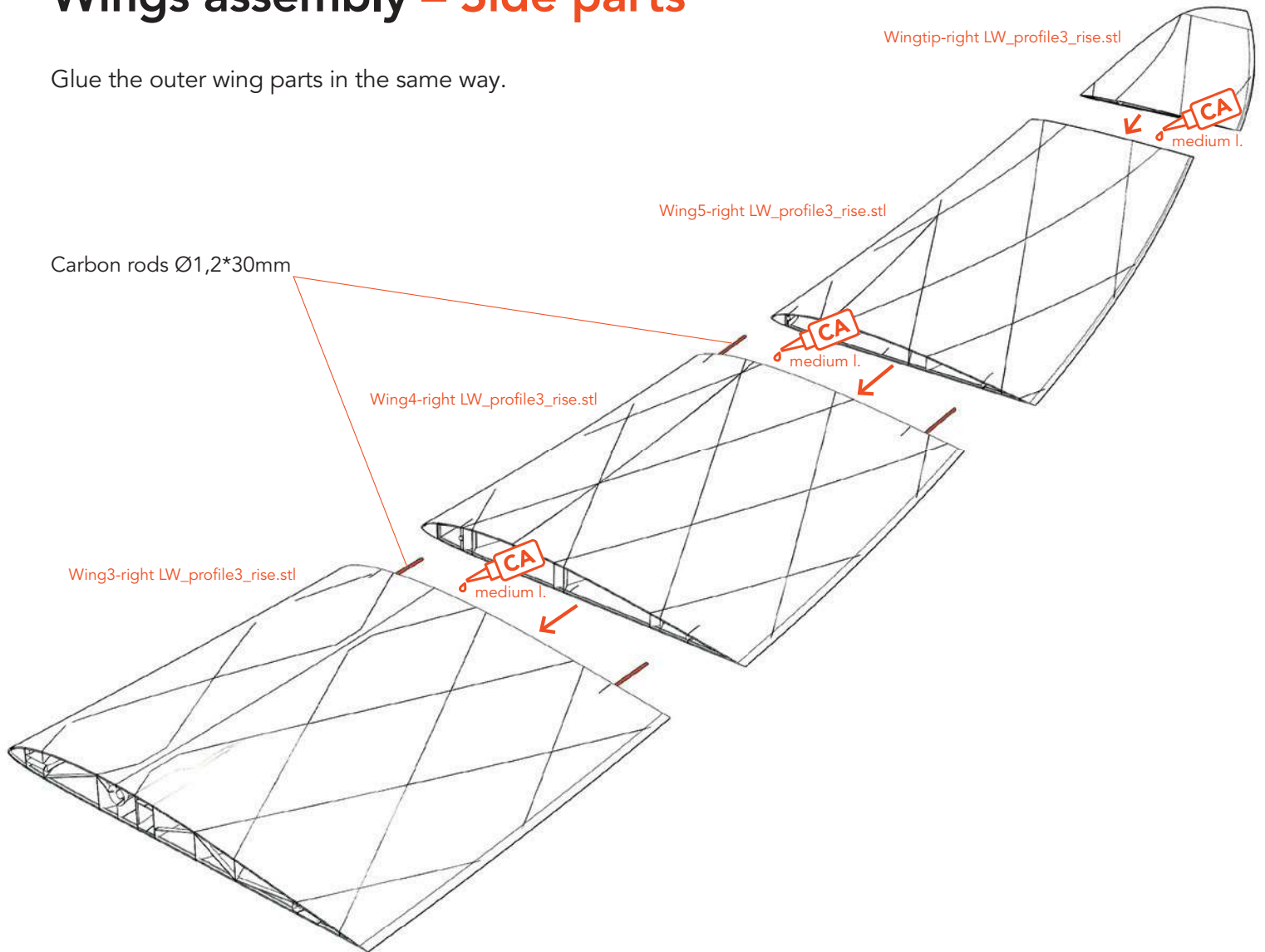
Cut six short pieces of carbon rod with the knife and use them as dowel pins to accurately glue the wing parts together. The bonding surfaces should be roughened with sandpaper beforehand to achieve a perfect bond.

IMPORTANT The carbon tube must NOT be glued!



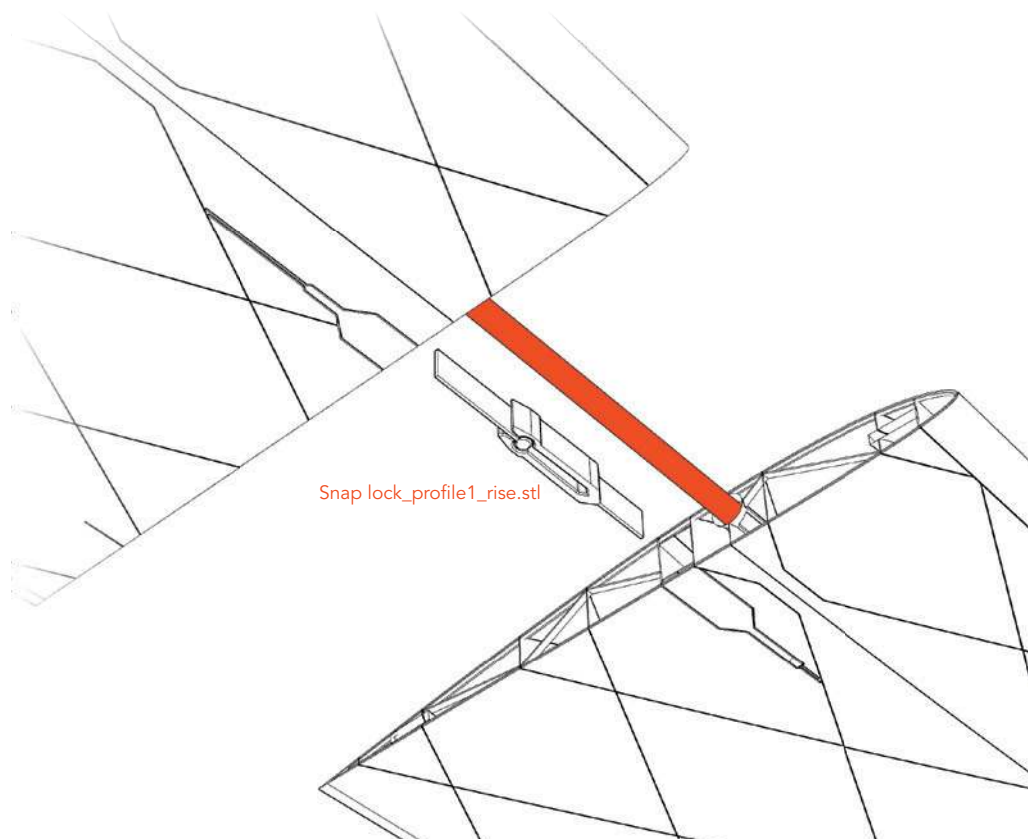
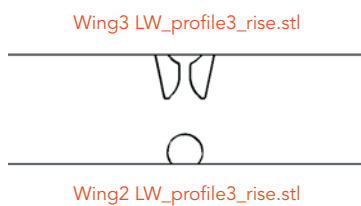
Wings assembly – Side parts

Glue the outer wing parts in the same way.



Wing Snap Lock

This mechanism allows easy assembly of the wing parts without tools. Insert the parts into the slots provided as far as they will go and check that they engage exactly when the wing parts are assembled before gluing.



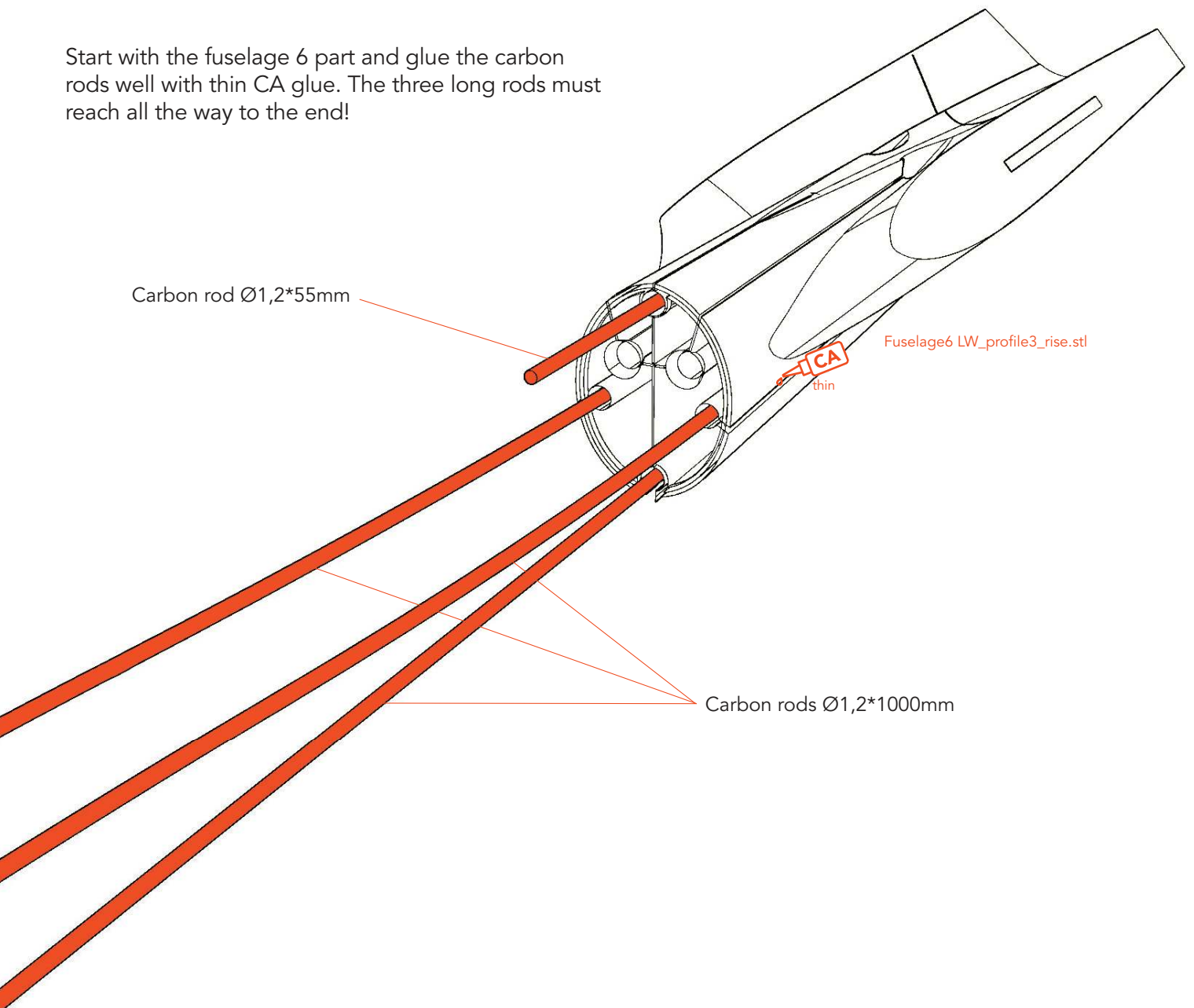
Fuselage assembly

NOTE To build the thin fuselage sufficiently stable, it is very important that the carbon rods are glued to the LW-PLA **over the entire length**.

