## Radio control model / Flugmodell

# Douglas DC-3

***ALL BALSA, PLYWOOD CONSTRUCTION AND ALMOST READY TO FLY***




# Instruction manual / Montageanleitung

### SPECIFICATIONS

Wingspan:.....1800mm (70.8in.)
Length:.....1200mm (47.2in.)
Electric Motor:.....x2
RTF Weight: 3.2Kg / 7.0lbs (Will vary with Equipment Used).
Radio:.....6 Channel / 4..8 Servos

### TECHNISCHE DATEN

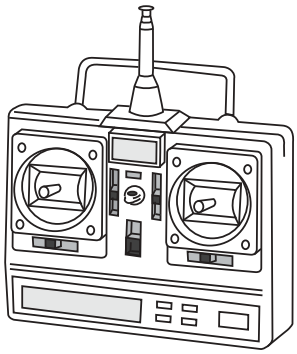
Spannweite:.....1800mm
Länge:.....1200mm
Elektroantrieb.....(siehe nächste Seite)
Brushless Motor:.....x 2
Fluggewicht:.....3.2Kg
Fernsteuerung.....6 Kanal / 4..8 Servos

RADIO CONTROL MODEL®

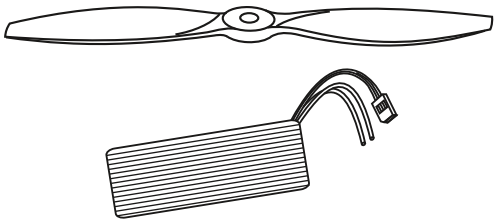
**WARNING!** This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice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

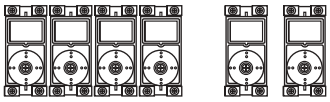
## **Sonderzubehör (empfohlen) /** Optional Accessories (recommended):



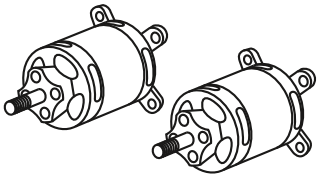
**# C8802**
Fernsteuerung GigaProp 6
Radio Set GigaProp 6



**# C6788**
**RED POWER LiPo Akku**
4500 - 11,1V



**# C5185** Servo MASTER S2112 ( x6)
**# C5638** Servo MASTER DS3012 MG (x2)



**# C8804**
**Antriebsset 2-motorig für Douglas DC-3**
inkl. 2x Brushless Motoren, 2x Brushless Regler, Luftschrauben, steckerfertige Kabelsätze

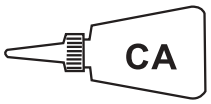
*Power Set motors for Douglas DC-3*
*incl. 2 Brushless Motors, 2 pcs. Brushless ESC, Props and plug&play cable/wiring harness*

**#C9218**
**Elektrisches Einziehfahrwerk**
Electric Retracts

**Alle Infos zu diesem Zubehör unter:**
More infos about these Accessories:

**www.pichler-modellbau.de**

**Klebestoffe (nicht mitgeliefert)**
GLUE (Purchase separately)




**X3572**
Zoom CA
Cyanoacrylate Glue (thin type)



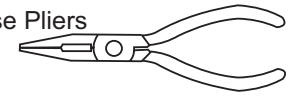

**X3598-120**
5-Min Epoxy

**TOLLS REQUIRED**

Hobby knife



Needle nose Pliers



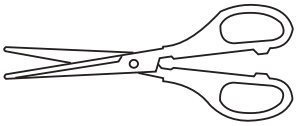
Sander



Phillip screw driver



Scissors



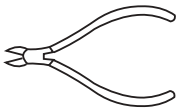
Hex Wrench



Awl



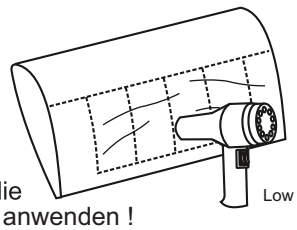
Wire Cutters



Masking tape - Straight Edged Ruler - Pen or pencil - Drill and Assorted Drill Bits

If exposed to direct sunlight and/or heat, wrinkels can appear. Storing the model in a cool place will let the wrinkles disappear. Otherwise, remove wrinkles in covering film with a hair dryer, starting with low temperature. You can fix the corners by using a hot iron.

Bei Sonneneinstrahlung und/oder Wärme kann die Folie erschlaffen bzw. Falten entstehen. Verwenden Sie ein Warumluftgebläse (Haartrockner) um evtl. Falten aus der Folie zu bekommen. Die Kanten können Sie mit einem Bügeleisen behandeln. Nicht zuviel Hitze anwenden !




Symbols used throughout this instruction manual, comprise:




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




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



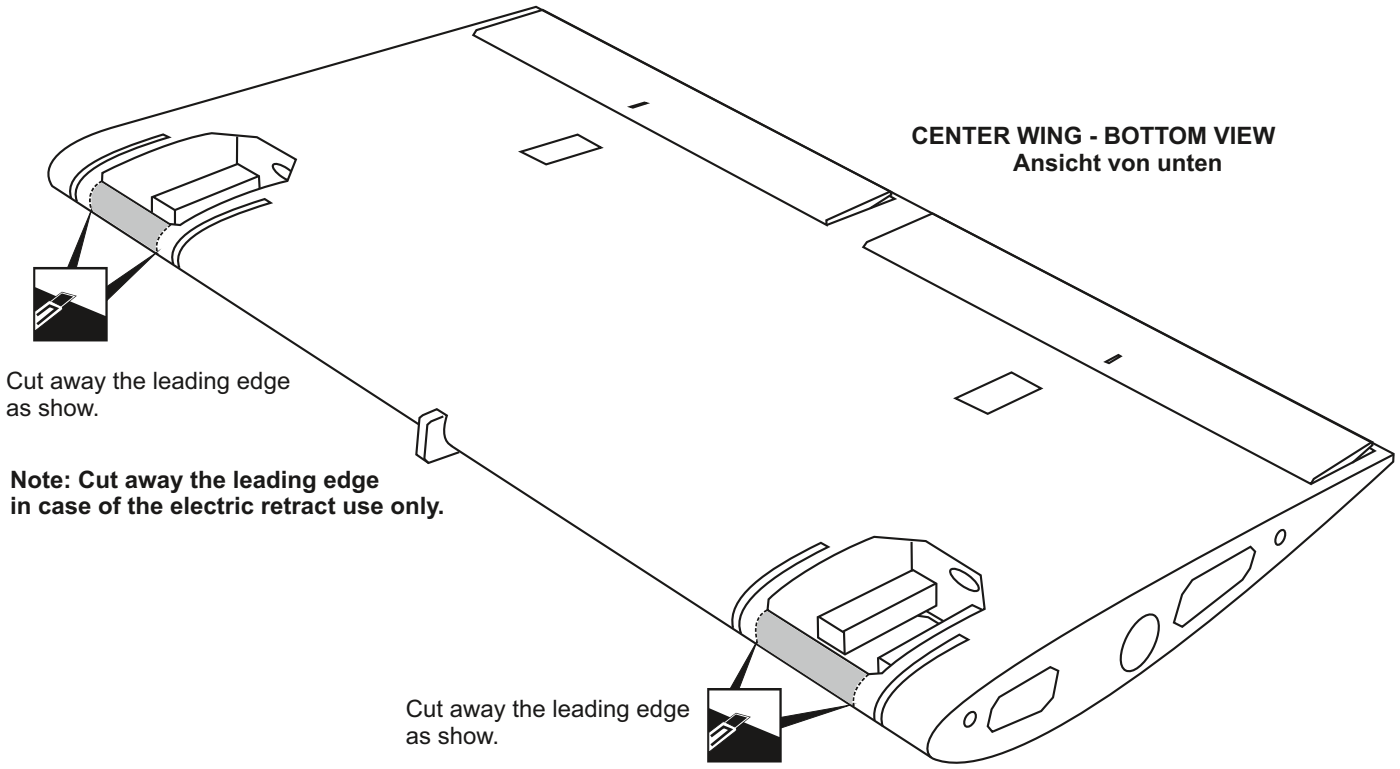

Nicht enthalten. Teile müssen separat gekauft werden.

