CESSNA 188
AGWAGON

SEMI SCALE MODEL



.60 CLASS
2 STROKE GLOW

6S 300-400KV
ELECTRIC MOTOR

.90 CLASS
4 STROKE GLOW

10cc CLASS
GAS ENGINE

INSTRUCTION MANUAL

SPECIFICATIONS

- Wingspan : 1920mm
- Length : 1300mm
- Electric Motor : 300-400kv (NTM 5060 380kv)
- Glow Engine : .60 2 Stroke / .90 4 stroke
- Gas Engine : 10cc
- Radio : 6 channel / 7-8 standard size servos

TECHNISCHE DATEN

- Spannweiter : 1920mm
- Lange : 1300mm
- Elektroantrieb : 300-400kv (NTM 5060 380kv)
- Verbrennerantrieb : .60 2 Stroke / .90 4 stroke
- Gas Engine : 10cc
- Fernsteuerung : 6 channel / 7-8 standard size servos

HobbyKing.com®

RADIO CONTROL MODEL®

WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if you are unexperienced.

ACHTUNG! Dieses ferngesteuerte Modell ist KEIN Spielzeug! Es ist für fortgeschrittene Modellflugpiloten bestimmt, die ausreichende Erfahrung im Umgang mit derartigen Modellen besitzen Bei unsachgemäßer Verwendung kann hoher Personen- und/oder Sachschaden entstehen. Fragen Sie in einem Modellbauverein in Ihrer Nähe um professionelle Unterstützung, wenn Sie Hilfe im Bau und Betrieb benötigen. Der Zusammenbau dieses Modells ist durch die vielen Abbildungen selbsterklärend und ist für fortgeschrittene, erfahrene Modellbauer bestimmt.

WARNING

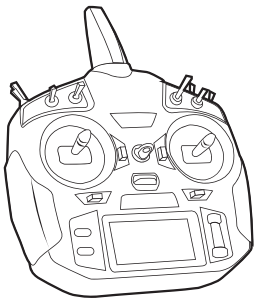
Please read this instruction manual fully and become completely familiar with the features of this product before operating. Failure to operate this product correctly could result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product and is NOT a toy. It must always be operated with caution, common sense and some basic mechanical ability. This manual provides instructions as to the assembly, safe operation and maintenance of this hobby product. It is highly recommended that you follow and read fully the instructions and warnings stated in this manual including safety, assembly, set-up and flying guidelines in order to operate this product correctly and avoid damage or serious injury.

SAFETY PRECAUTIONS

As the user of this product you and you alone are responsible for operating it in a manner that does not endanger yourself and others around you or result in damage to the product or property of others. This product is operated via a radio controlled system that in some cases can be subject to interference from sources outside of your control. Interference may result in a momentary loss of control so it is always recommended that this product be used in a suitably open outdoors space.

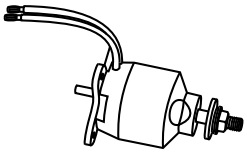
- This is a radio controlled flying model and as such must always be flown with caution and care. This is not a toy.
- The Tiger Moth is designed for intermediate to advanced pilots.
- Alway exercise great caution when using the recommended battery to power this product. For full safety notes and operating procedures, please see information provided by your battery supplier.
- Take great care when connecting/disconnecting the battery. See battery supplier for full safty procedures.
- Never power up the model in confined spaces and always keep the prop clear of obstructions.
- This product is not a toy. Children must be accompanied by an adult at all times if operating this product.
- Only fly this model in an open area away from crowds, people, buildings, trees, power lines and obstructions.
- Always put safety first when operating this model and consider the warnings stated above.
- The supplier/manufacturer accepts no responsibility for damage or injury caused through the use of the product. Not suitable for children under the age of 14. **THIS IS NOT A TOY.**

REQUIRED TO COMPLETE (PURCHASE SEPARATELY)

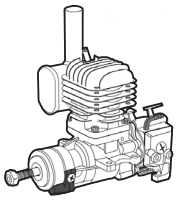


Minimum 6 channel radio
for airplane
Minimum 6 Kanal
Fernsteuerung

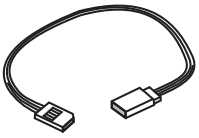




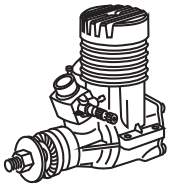
Brushless Motor: NTM 5060 380kv
Brushless ESC: 70-100 amp ESC
Battery/Flugakku LEMONRC:
Turnigy NanoTech 5000mah 6S



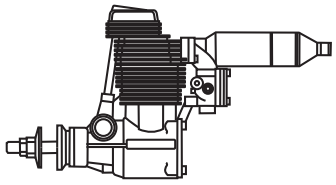
0.61 cu.in. (10cc)



Extension cord
Servoverlangerungskabel



.60 cu.in. (7.5cc)



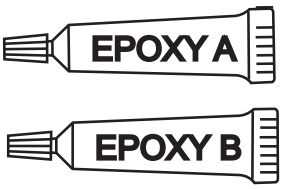
.90 cu.in (8.5cc)



Cyanoacrylate Glue
Sekundenkleber

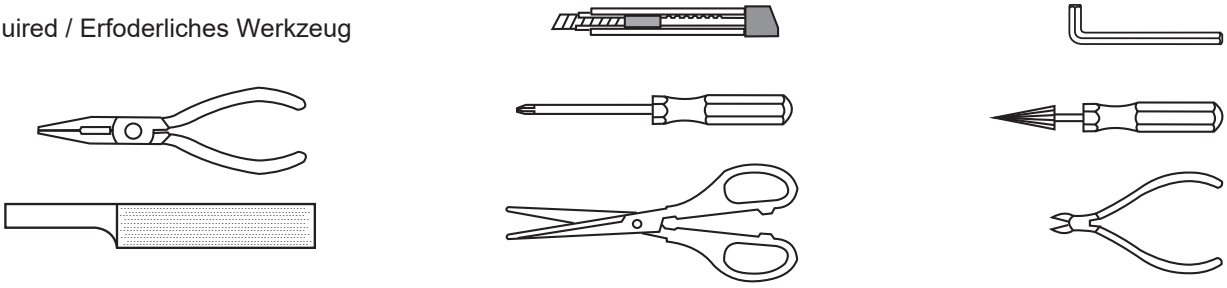


Silicon Glue
Silikonkleber



Epoxy Glue (30 minutes type)
Epoxy-Klebstoff (30min)

Tool Required / Erfoderliches Werkzeug



The pre-covered film on ARF kit may wrinkle due to variations of temperature.
Store model in a cool and dry place for awile.
Then, staring with low heat, you may carefully use a hair dryer to smooth out wrinkels.

Die Bespannung des Modells kann durch Temeratureinflusse erschlaffen oder Falten werfen z.b bei zu starker Sonnenenstrahlung oder Hitze.
Stellen Sie das Modell zunachst an einen kuhlen Platz fur eine bestimmte Zeit. Danach konnen Sie versuchen die restlichen Falten vorstichtig mit einem Haartrockner zu behandeln.





Drill holes using the stated size of drill (in this case 1.5 mm Ø)



Take particular care here



Hatched-in areas: remove covering film carefully



Check during assembly that these parts move freely, without binding



Use epoxy glue



Apply cyano glue



Assemble left and right sides the same way.



Not included.
These parts must be purchased separately



Löcher bohren mit dem angegebenen Bohrer (hier 1,5 mm)



Hier besonders aufpassen



Schraffierte Stellen, Bespannfolie vorsichtig entfernen



Während des Zusammenbaus immer prüfen, ob sich die Teile auch reibungslos bewegen lassen



Epoxy-Klebstoff verwenden



Sekundenkleber auftragen



Linke und rechte Seite wird gleichermaßen zusammengebaut

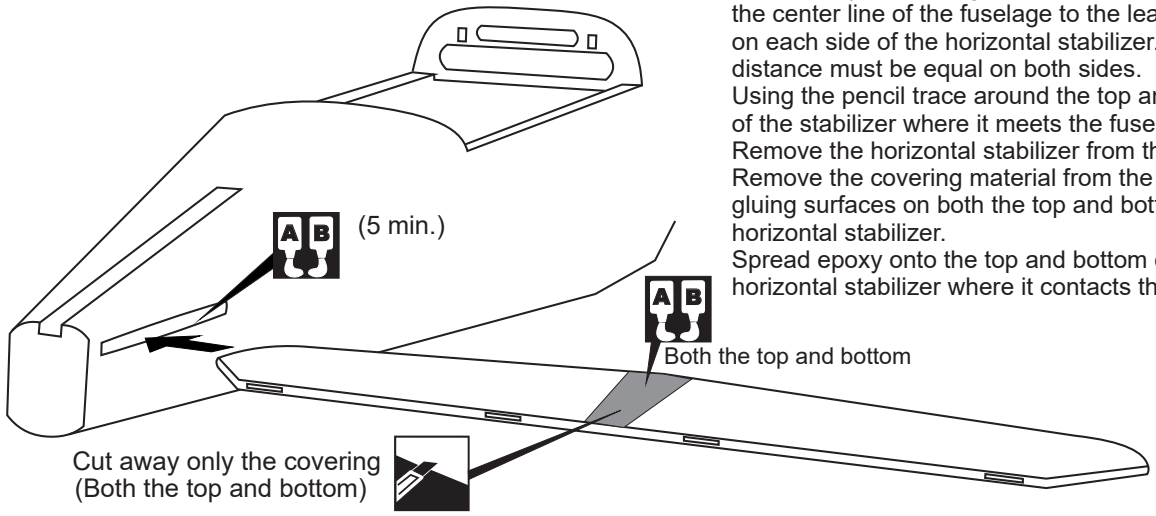


Nicht enthalten. Teile müssen separat gekauft werden.