Therefore, there are open gaps along the carbon rods on the outer surface of the fuselage. Pour **thin CA glue** into these gaps along the entire length to create a complete bond between the LW-PLA and the carbon rod.



Start with the fuselage 6 part and glue the carbon rods well with thin CA glue. The three long rods must reach all the way to the end!

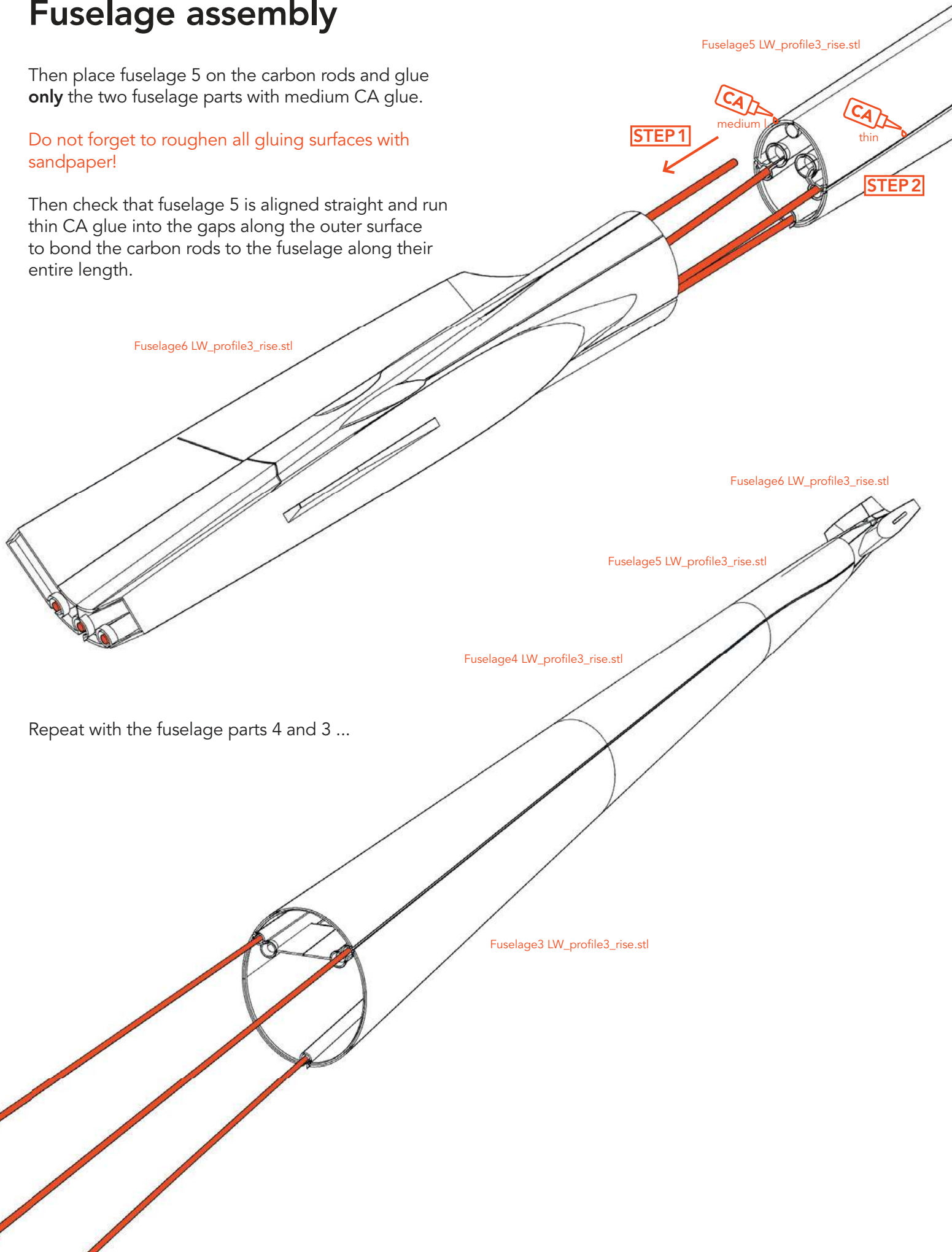


Fuselage assembly

Then place fuselage 5 on the carbon rods and glue **only** the two fuselage parts with medium CA glue.

Do not forget to roughen all gluing surfaces with sandpaper!

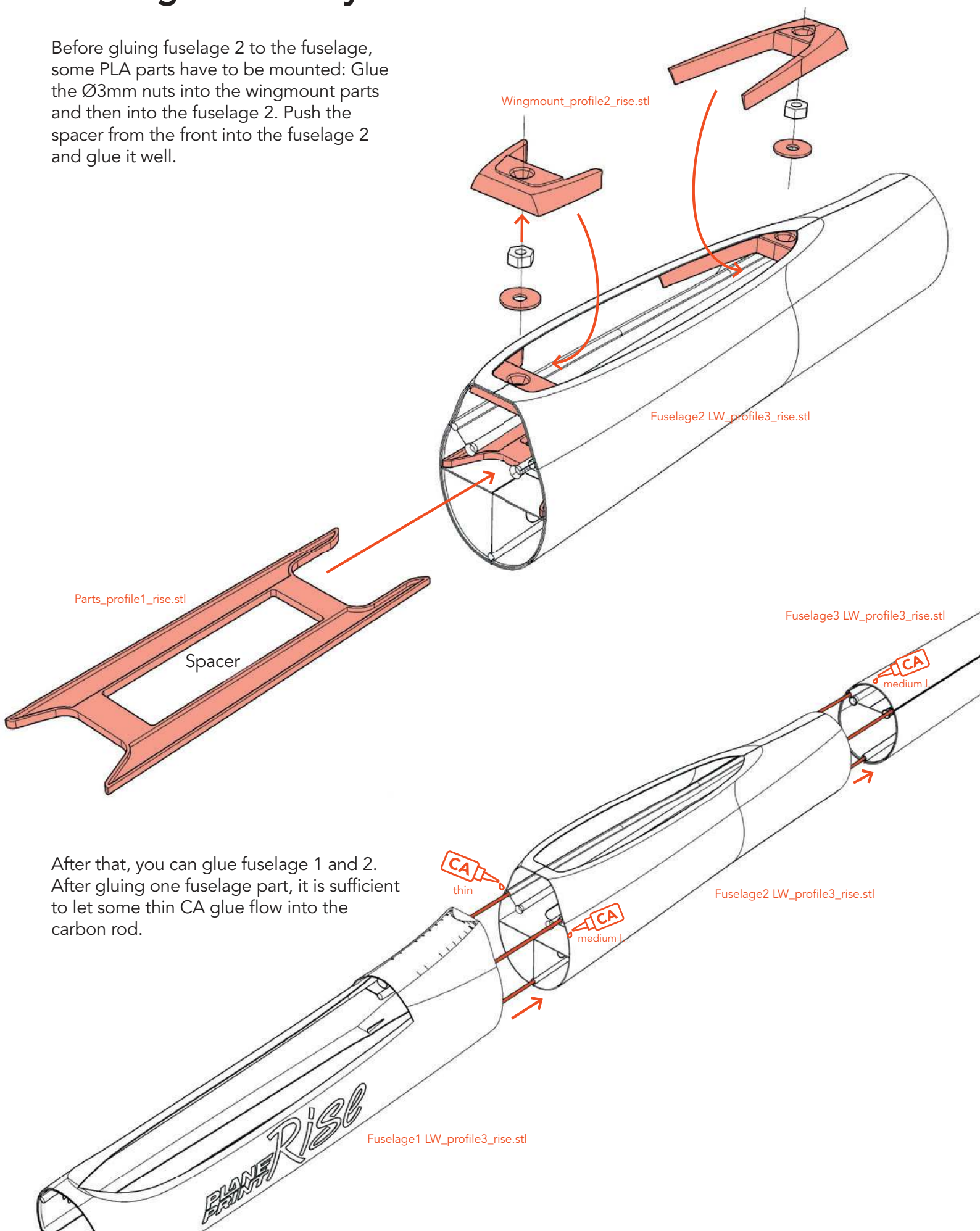
Then check that fuselage 5 is aligned straight and run thin CA glue into the gaps along the outer surface to bond the carbon rods to the fuselage along their entire length.



Repeat with the fuselage parts 4 and 3 ...