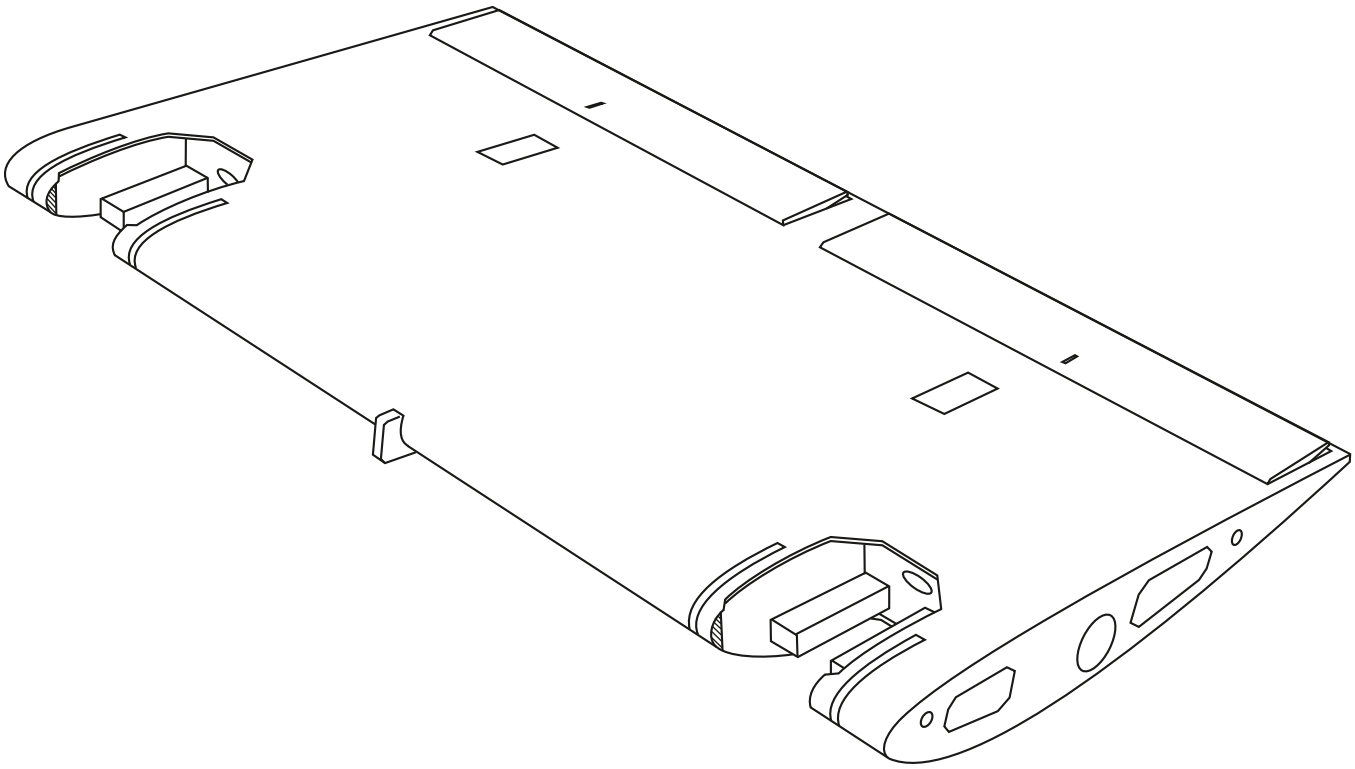
**Read through the manual before you begin, so you will have an overall idea of what to do.**

**CONVERSION TABLE**

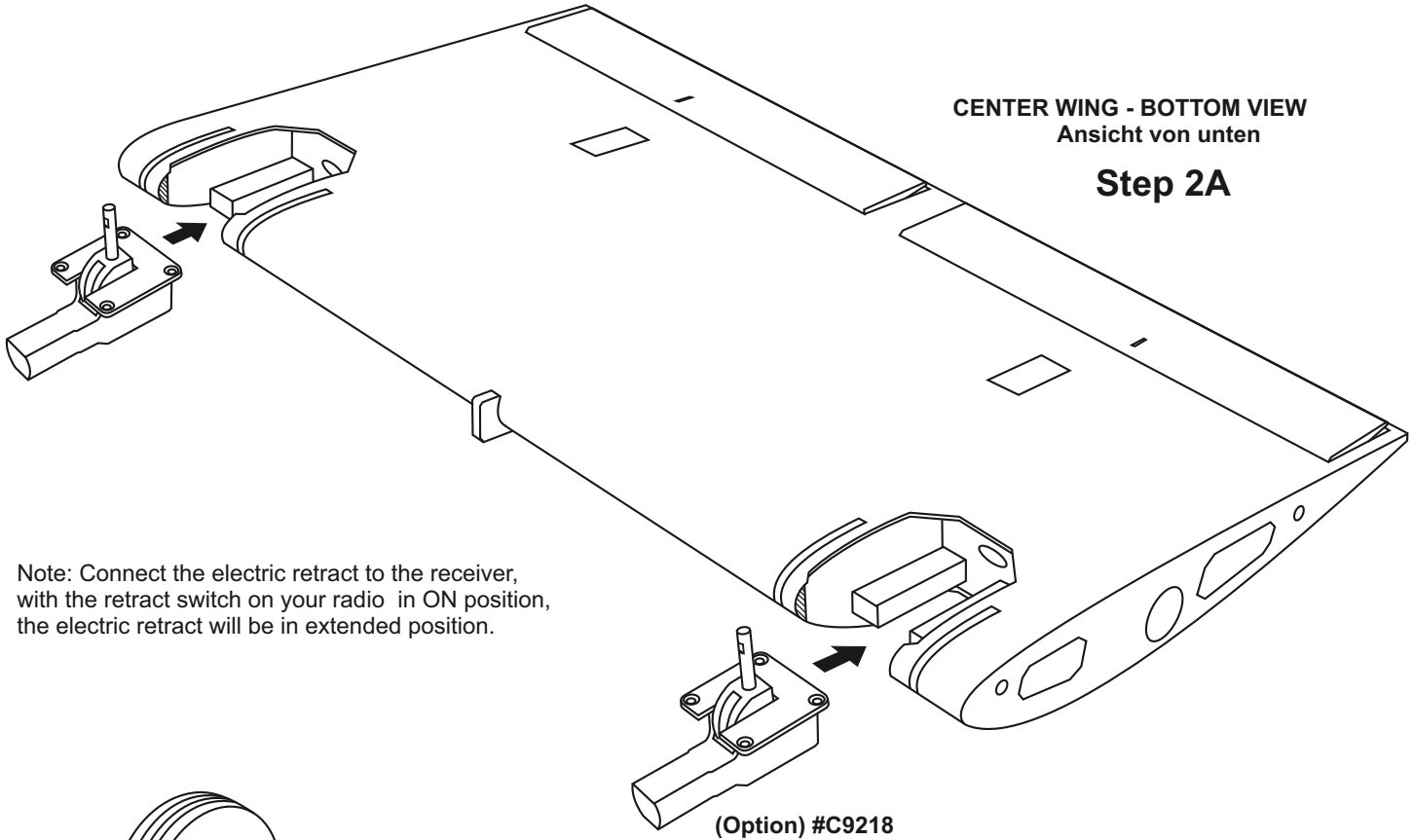
| | | | |
|---|---|---|---|
| 1.0mm = 3/64” | 3.0mm = 1/8” | 10mm = 13/32” | 25mm = 1” |
| 1.5mm = 1/16” | 4.0mm = 5/32” | 12mm = 15/32” | 30mm = 1-3/16” |
| 2.0mm = 5/64” | 5.0mm = 13/64” | 15mm = 19/32” | 45mm = 1-51/64” |
| 2.5mm = 3/32” | 6.0mm = 15/64” | 20mm = 51/64” | |

