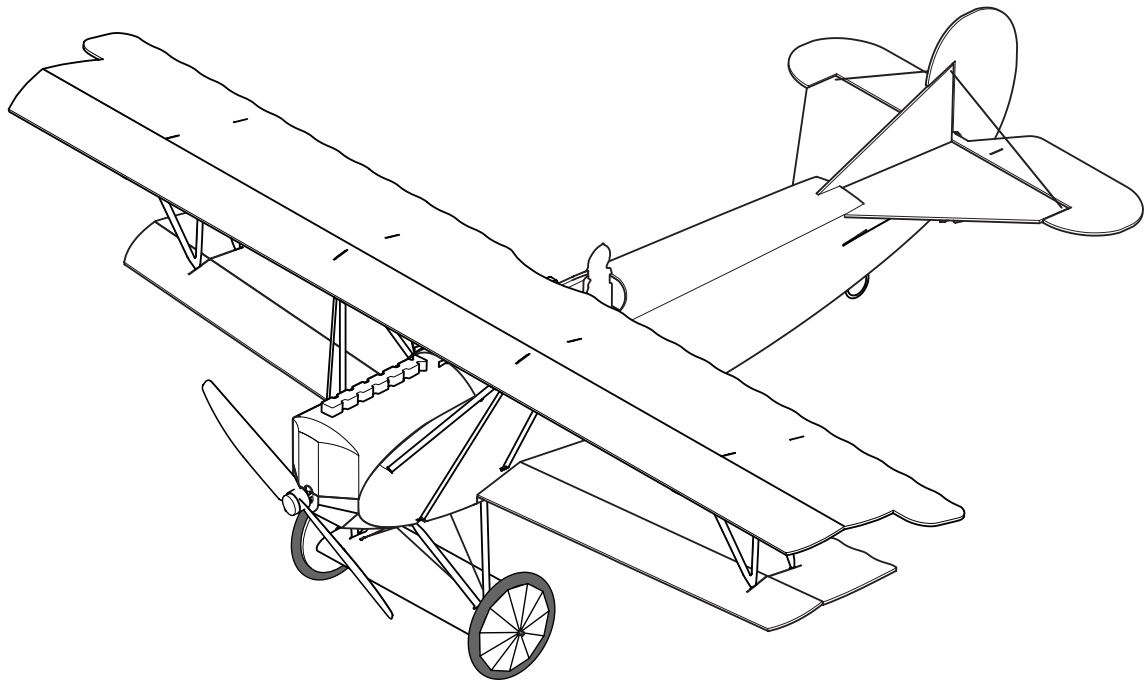




ASSEMBLY GUIDE



Fokker

D.VII

Version 3.1



Introduction

Thank you for purchasing this Microaces Kit. Designed using innovative ideas, advanced materials and detailed aircraft illustrations, this 1/24th scale aircraft will bring you hours of building enjoyment and many more exciting flying hours too:

Please take your time to familiarise yourself with these instructions as the aircraft assembles in a very unique way, following a sequence of steps that should be adhered too to ensure a satisfactory and flyable model.

Safety

It is extremely important to us that you and those around you remain safe while building and flying Microaces kits. Please take note of the following notices of safety. Microaces Aero kits contain parts and packaging **unsuitable** for handling by small children. Please ensure that children under the age of 6 years are prevented from handling the component parts or packaging of this kit. Although the resulting model is lightweight, we DON'T recommend that you fly it near or over others where there is a danger of striking someone. We DO recommend that the maiden flight is performed over long grass in calm weather away from others.












Assembly

Read all the instructions carefully before starting assembly. It is important to use the recommended glues or an equivalent with similar properties. Foam parts must be glued with a foam safe cement or permanent damage can result to components. Ensure your knife has a fresh or sharp blade installed to ensure a clean cut.

Warranty

Microaces warranties that this kit is supplied with all components present and that those components are free from cosmetic or structural damage to an extent that would impair the assembly of the kit, alter the aesthetics of the built model and/or the flight performance of the resulting model. If any parts are missing or damaged please contact us via email at: support@microaces.com

Key

- | | | | |
|---|----------------------------------|--|-----------------------|
|  | Note (Information) |  | Attention |
|  | Part Number |  | Do Not Glue |
|  | Contact Adhesive (Foam Safe) |  | Score before assembly |
|  | Alphatic Resin (or Foam Safe CA) |  | Cut |
|  | Paint |  | Sanding Required |
|  | Area of adhesion for glue | | |

KIT PARTS

Sheet Parts

1 x 2mm Laser cut Foam airframe
1 x 1mm printed & laser cut Foam fuselage
1 x 1mm printed & laser cut Foam flight surfaces
1 x 200 micron printed & laser cut polypropylene
1 x polyester sticker sheet

Loose Parts

1 x 0.8mm laser cut plywood motor mount
2 x neoprene tyres
6 x 3mmØ x 1mm neodymium magnets
1 x 100mm x 5mmØ plastic tube
1 x 104mm x 0.4mm x 1mm carbon fibre strip
1 x 500mm x 0.4mm x 1mm carbon fibre strip
1 x 86mm x 1mmØ carbon fibre rod (Axle)
1 x piano wire elevator control rod
1 x piano wire rudder control rod
1 x profile pilot figure
1 x Rigging wire

RECOMMENDED TOOLS/GLUES

Knife or scalpel with fresh blade

Steel rule or straight edge

Sanding stick or sand paper (180 grit recommended)

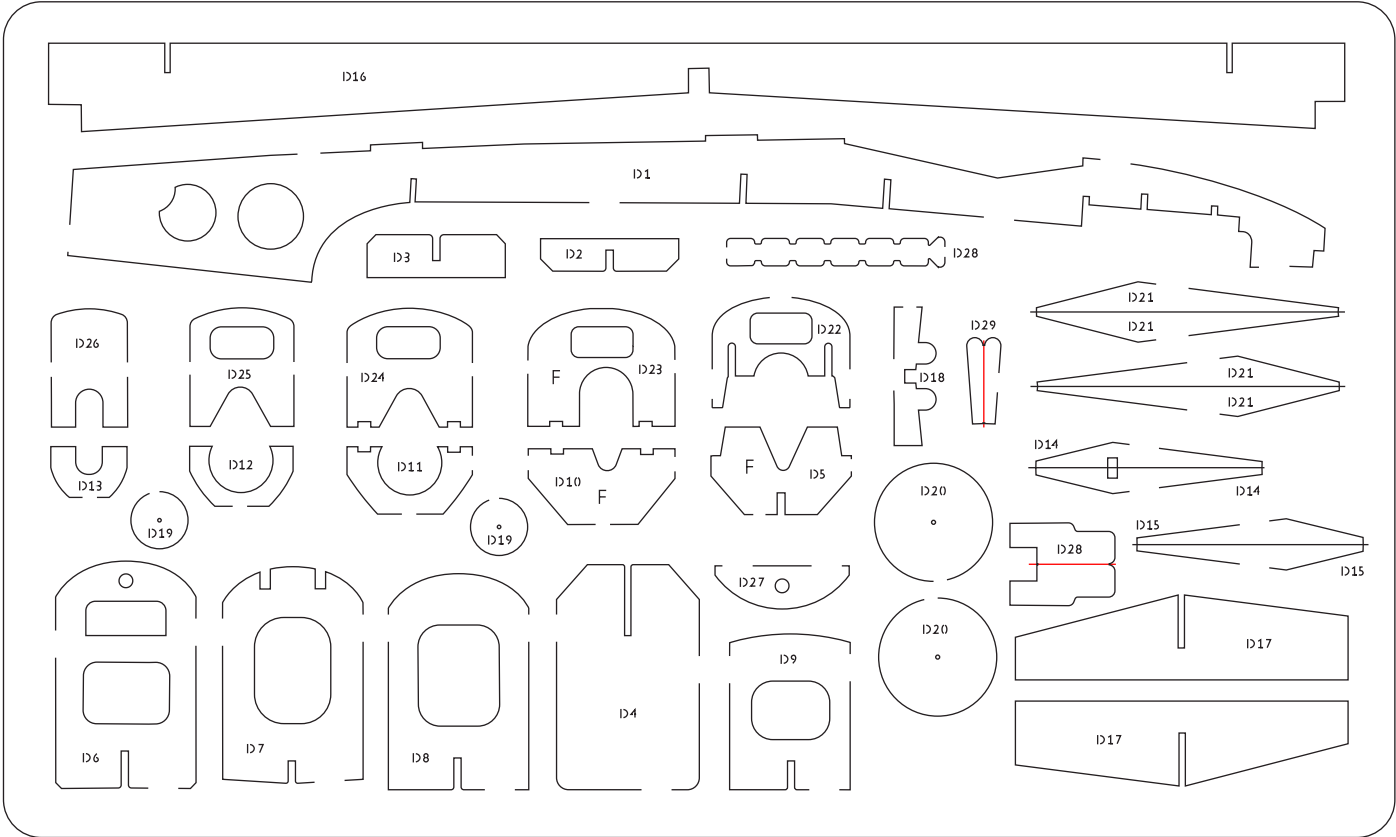
Tweezers

Needle nose pliers

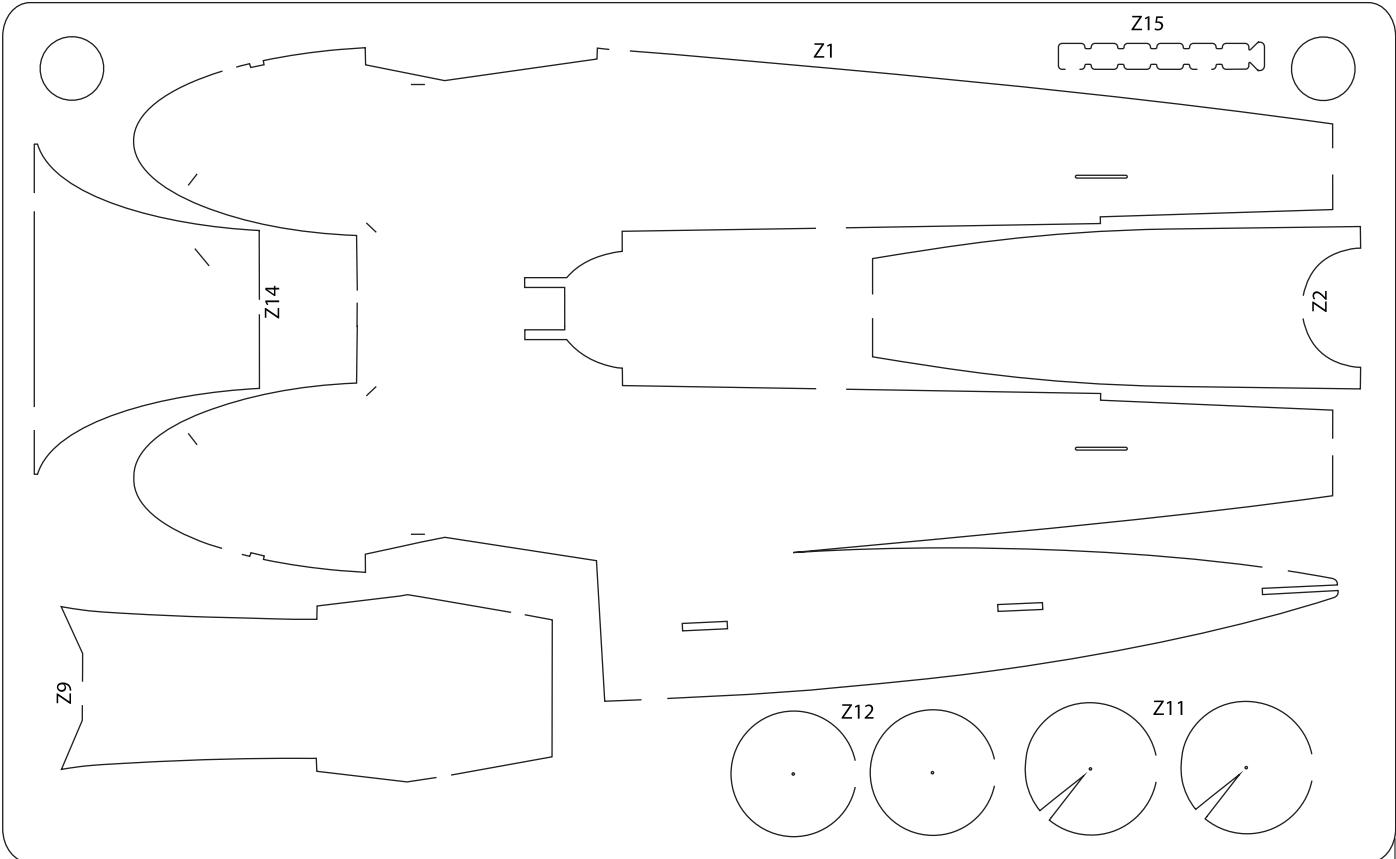
Deluxe Materials Foam2Foam adhesive

Aliphatic resin or foam safe cyano glue (for rigging & re-inforcement)