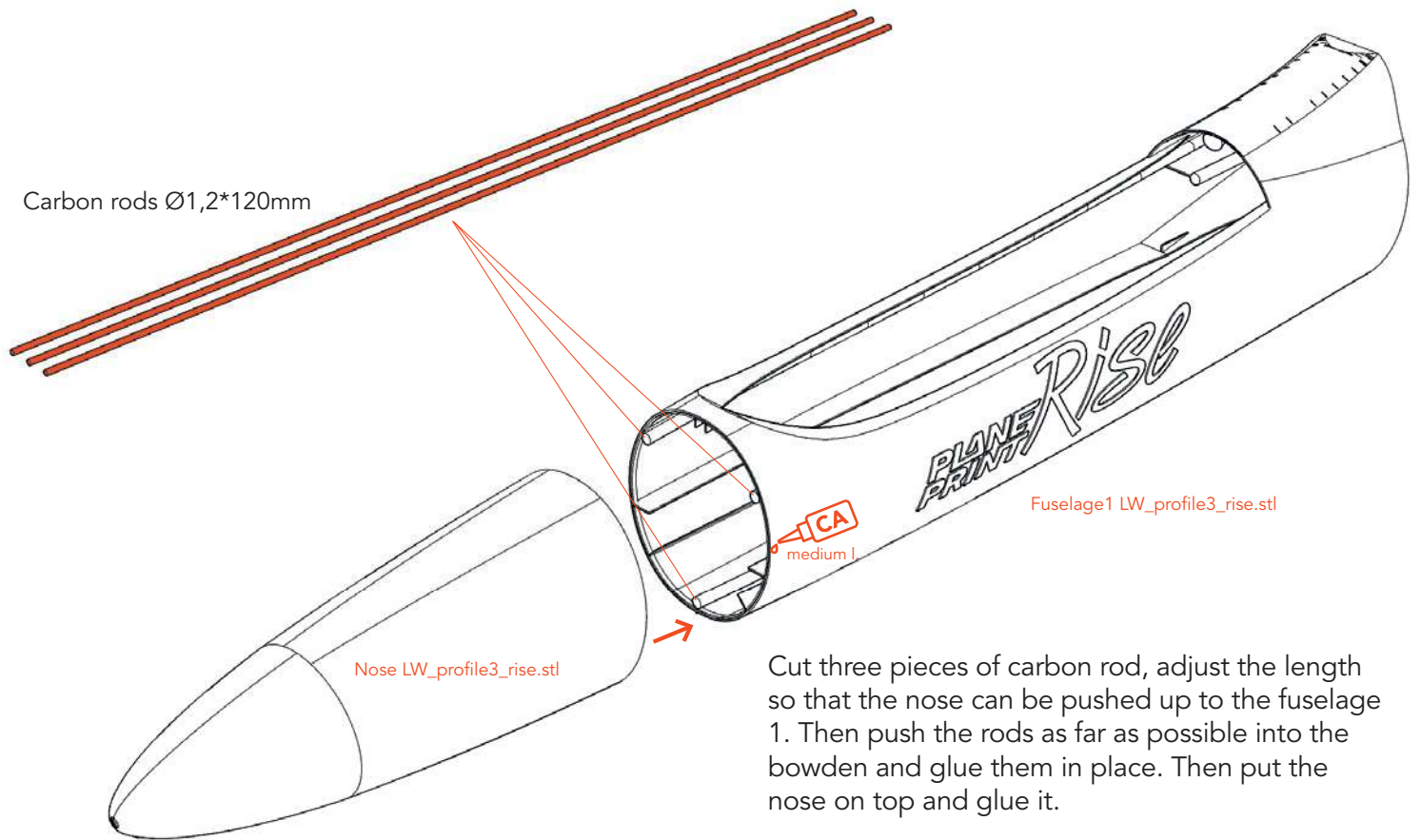
Fuselage assembly

Before gluing fuselage 2 to the fuselage, some PLA parts have to be mounted: Glue the Ø3mm nuts into the wingmount parts and then into the fuselage 2. Push the spacer from the front into the fuselage 2 and glue it well.



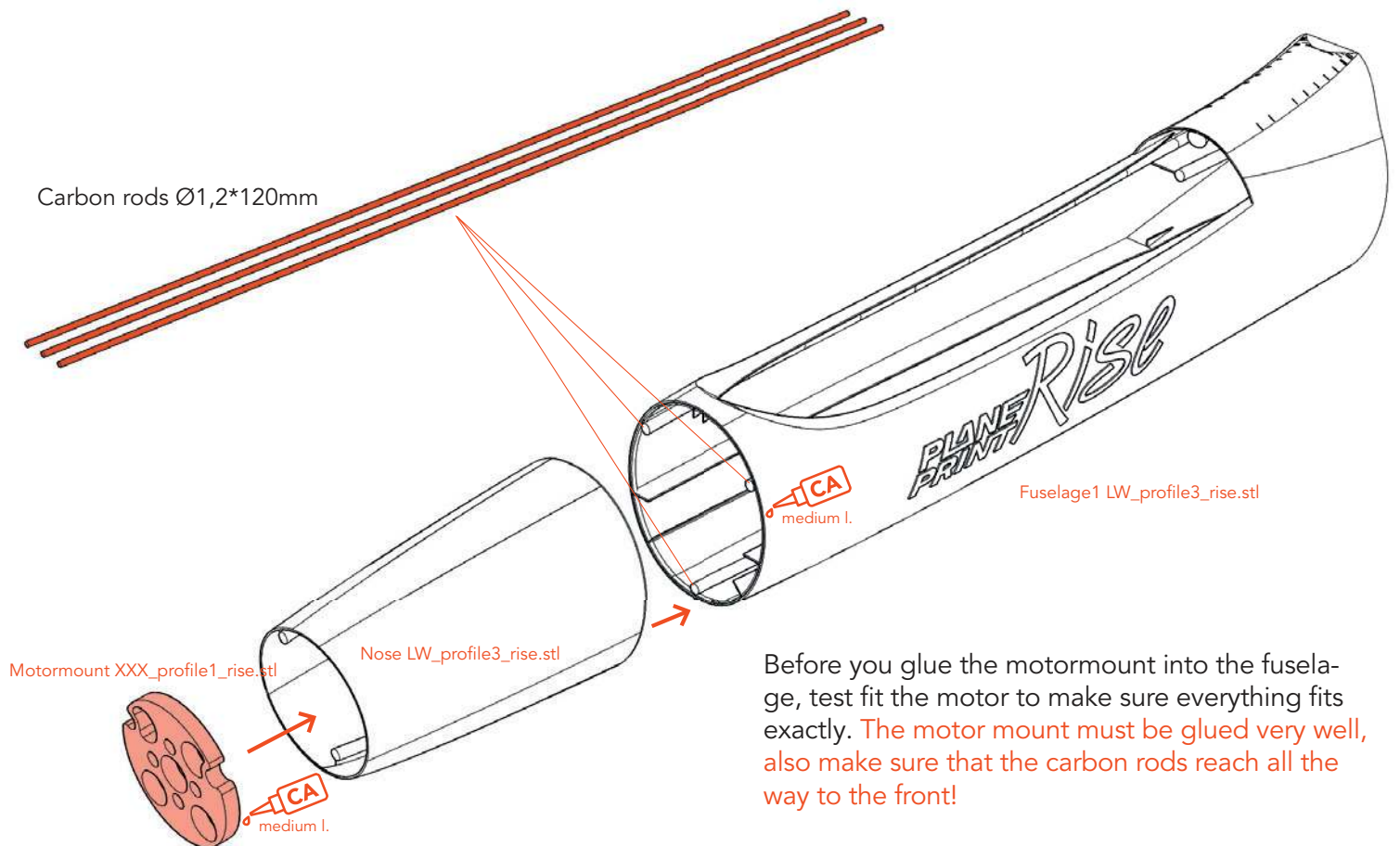
After that, you can glue fuselage 1 and 2. After gluing one fuselage part, it is sufficient to let some thin CA glue flow into the carbon rod.