# 1- CENTER WING:ELECTRIC RETRACT INSTALLATION (OPTION)
# Tragflächenmittelstück



# 2- CENTER WING: ELECTRIC RETRACT INSTALLATION (OPTION)
## Tragflächenmittelstück

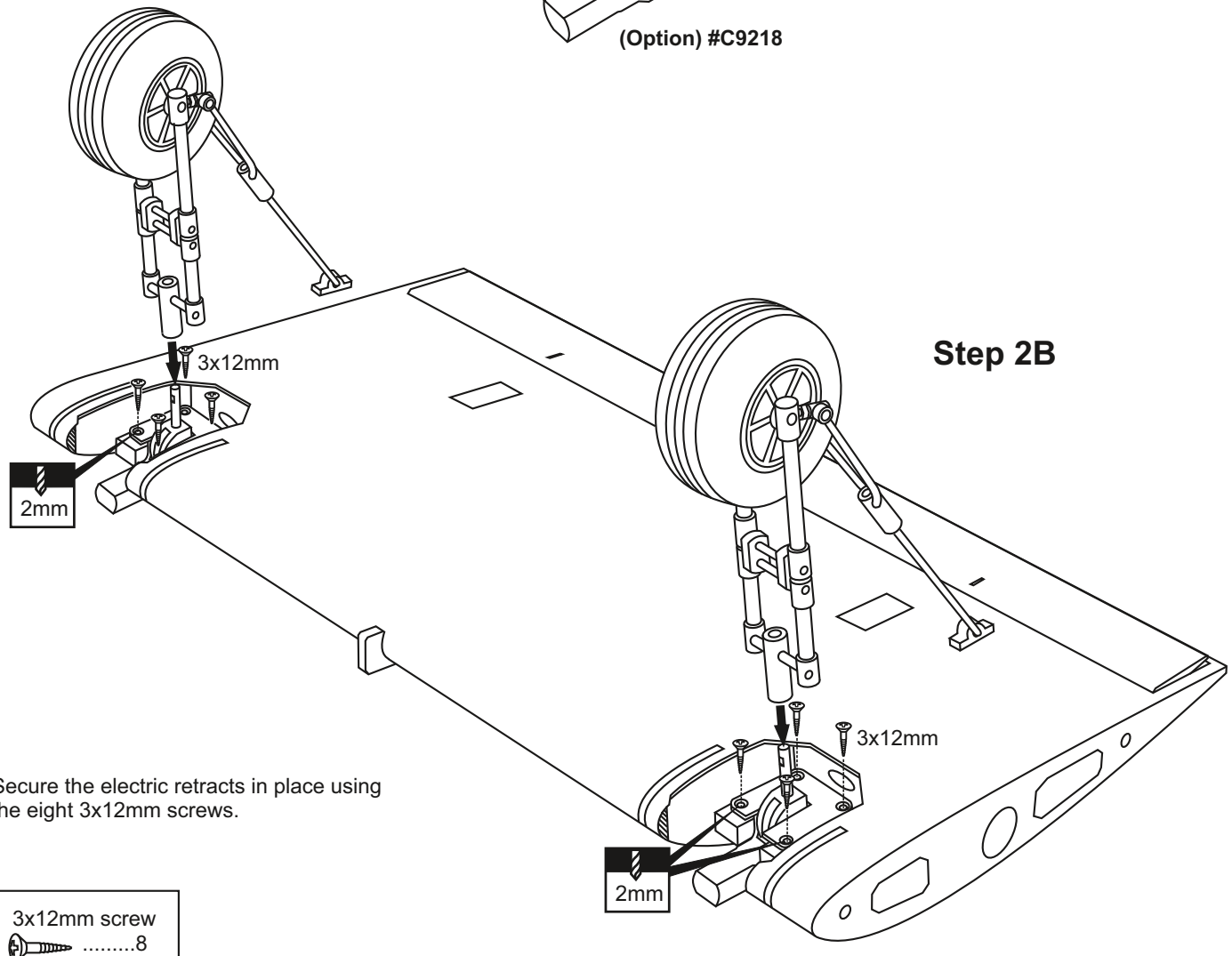


**CENTER WING - BOTTOM VIEW**
**Ansicht von unten**

**Step 2A**

Note: Connect the electric retract to the receiver, with the retract switch on your radio in ON position, the electric retract will be in extended position.

**(Option) #C9218**




**Step 2B**

Secure the electric retracts in place using the eight 3x12mm screws.