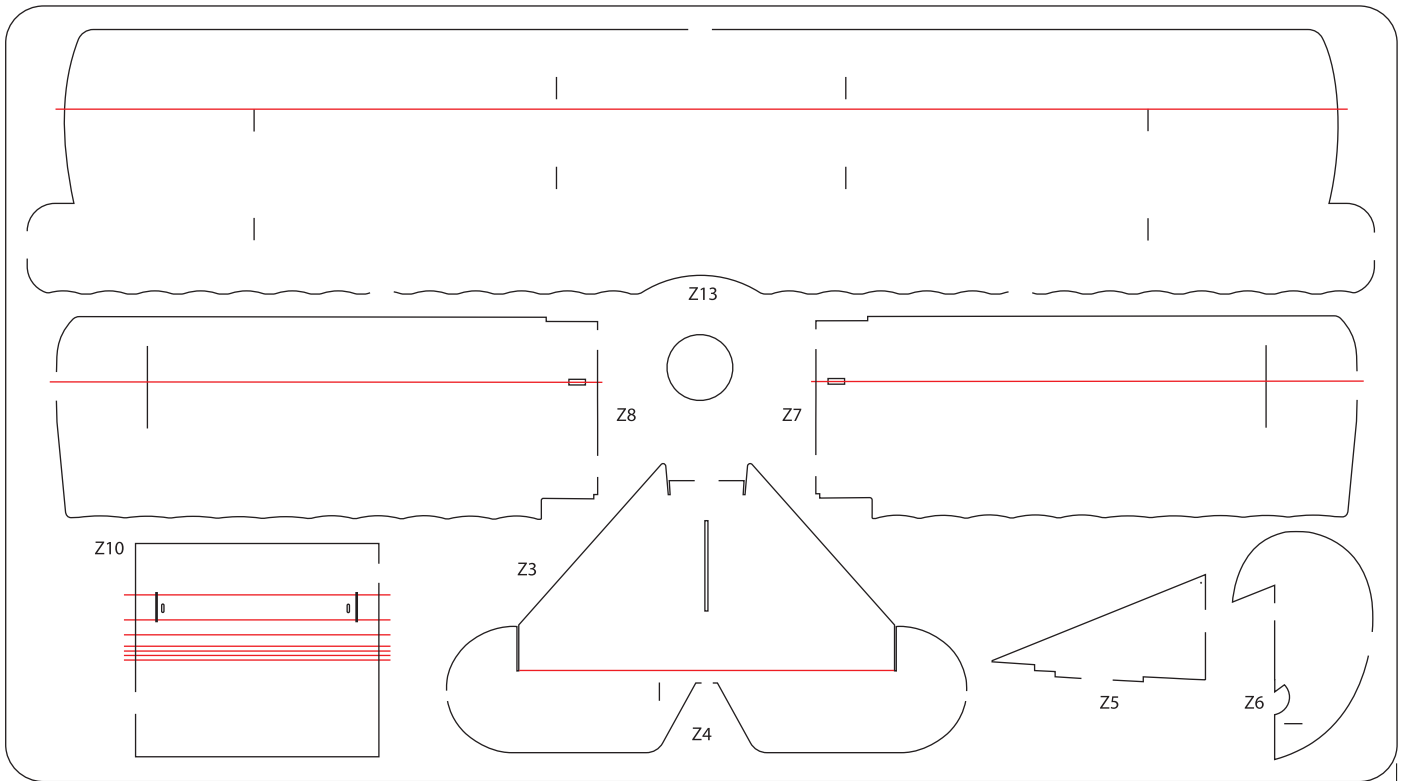
2mm FOAM



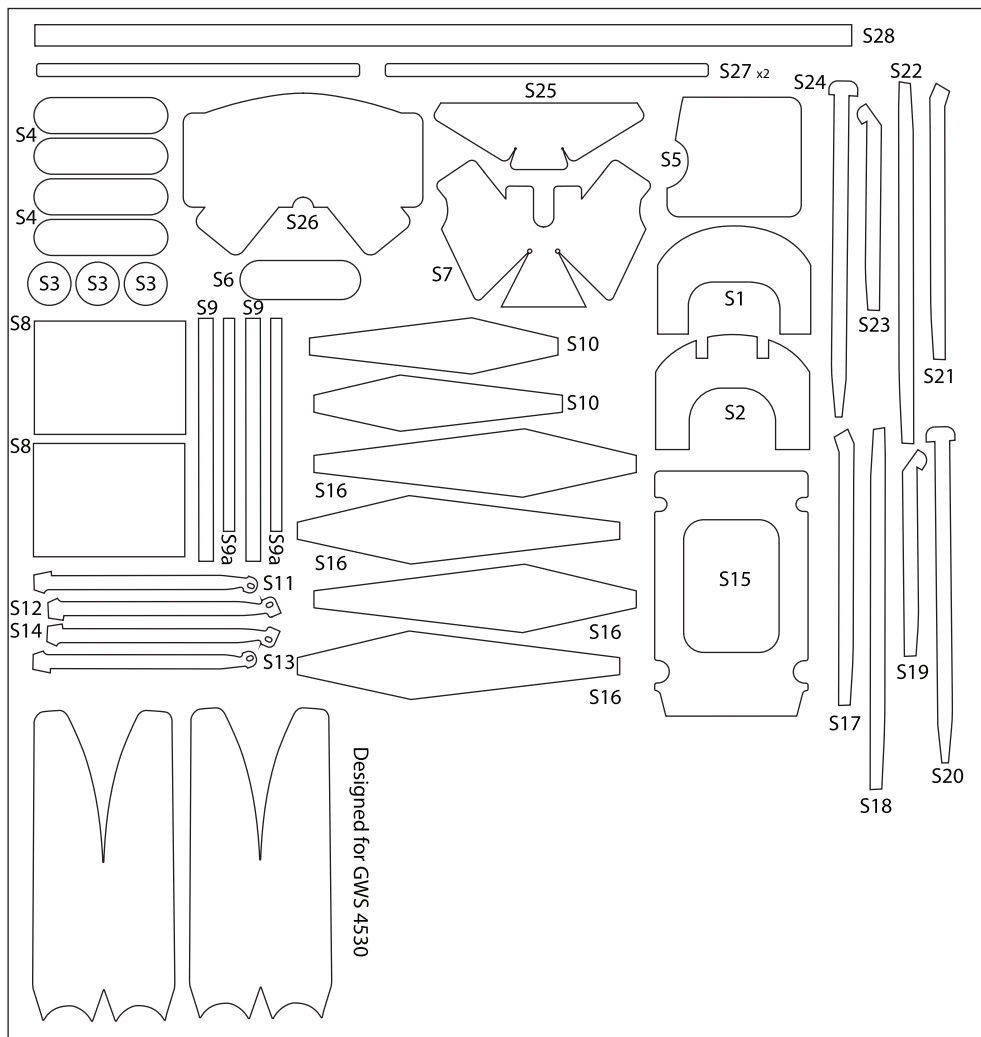
1mm FOAM



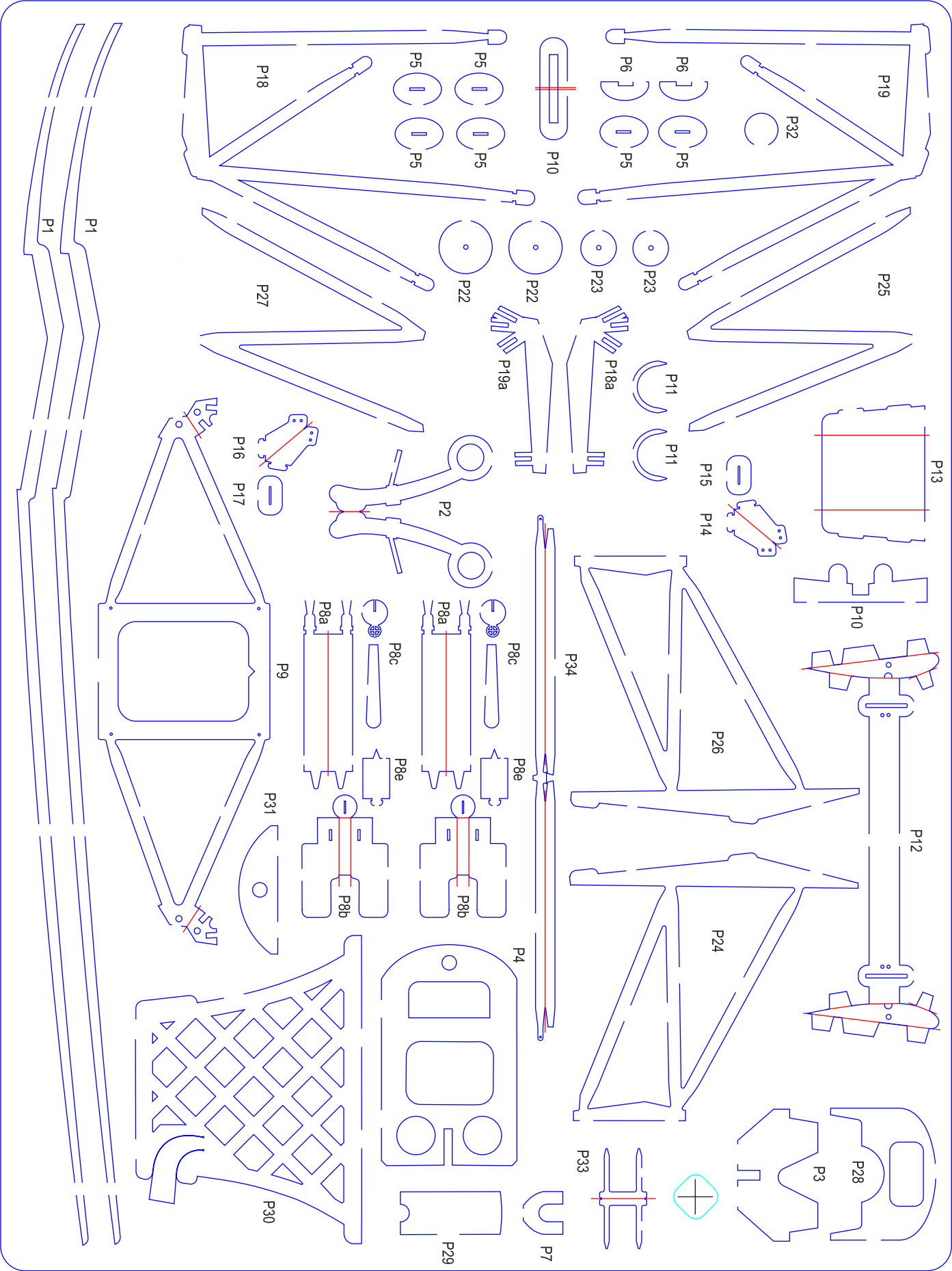
1mm FOAM




STICKERS



PLASTIC PARTS



SCORING & BEVELING GUIDE #1

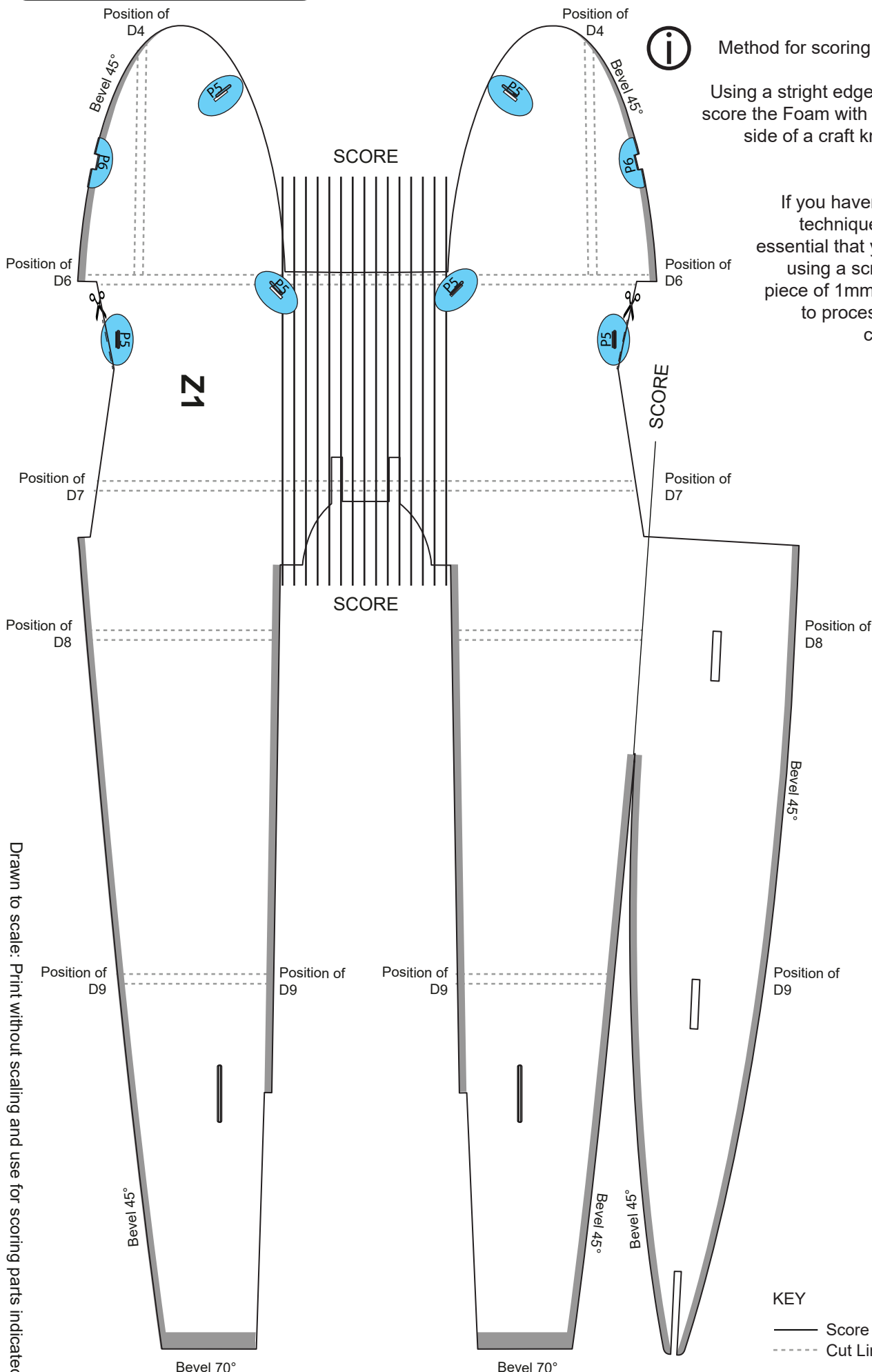
 Always score on the UNPRINTED side of the Foam unless otherwise directed



Method for scoring 1mm Foam

Using a straight edge as a guide, score the Foam with the **reverse** side of a craft knife or a ball point pen.

If you haven't used this technique before it is essential that you practice using a scrap or spare piece of 1mm Foam prior to processing any kit components.



SCORING & BEVELING GUIDE #2



Method for scoring 1mm Foam

Using a straight edge as a guide, score the Foam with the **reverse** side of a craft knife or a ball point pen.

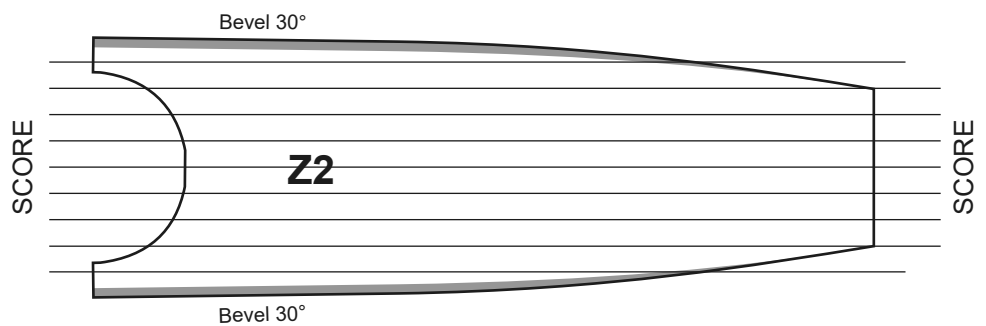
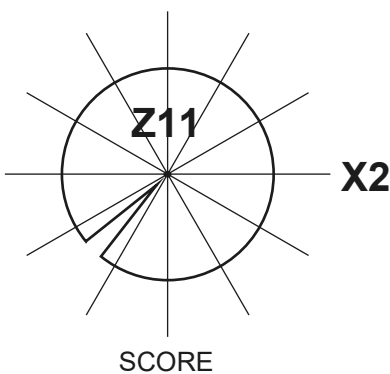
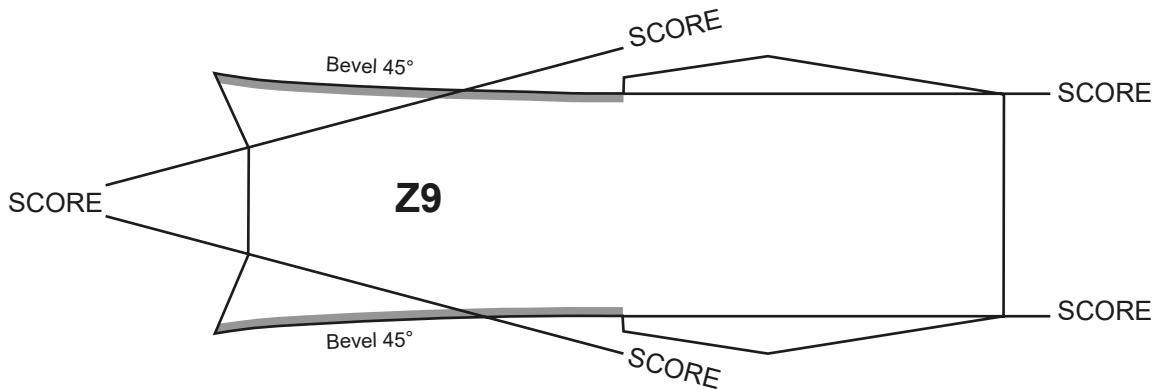
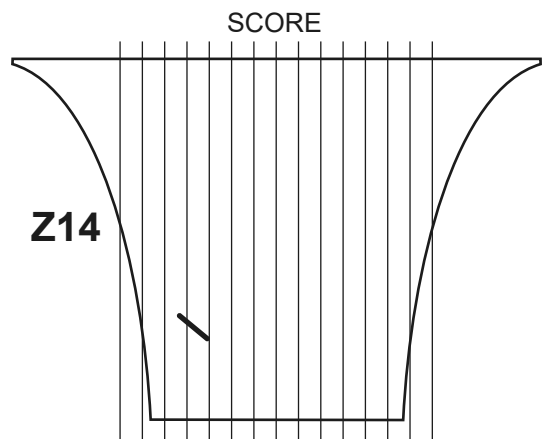
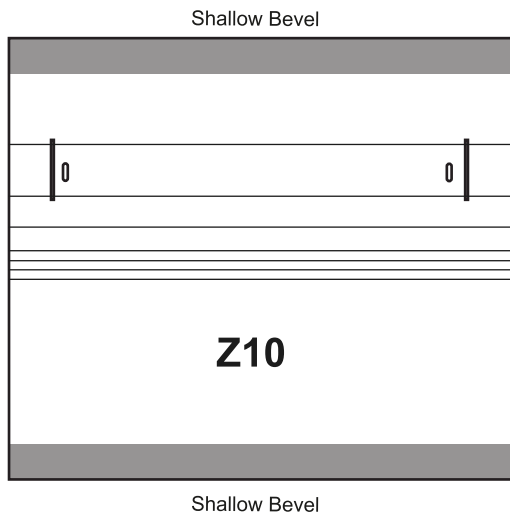
If you haven't used this technique before it is essential that you practice using a scrap or spare piece of 1mm Foam prior to processing any kit components.

KEY

— Score Lines
 - - - - - Cut Lines



Always Score on the **UNPRINTED** side of the Foam unless otherwise stated



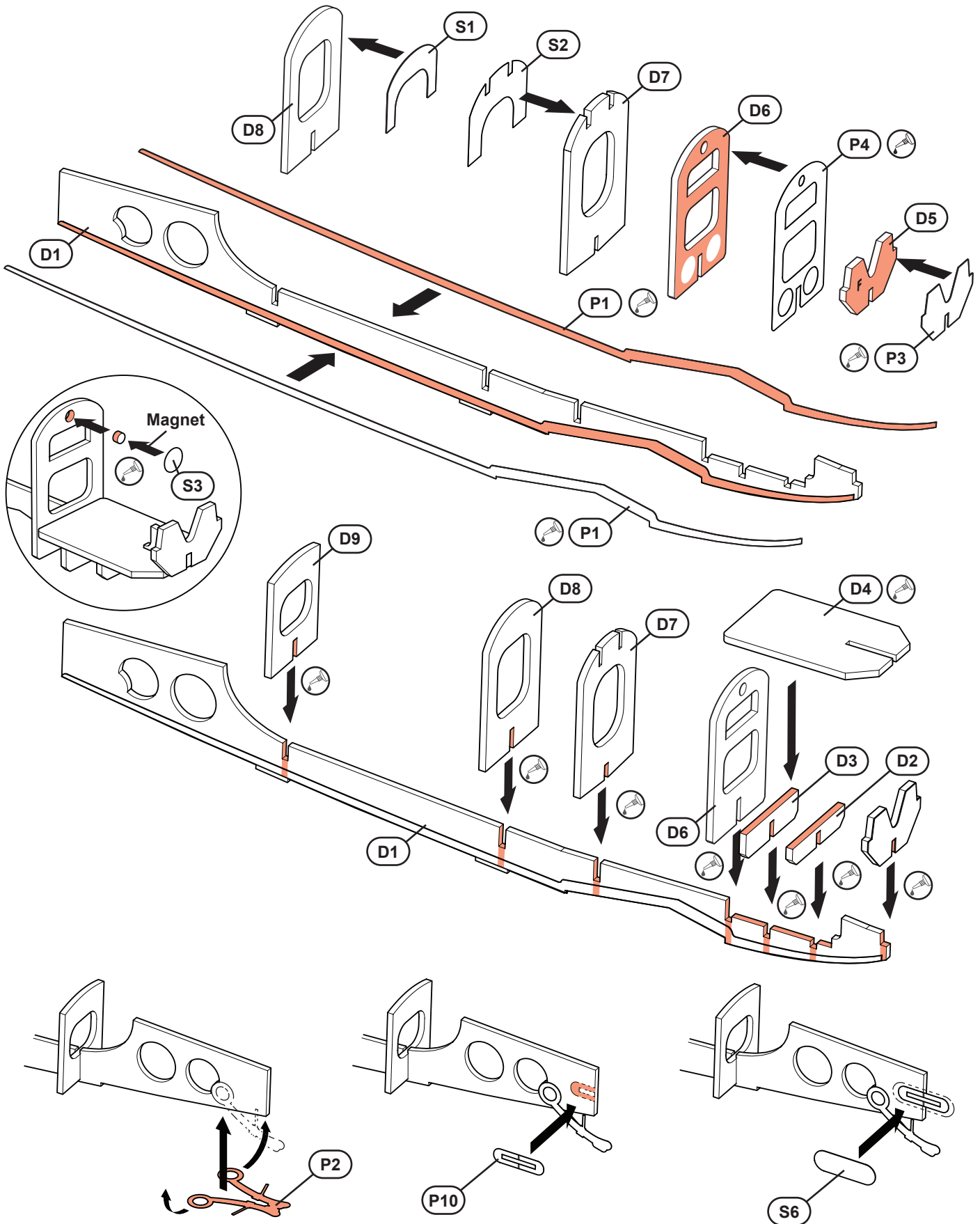
STAGE 1 AIRFRAME



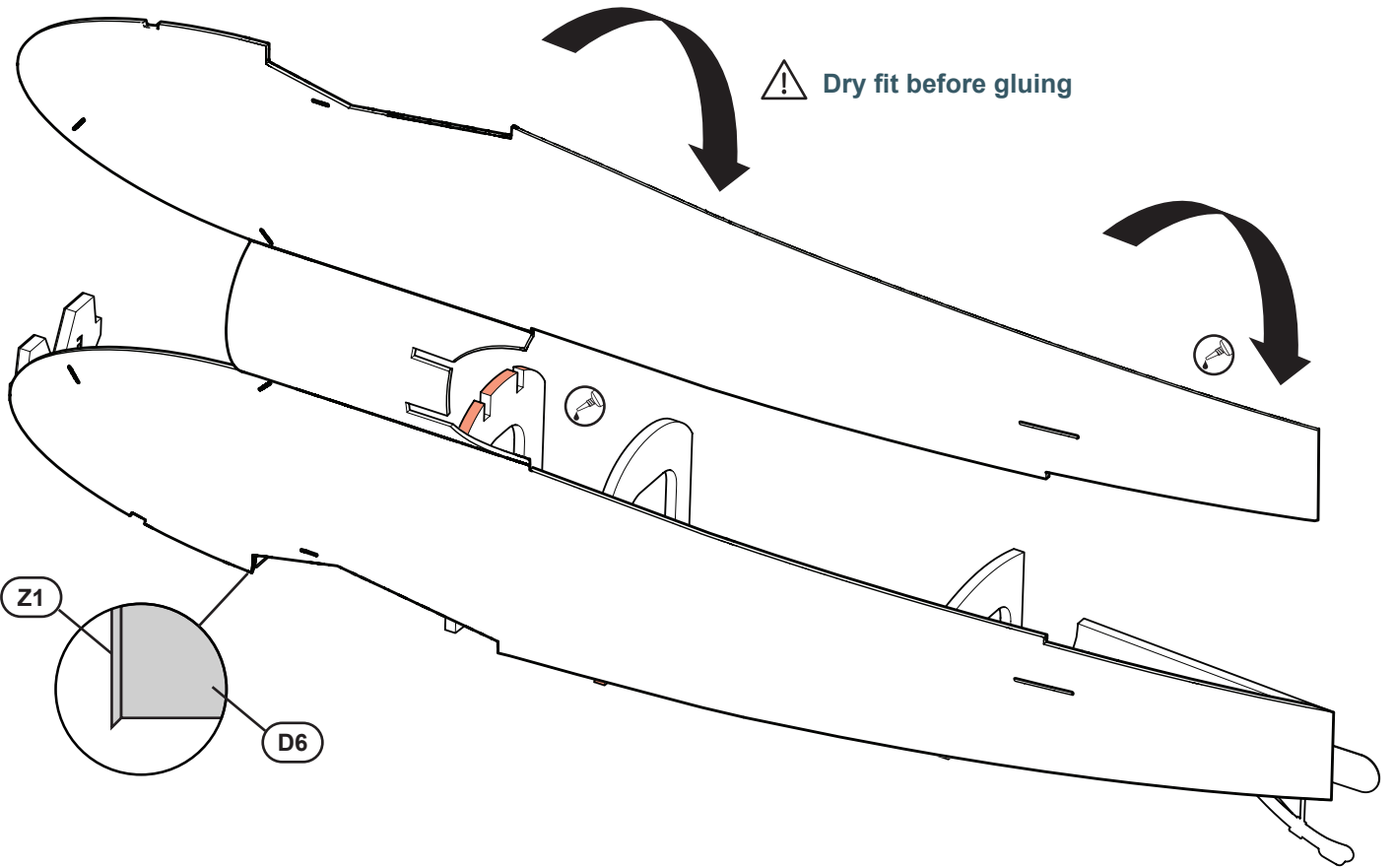
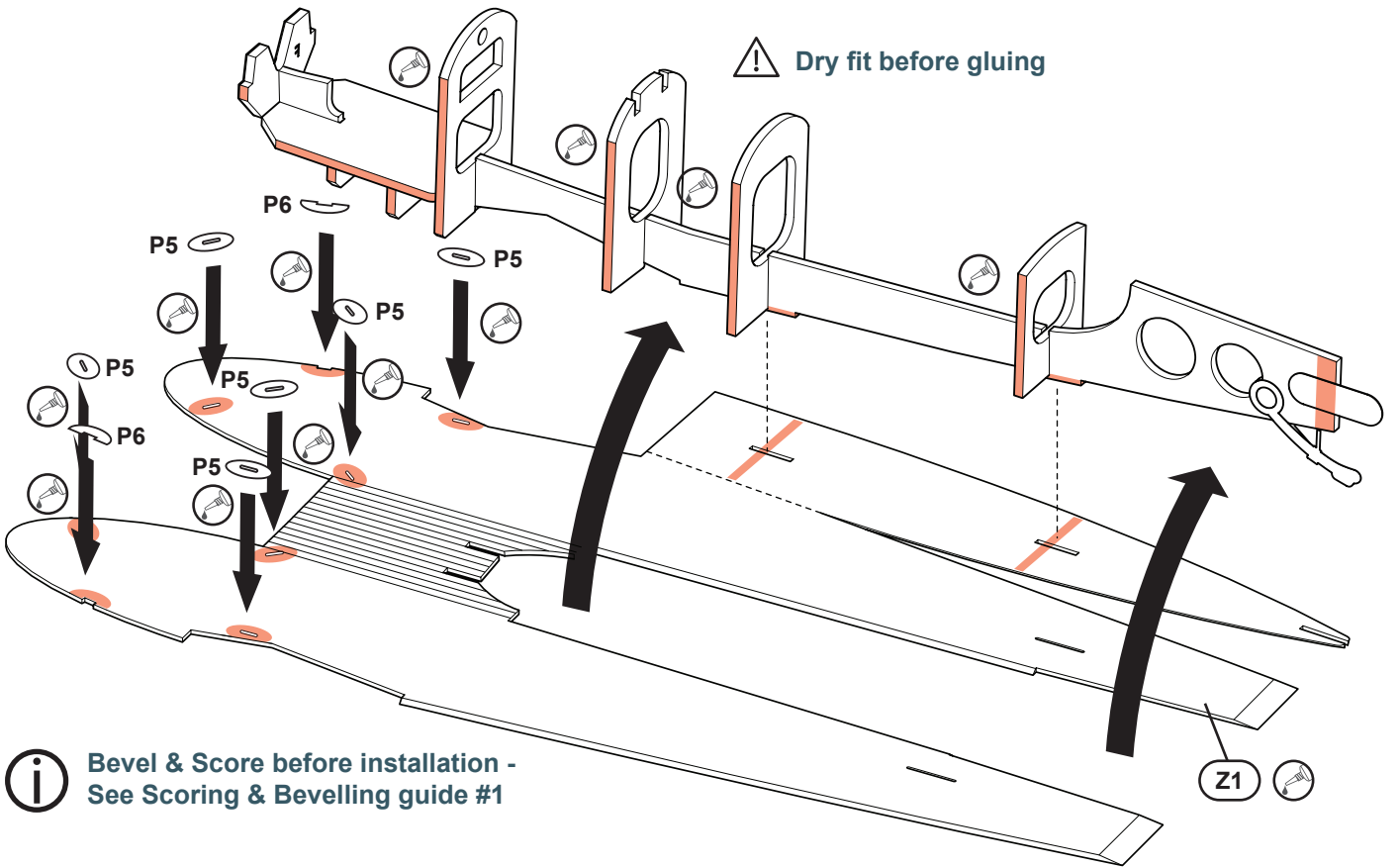
The plastic parts used in the airframe are there to increase the strength of the structure in vital areas whilst still providing some flexibility.