Fuselage assembly – Glider version



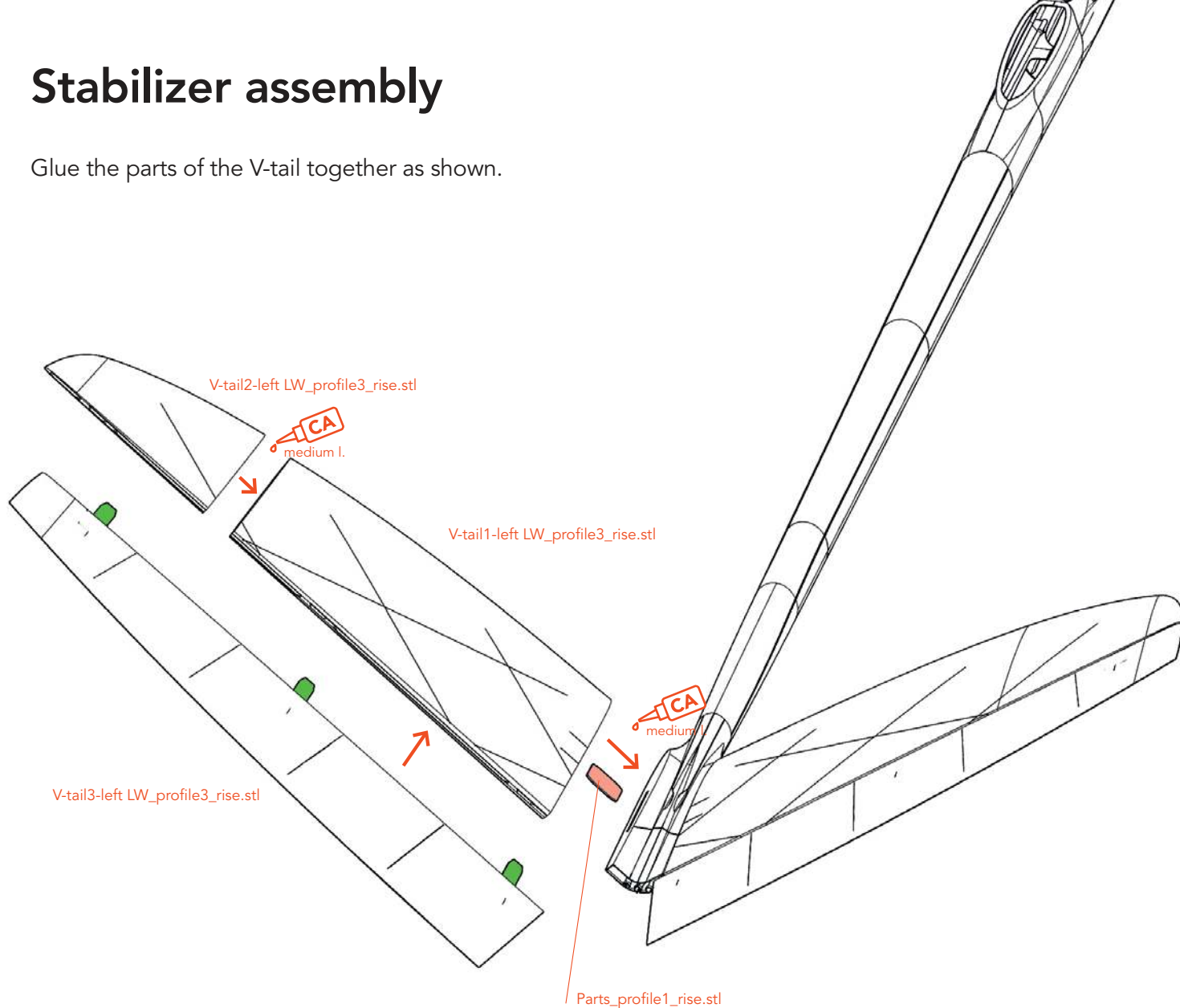
Motor version

This parts are only required for the Motor/Spoiler upgrade Kit!



Stabilizer assembly

Glue the parts of the V-tail together as shown.



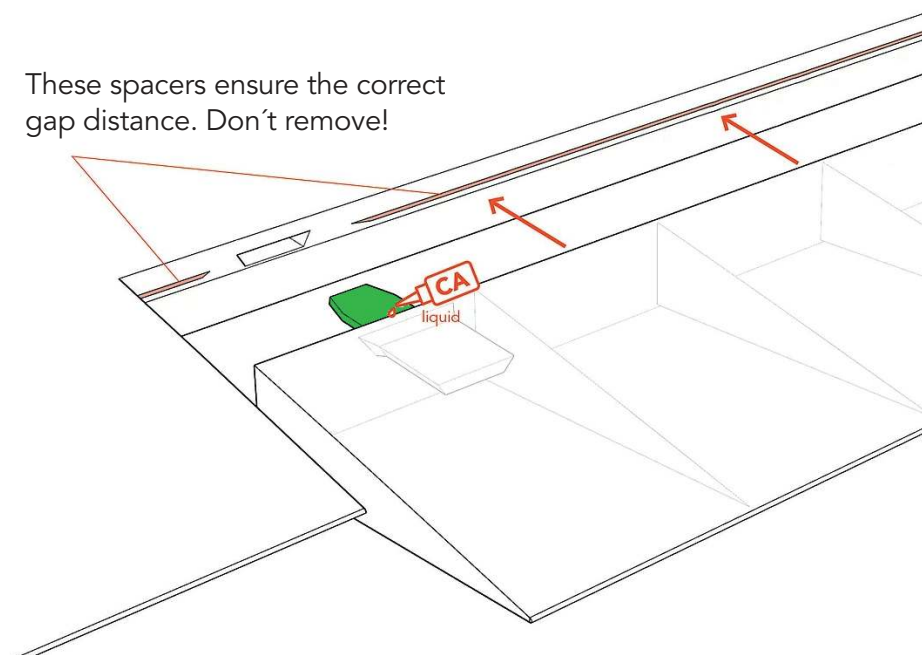
Installation of the TPU Hinges

First insert the hinge into the movable flap and add a drop of liquid CA adhesive into the gap. Wait for the glue to drain completely, then spray the activator on it.

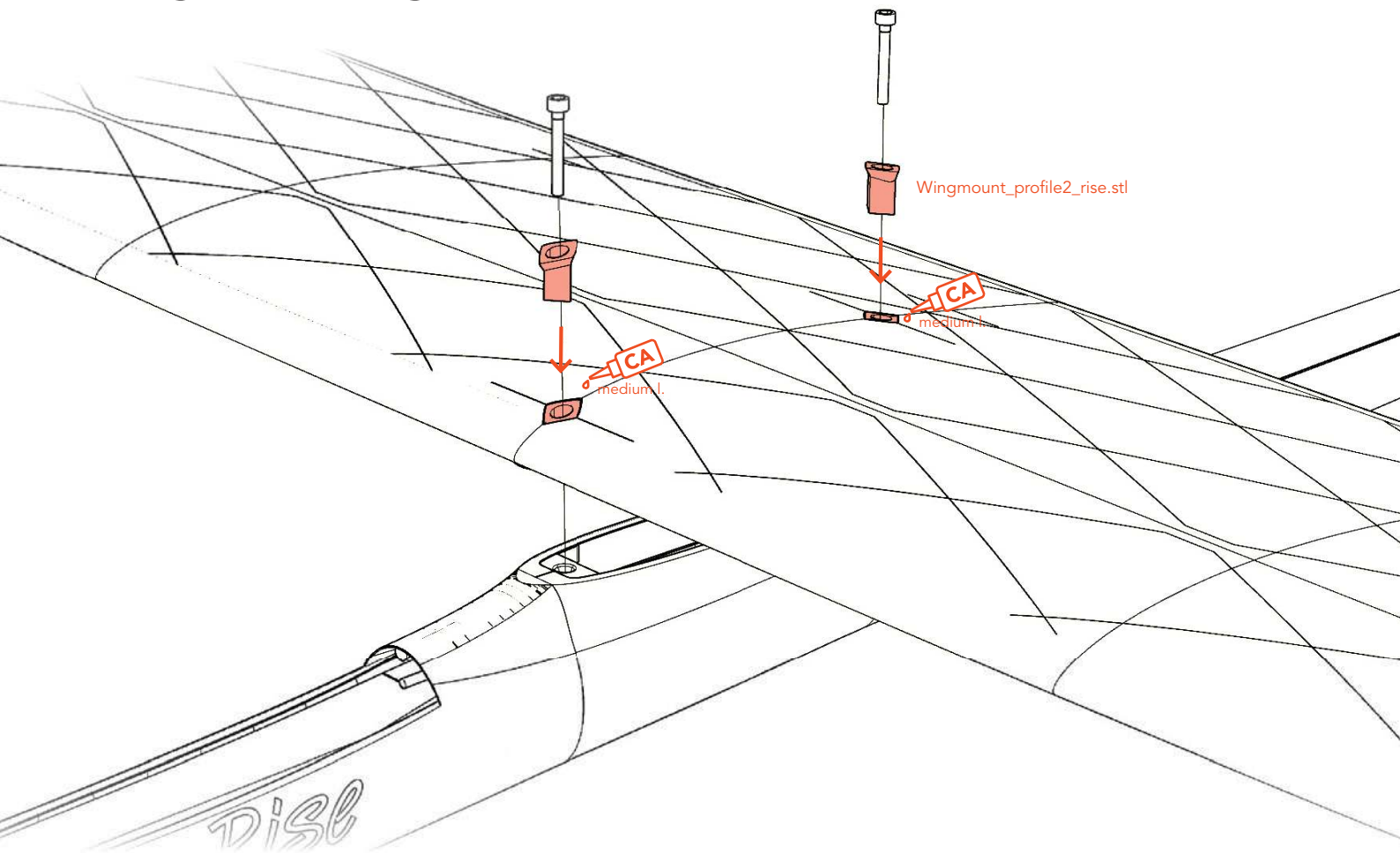
Then put the flap in the wing until the flap touches the spacers and put a drop of CA glue on the hinge. Wait again for the glue to run in, and then spray the activator on it.

Do not use too much glue, the flap must move easily!

These spacers ensure the correct gap distance. Don't remove!