3x12mm screw .....8

# 3- CENTER WING: ELECTRIC RETRACT INSTALLATION (OPTION)

**Tragflächenmittelstück**

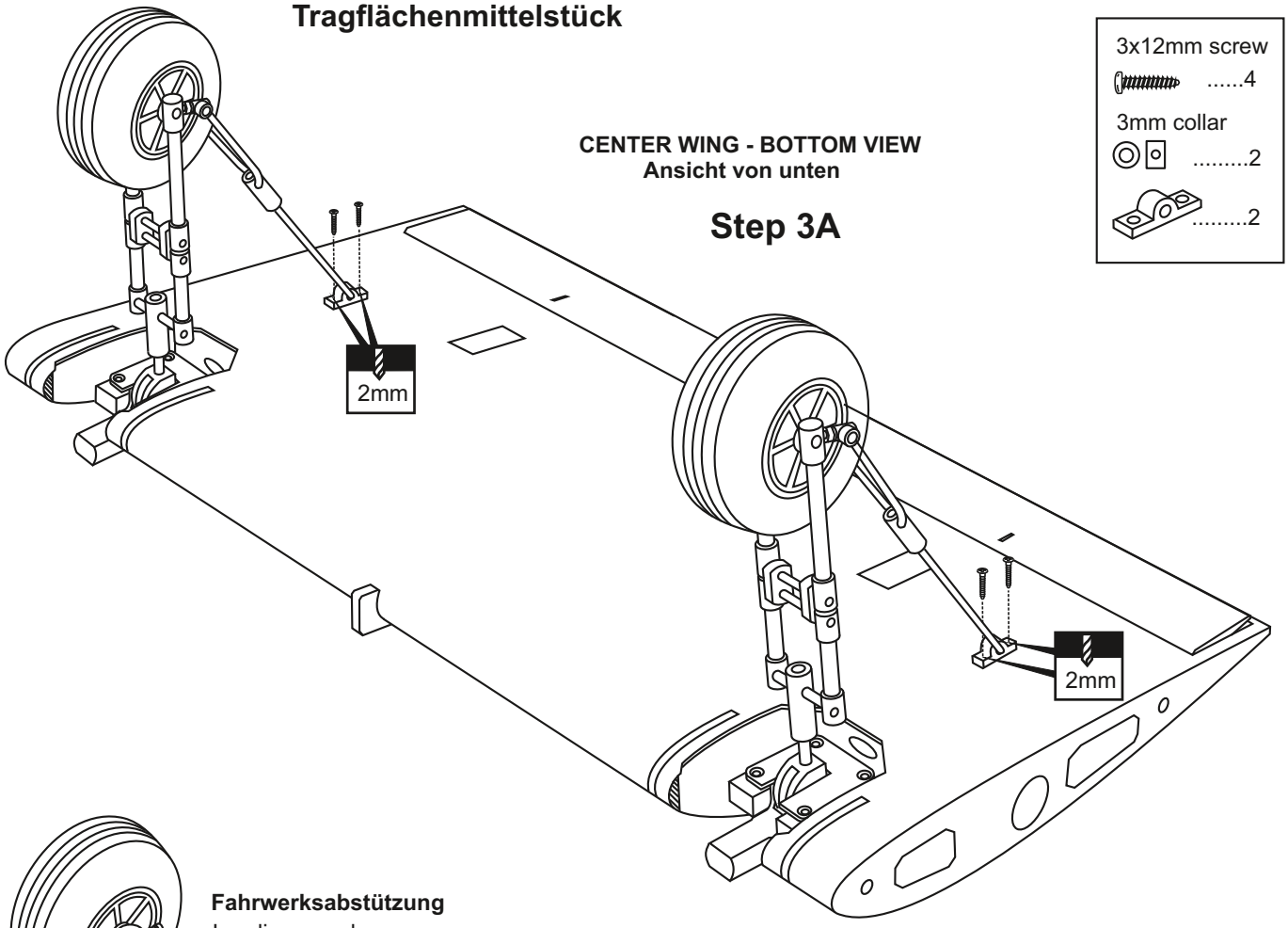
3x12mm screw .....4

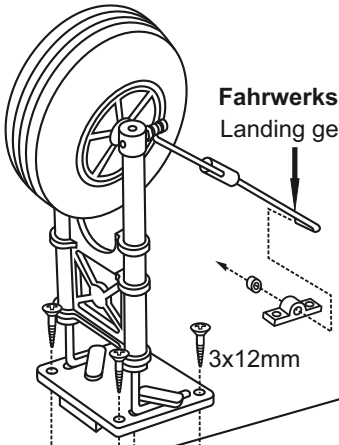
3mm collar .....2

.....2

**CENTER WING - BOTTOM VIEW**
**Ansicht von unten**

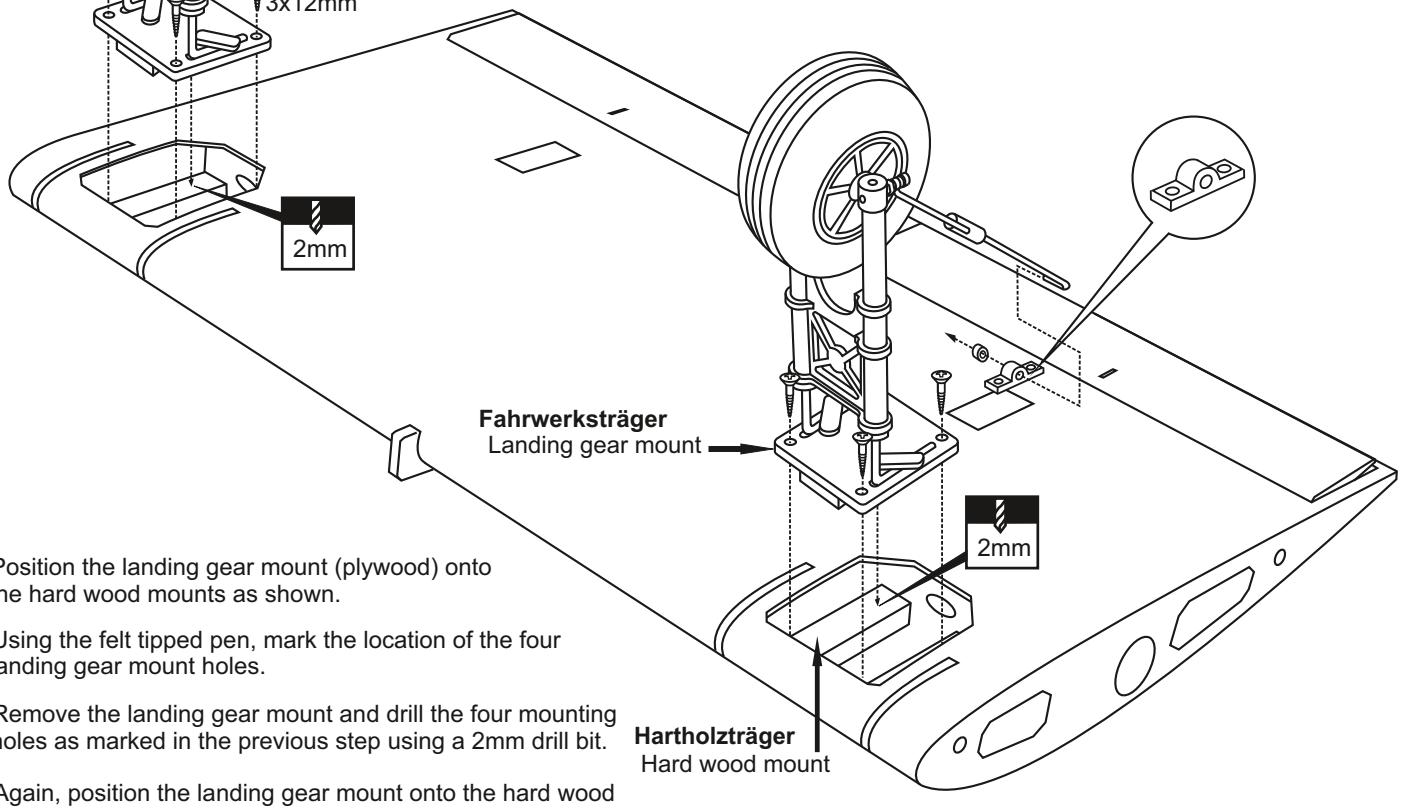
## Step 3A




## STEP 3B: FIXED GEAR INSTALLATION

Note: In case of fixed gear using, do not cut the leading edge




1-Position the landing gear mount (plywood) onto the hard wood mounts as shown.

2-Using the felt tipped pen, mark the location of the four landing gear mount holes.

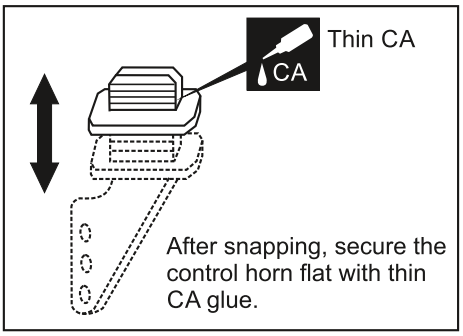
3-Remove the landing gear mount and drill the four mounting holes as marked in the previous step using a 2mm drill bit.

4-Again, position the landing gear mount onto the hard wood mounts and secure it in place using a four 3x12mm screws.

# 4- CENTER WING

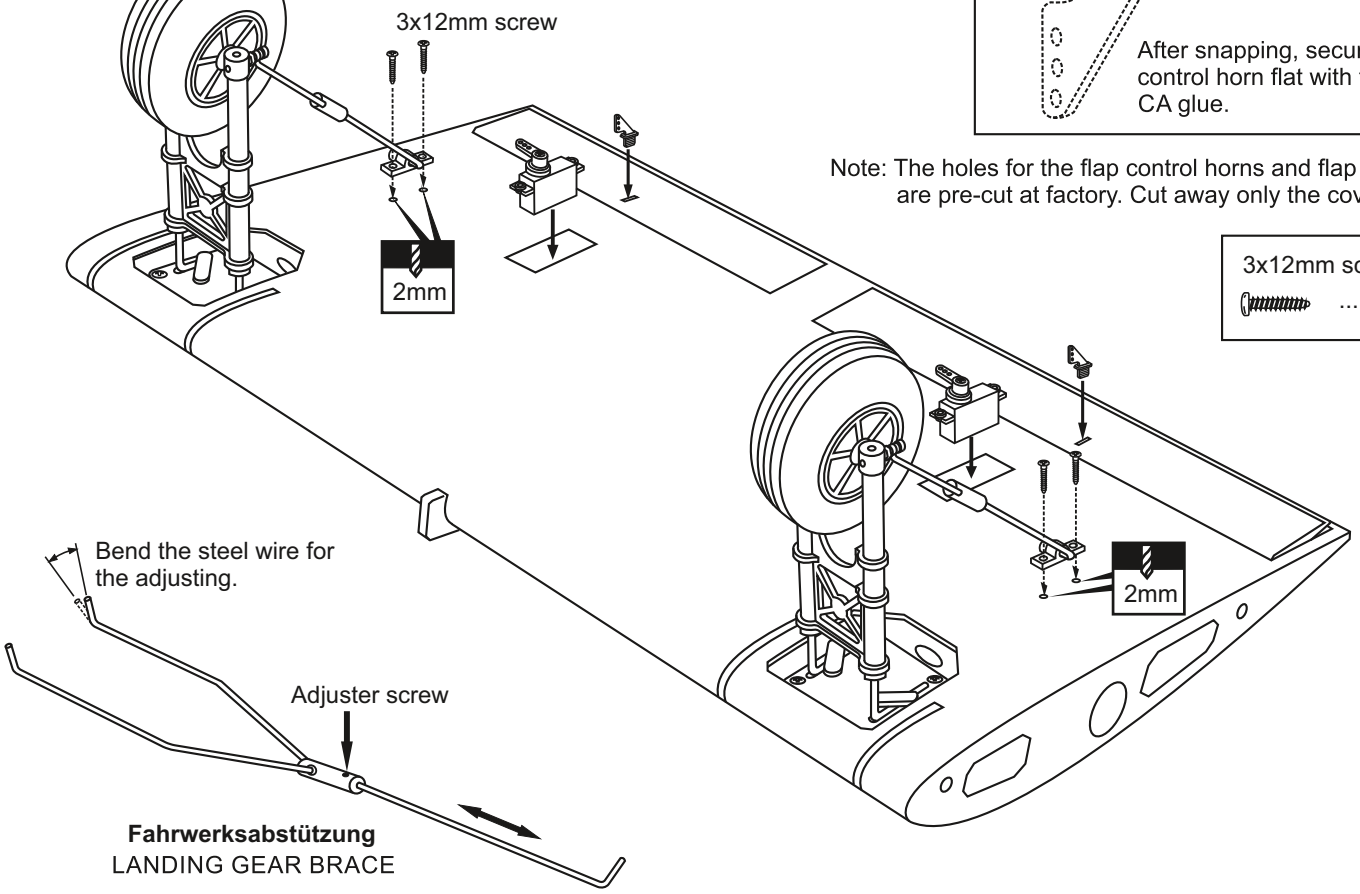
## Tragflächenmittelstück

Plastic control horn .....1




**CENTER WING - BOTTOM VIEW**
**Ansicht von unten**

### Step 4A




Note: The holes for the flap control horns and flap servos are pre-cut at factory. Cut away only the covering.