Apply a thin layer of adhesive to the plastic parts and attach immediately to allow some wiggle time to get the parts lined up. Set aside to cure for 30 mins or more.

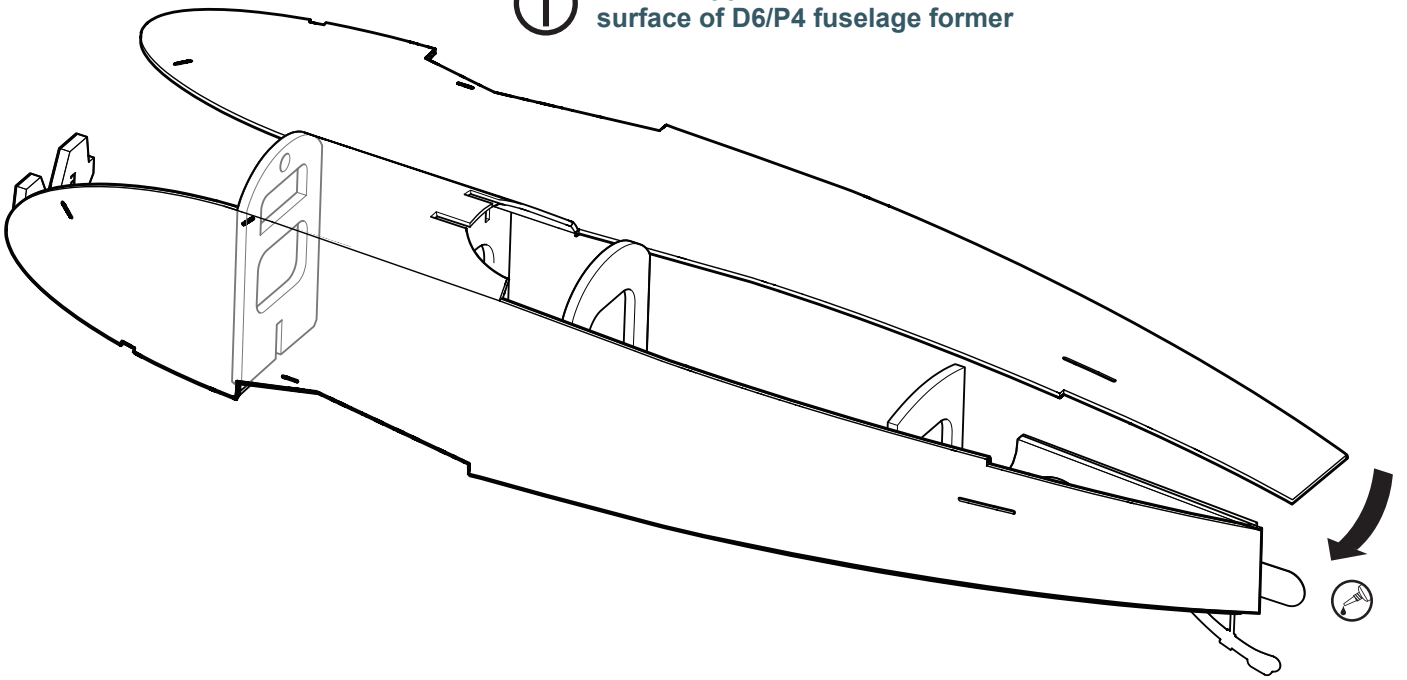


STAGE 2 FUSELAGE

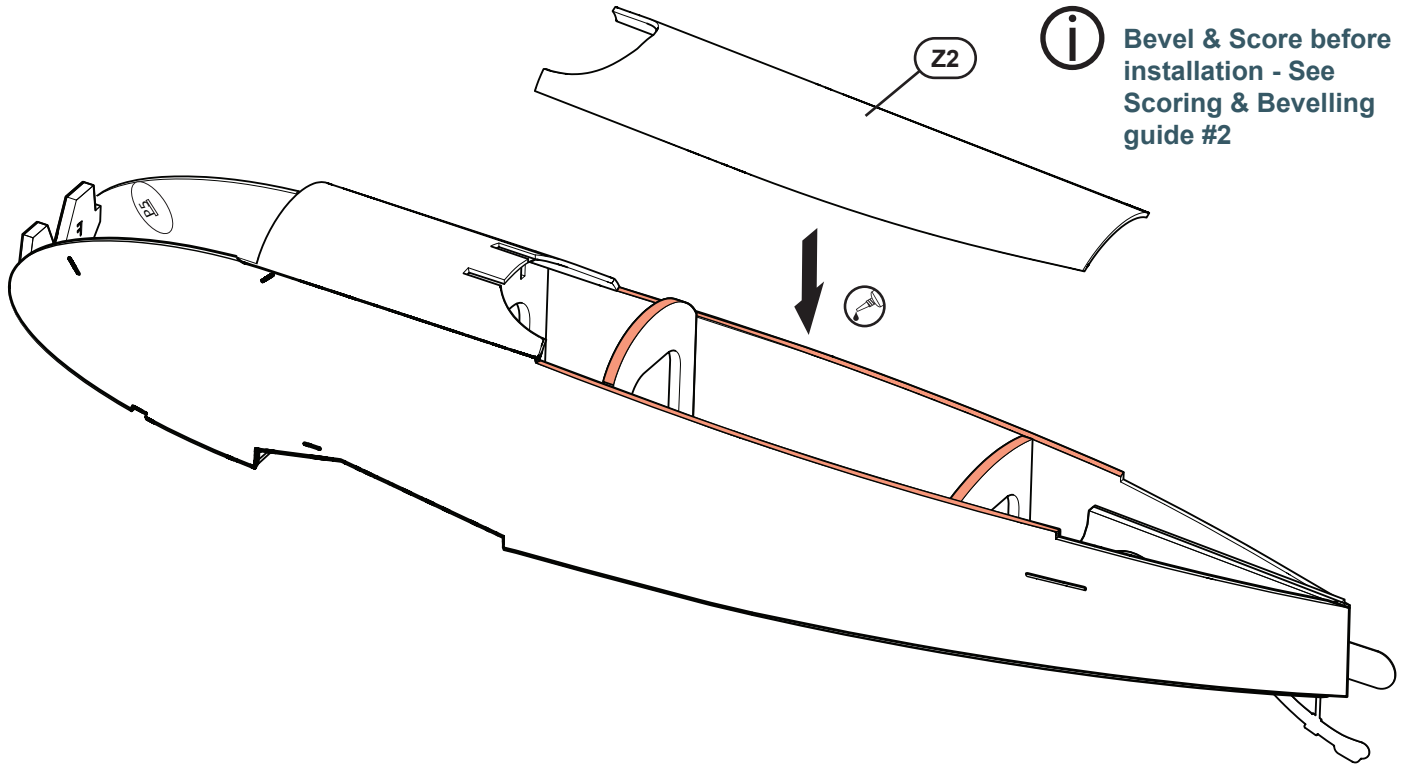


STAGE 2 FUSELAGE

i Ensure upper deck is flush with front surface of D6/P4 fuselage former

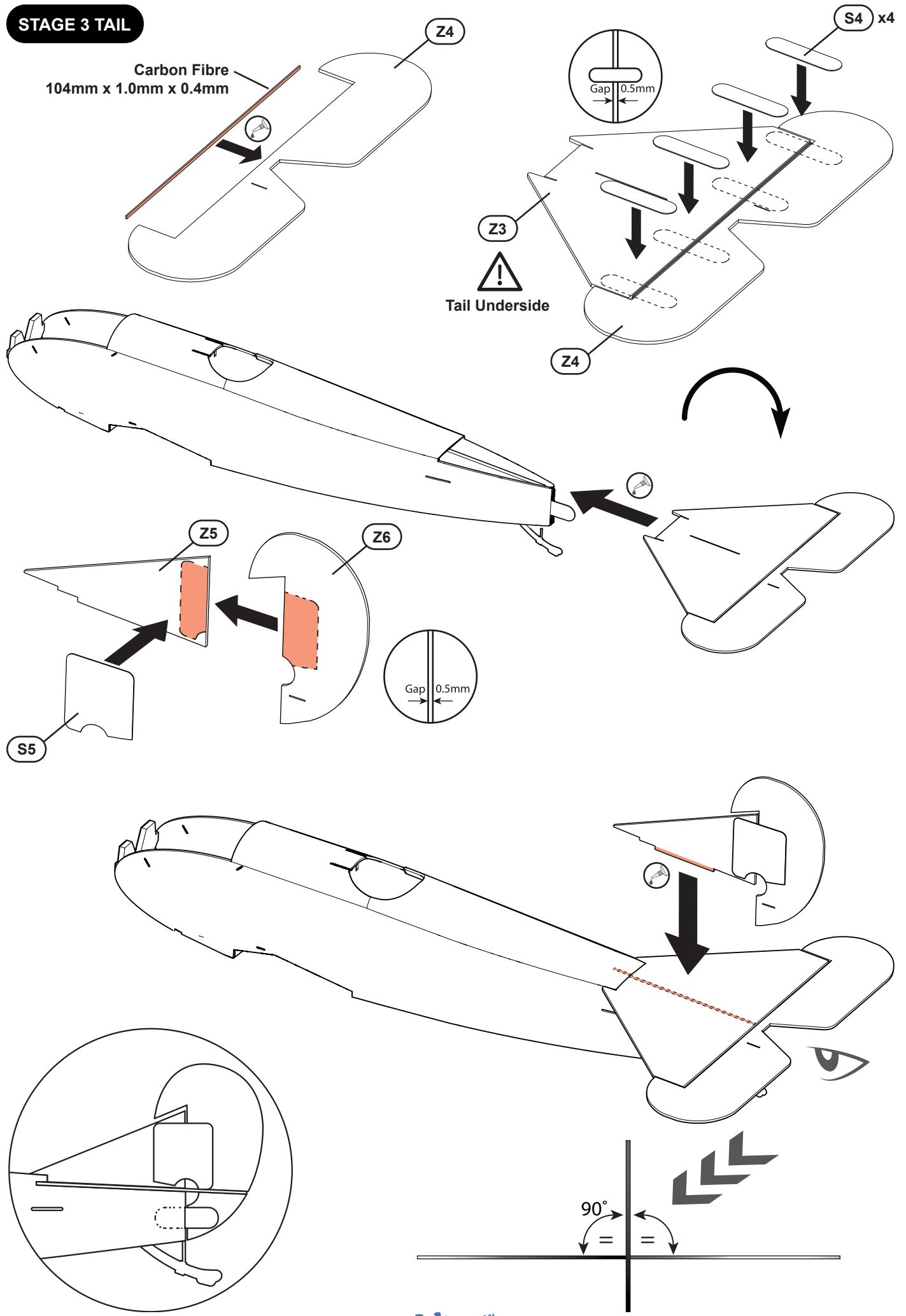


i Bevel & Score before installation - See Scoring & Bevelling guide #2

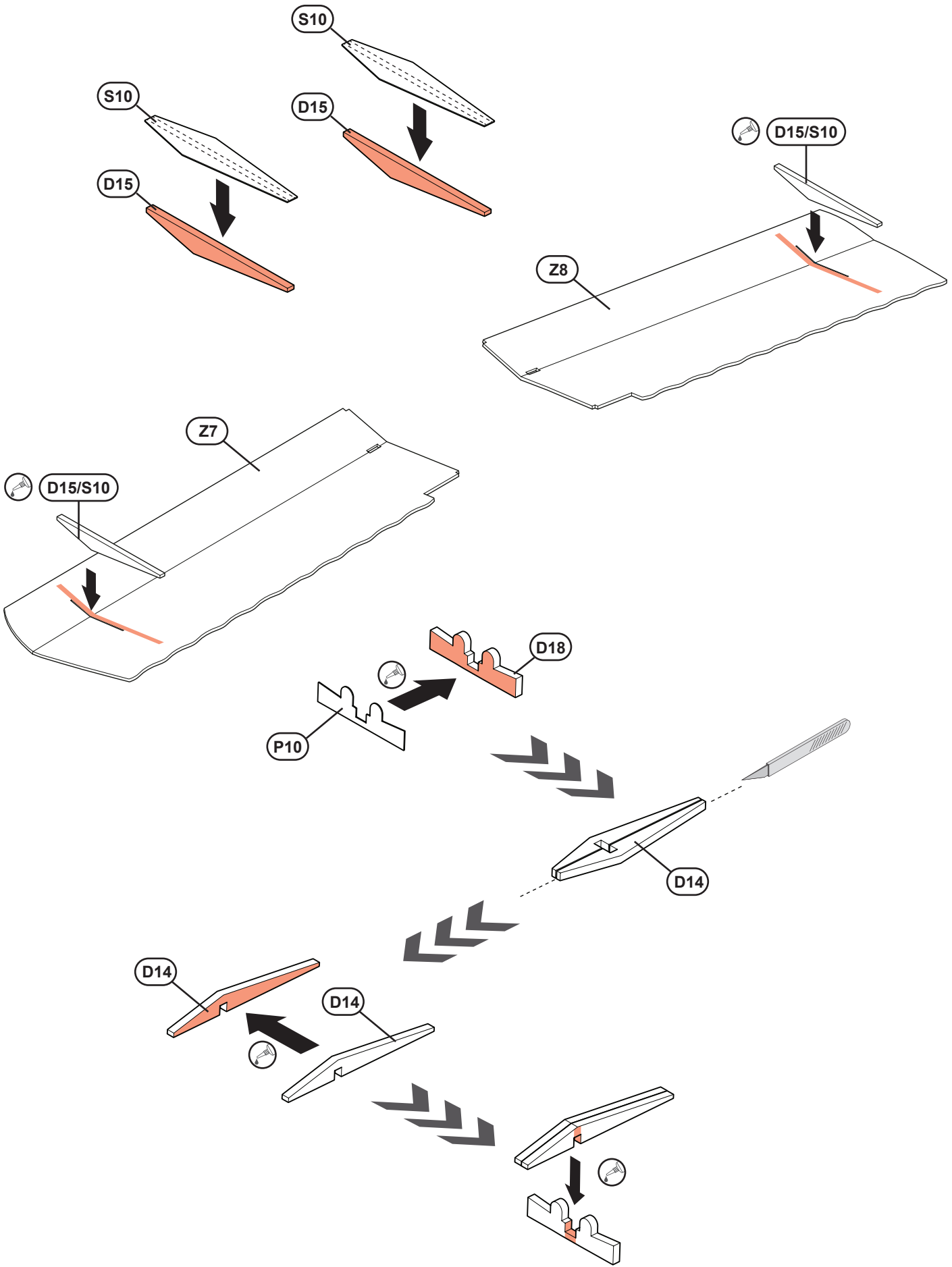


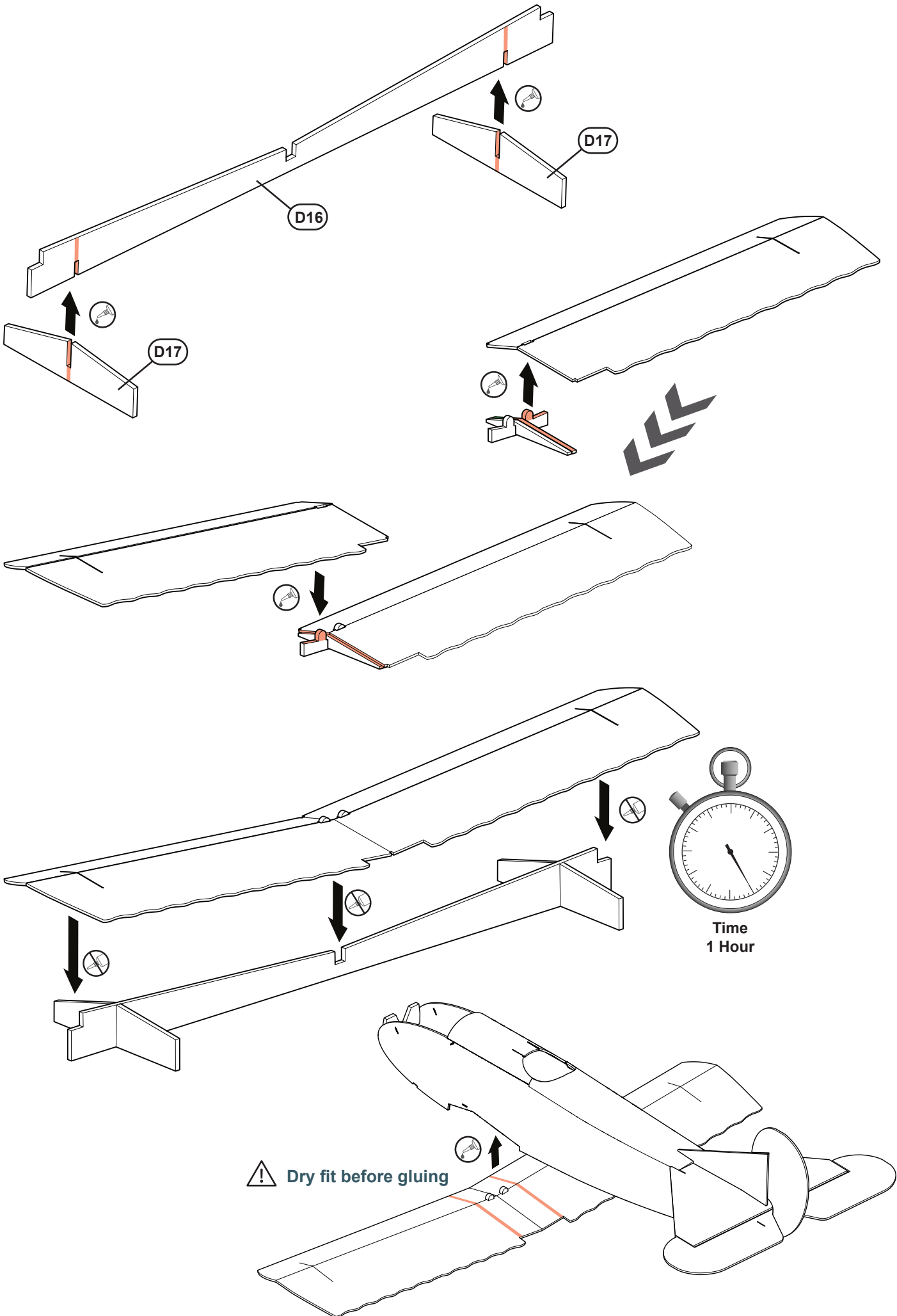
STAGE 3 TAIL

Carbon Fibre
104mm x 1.0mm x 0.4mm

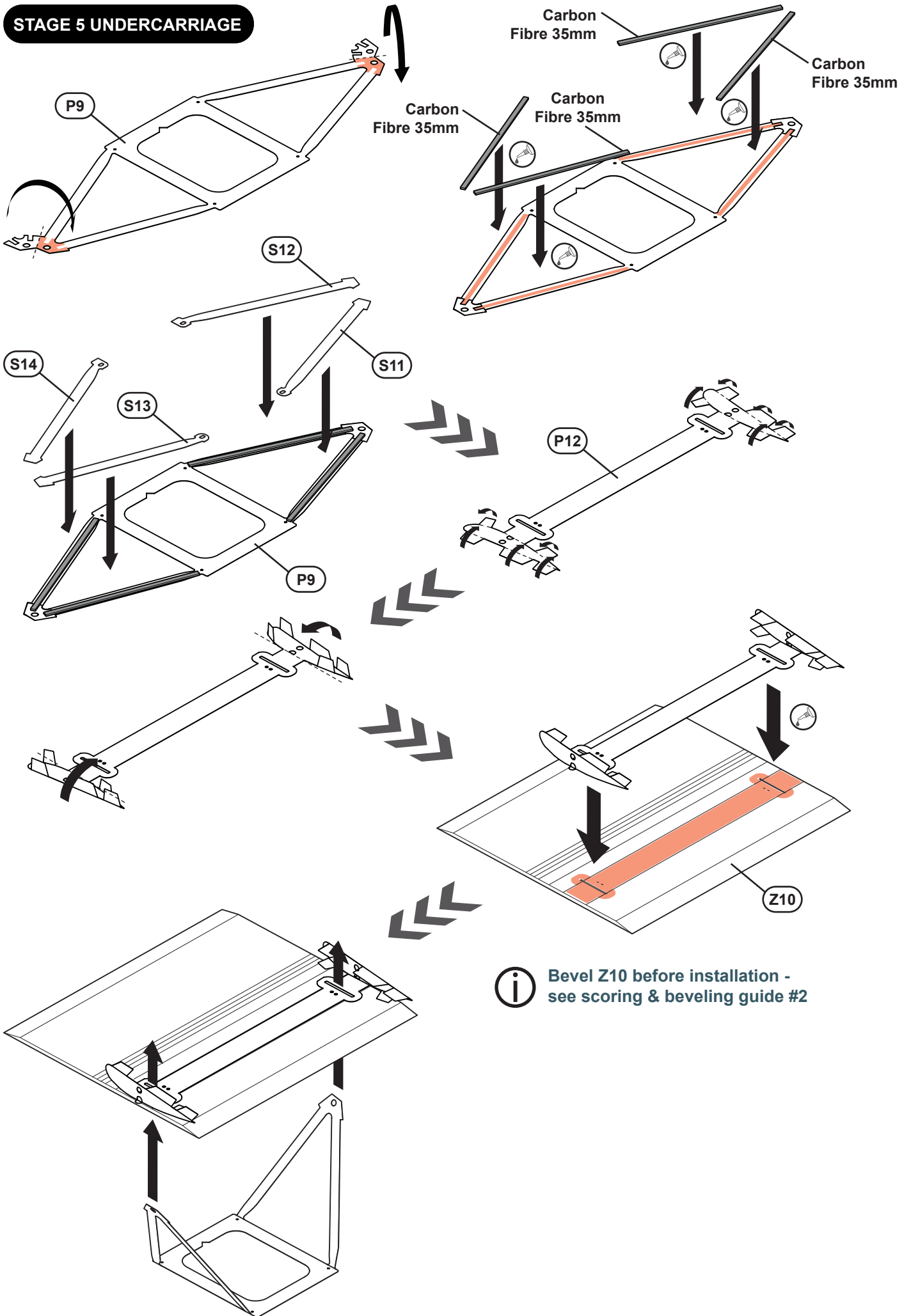


STAGE 4 LOWER WING





STAGE 5 UNDERCARRIAGE

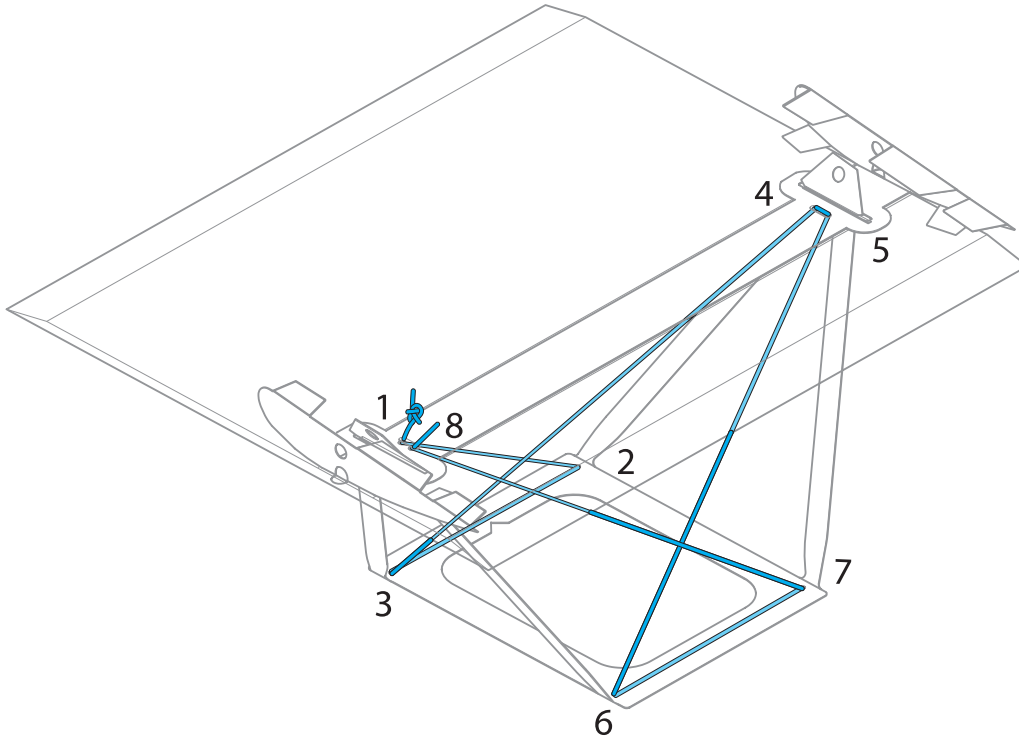


STAGE 5 UNDERCARRIAGE