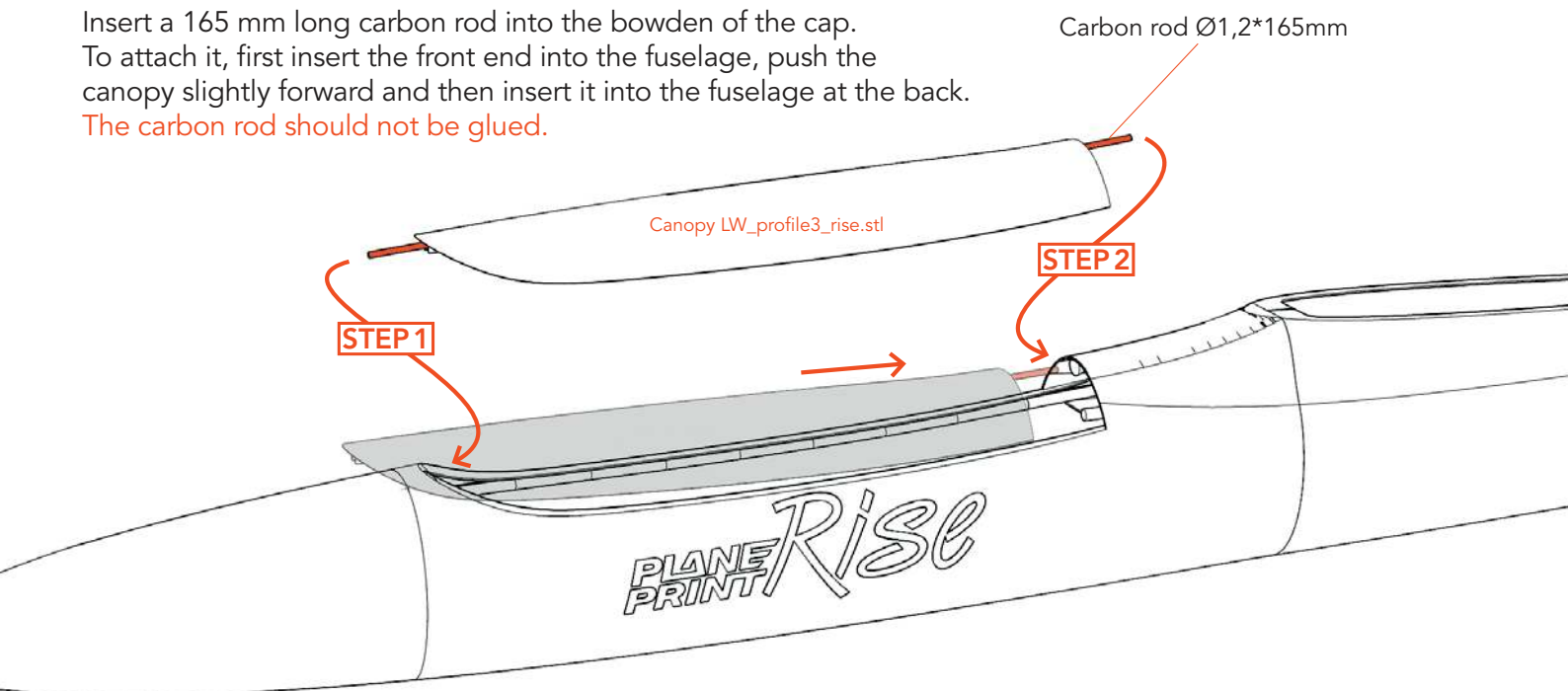


Wing fastening



Canopy fastening

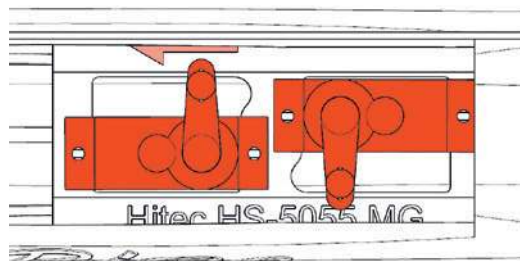
Insert a 165 mm long carbon rod into the bowden of the cap.
To attach it, first insert the front end into the fuselage, push the canopy slightly forward and then insert it into the fuselage at the back.
The carbon rod should not be glued.



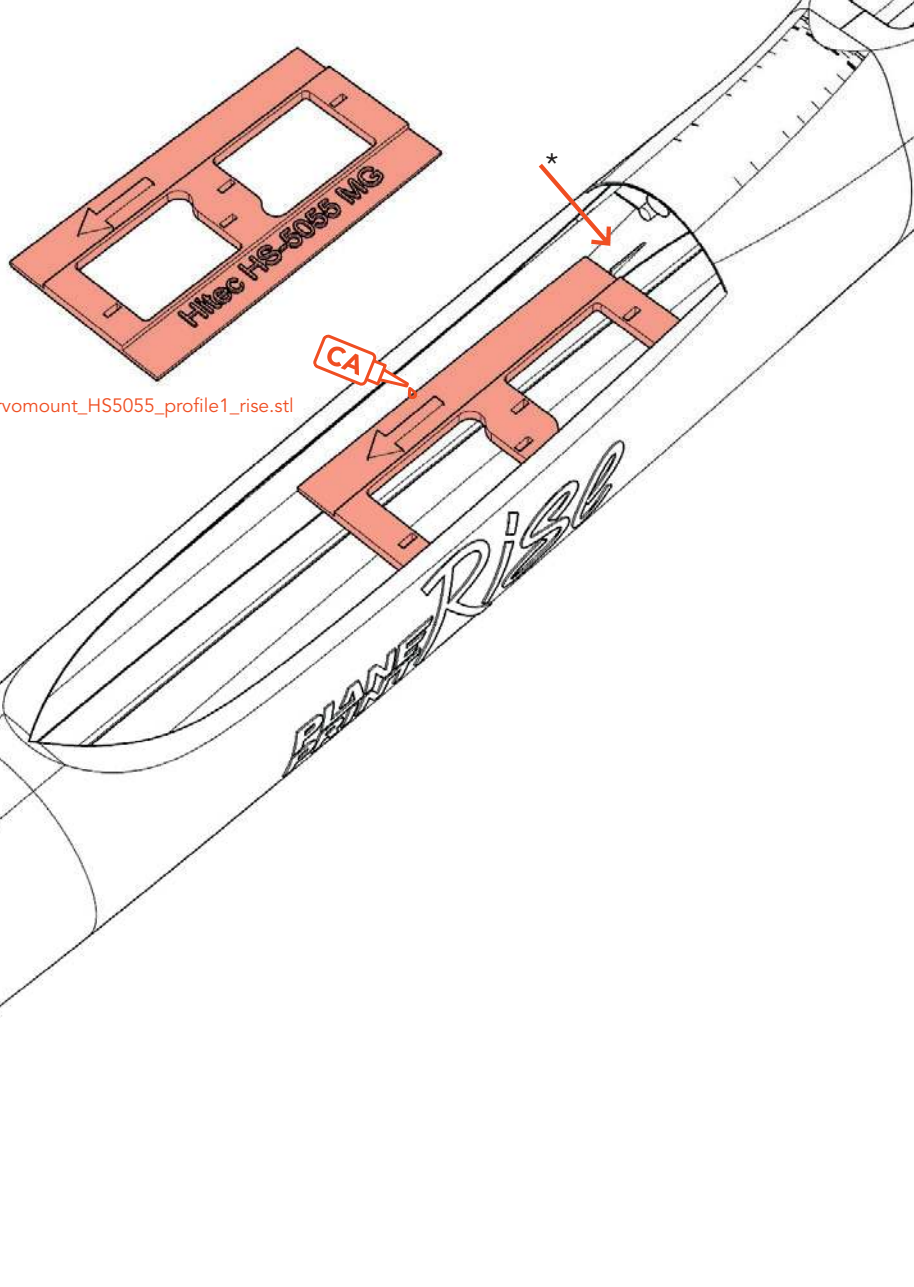
Servo mounting

Stick the servomount in fuselage 1, push it backwards up to this nub*. The arrow must point forward.

The servos must be installed in this way:



Servomount_HS5055_profile1_rise.stl



Linkage

For the linkage of the V-tail we recommend to bend short pieces of steel wire Ø1mm 90 degrees, to glue it to the carbon rod Ø1.2mm (secure it with heat shrink tube).

Secure the linkages to the pin horn with a short piece of heat shrink tubing (shrink it beforehand on a piece of steel wire and then cut short pieces) and a drop of medium CA glue.

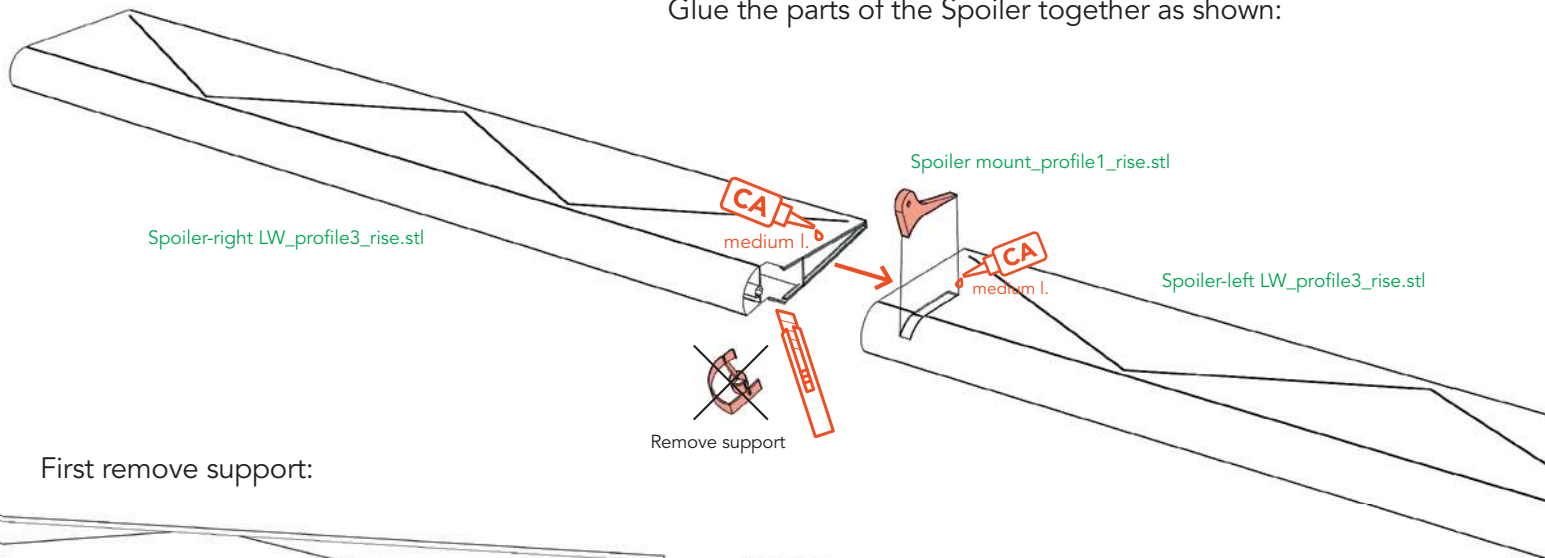
Mount the adjustable rod connections to the servos.

Glue the pin horns
(parts_profile1_rise.stl)
well as shown here.