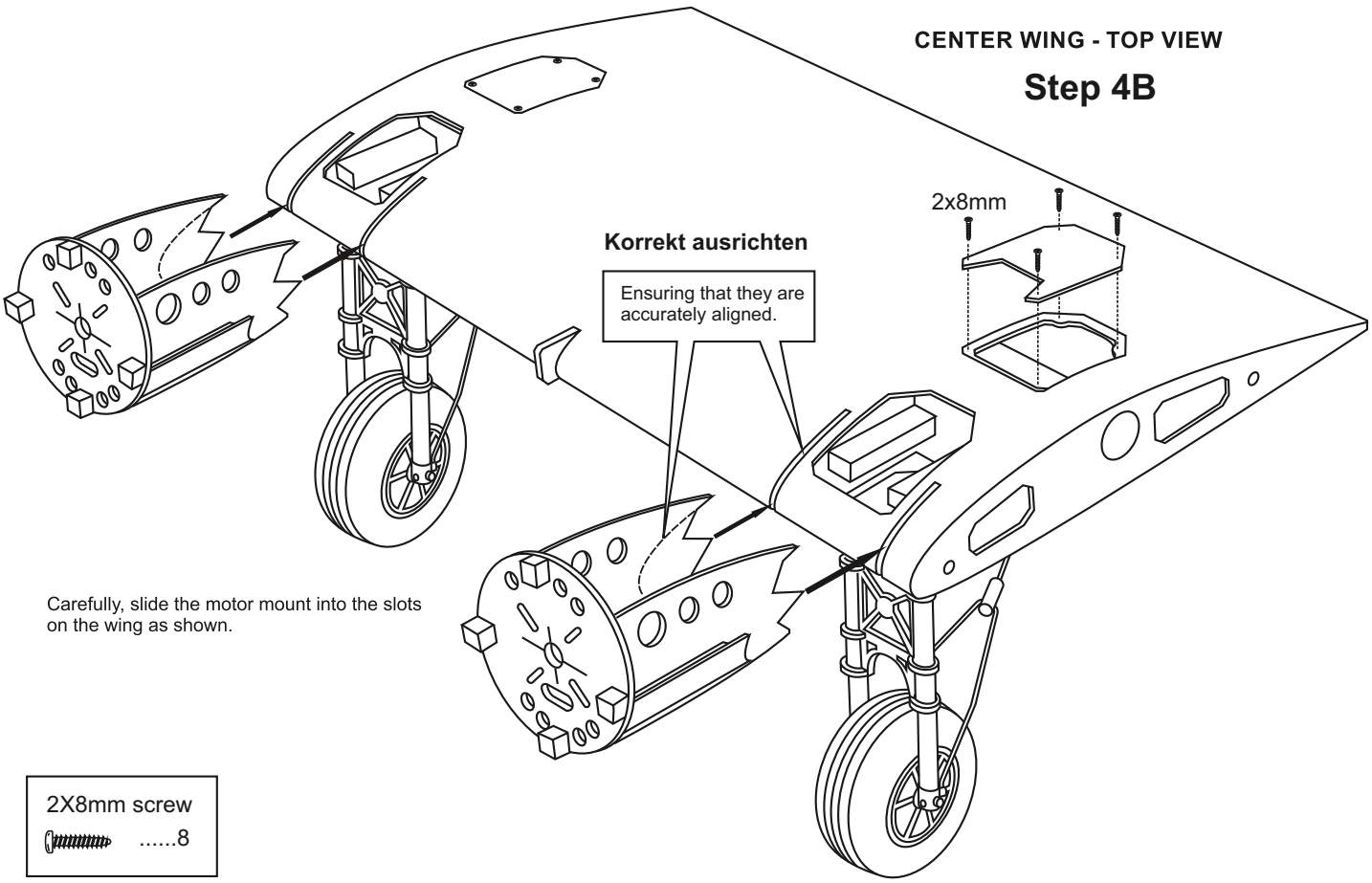
3x12mm screw .....4




**Fahrwerksabstützung**
LANDING GEAR BRACE

**CENTER WING - TOP VIEW**

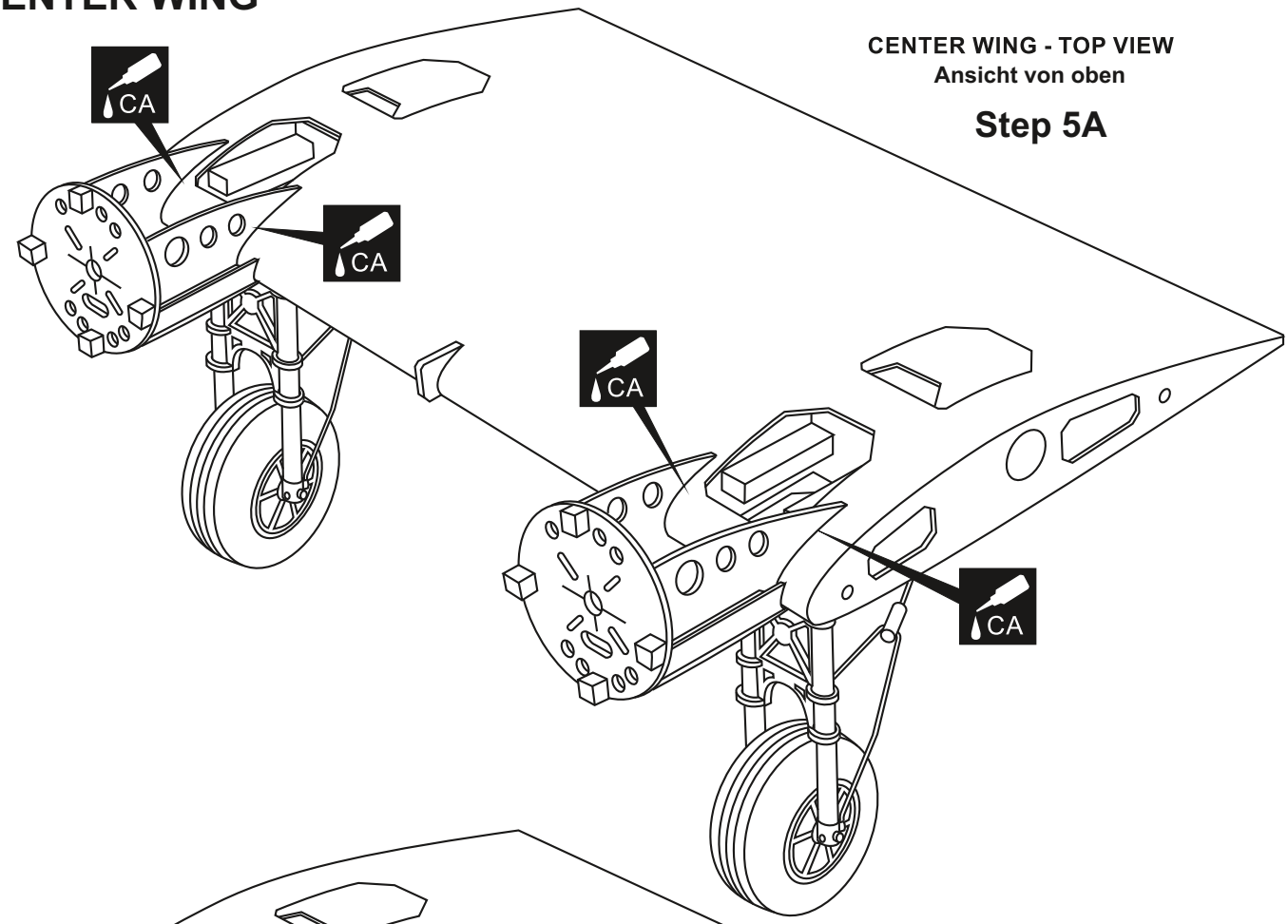
### Step 4B




Carefully, slide the motor mount into the slots on the wing as shown.