The undercarriage rigging on this model is functional and reduces the side movement of the undercarriage legs.

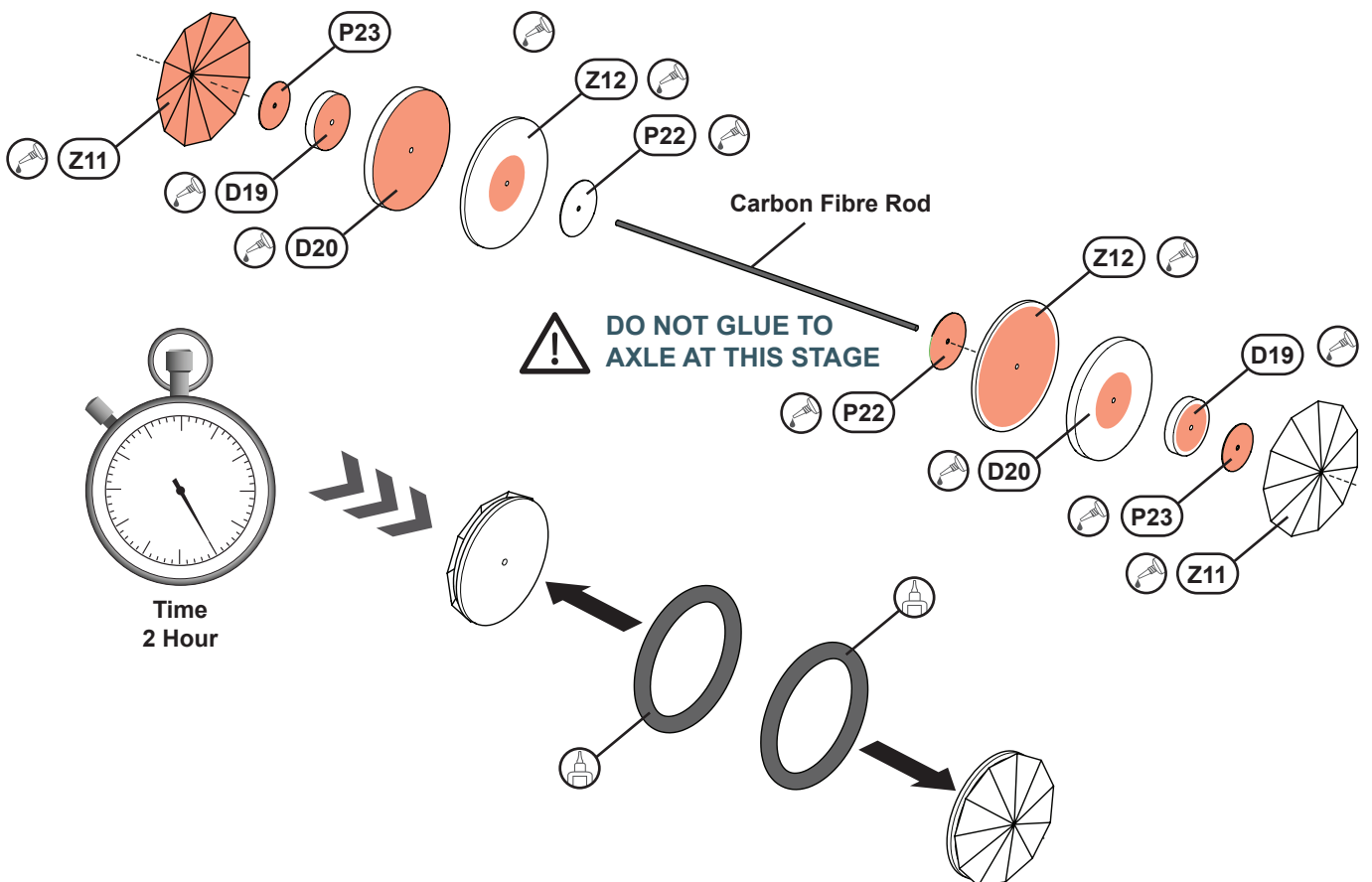
Using the pre-cut holes, thread the supplied rigging wire with a knotted end as shown. Pull tight, secure and glue the end in position.



Bevel & Score Z11 before installation - See Scoring & Beveling guide #2

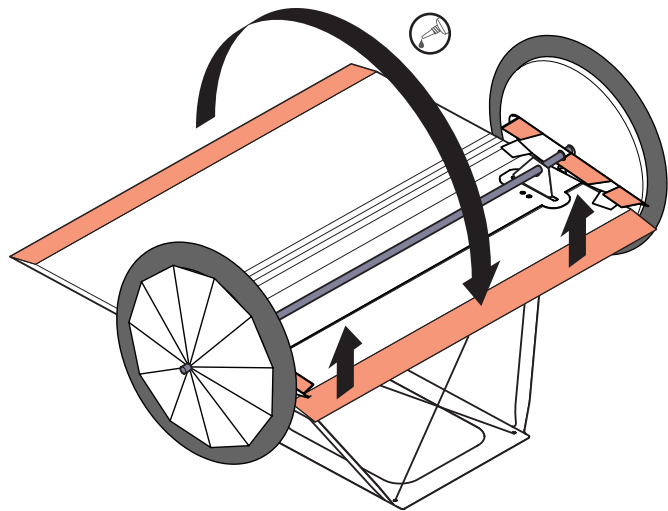
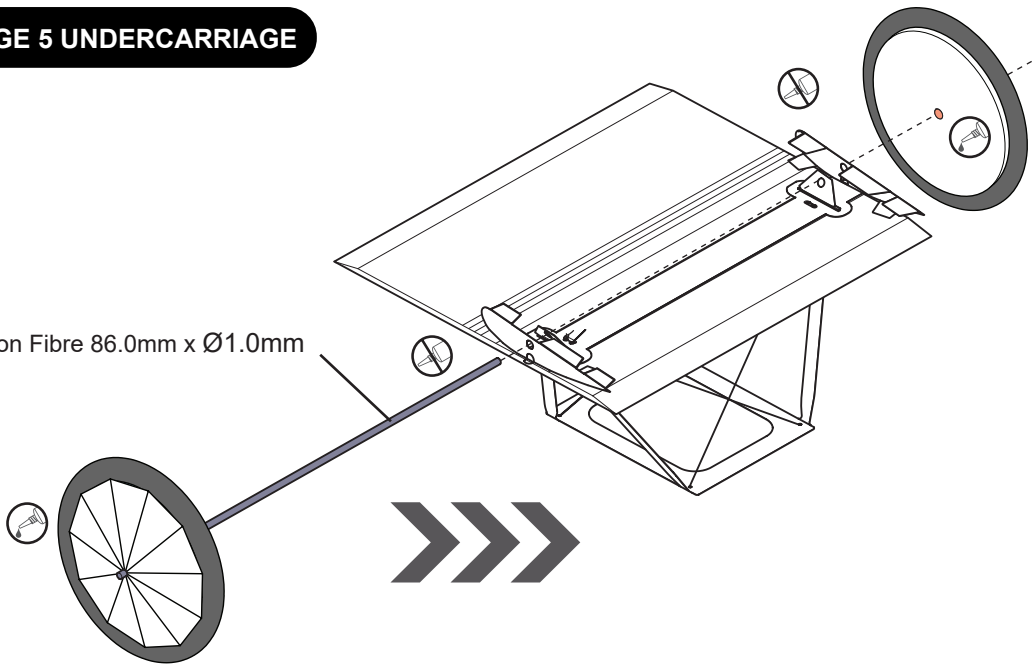


Assemble each wheel onto the axle temporarily to ensure good alignment.

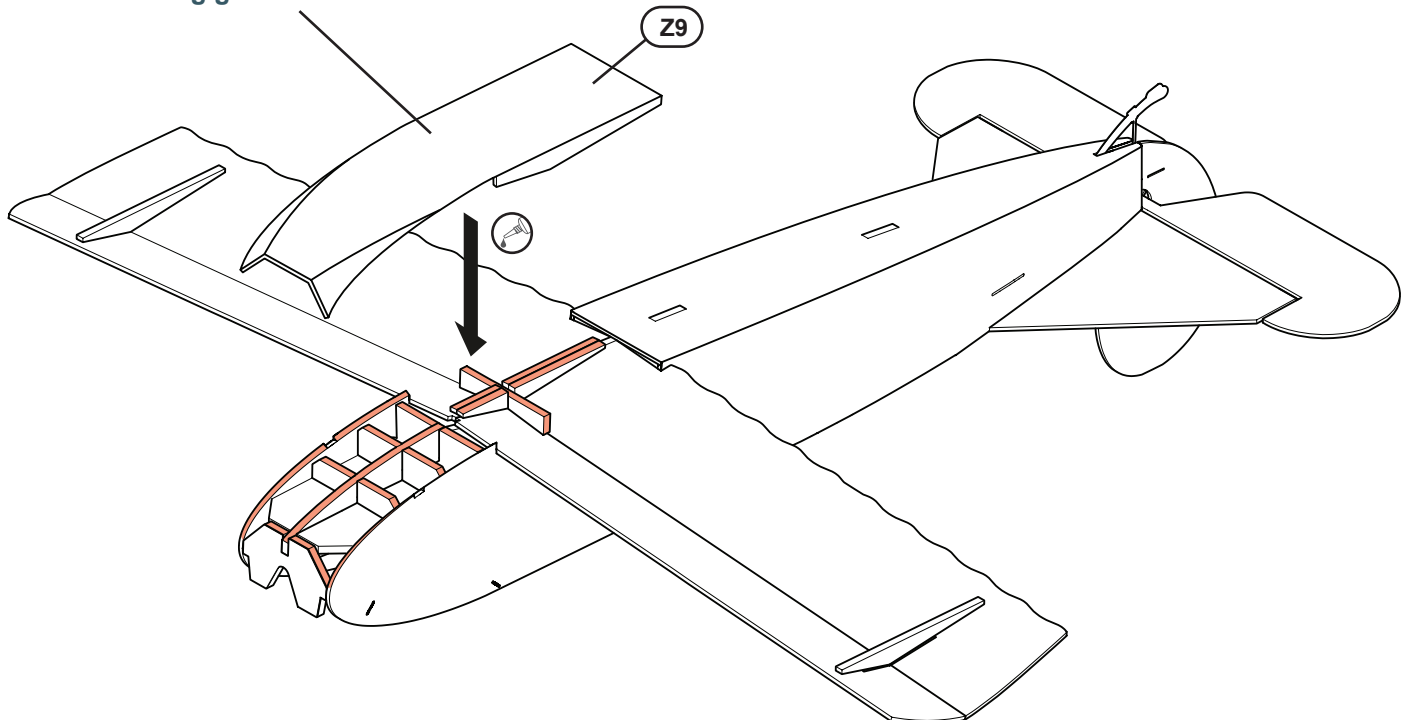


STAGE 5 UNDERCARRIAGE

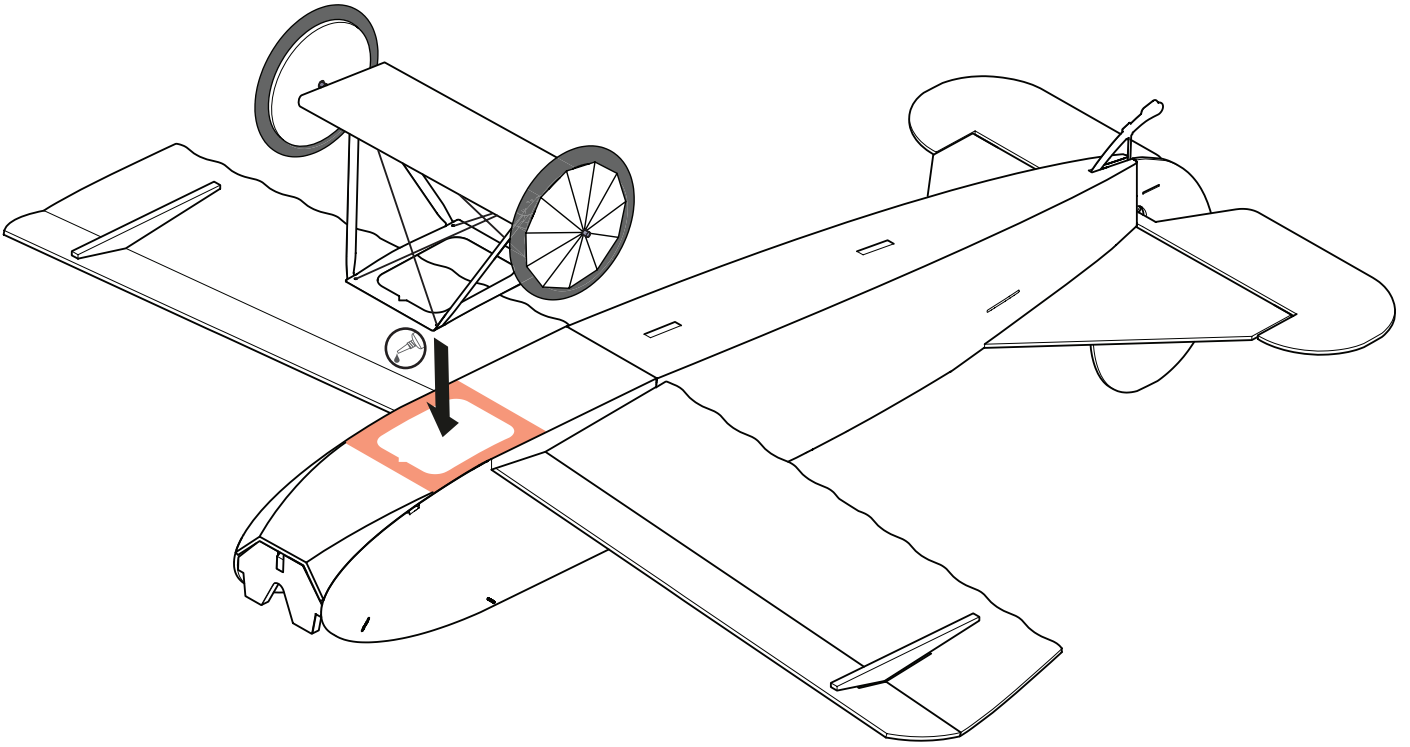
Carbon Fibre 86.0mm x Ø1.0mm



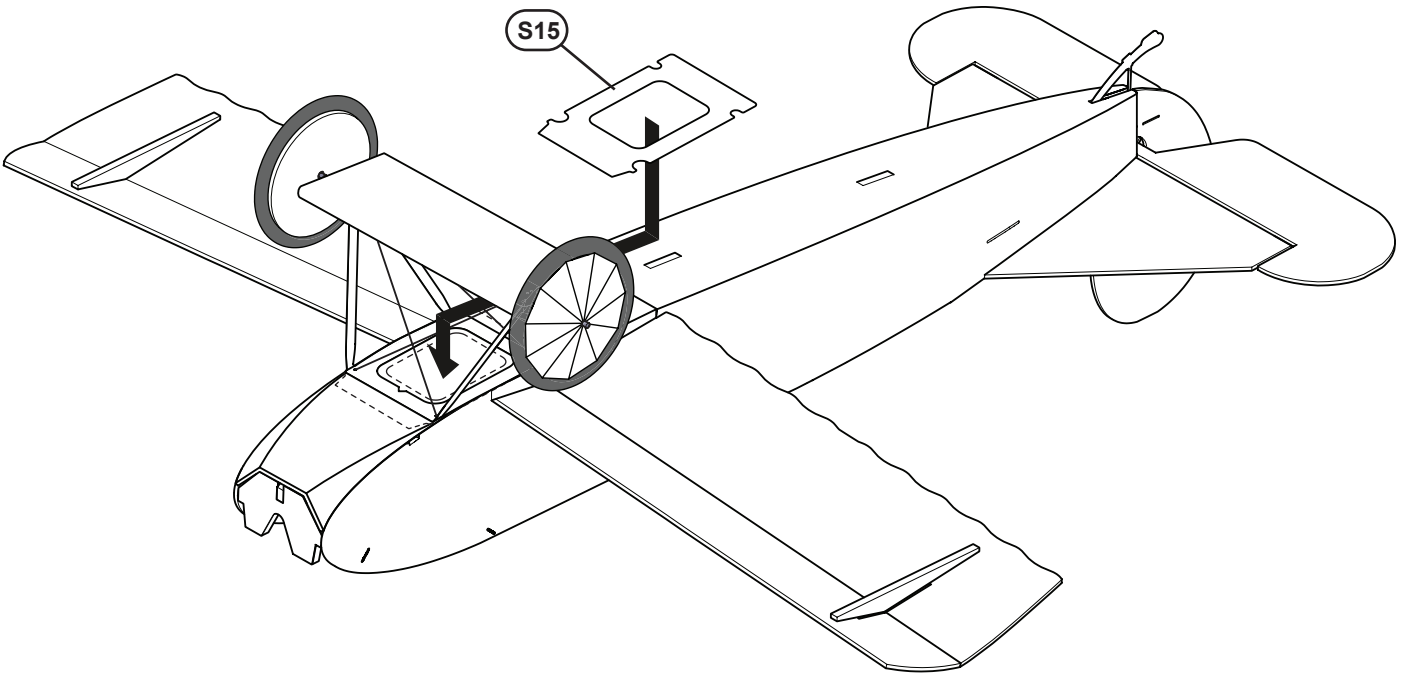
i Bevel & Score Z9
before installation
- See Scoring &
Bevelling guide #2