CONVERSION TABLE

1.0mm = 3/64”	3.0mm = 1/8”	10mm = 13/32”	25mm = 1”
1.5mm = 1/16”	4.0mm = 5/32”	12mm = 15/32”	30mm = 1-3/16”
2.0mm = 5/64”	5.0mm = 13/64”	15mm = 19/32”	45mm = 1-51/64”
2.5mm = 3/32”	6.0mm = 15/64”	20mm = 51/64”	

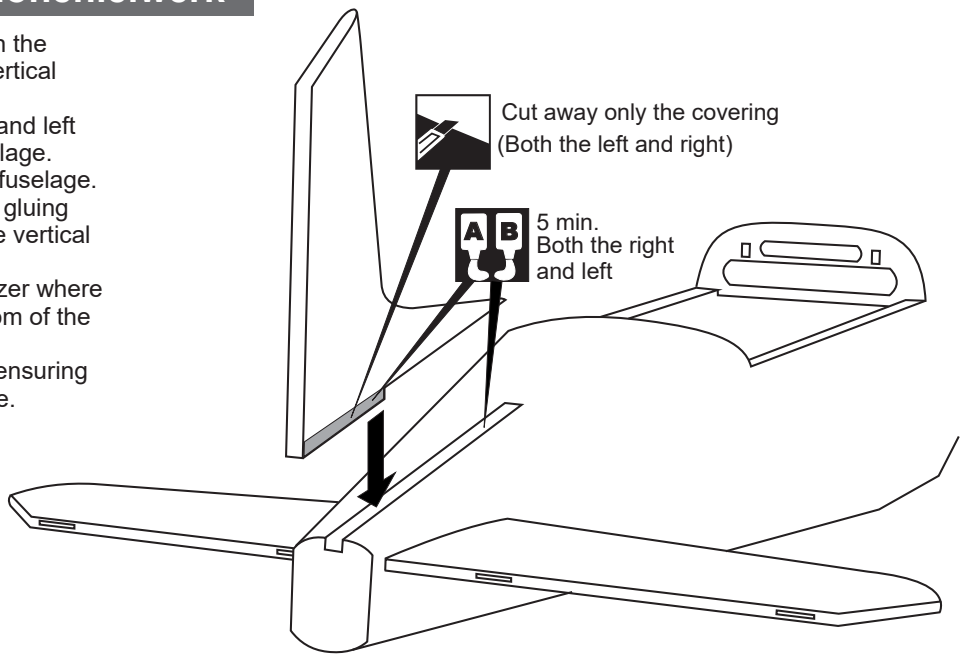
1- Horizontal Stabilizer / Höhenruder



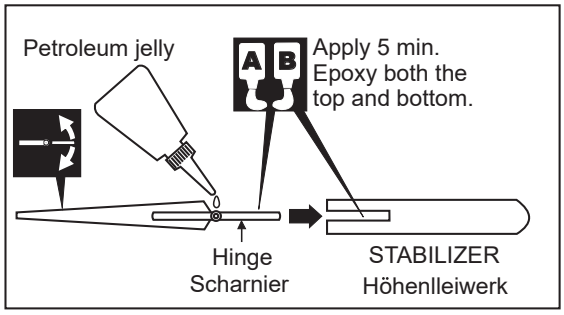
Trial fit the horizontal stabilizer in place on the fuselage. Check the alignment of the horizontal stabilizer by measuring from a fixed point along the center line of the fuselage to the leading edge on each side of the horizontal stabilizer. The distance must be equal on both sides.
Using the pencil trace around the top and bottom of the stabilizer where it meets the fuselage.
Remove the horizontal stabilizer from the fuselage
Remove the covering material from the gluing surfaces on both the top and bottom of the horizontal stabilizer.
Spread epoxy onto the top and bottom of the horizontal stabilizer where it contacts the fuselage.

2- Vertical Stabilizer / Höhenleiwerk

Trial fit the vertical stabilizer in place on the fuselage. Check the alignment of the vertical stabilizer.
Using the pencil trace around the right and left of the stabilizer where it meets the fuselage.
Remove the vertical stabilizer from the fuselage.
Remove the covering material from the gluing surfaces on both the right and left of the vertical stabilizer.
Spread the epoxy on the vertical stabilizer where it contacts the fuselage and to the bottom of the stabilizer.
Insert the vertical fin into the fuselage, ensuring that it is seated properly on the fuselage.