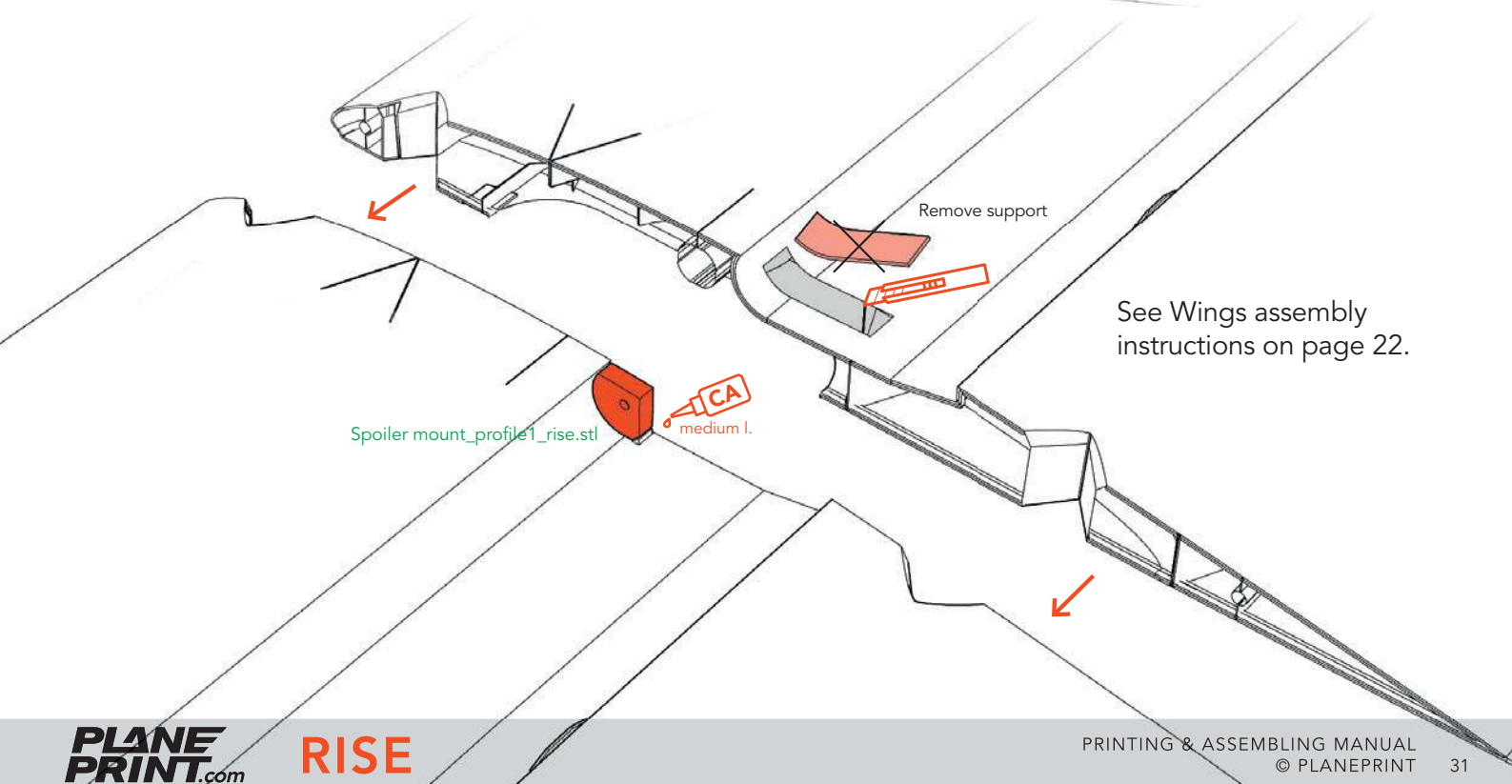
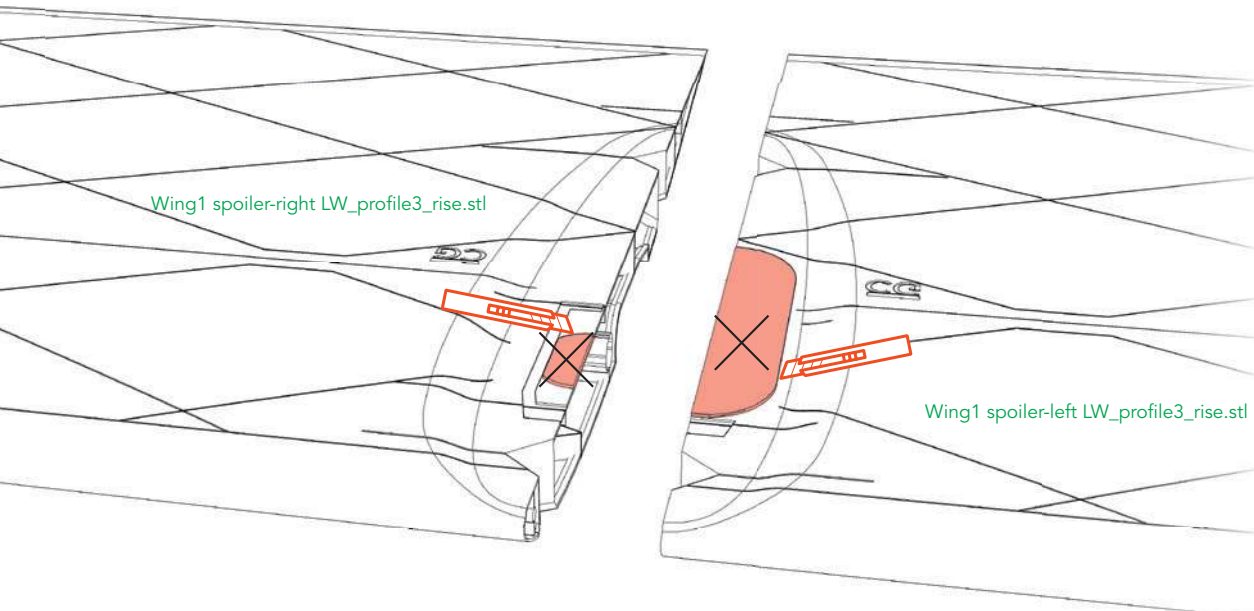


Spoiler assembly

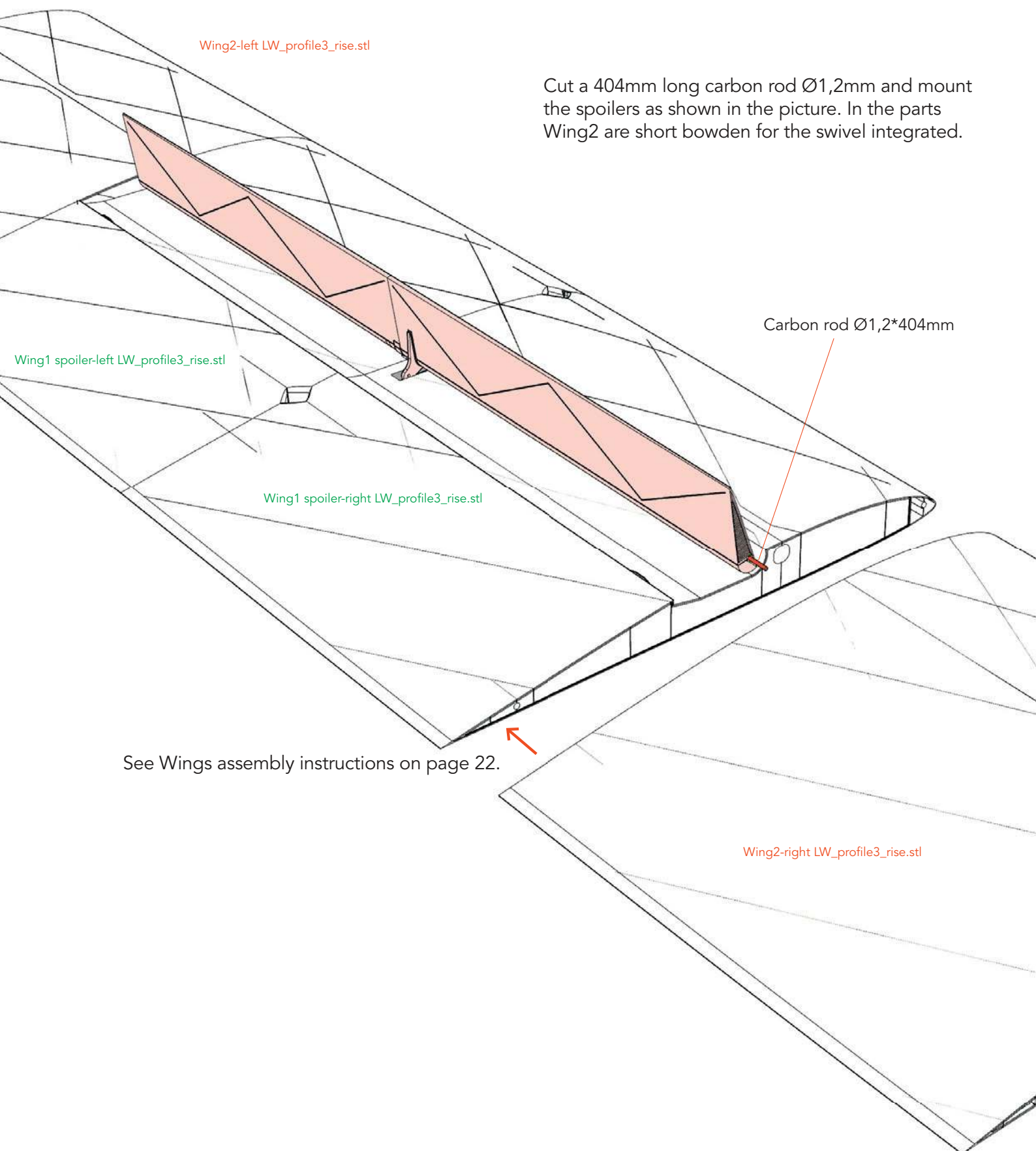
Glue the parts of the Spoiler together as shown:



First remove support:



Spoiler assembly



Wing2-left LW_profile3_rise.stl

Cut a 404mm long carbon rod $\varnothing 1,2\text{mm}$ and mount the spoilers as shown in the picture. In the parts Wing2 are short bowden for the swivel integrated.