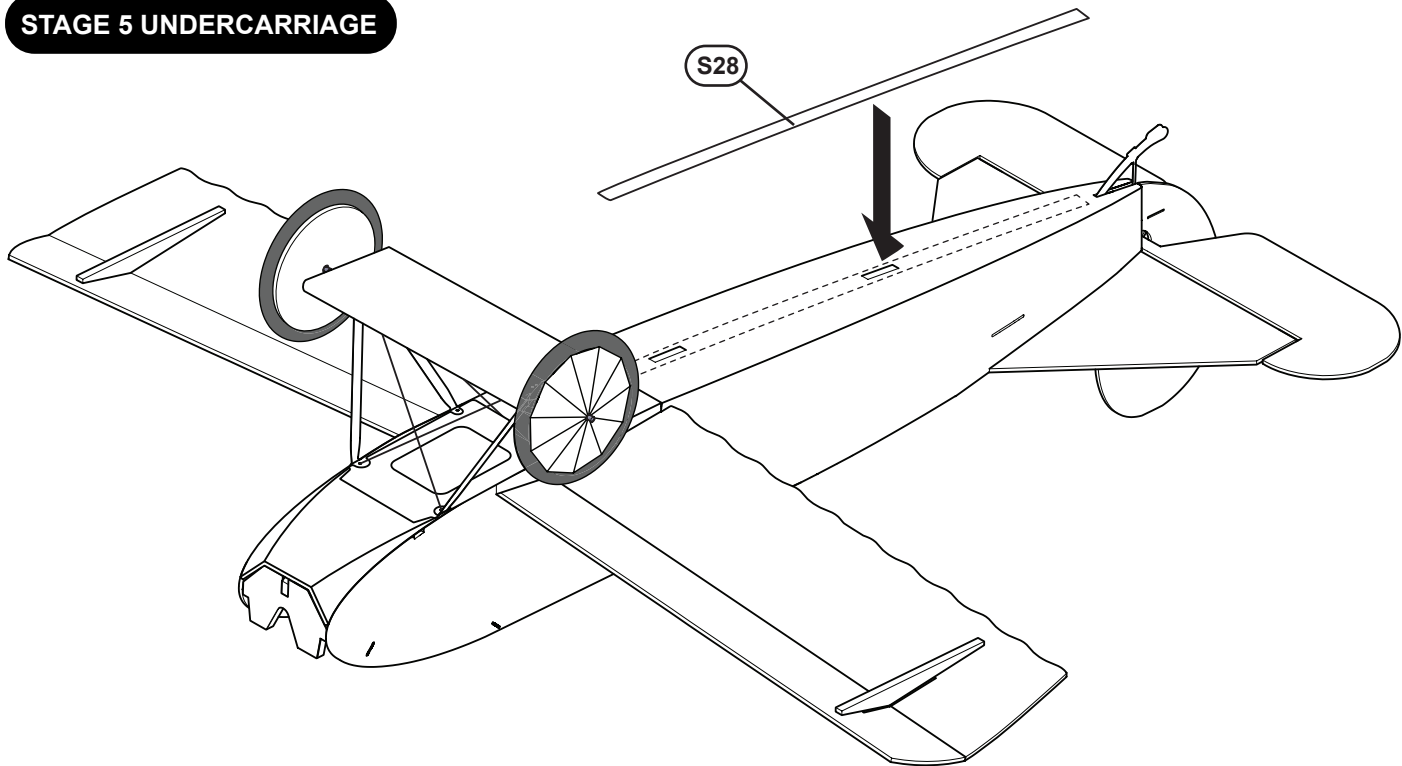
STAGE 5 UNDERCARRIAGE



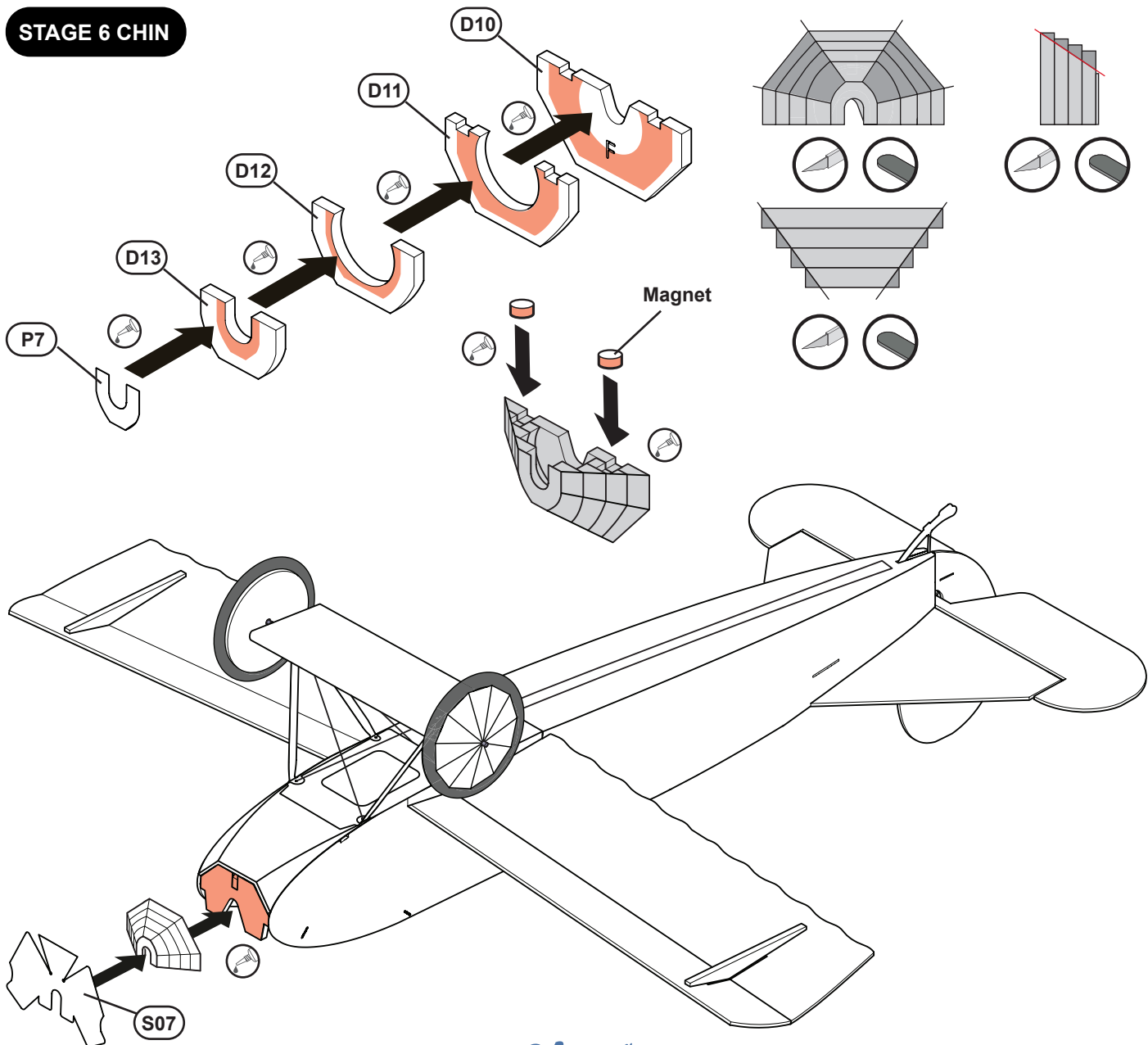
i Wet sticker adhesive surface before applying to allow for accurate positioning



STAGE 5 UNDERCARRIAGE

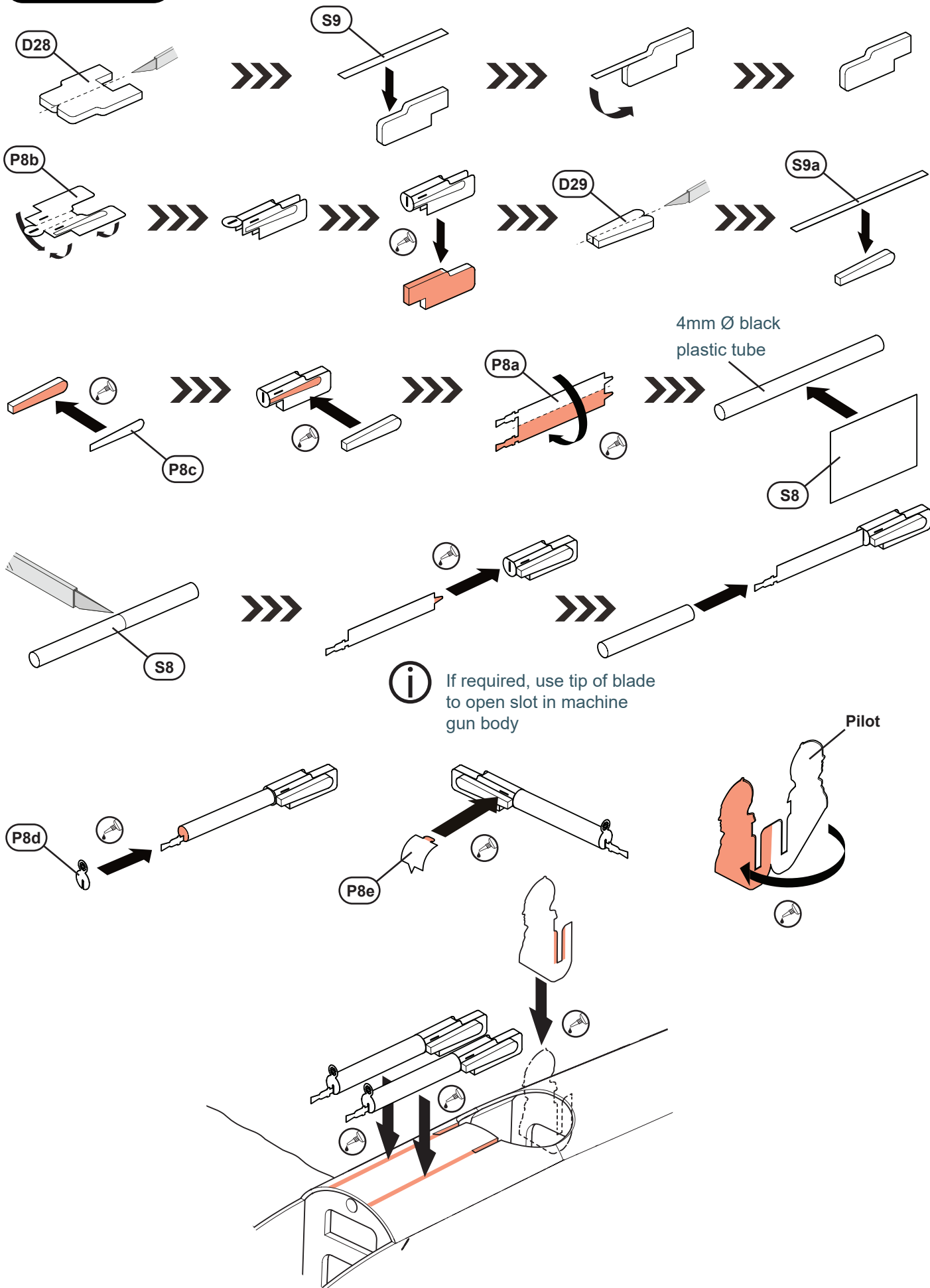


STAGE 6 CHIN

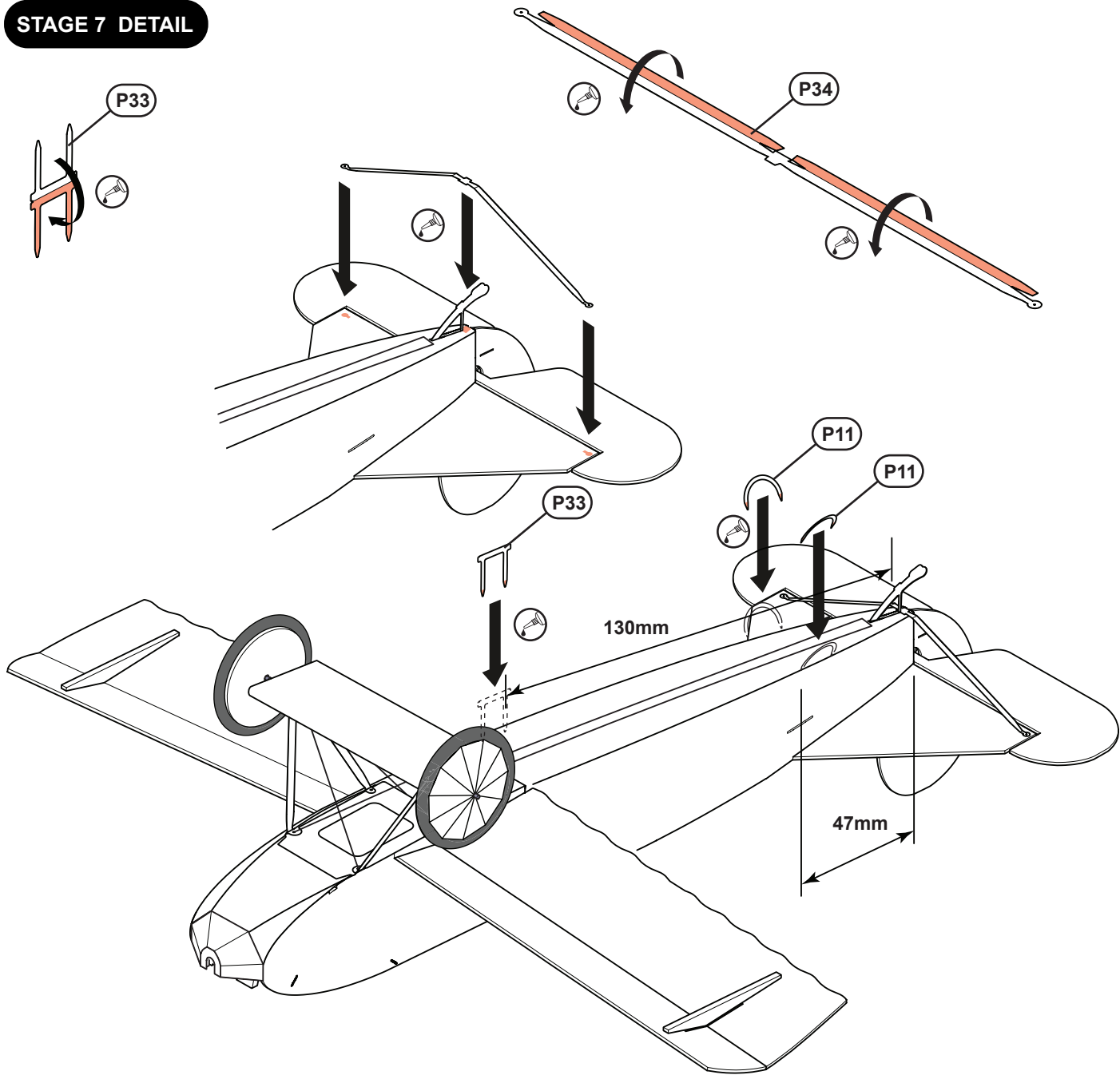


STAGE 7 DETAIL

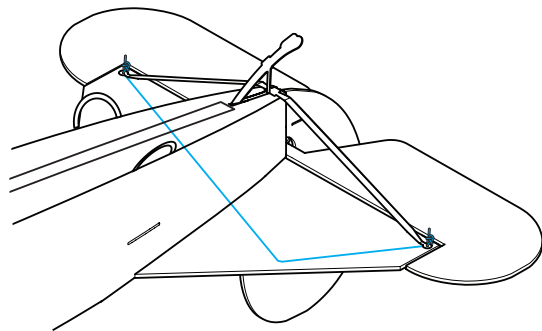
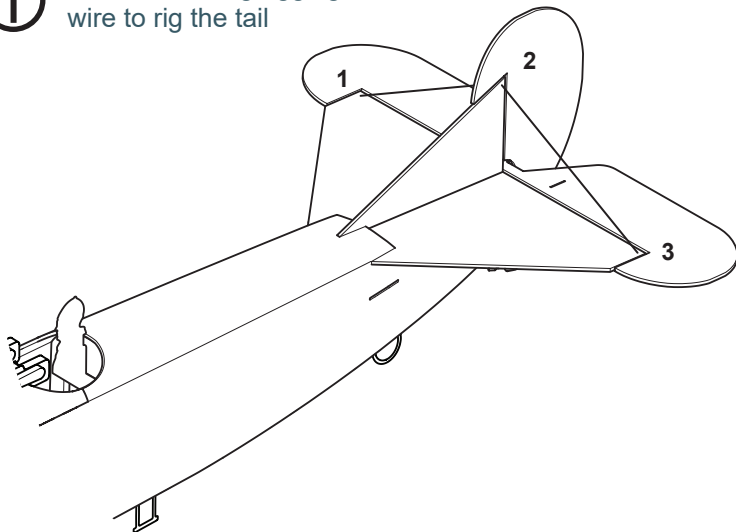
Spandau LMG x2