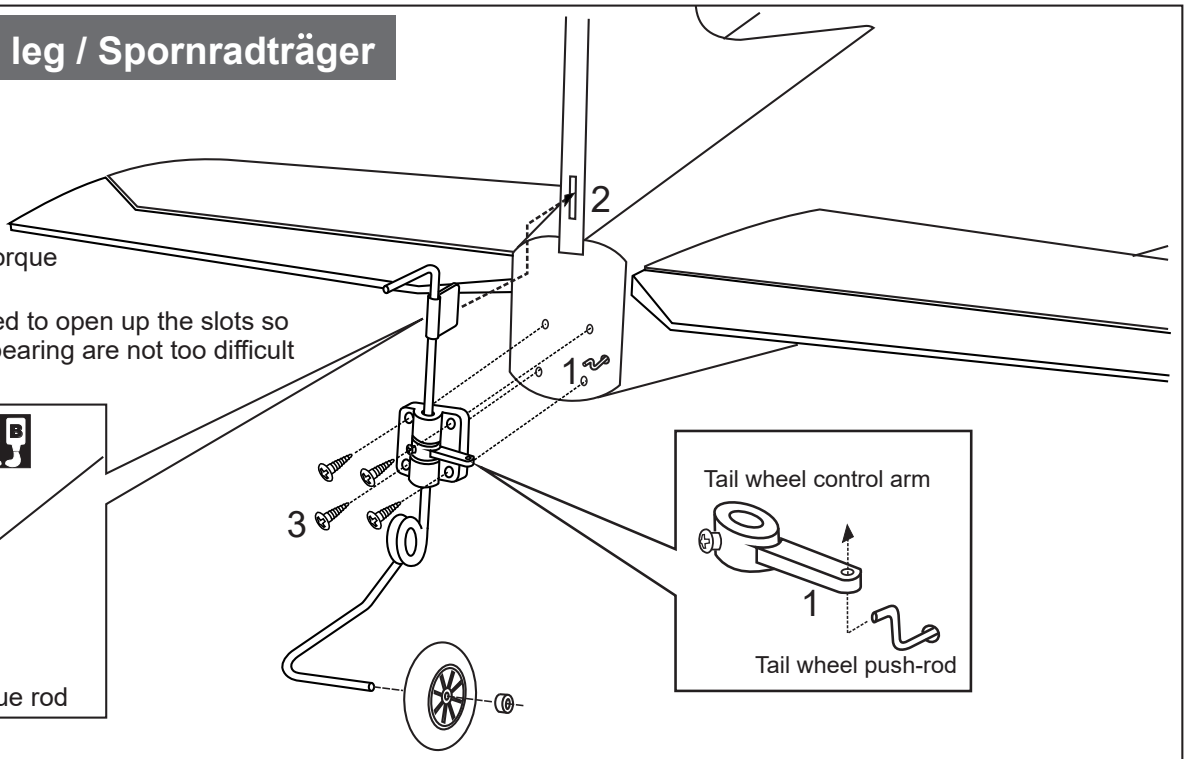


3- Elevator / Höhenruder



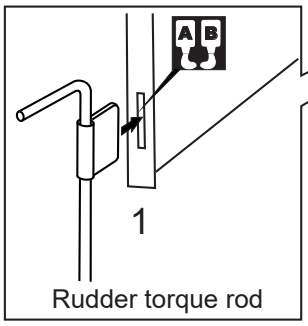
4- Tail wheel leg / Spornradträger

3x12mm screw 4



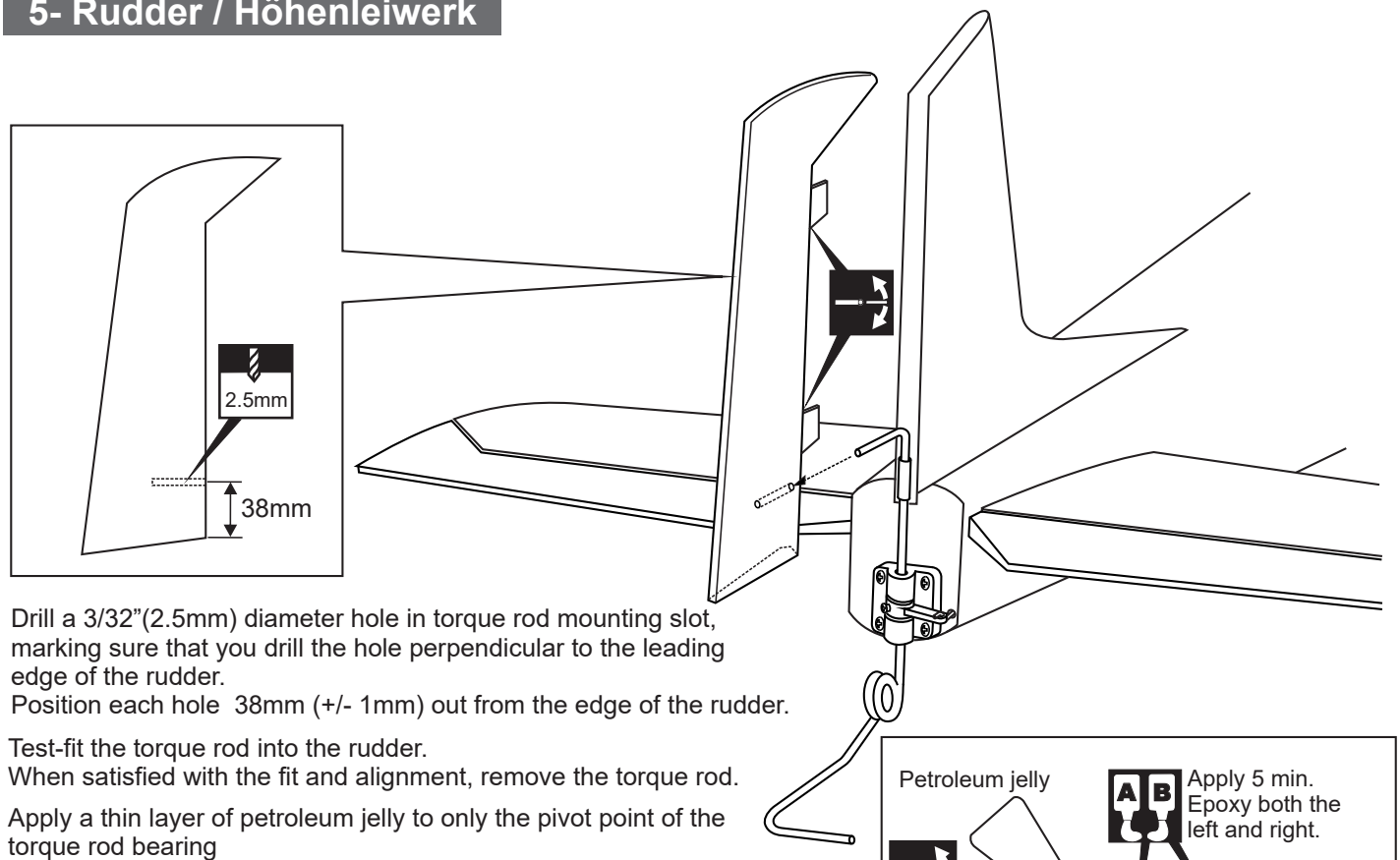
Test-fit the rudder torque rod into the slot.

NOTE: You may need to open up the slots so that the torque rod bearing are not too difficult to push in



1- Insert the tail wheel pushrod into the hole on the tail wheel control arm (as show).
2- Re-install the rudder torque rod and tail wheel mount in place.
3- Secure the tail wheel mount in place using four 3x12mm screws.
Secure the tail wheel control horn in place using a 1/8"(3mm) screw set, Ensure smooth non-binding movement.

5- Rudder / Höhenleiwerk

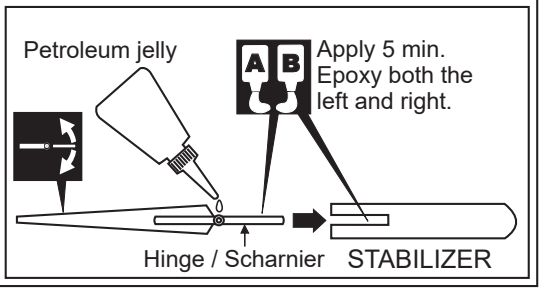


Drill a 3/32"(2.5mm) diameter hole in torque rod mounting slot, marking sure that you drill the hole perpendicular to the leading edge of the rudder.
Position each hole 38mm (+/- 1mm) out from the edge of the rudder.

Test-fit the torque rod into the rudder.
When satisfied with the fit and alignment, remove the torque rod.

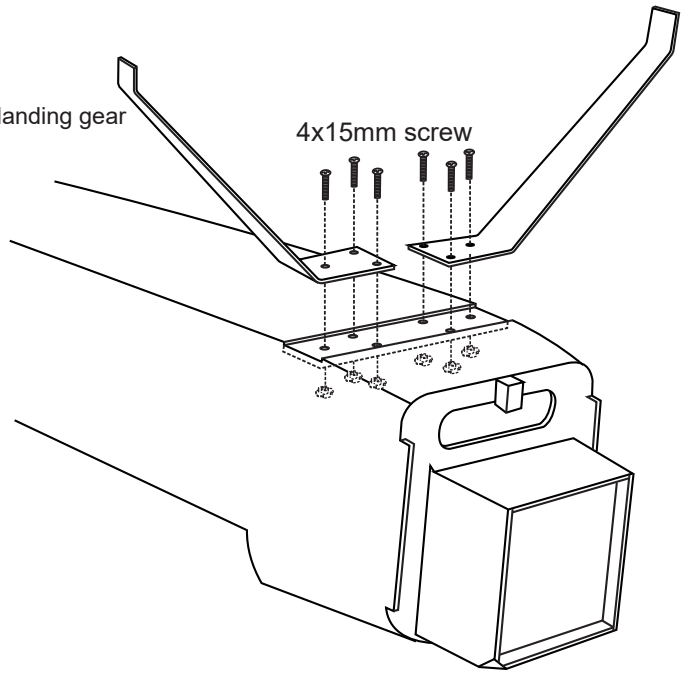
Apply a thin layer of petroleum jelly to only the pivot point of the torque rod bearing

Hinge the rudder to the vertical stabilizer, using 5 minute epoxy. Make sure to apply a thin layer of epoxy to the left and right of both hinges and to the inside the torque rod mounting slot and to the end of the torque rod itself.



6- Main landing gear / Fahrwerk

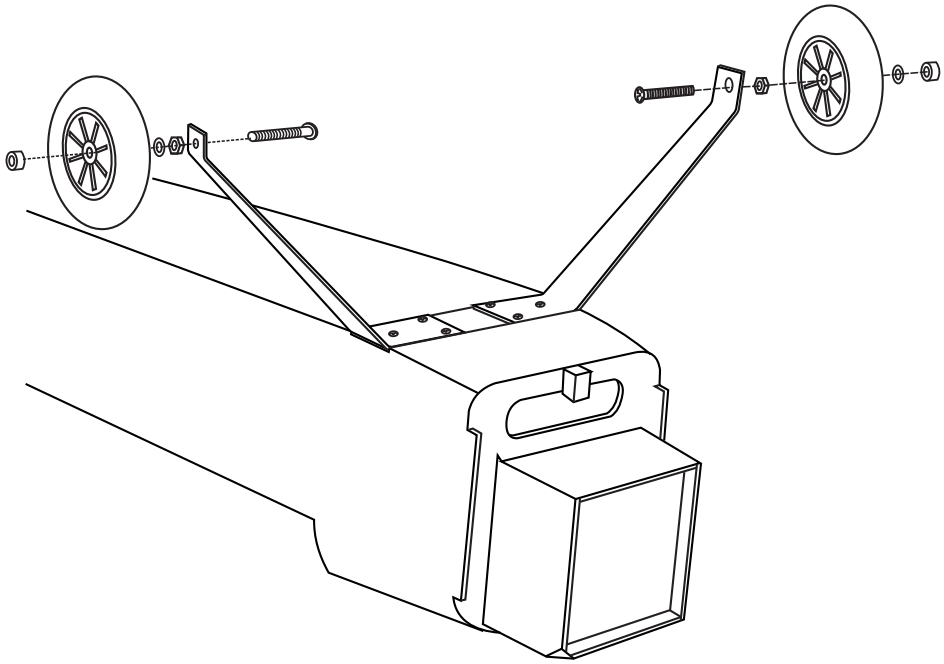
4X15mm screw
.....6



Note: All holes on the fuselage and bilnd-nuts are pre-installed at factory.