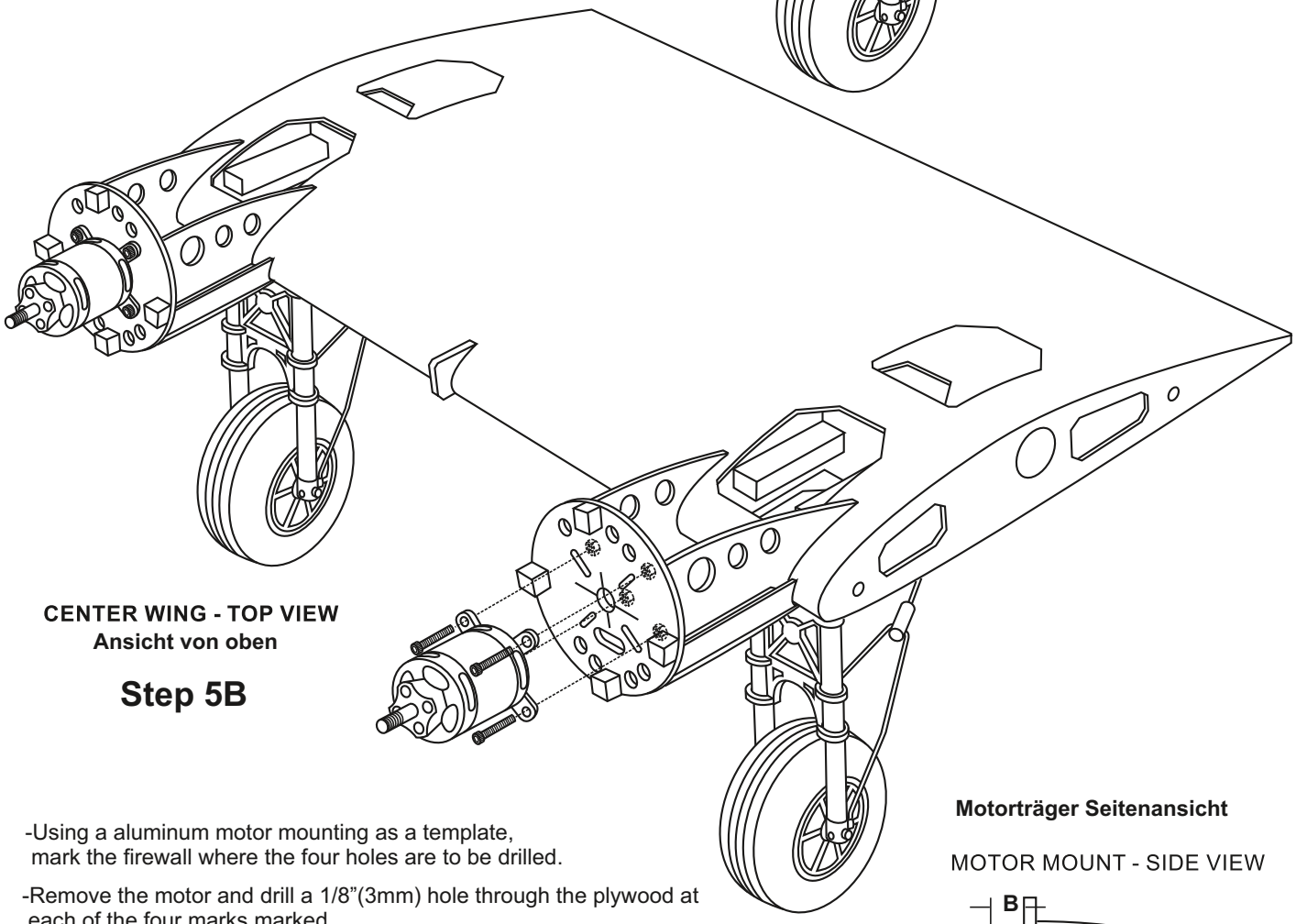
2X8mm screw .....8

# 5- CENTER WING




**CENTER WING - TOP VIEW**
**Ansicht von oben**

**Step 5A**



**CENTER WING - TOP VIEW**
**Ansicht von oben**

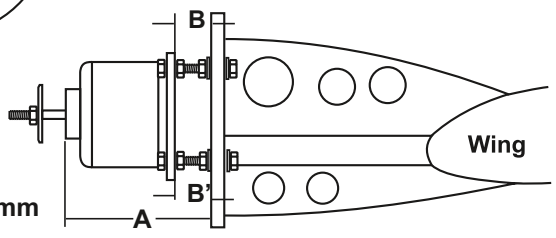
**Step 5B**

-Using a aluminum motor mounting as a template, mark the firewall where the four holes are to be drilled.

-Remove the motor and drill a 1/8”(3mm) hole through the plywood at each of the four marks marked .