STAGE 7 DETAIL

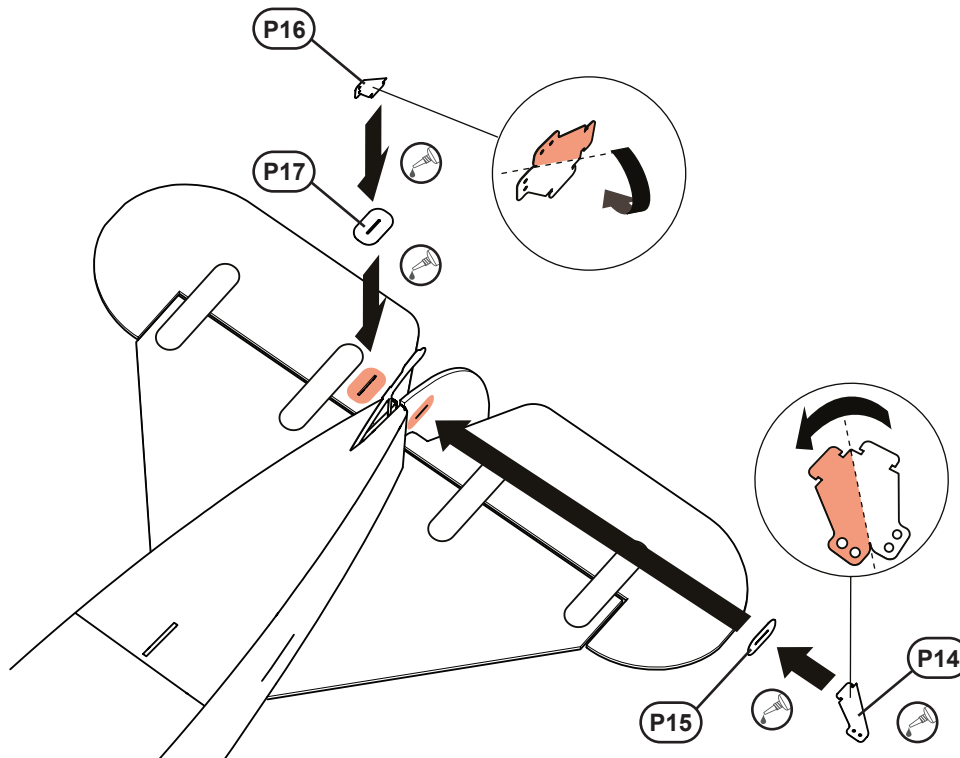



i Used remaining rigging wire to rig the tail

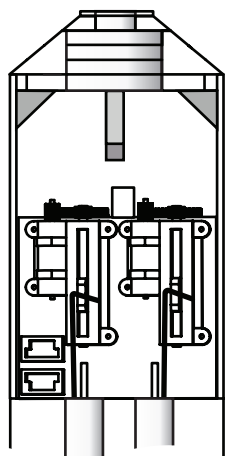



View from below

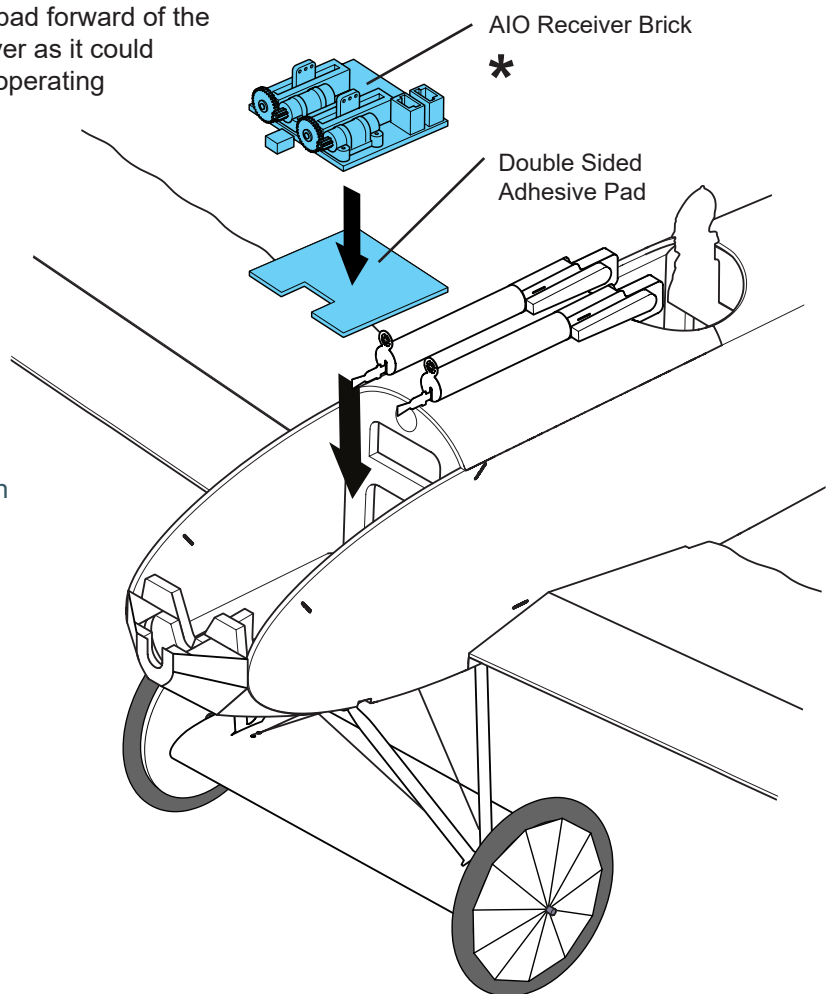
STAGE 8 CONTROLS



 Avoid mounting the adhesive pad forward of the leading edge of the AIO receiver as it could prevent the servo gears from operating



 Suggested position of receiver

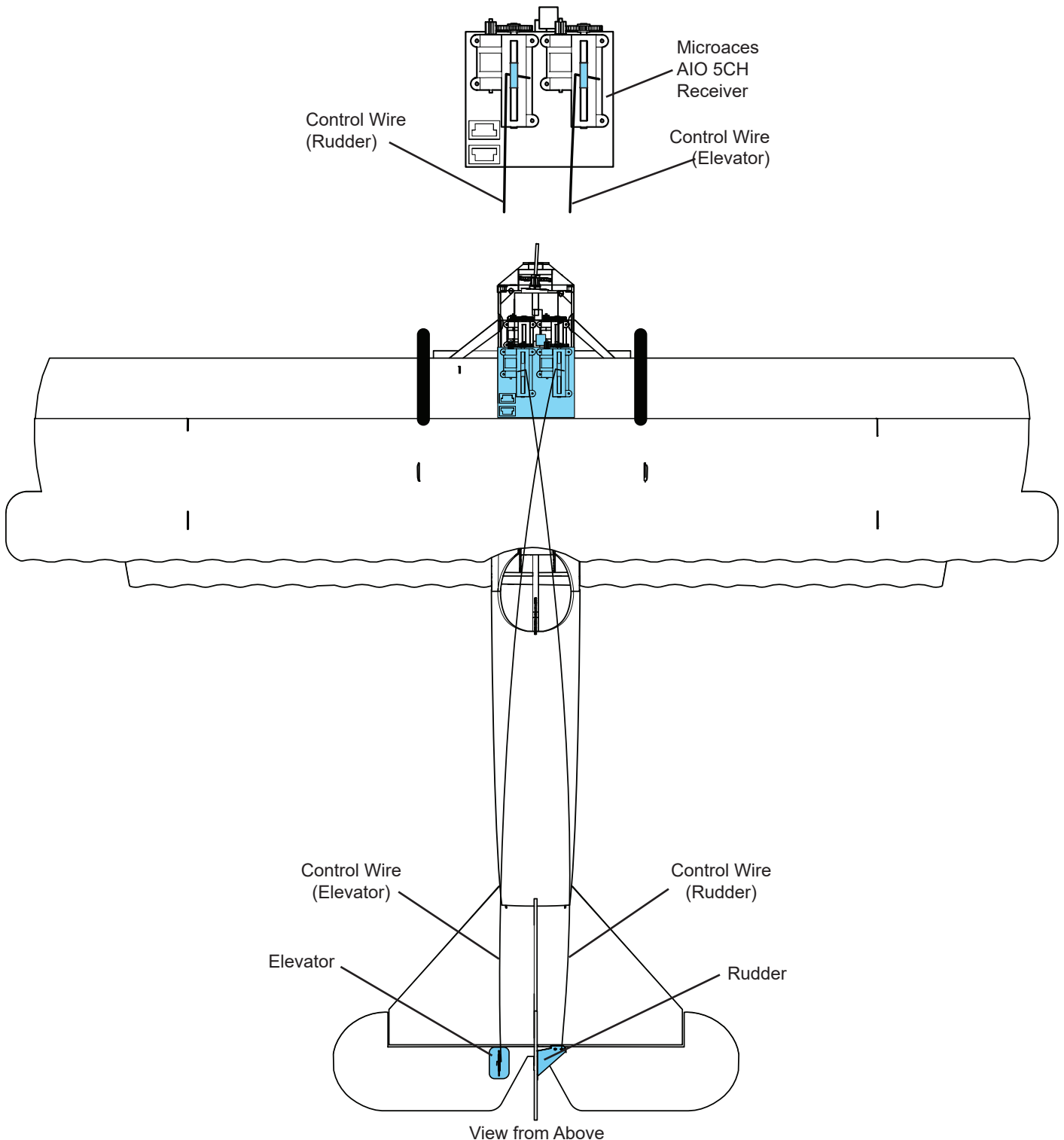


* Not included in 'kit only' kit

STAGE 8 CONTROLS



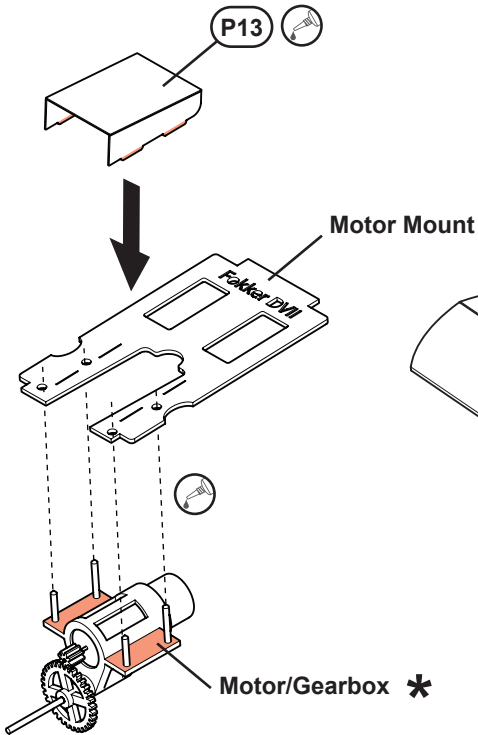
Insert individual control wire from the rear and attach to appropriate control horn. Set control surface to neutral then, using slim or needle nose pliers, bend the end of the control wire at the point it will need to attach to the servo arm. Un-hook the control wire from the control horn, pull out of the fuselage and complete the hook bend for the servo arm. Trim hook to 4mm in length.



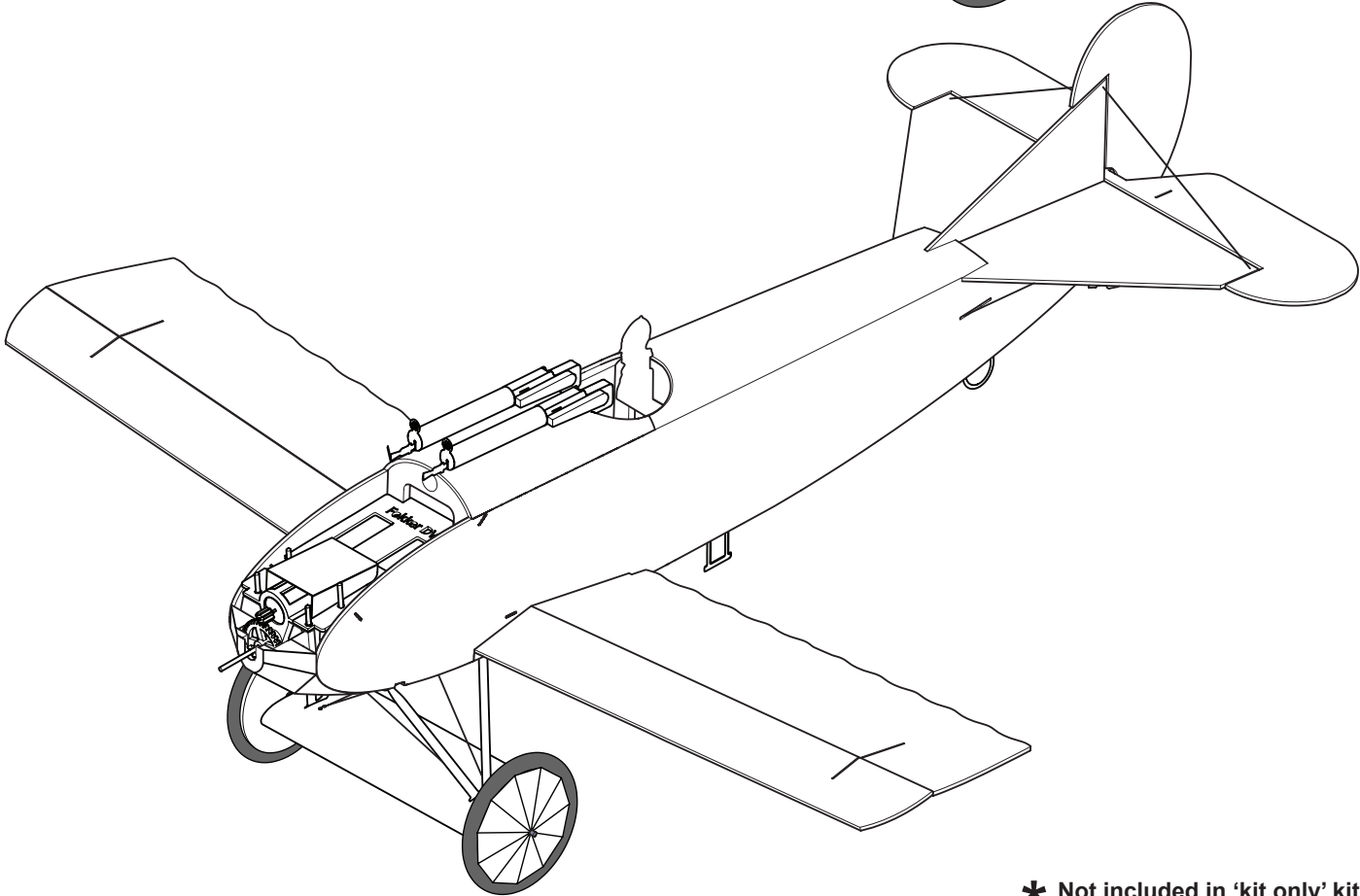
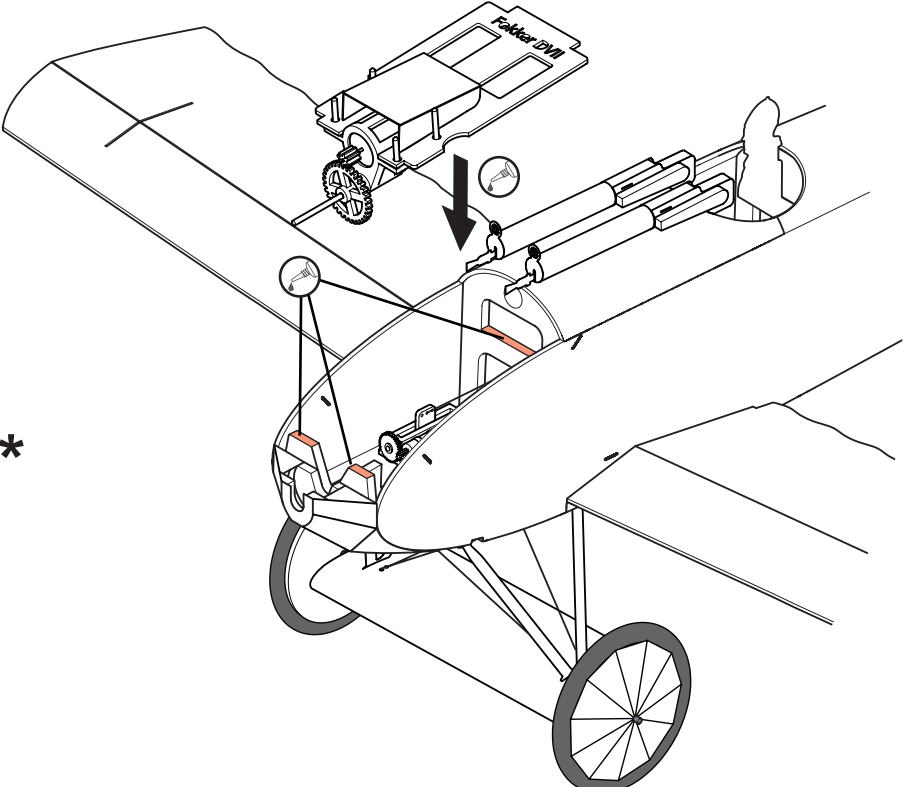
The Control Horns for the rudder and elevator are very flexible. Install the control wires for each and use tweezers to bend the horns to insert the 'Z' bend into the hole.

Use the outer hole of the control horns for more gentle control of your aircraft!

STAGE 9 MOTOR MOUNT



i Use contact adhesive sparingly to attach ply motor mount to airframe

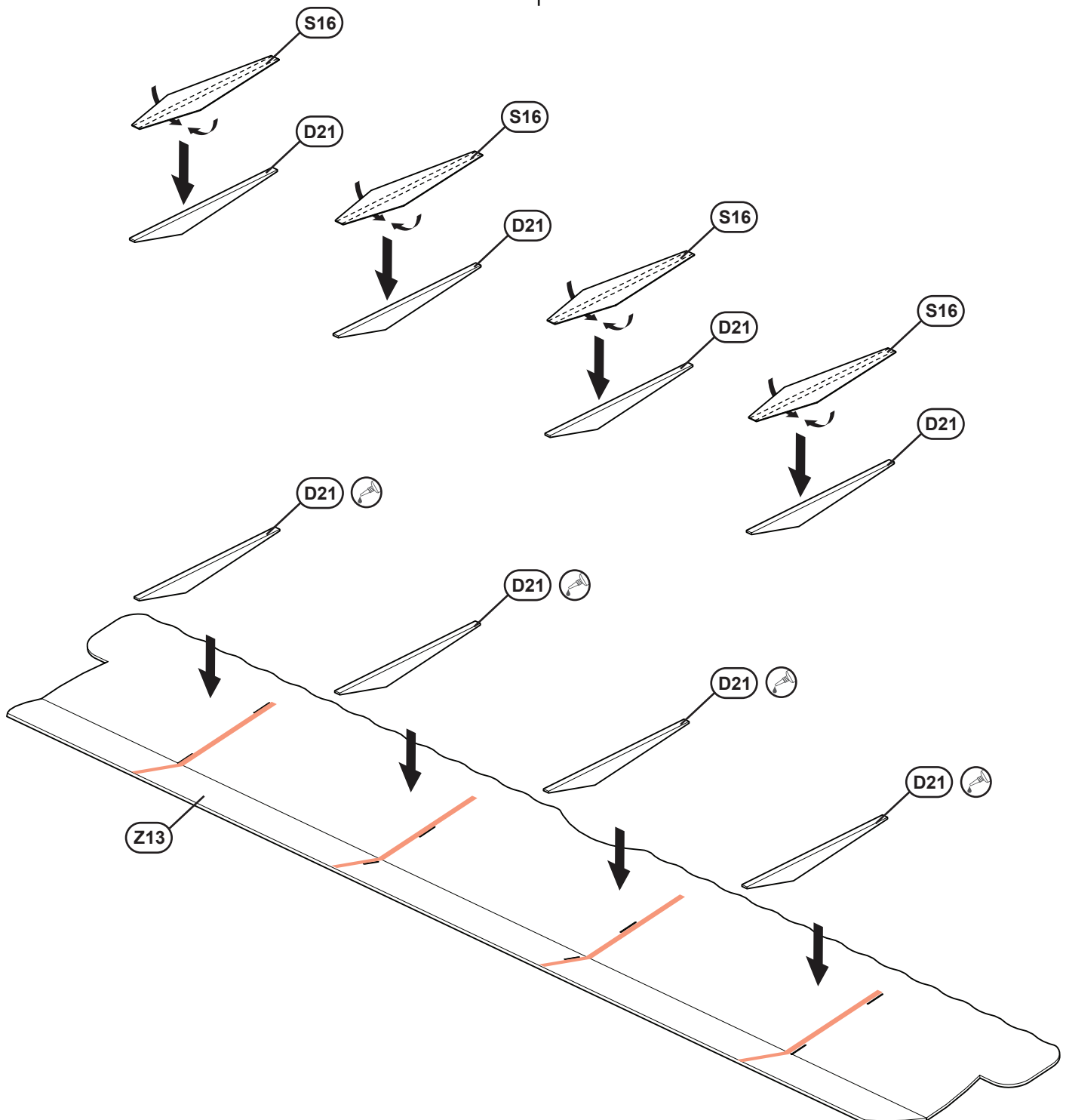
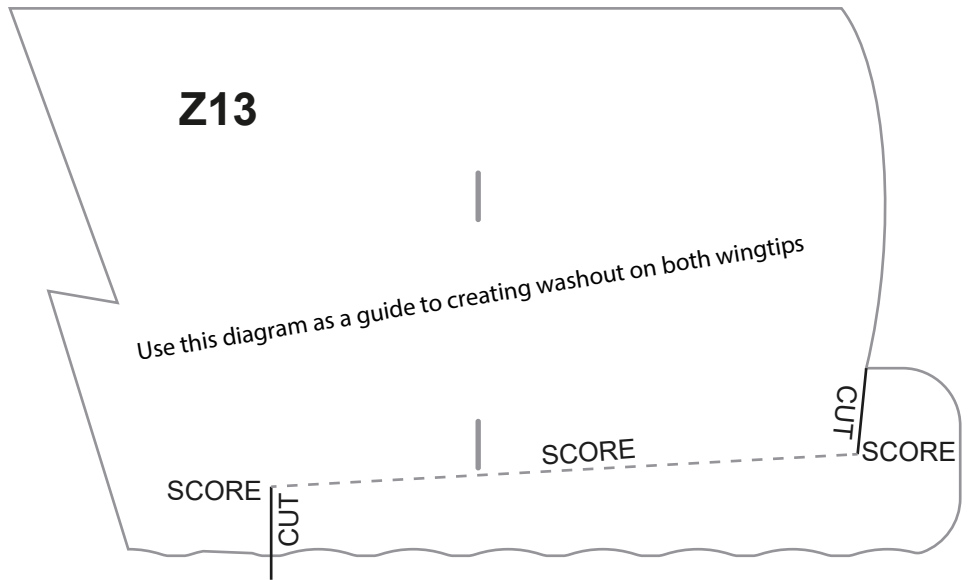