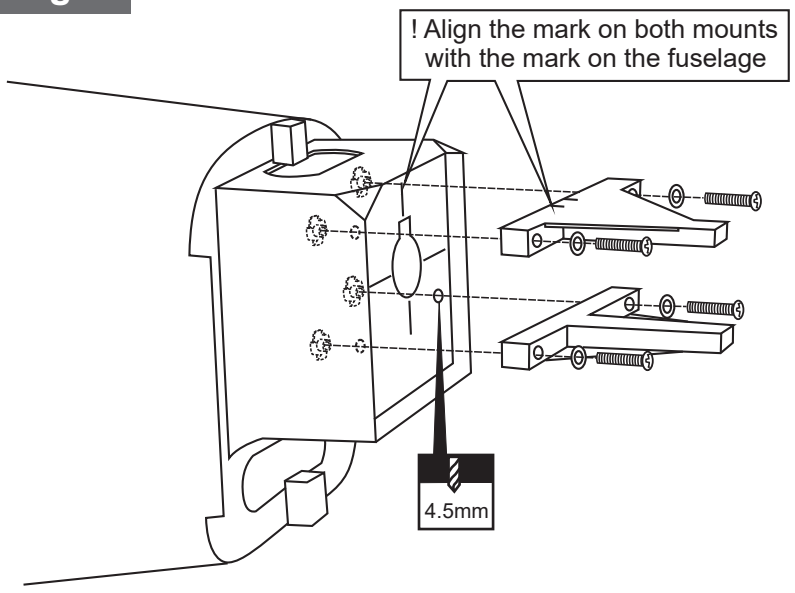
7- Wheel / Radl

4X30mm screw
.....2
.....2
.....2
.....2

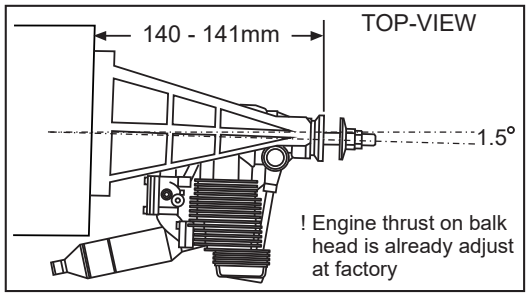


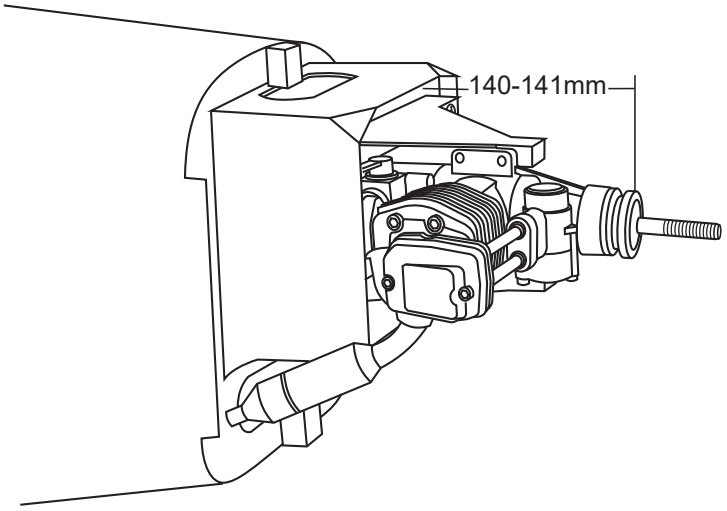
8- Engine mount / Motorträger

4X25mm screw
.....4
.....4
.....4

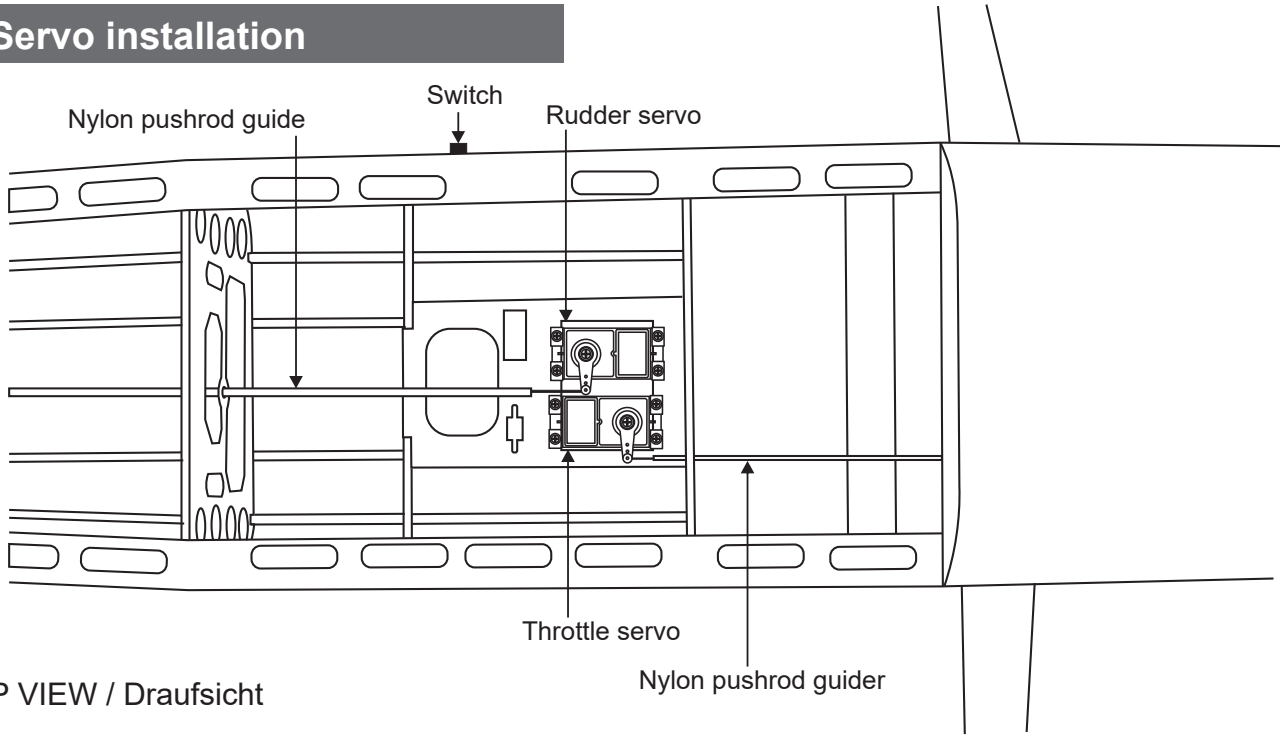


9- Engine / Motor



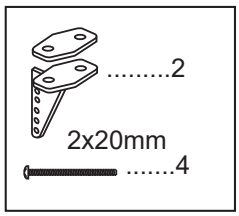


10- Servo installation

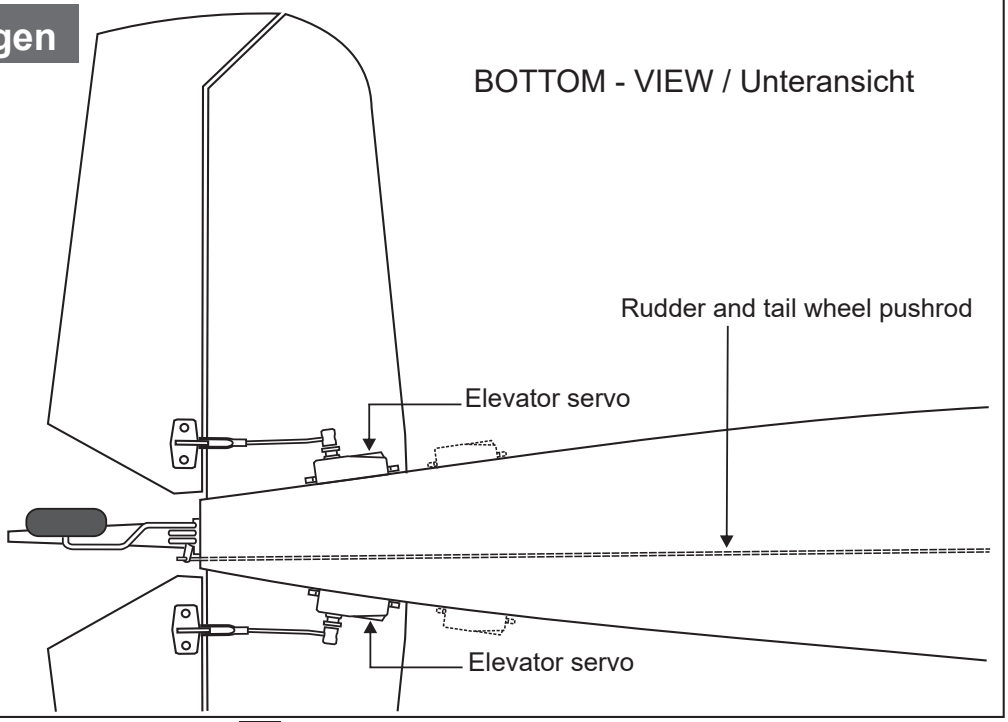


TOP VIEW / Draufsicht

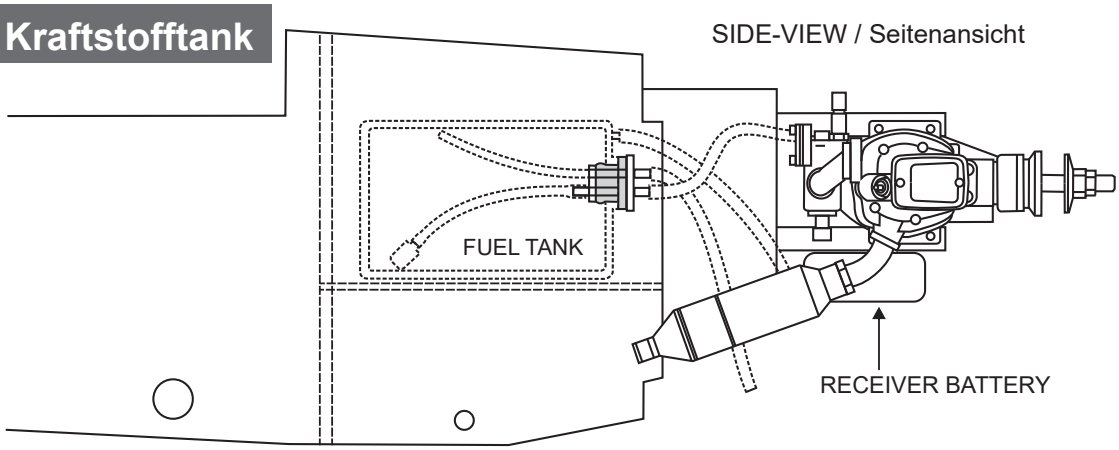
11- Linkage / Alenkungen



BOTTOM - VIEW / Unteransicht

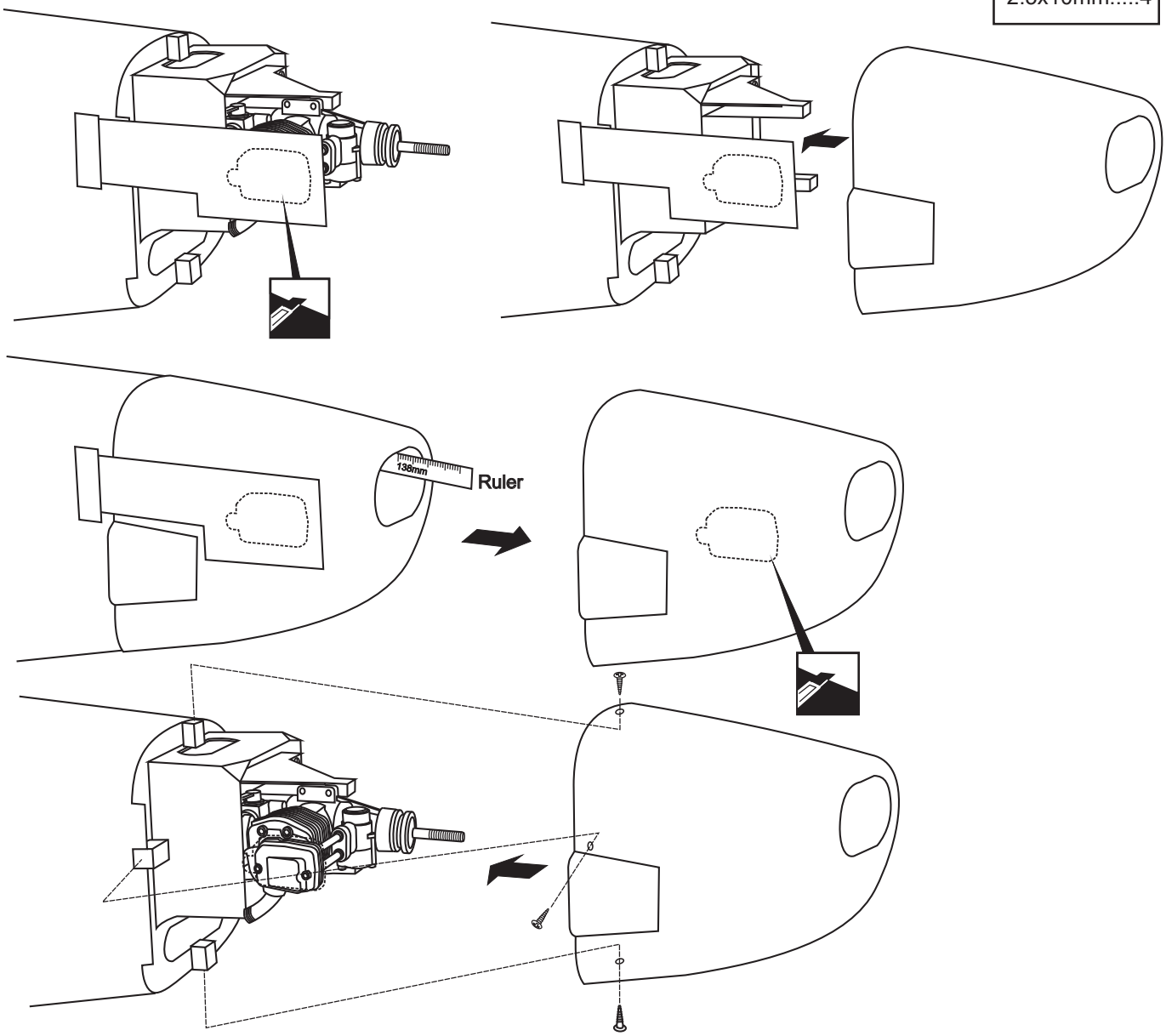


12- Fuel tank / Kraftstofftank



13- Cowling / Motorhaube

2.5x10mm.....4



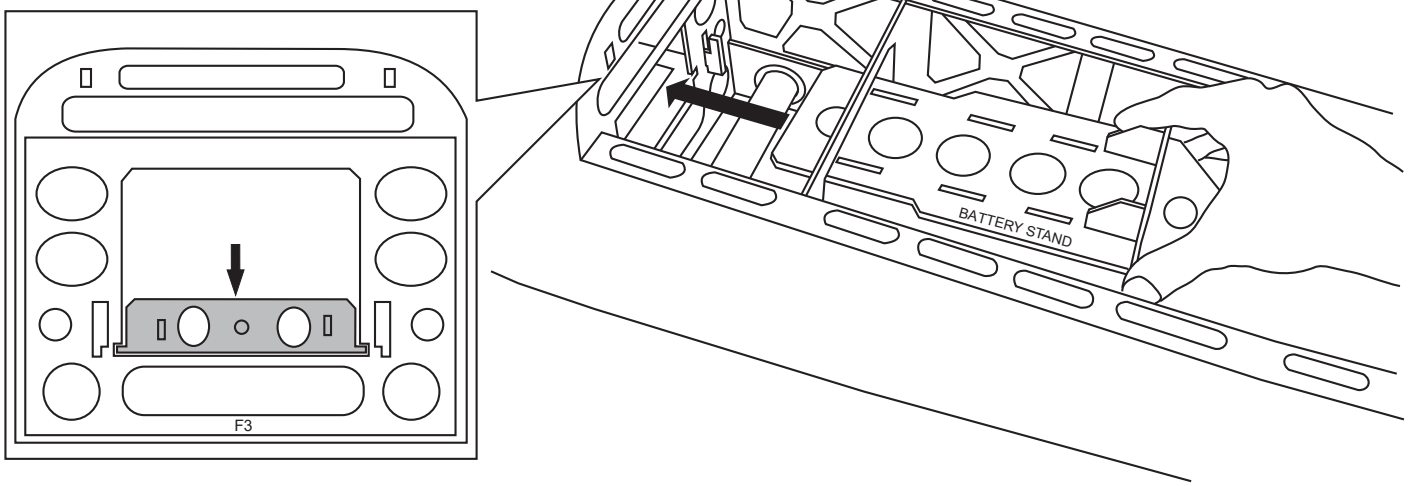
Attach the board or transparent plastic on the side of the fuselage with the adhesive tape as show.