Carbon rod $\varnothing 1,2 \times 404\text{mm}$

Wing1 spoiler-left LW_profile3_rise.stl

Wing1 spoiler-right LW_profile3_rise.stl

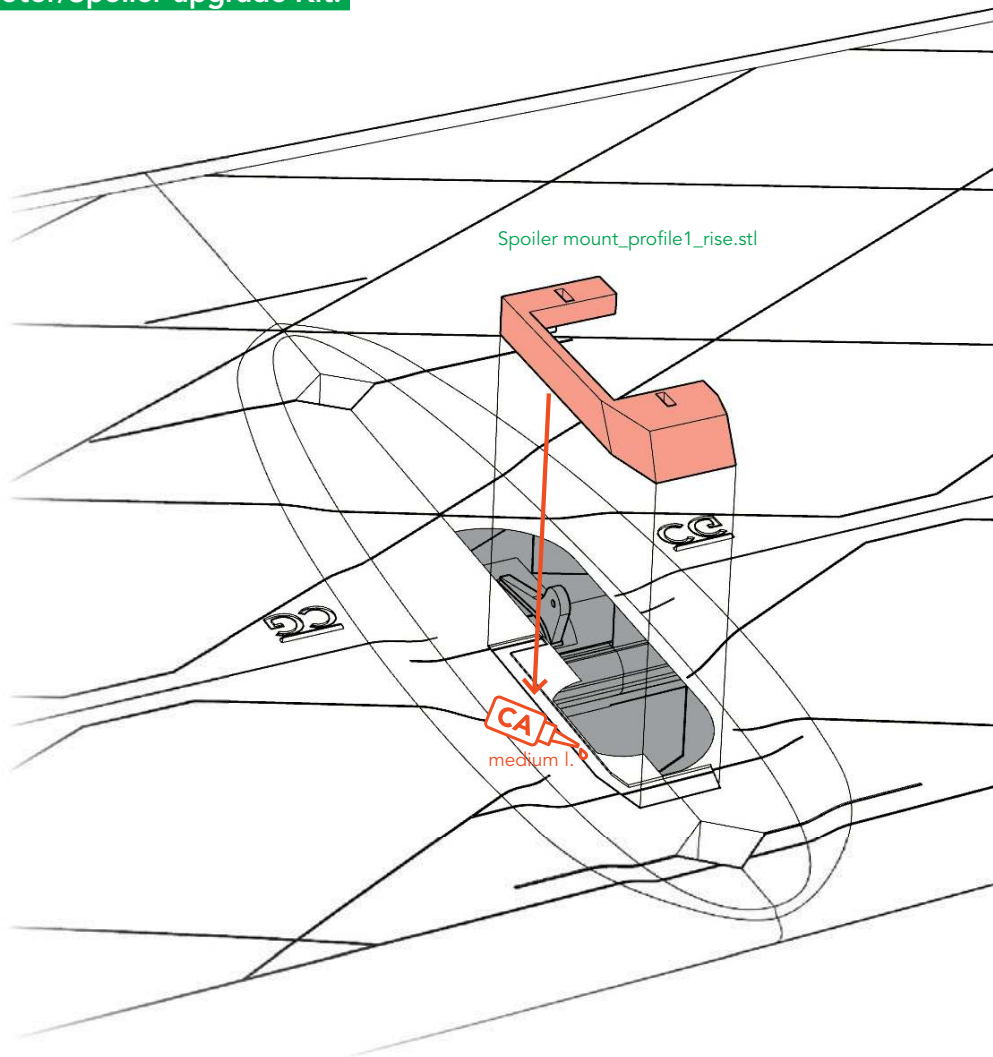
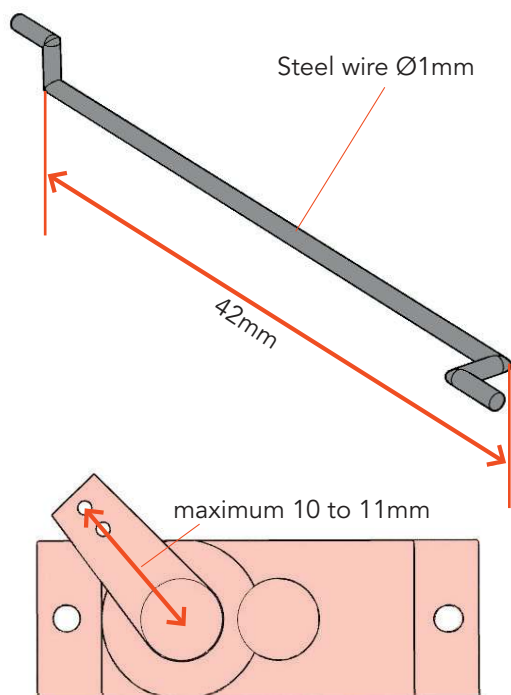
See Wings assembly instructions on page 22.

Wing2-right LW_profile3_rise.stl

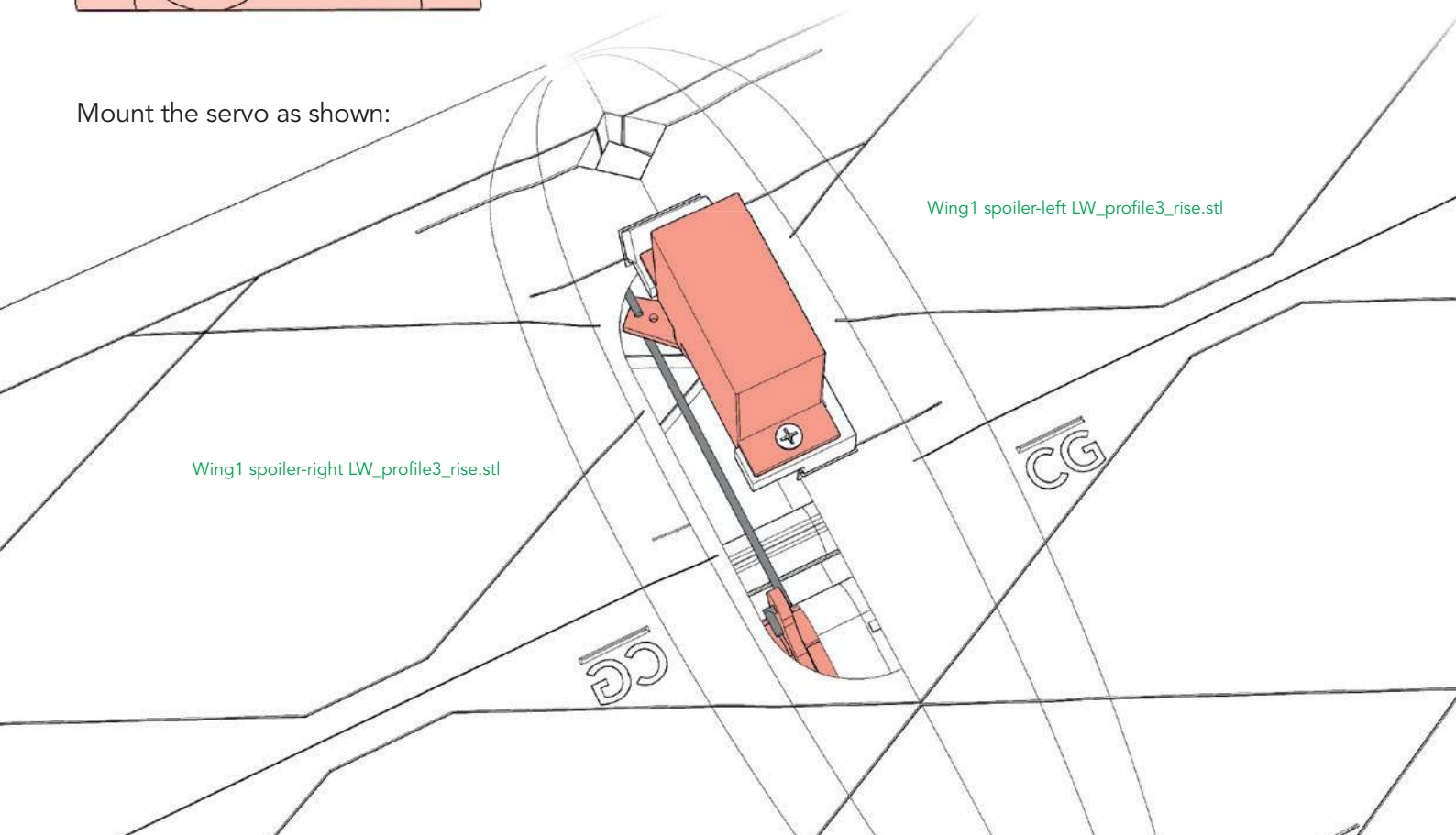
Spoiler linkage

Glue the servo mount to the wing.

Bend a steel wire Ø1mm as shown. The distance between the axes should be exactly 42mm.