* Not included in 'kit only' kit

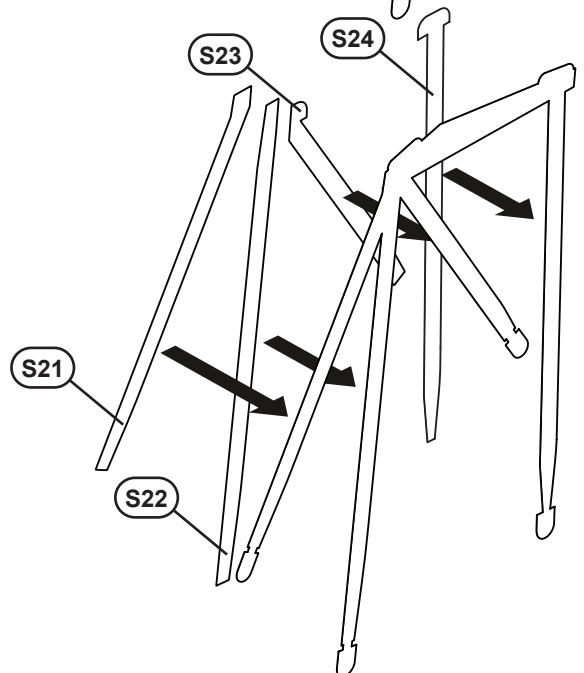
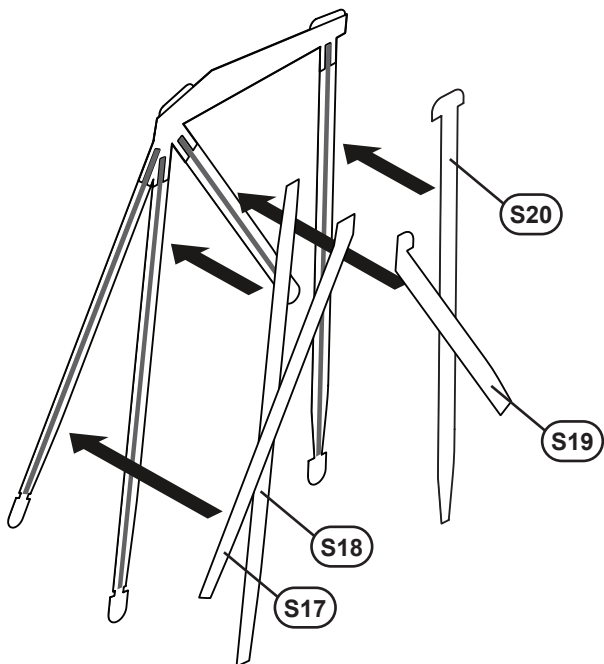
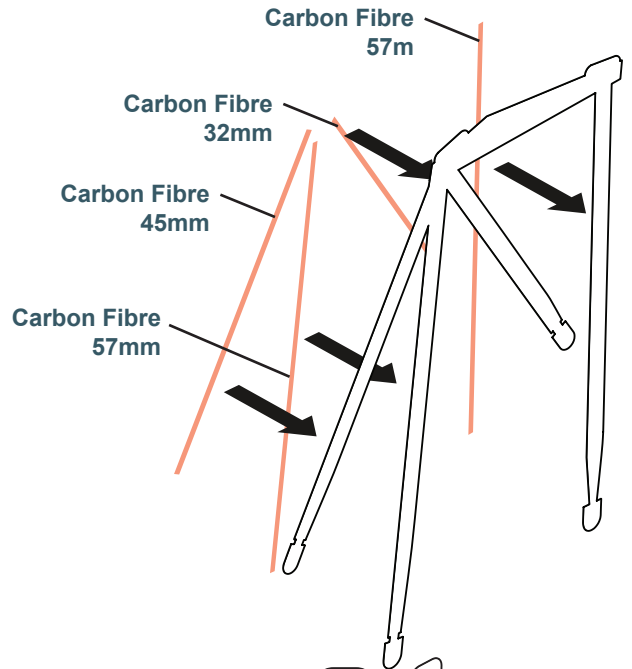
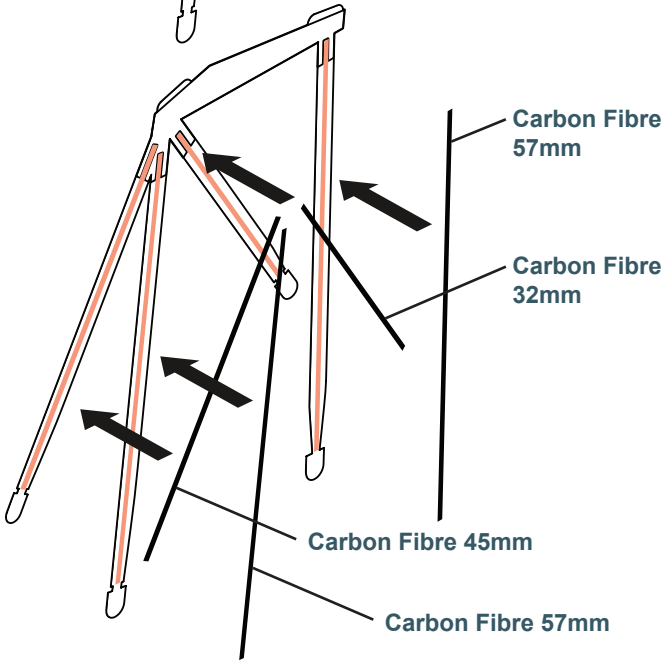
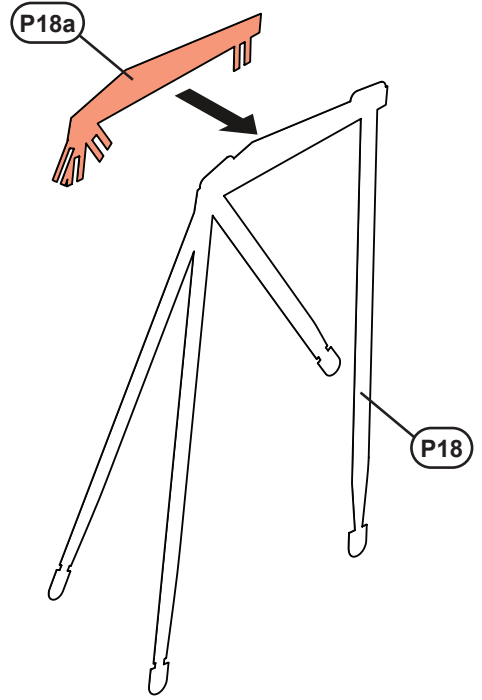
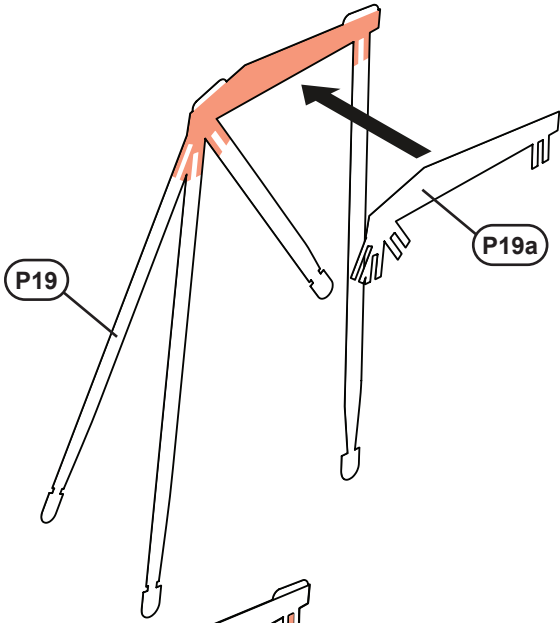
STAGE 10 UPPER WING

To increase stability in flight both of the ailerons can be used to great effect to provide 'washout' to the upper wing tips.

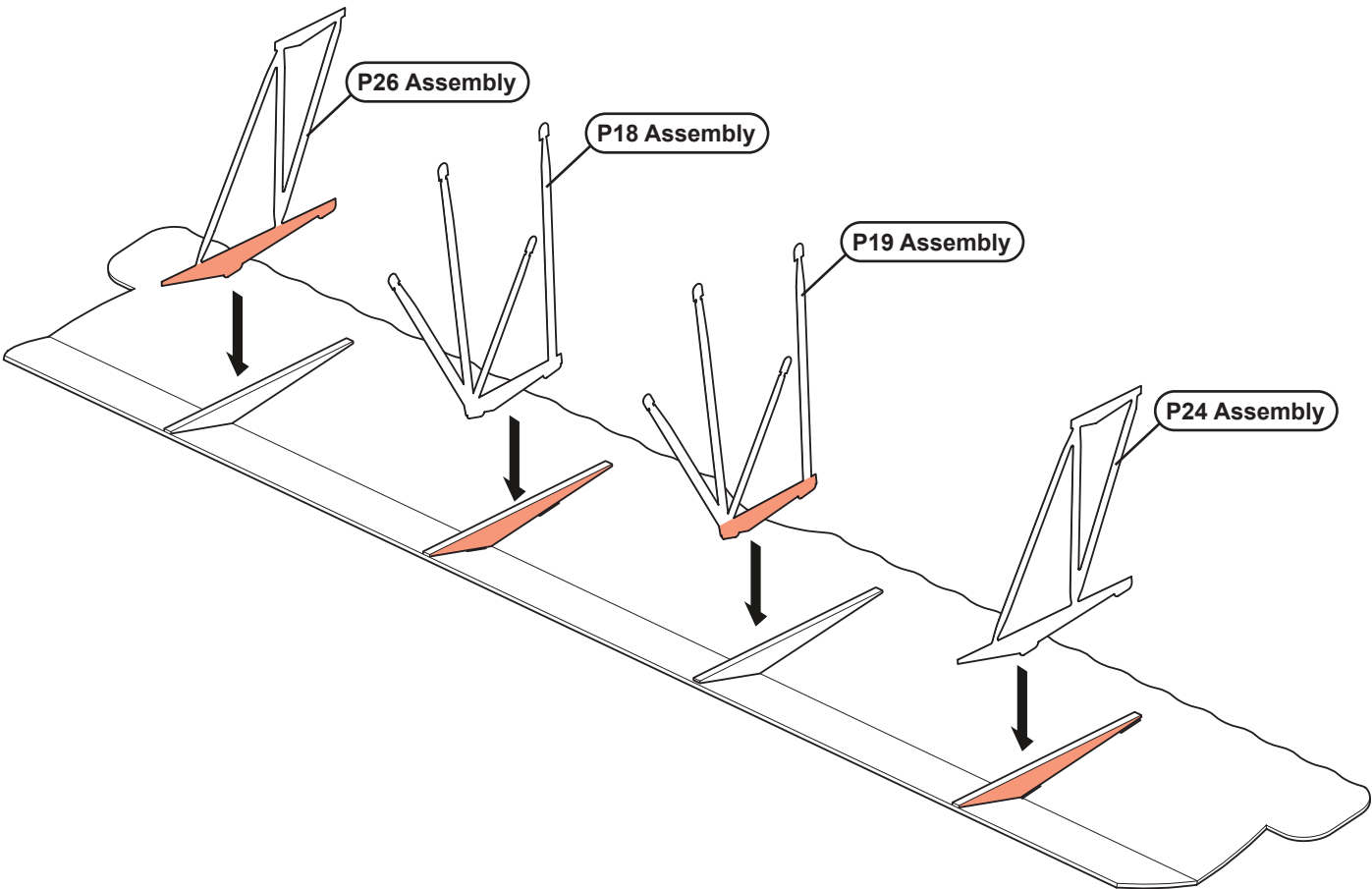
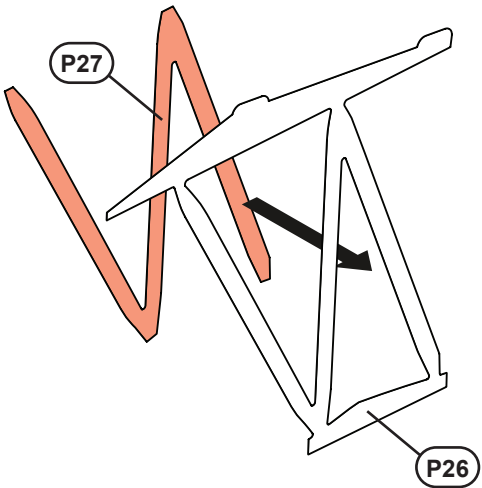
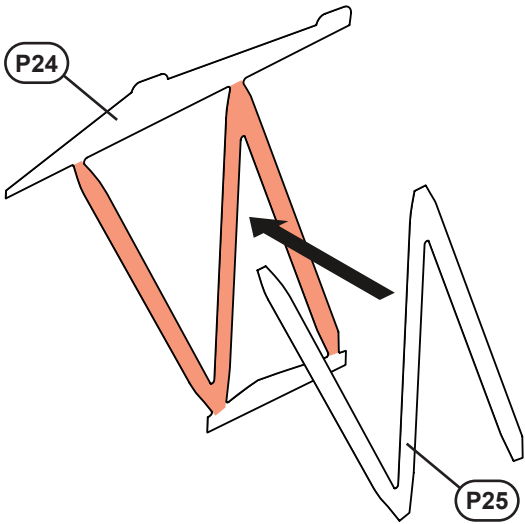
Bending both ailerons up by 1mm at the tips can make the difference between a pleasurable experience and a battle of wits!



STAGE 10 UPPER WING

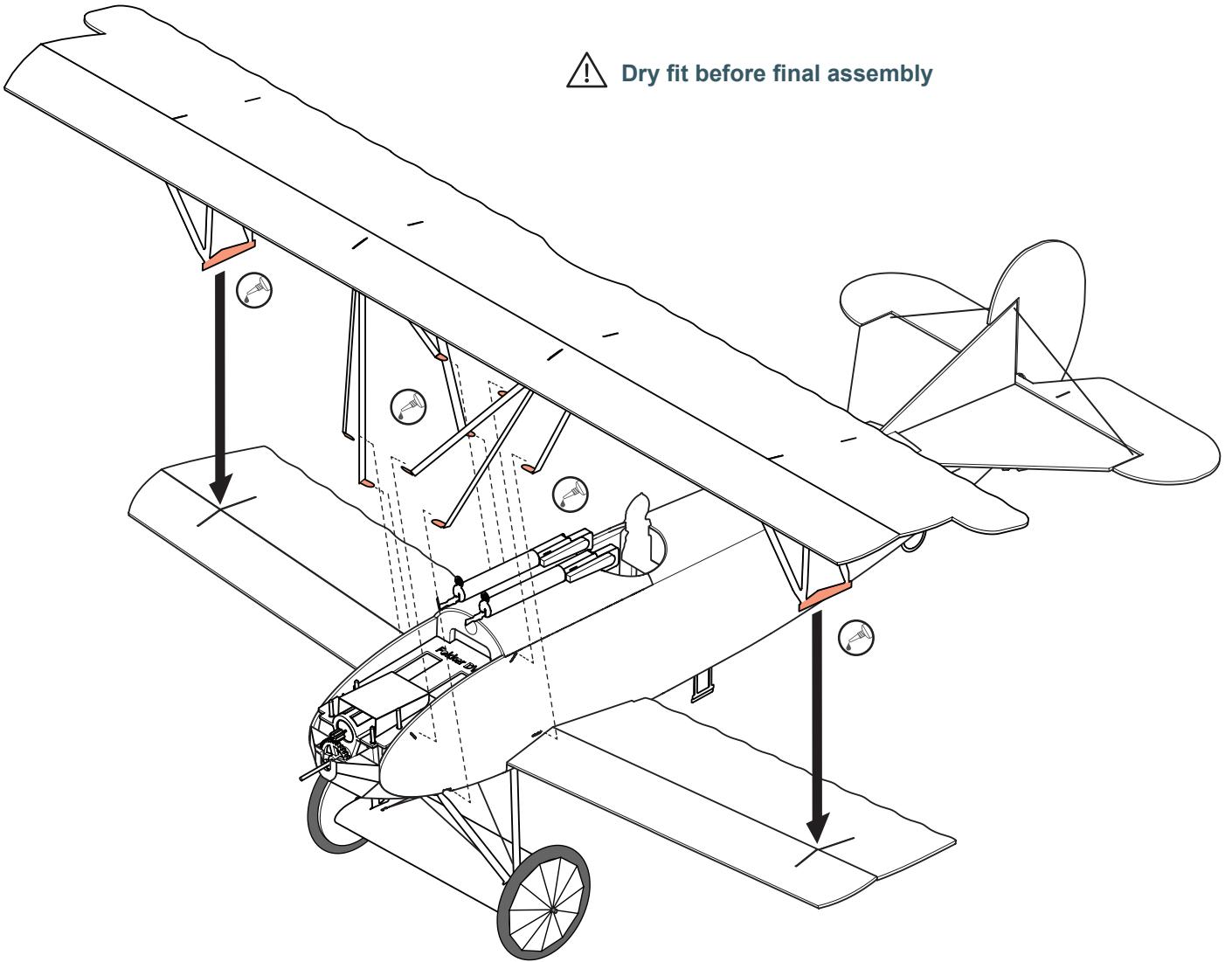


STAGE 10 UPPER WING

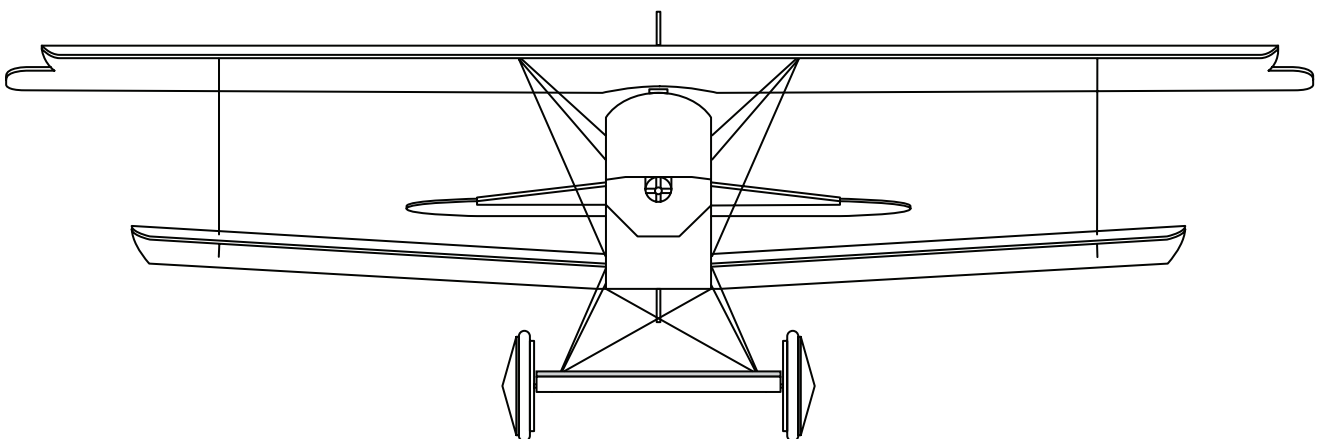


STAGE 10 UPPER WING

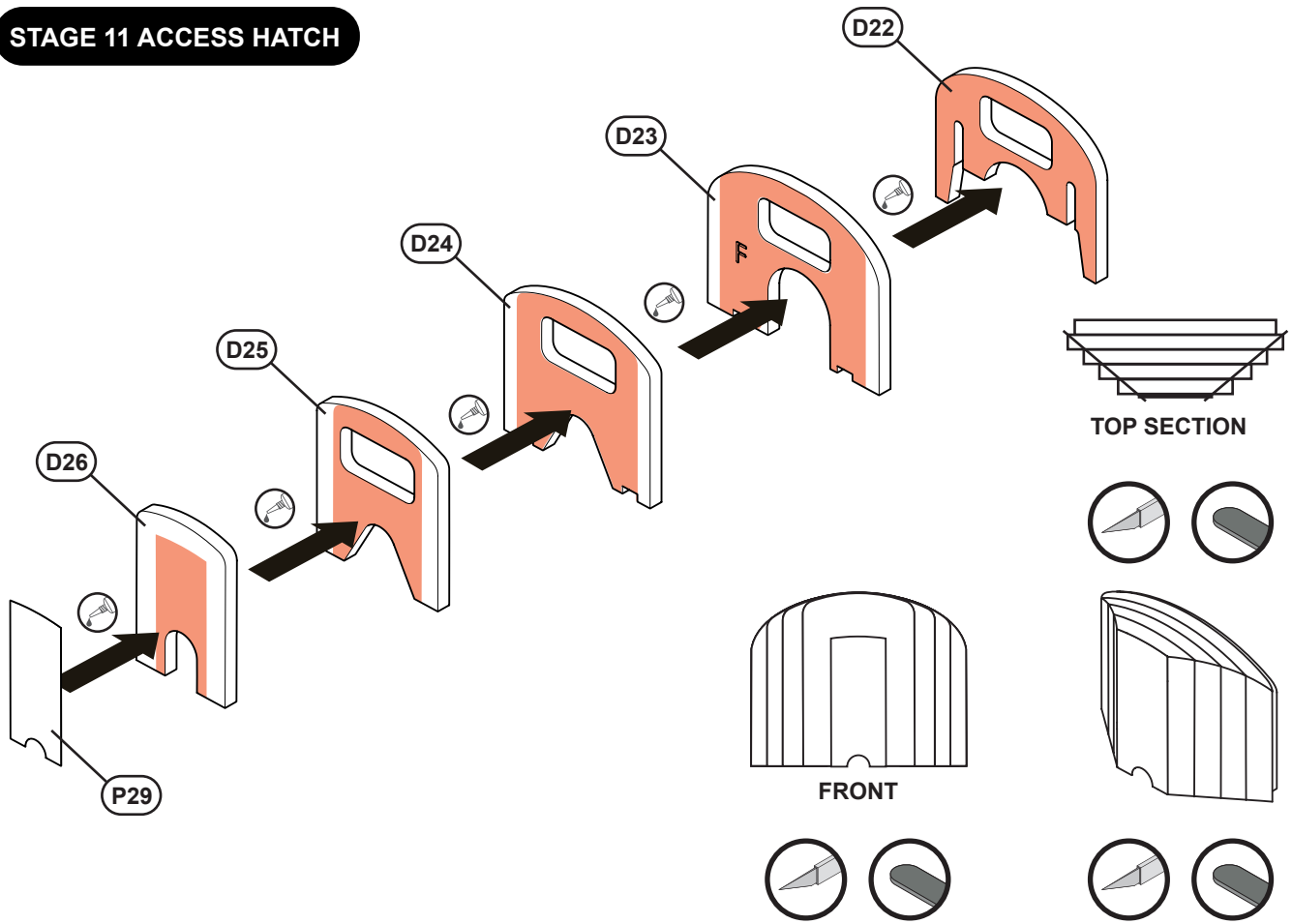
⚠ Dry fit before final assembly



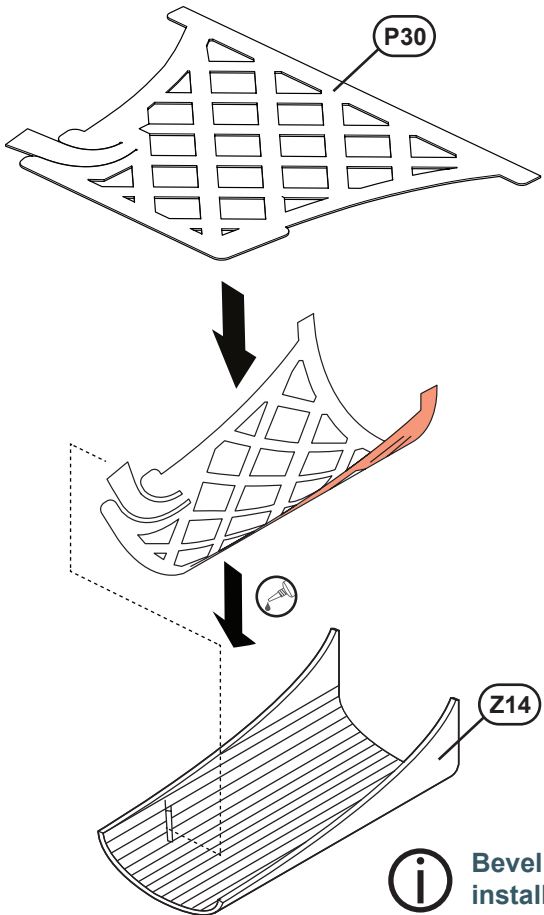
Ensure wings are perpendicular to fuselage, are not twisted and lower wing has visible dihedral