**Motorträger Seitenansicht**

MOTOR MOUNT - SIDE VIEW



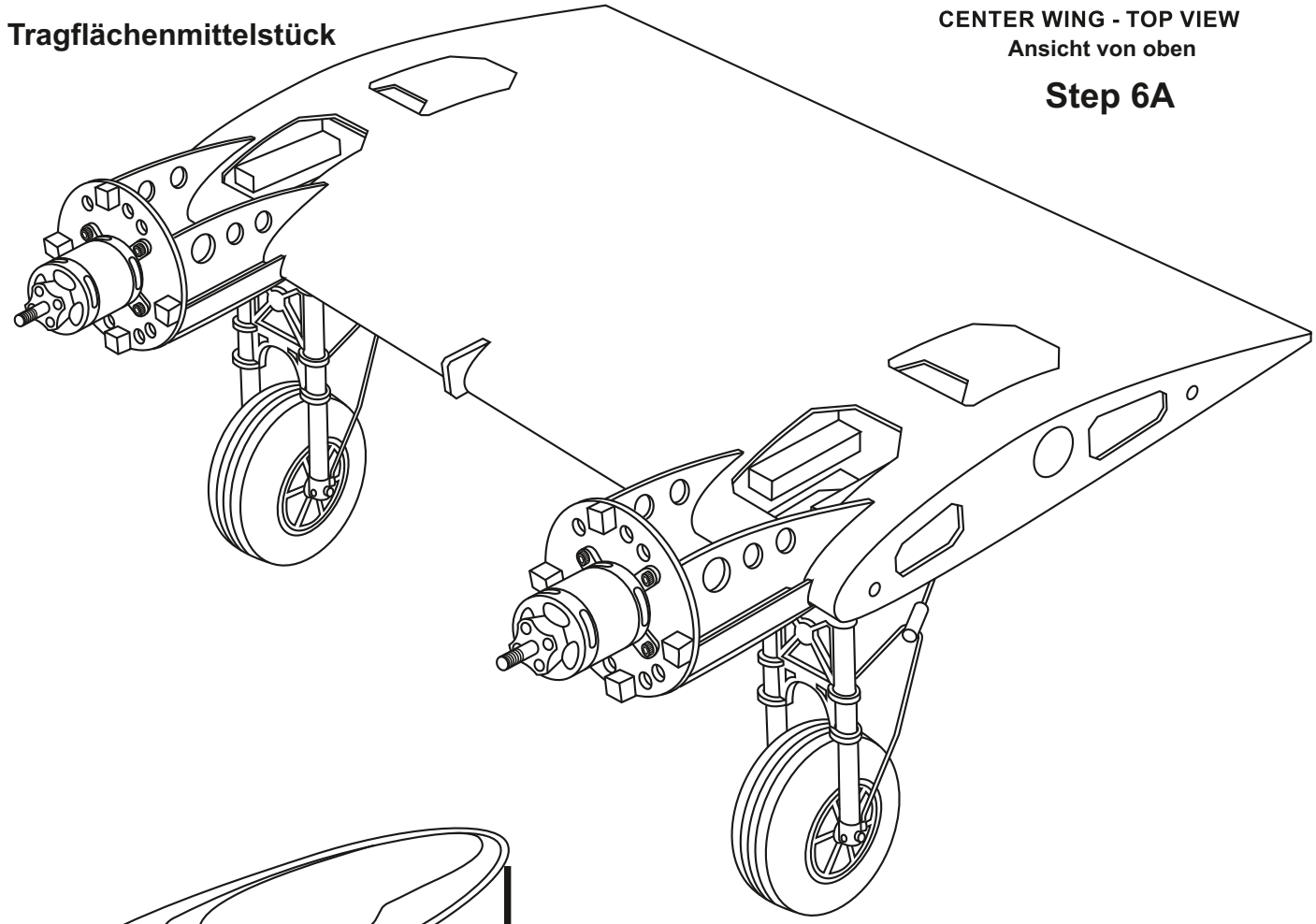

**B=B’**
**A= 60-65mm**

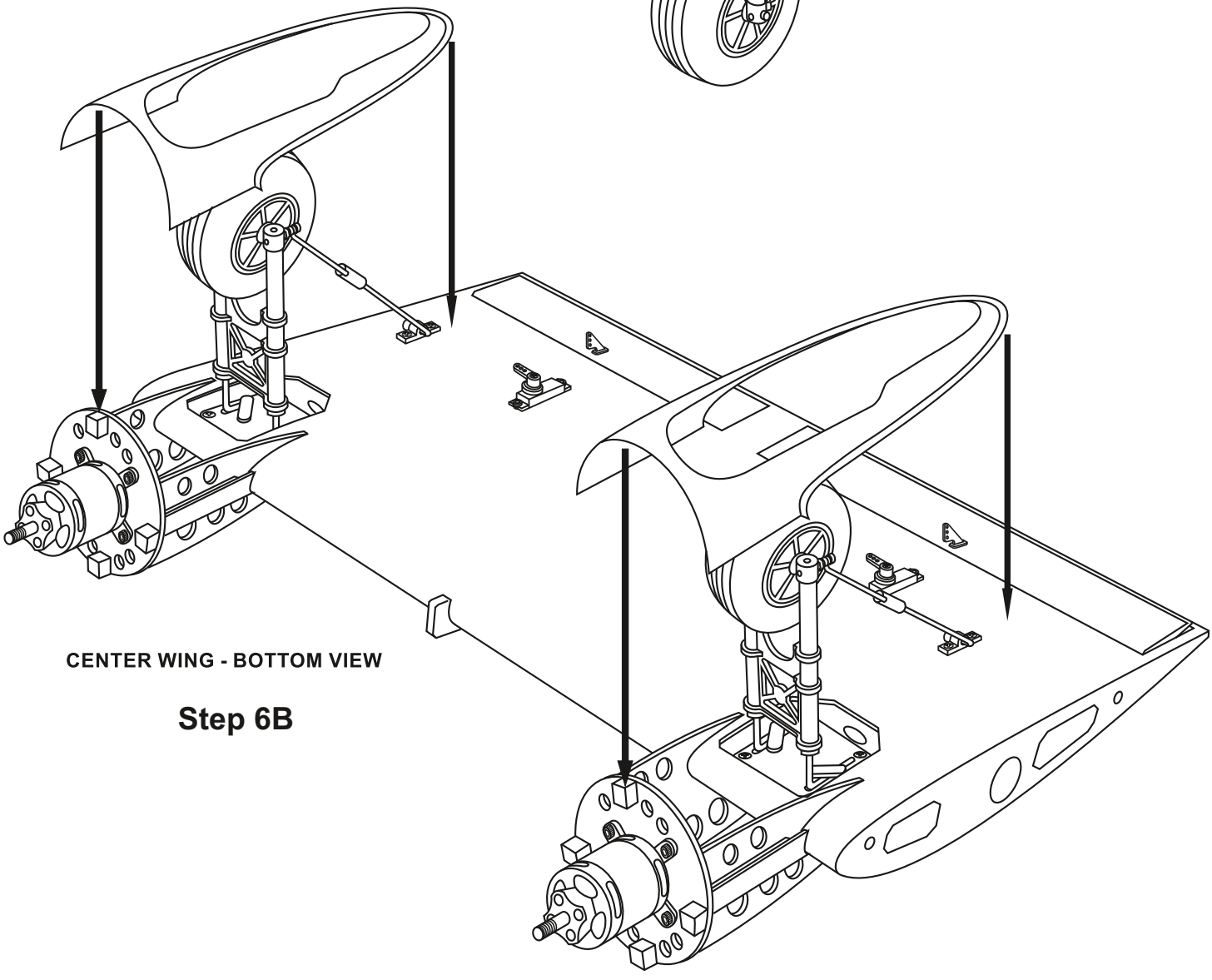
# 6- CENTER WING

**Tragflächenmittelstück**

**CENTER WING - TOP VIEW**
**Ansicht von oben**

**Step 6A**

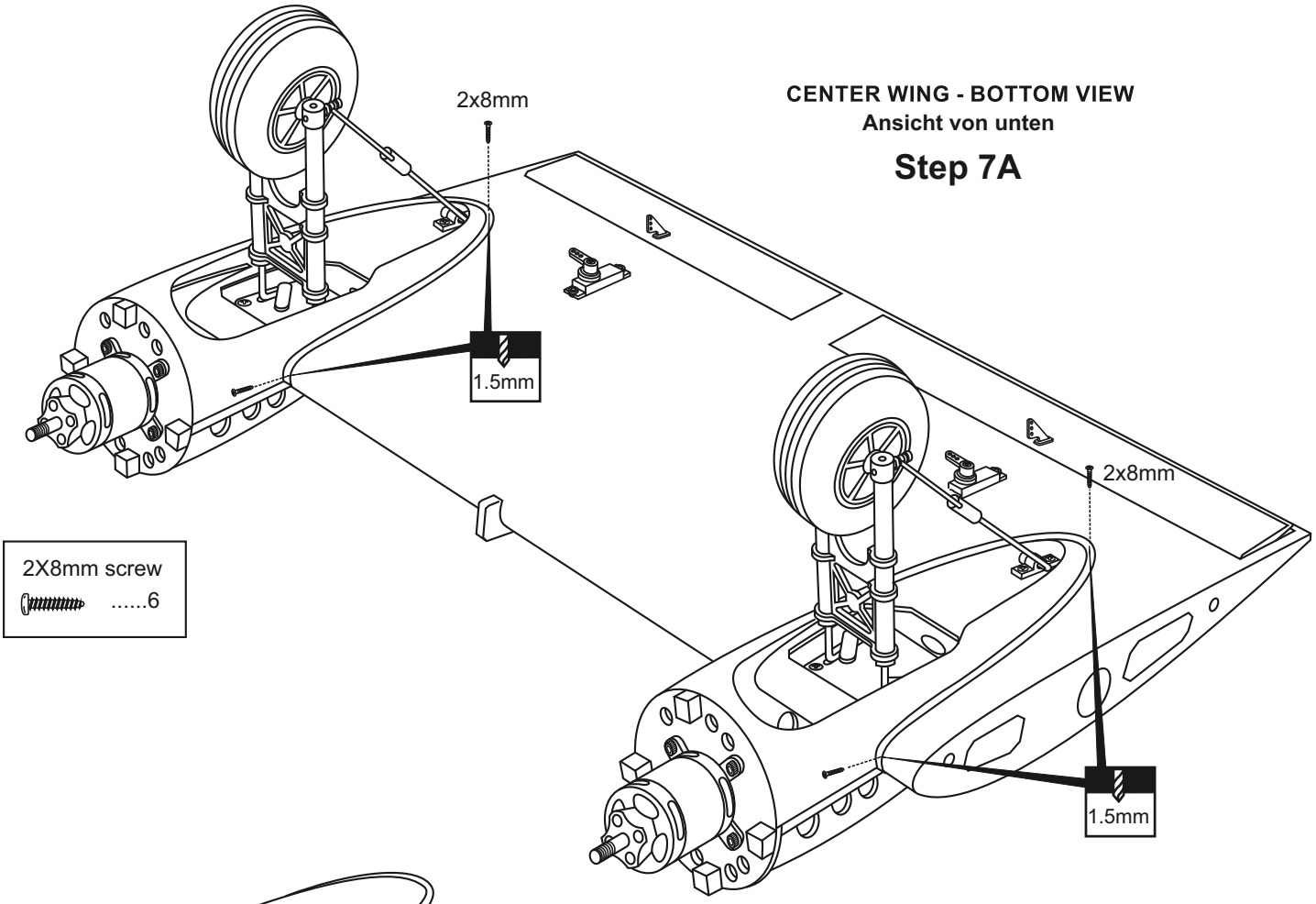




**CENTER WING - BOTTOM VIEW**

**Step 6B**

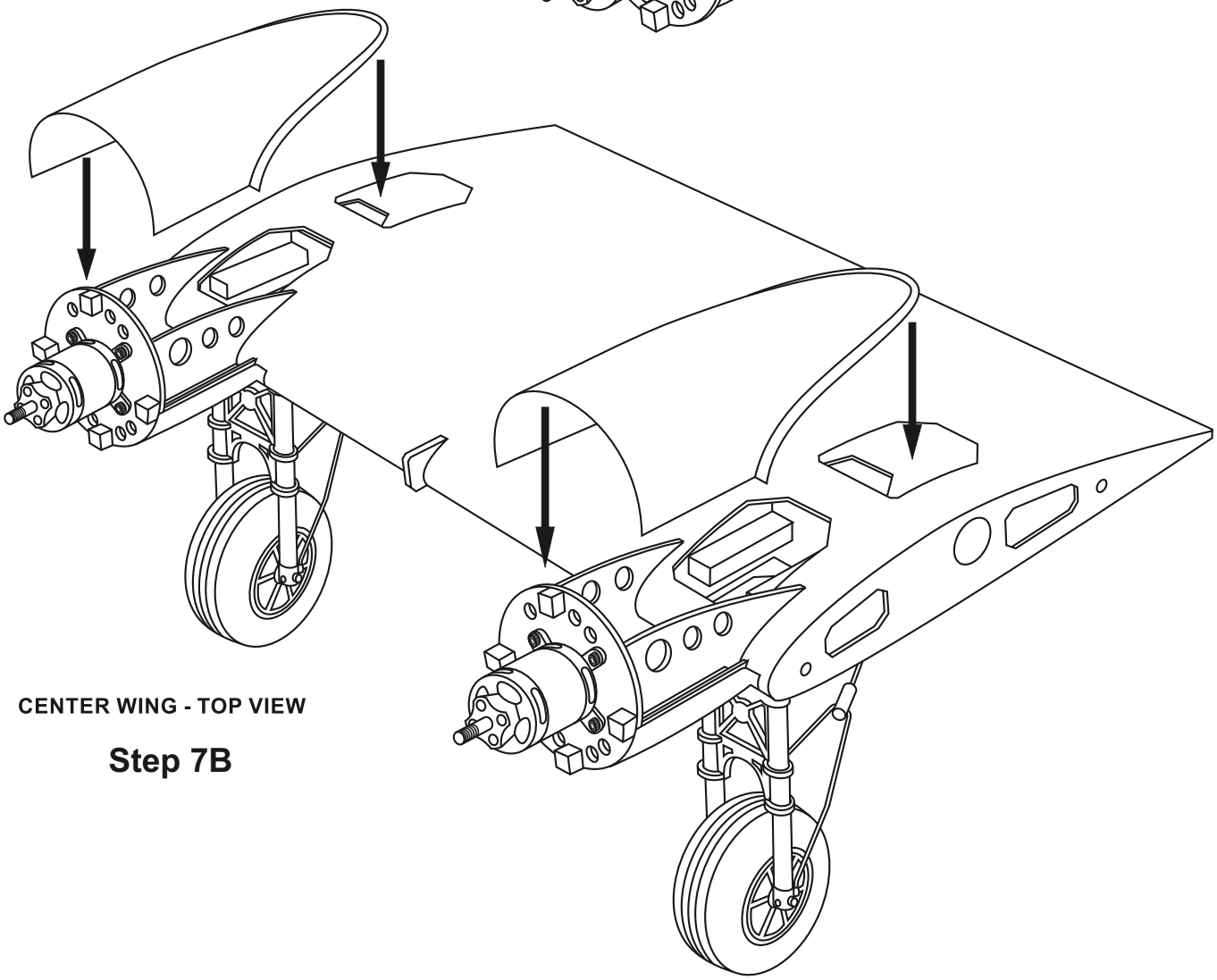
# 7- CENTER WING Tragflächenmittelstück




**CENTER WING - BOTTOM VIEW**
**Ansicht von unten**

**Step 7A**

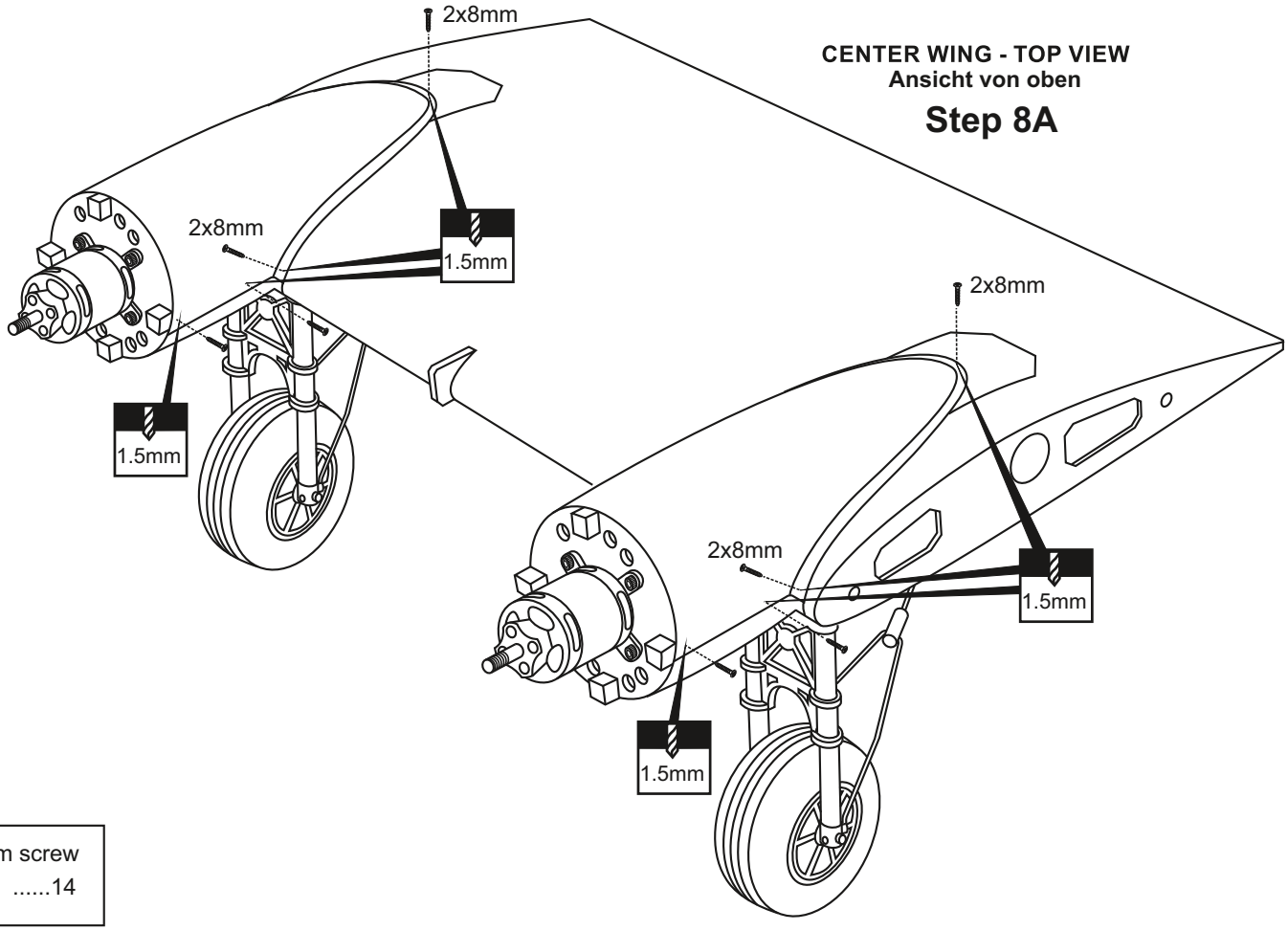
2X8mm screw