Using a pencil or felt tipped pen trace around the engine head where it meet the cowl. Cut the opening the board or transparent plastic for the engine head as marked above.
Remove the engine and insert the cowl on to the fuselage so the distance from the fire wall to the front of the cowl is 138 to 139mm.
Remove the cowl from the fuselage and carefully cut the opening for the engine head as marked above. Do the same way with the hole for needle-valve and silencer.
Again. Insert the cowl on to the fuselage and secure it in place with five 2x5mm screws.

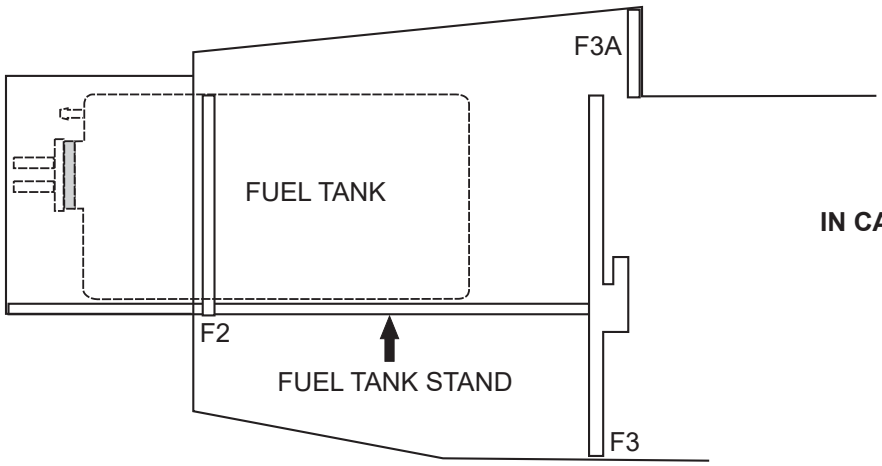
14- Li-po battery / Li-po akku

IN CASE OF LI-PO BATTERY USING

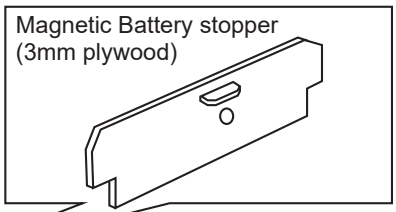
Slide the battery stand throughout the slots on the bottom of F3