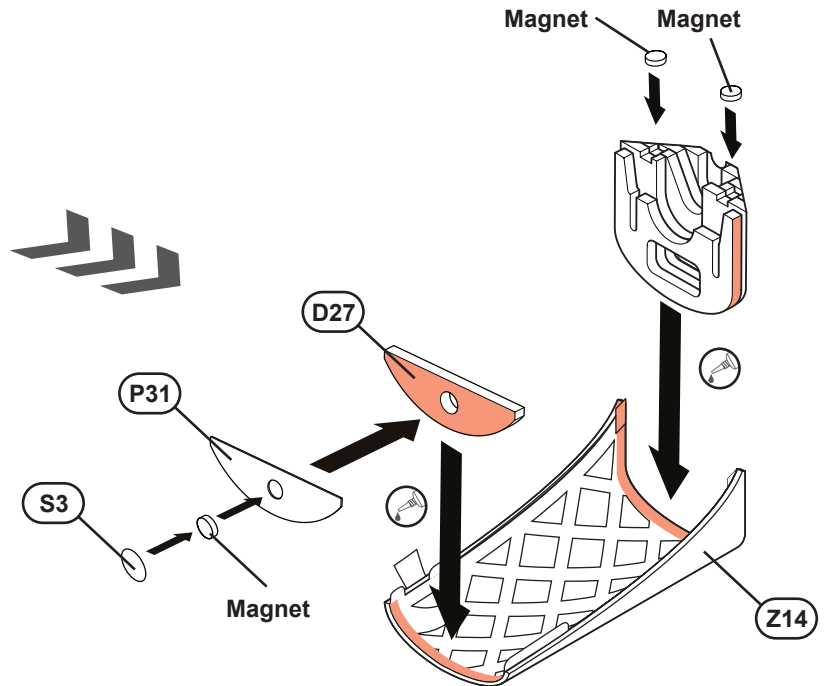
STAGE 11 ACCESS HATCH



i Ensure the magnets are correctly oriented before installation. Do this by matching them to the magnets installed in the chin before installing it here.

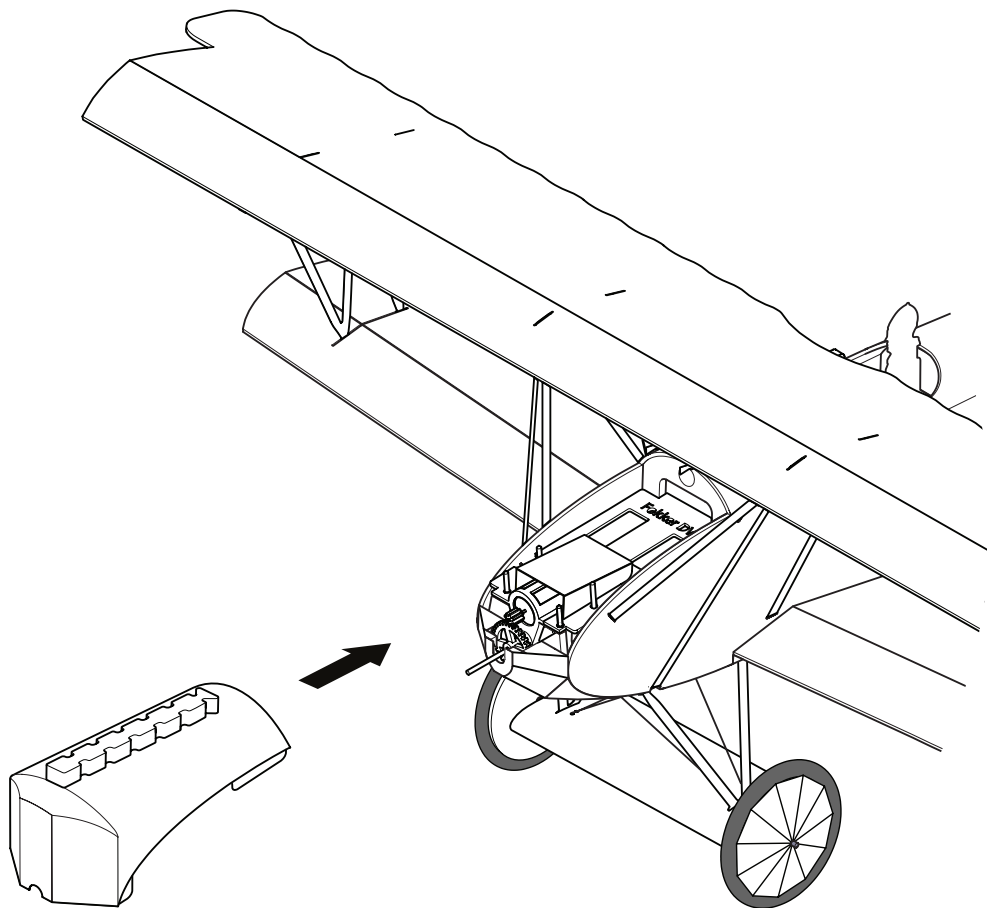
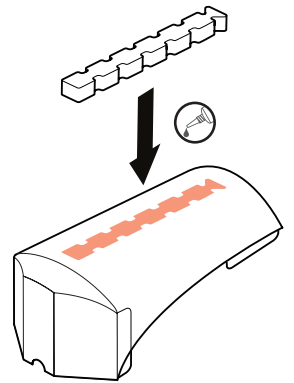
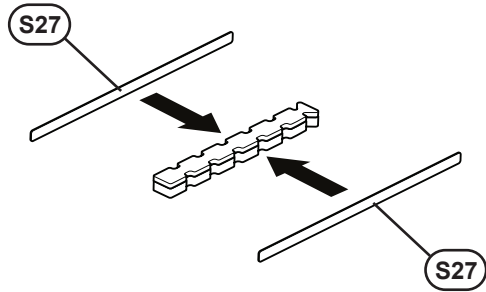
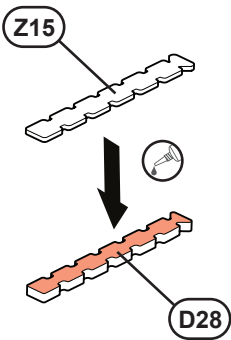
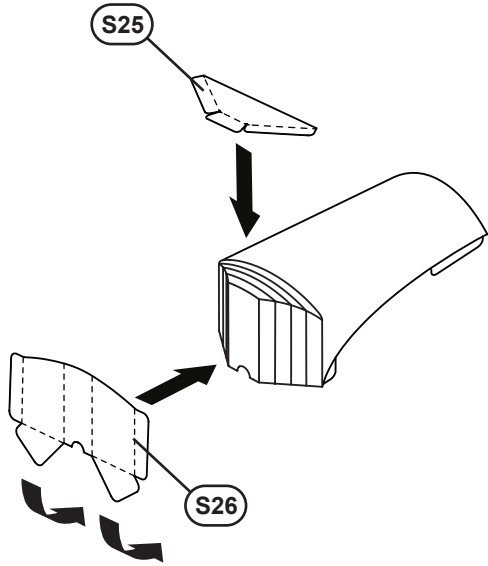


i Bevel & Score Z14 before installation - See Scoring & Beveling guide #2

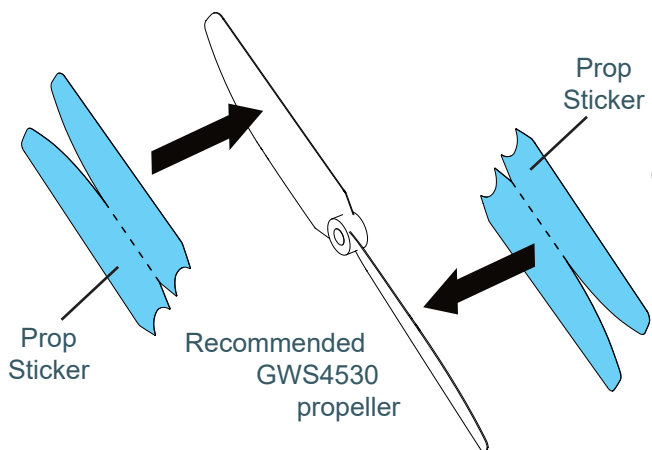


i Ensure the magnet is correctly oriented before installation. Do this by matching it to the magnet installed in the fuselage firewall

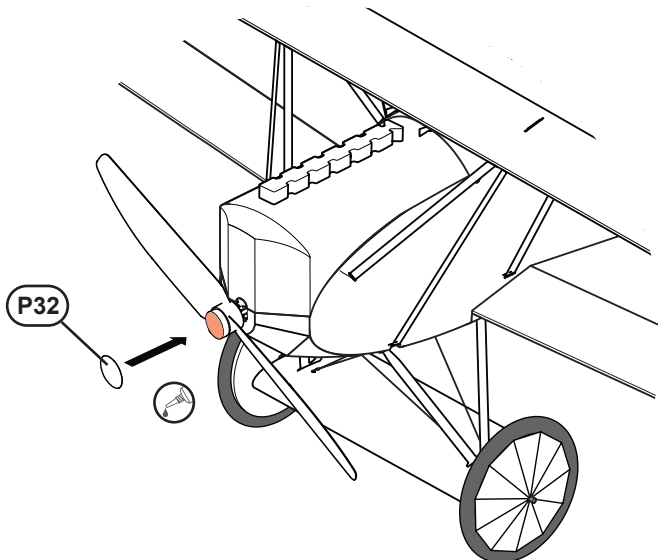
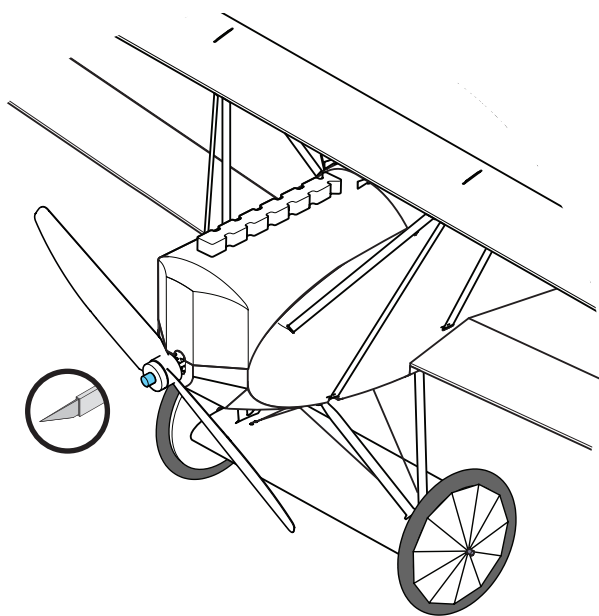
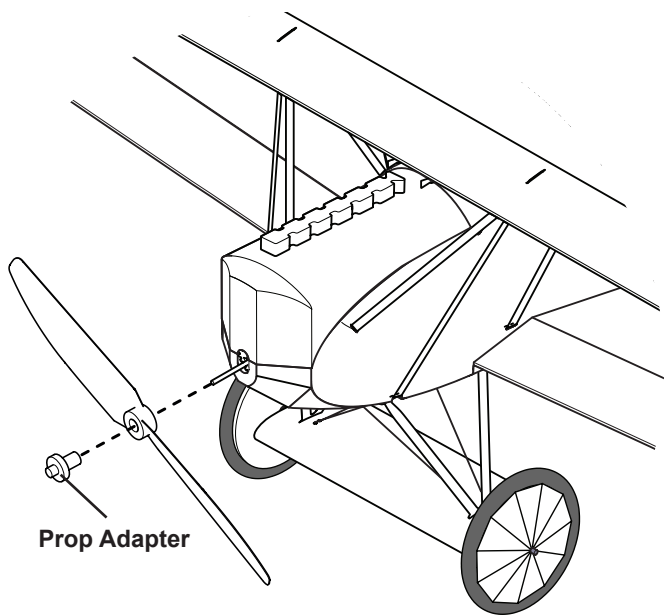
STAGE 11 ACCESS HATCH



STAGE 12 FINISHING TOUCHES



i Wet adhesive side of sticker to allow for correct positioning

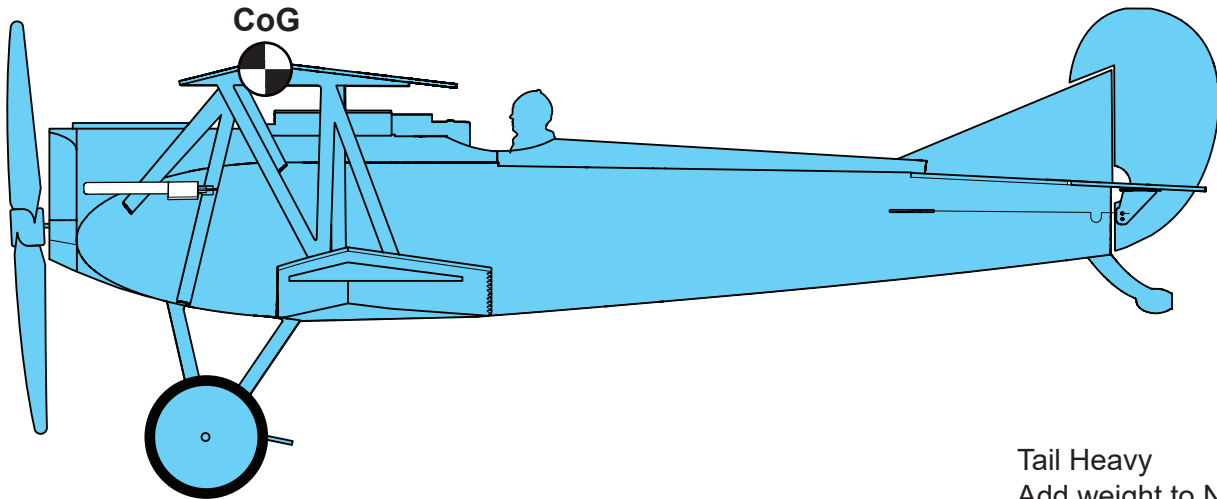


STAGE 12 FINISHING TOUCHES

Centre of Gravity (CoG)

With all the electronics installed including the battery, the CoG should be around the apex of the top wing as shown on the diagram below.

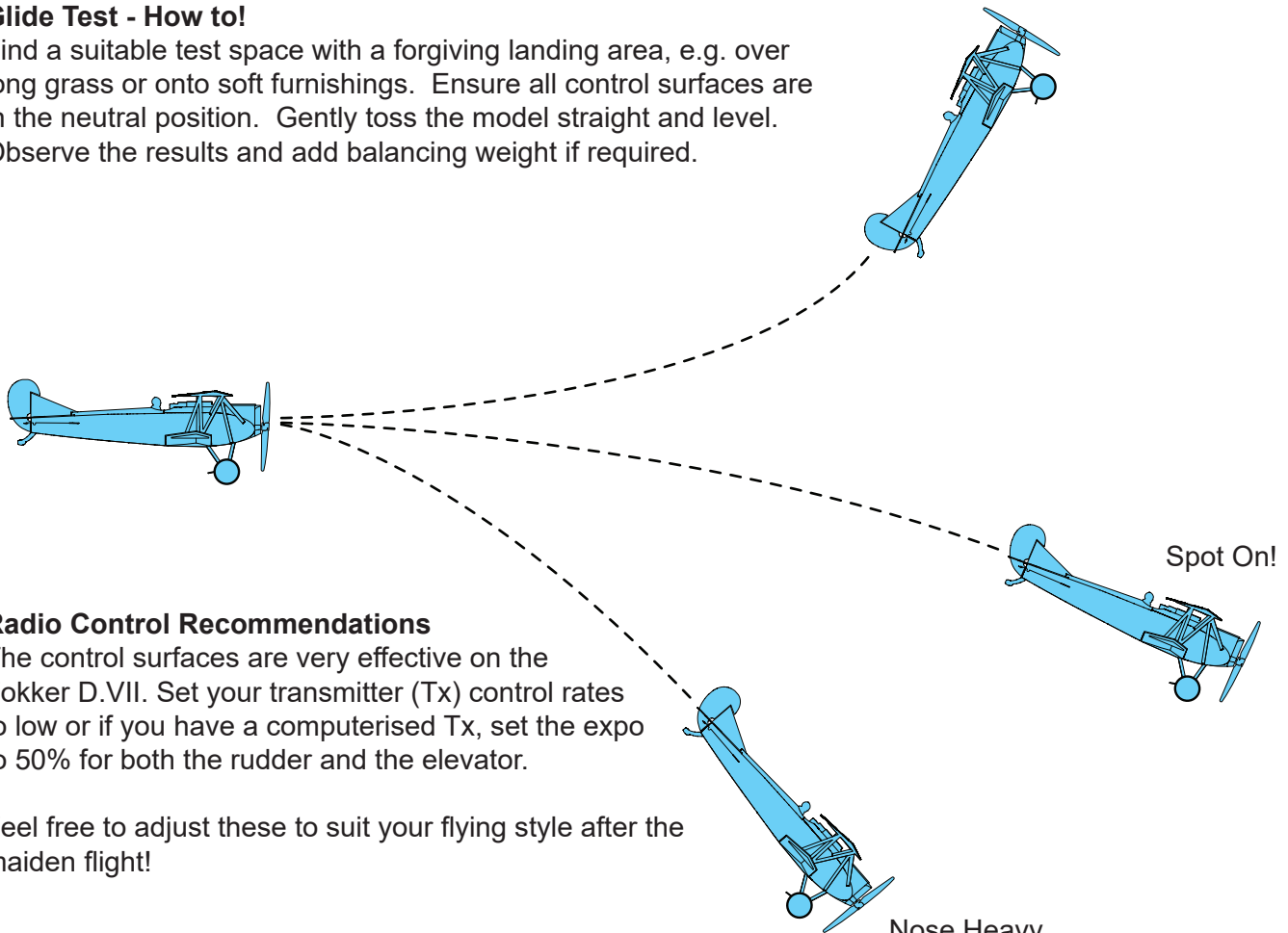
Balance on finger tips to see if the aircraft balances at this point. Before adding any weight it is advisable to perform a glide test. Add weight accordingly to obtain a smooth glide.



Glide Test - How to!

Find a suitable test space with a forgiving landing area, e.g. over long grass or onto soft furnishings. Ensure all control surfaces are in the neutral position. Gently toss the model straight and level. Observe the results and add balancing weight if required.

Tail Heavy
Add weight to Nose



Radio Control Recommendations

The control surfaces are very effective on the Fokker D.VII. Set your transmitter (Tx) control rates to low or if you have a computerised Tx, set the expo to 50% for both the rudder and the elevator.

Feel free to adjust these to suit your flying style after the maiden flight!

Nose Heavy
Add weight to Tail

Happy Flying!