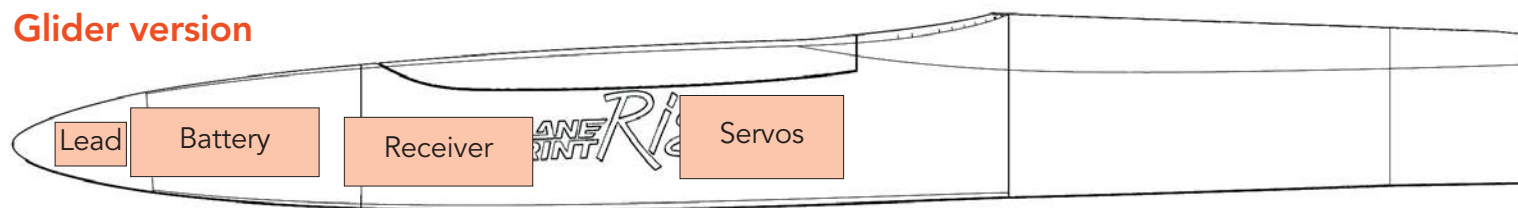


Mount the servo as shown:

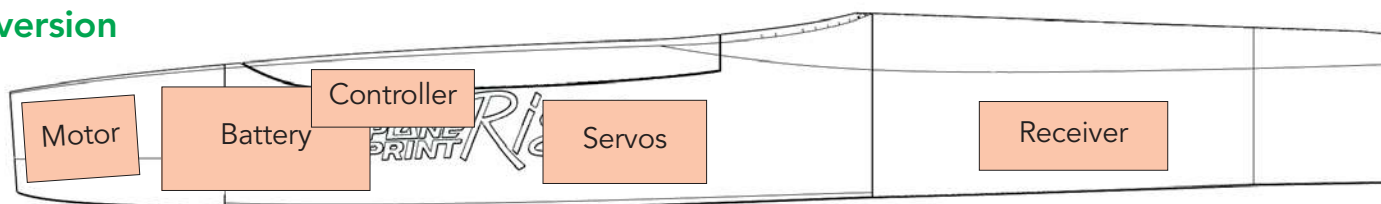


RC components

Glider version



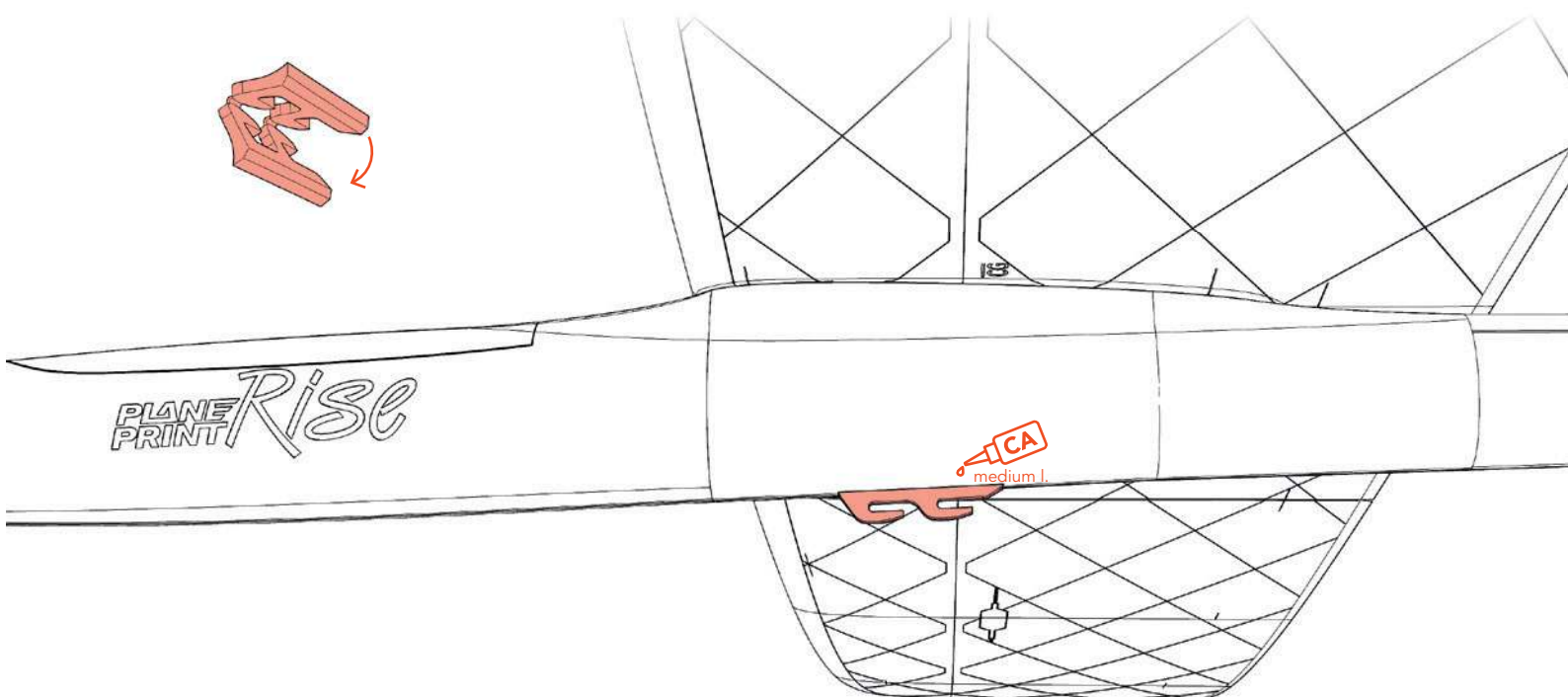
Motor version



Launch Hook – Glider version

The launch hook is only recommended for experienced pilots, because the wings made of LW-PLA are very soft and must only be loaded very gently!



The rear hook should be positioned about 5mm in front of the CG.





Control Direction Test


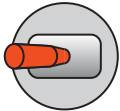
Turn on the transmitter and connect the battery. When checking the control directions, **look at the aircraft from behind.**


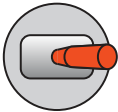
ELEVATOR



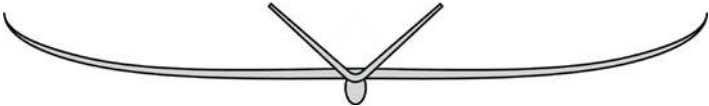


RUDDER






SPOILER 0 %



SPOILER 100 %



Motor version

We recommend that you put the engine on a switch and the spoiler on the gas stick.

SETTINGS FOR FLYING

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

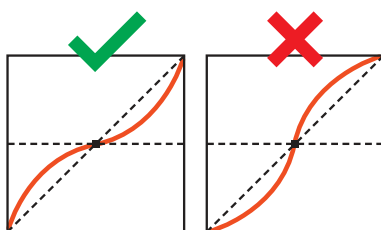
ELEVATOR up: 14 mm, down: 14 mm

RUDDER left: 14 mm, right: 14

Expo setting

ELEVATOR 20 %

RUDDER 20 %

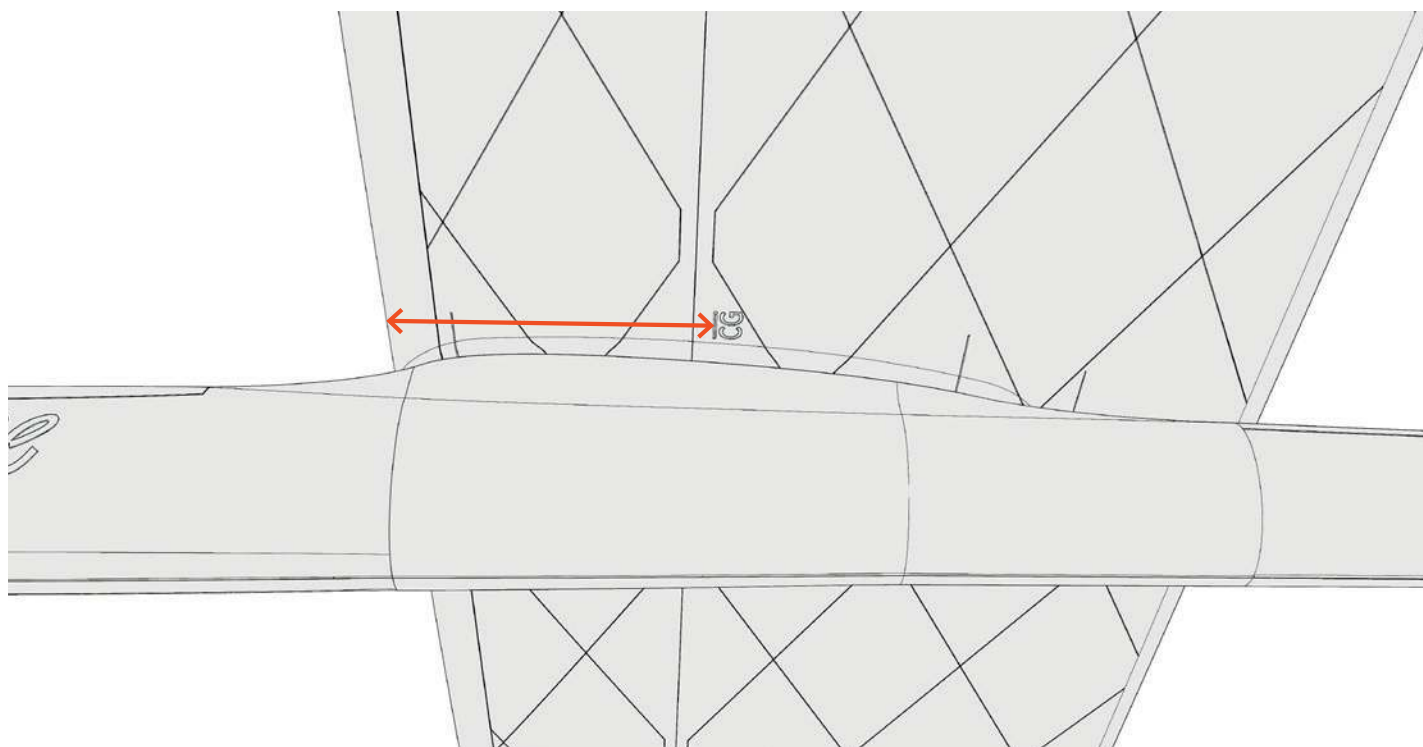


(for some remote controls a minus has to be in front of the number)

Center of Gravity (CG)

The aircraft must balance 76 mm/3 inches behind the leading edge (see markings on the fuselage). For the first flight we recommend to move the center of gravity about 5 mm/0.2 inches further forward.

NOTE The CG of 76 mm is the setting we tested with the best flight characteristics. If you are not yet an expert pilot, your CG should be a few millimeters further forward, not further back!



Flight timer

Flight time will vary depending on the battery size. Expect 5 minutes under normal circumstances; however, it may be possible to fly for much longer. It is a good idea to be conservative with the flight timer until you gain experience with your airplane.

TECHNICAL SPECIFICATIONS

WINGSPAN 2000 mm/78.7 inches

LENGTH 1198 mm/47 inches

FLIGHT WEIGHT **Glider version** 650 grams
Motor version 680 grams (with 3S/640MaH-Battery)

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. **Please be careful when handling motors, batteries and propellers** and only move your model with insurance and in approved places!

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