One end of the battery stand touched the rear of the fire-wall

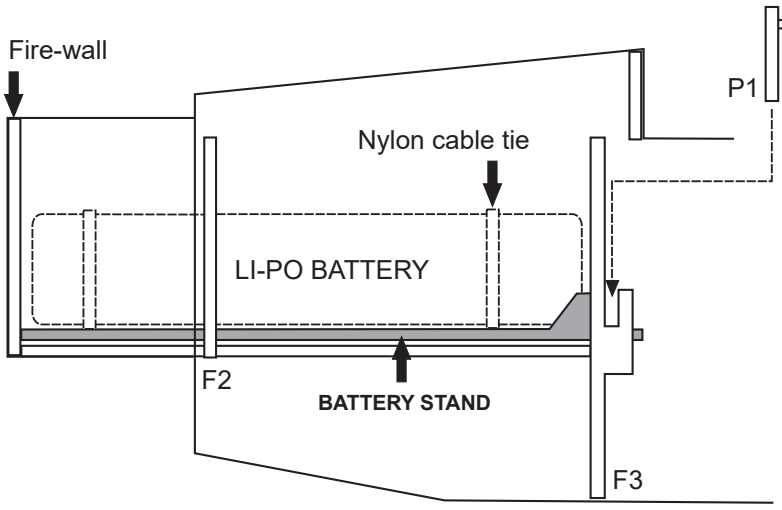




IN CASE OF GLOW ENGINE USING



SIDE-VIEW / Seitenansicht



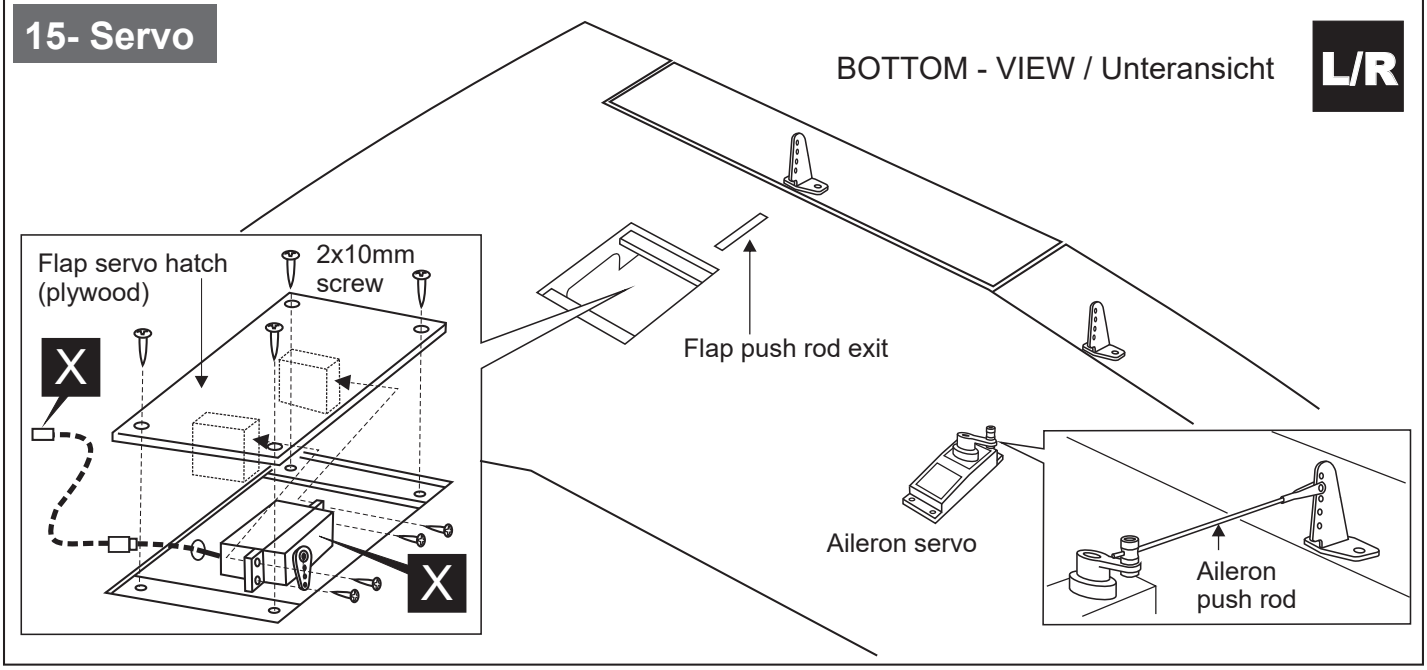
Place the Li-po battery on to the battery stand and secure it in place with the nylon cable tie.

Slide the battery stand (P1) throughout the slots on the bottom of F3 so that the end of the battery stand touched the rear of the fire-wall.

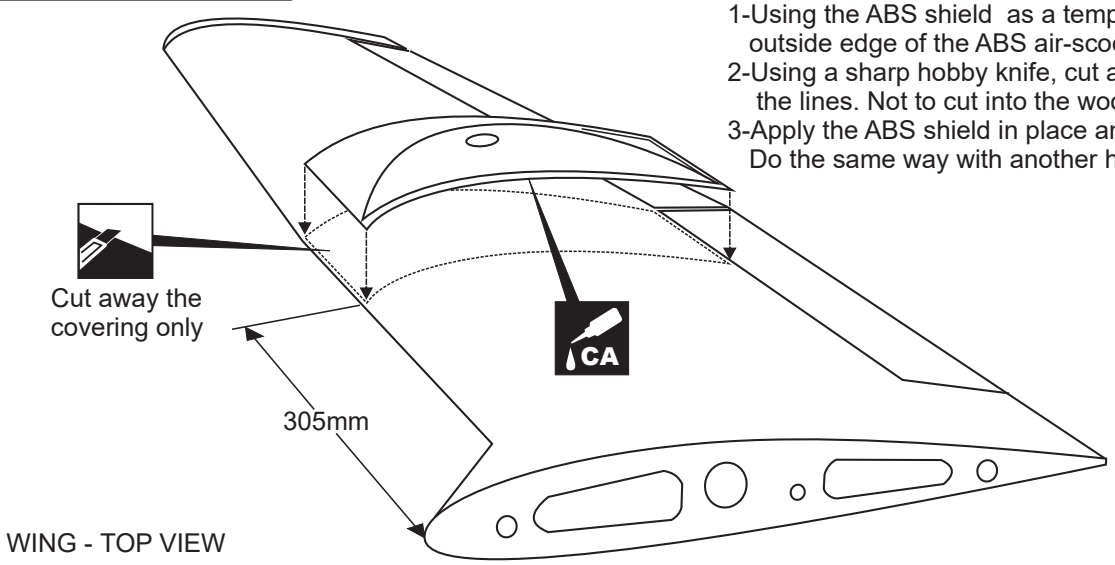
Secure the battery stand in place using the magnetic battery stopper (P4).

IN CASE OF ELECTRIC MOTOR USING

15- Servo

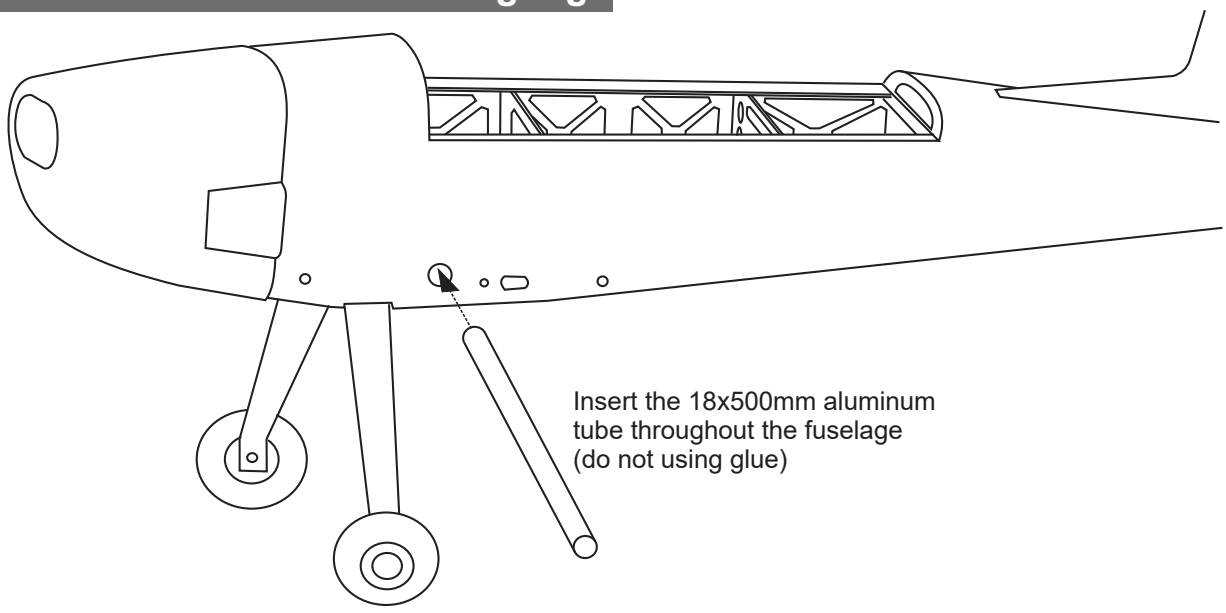


16- ABS Shield



1-Using the ABS shield as a template, trace around the outside edge of the ABS air-scoop,and then remove it.
2-Using a sharp hobby knife, cut away the covering inside the lines. Not to cut into the wood.
3-Apply the ABS shield in place and secure with CA glue. Do the same way with another half wing.

17- Wing installation / Flächenbefestigung

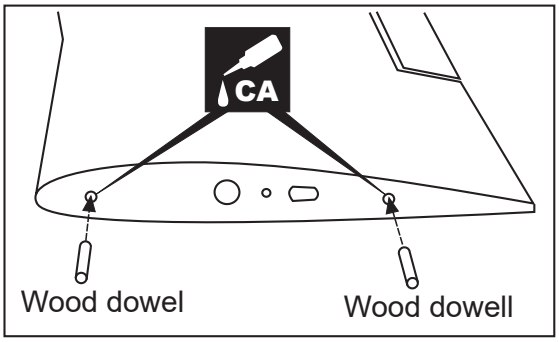


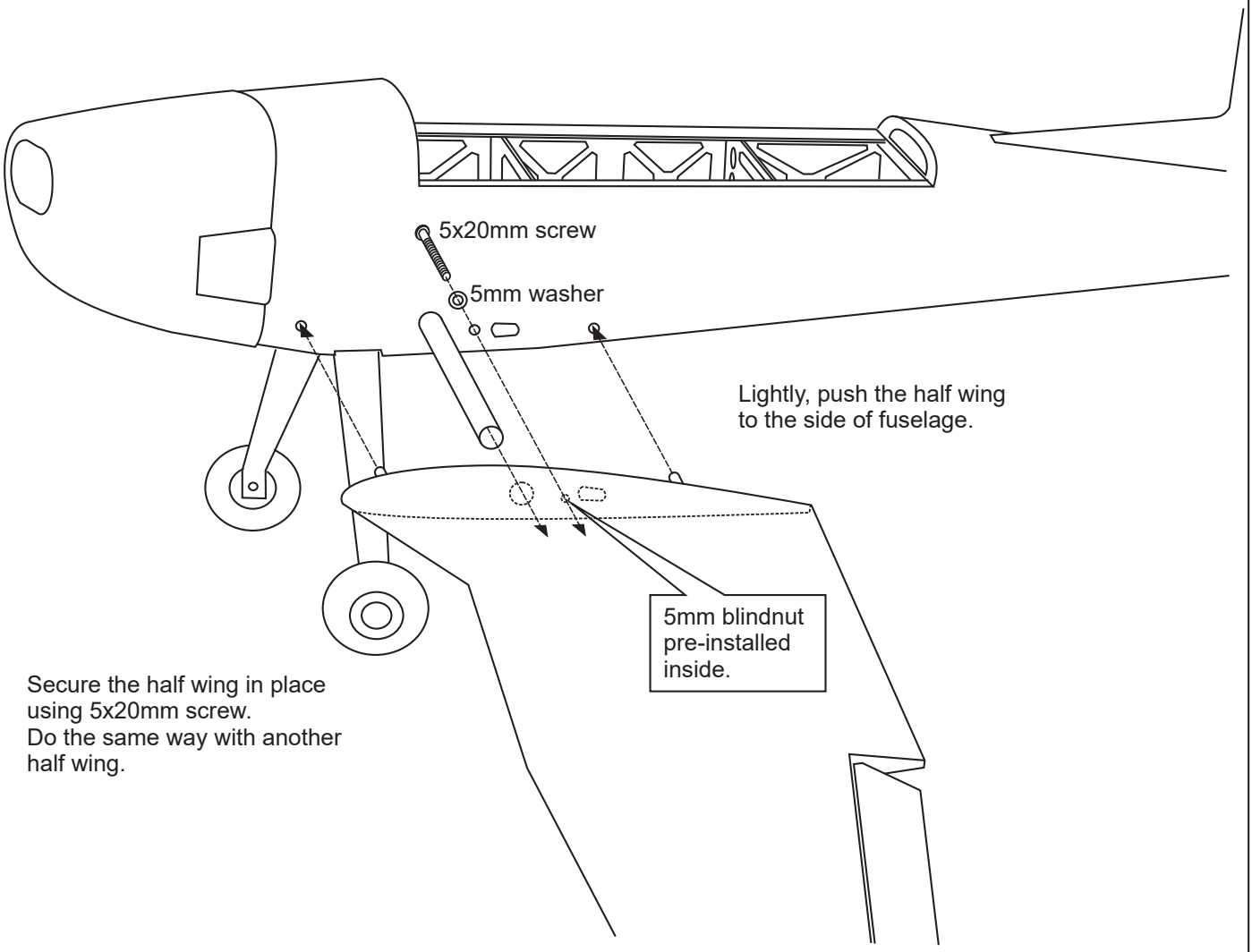
18- Wing installation / Flächenbefestigung

5X20mm screw
.....2
.....2

1- Test-fit the dowel into the hole.

2- Secure the dowel in place using CA glue.
Do the same way with another haft wing.

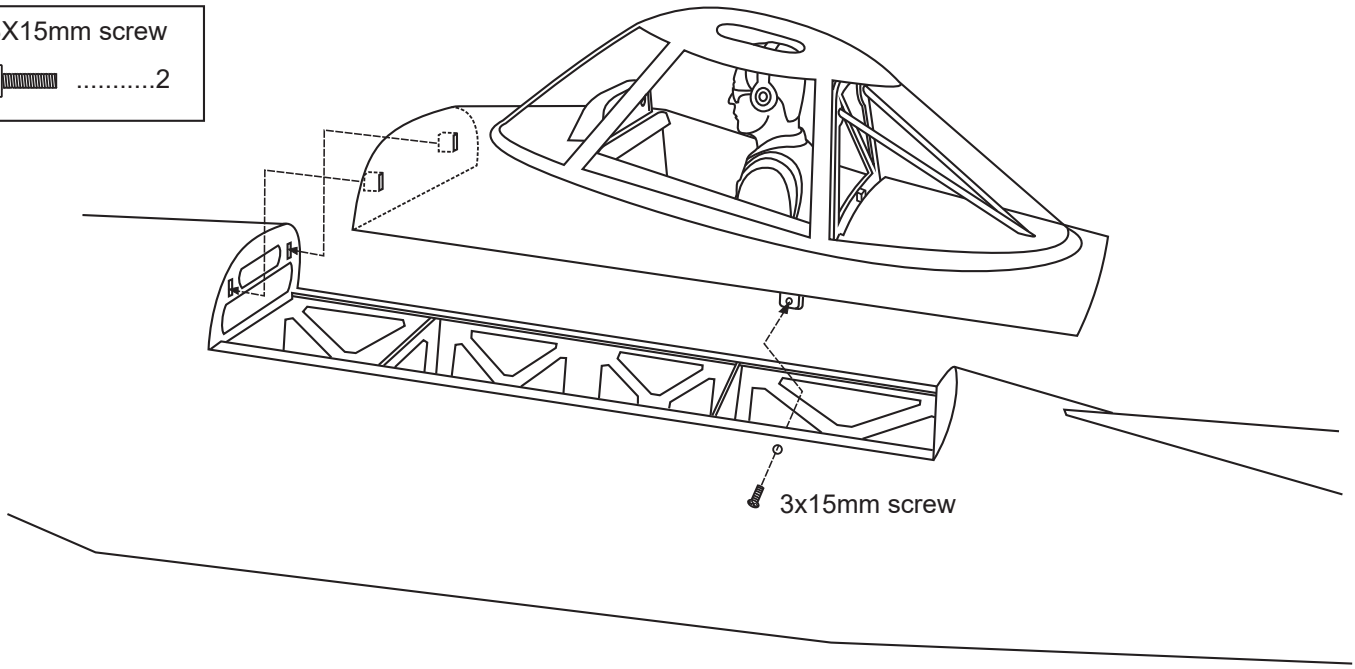




Secure the half wing in place using 5x20mm screw.
Do the same way with another half wing.

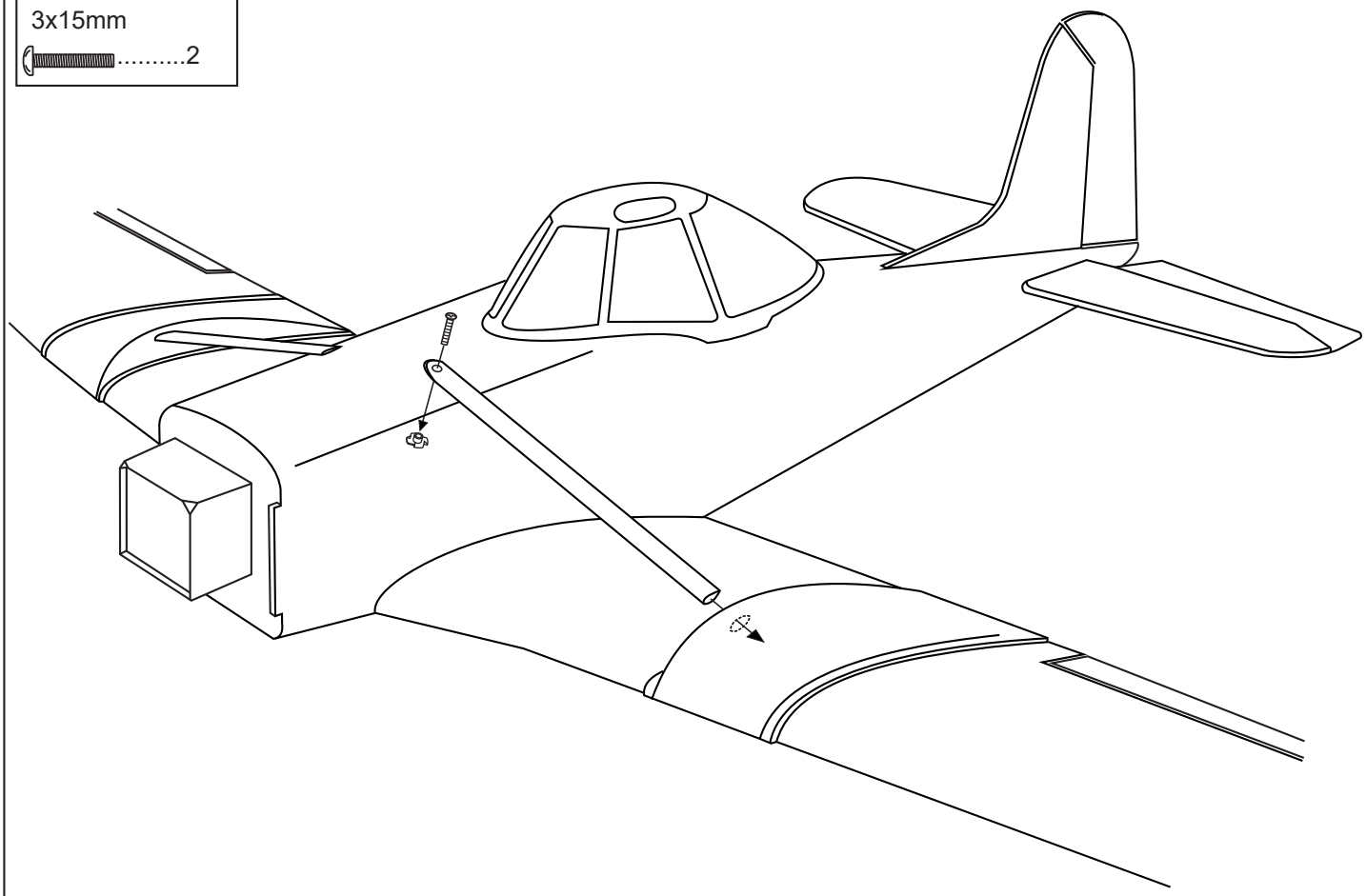
19- Cockpit installation

3X15mm screw 2

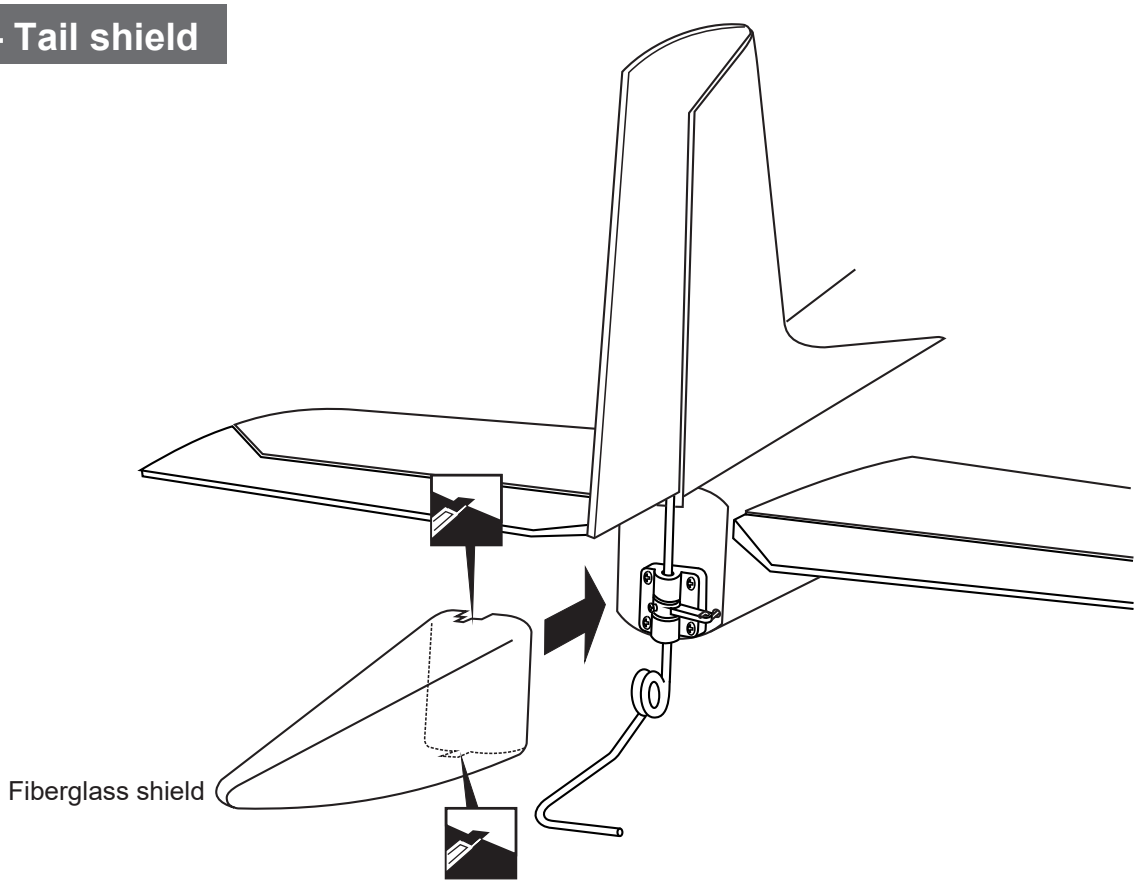


20- Wing brace

3x15mm 2

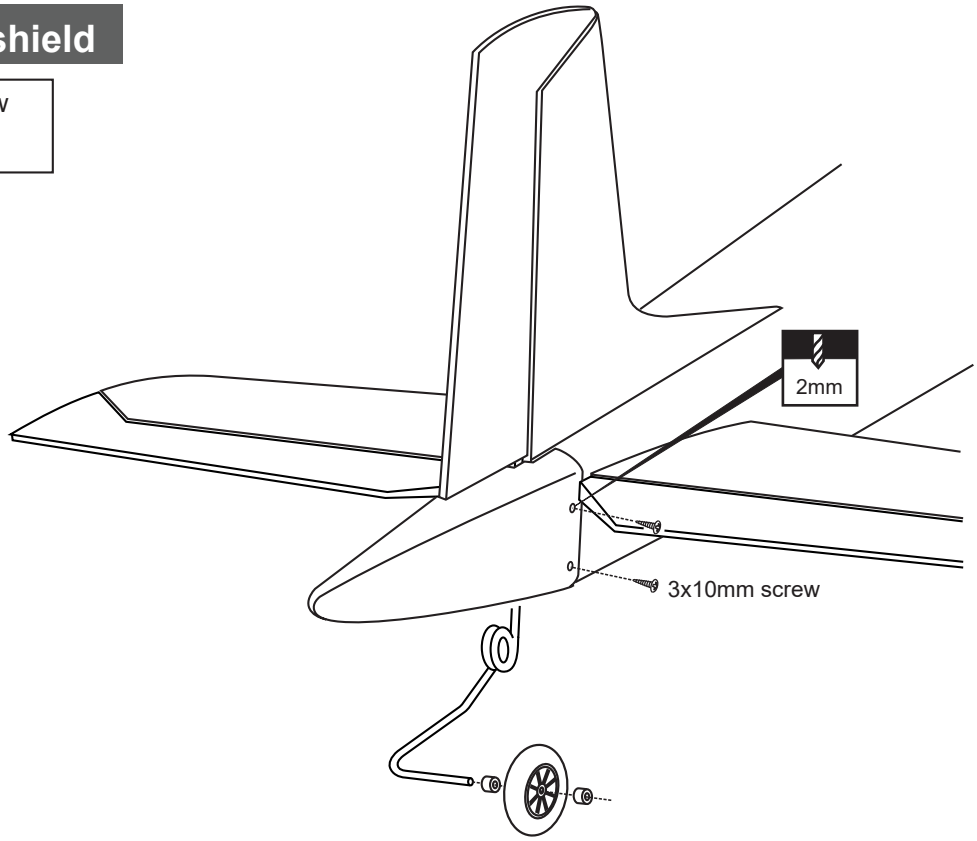


21- Tail shield



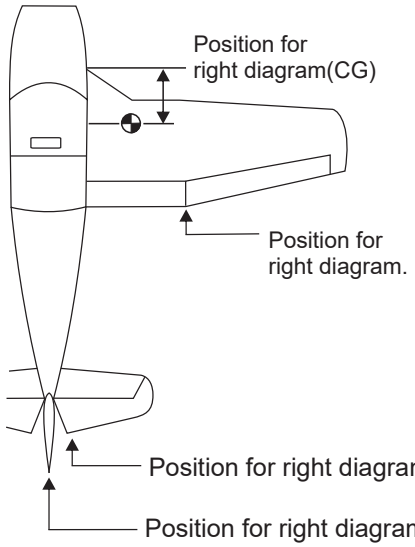
22- Tail shield

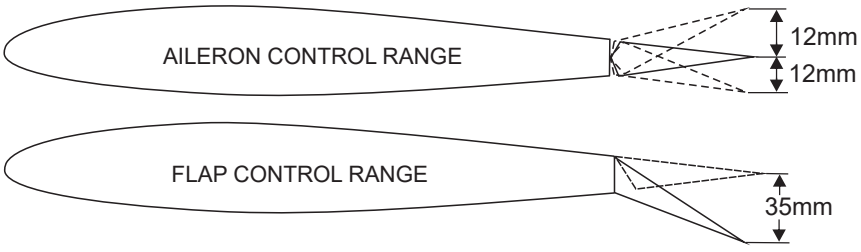
3x10mm screw
.....4



26- Control surface & Balance
Schwerpunkt & Ruderausschläge

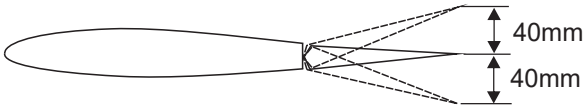
Adjust the travel of each control surface to the values in the diagrams these values fit general flight capabilites. Readjust according to your needs and flight level.



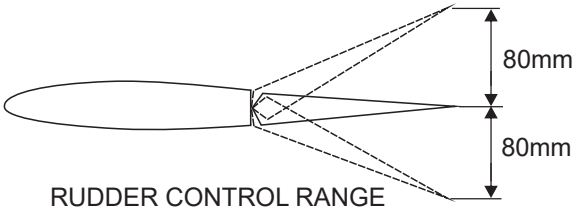




NEVER FLY BEFORE CHECKING THE CG'S REQUIRED POSITION.



ELEVATOR CONTROL RANGE



RUDDER CONTROL RANGE

Shift the location of the battery pack as needed to obtain the specification.
Carefully install the battery pack to ensure that they will not shift during flight.

IMPORTANT: Please do not clean your model with pure alcohol, only use liquid soap with water or use glass cleaner to clean on surface of your model to keep the colour not fade.

All details are subject to change without notice !

Technische Anderungen und Irrtumer vorbehalten !



CE RoHS

Made in Vietnam