.....6



**CENTER WING - TOP VIEW**

**Step 7B**

# 8- CENTER WING




**CENTER WING - TOP VIEW**
**Ansicht von oben**

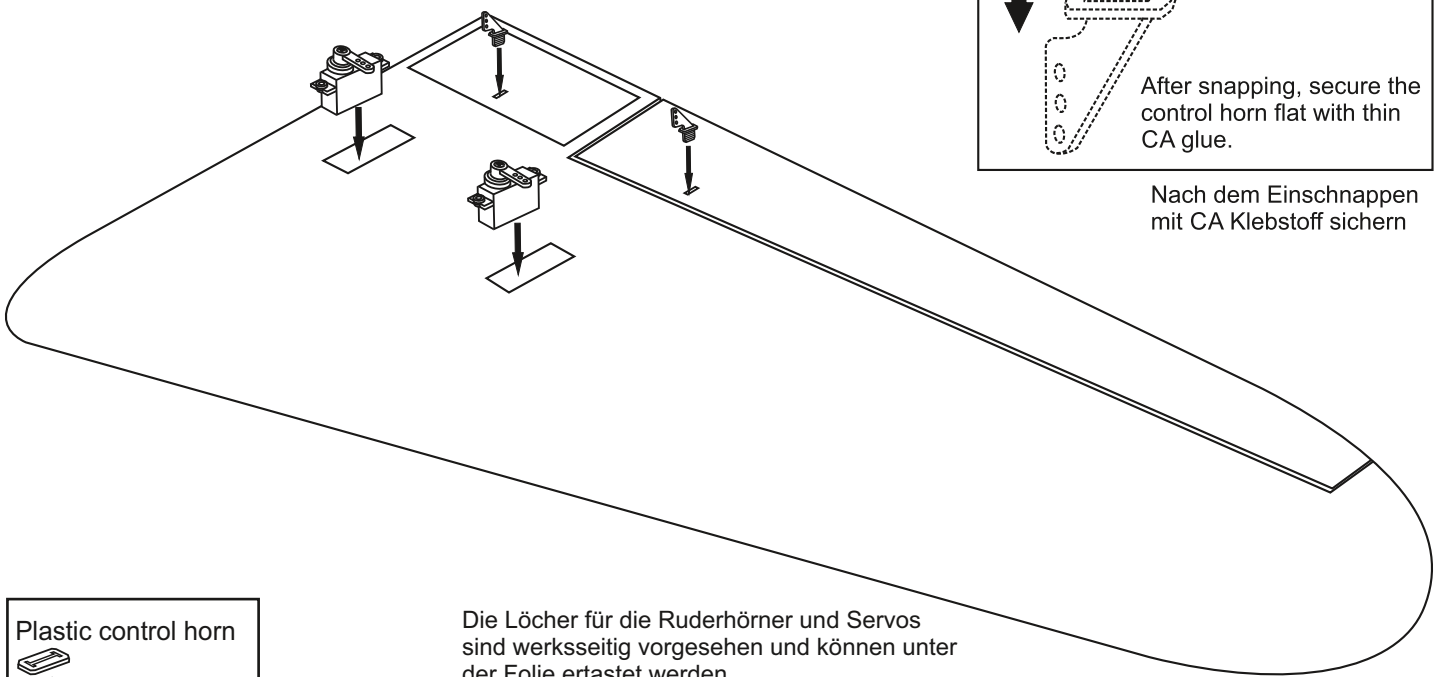
**Step 8A**

2X8mm screw
.....14

# 9- RIGHT (LEFT) WING

**RIGHT WING - TOP VIEW**

**Step 9A**






Nach dem Einschnappen mit CA Klebstoff sichern

Plastic control horn
.....2

Die Löcher für die Ruderhörner und Servos sind werksseitig vorgesehen und können unter der Folie ertastet werden.

Note: The holes for the control horns and servos installation are pre-cut at factory. Cut away only the covering.

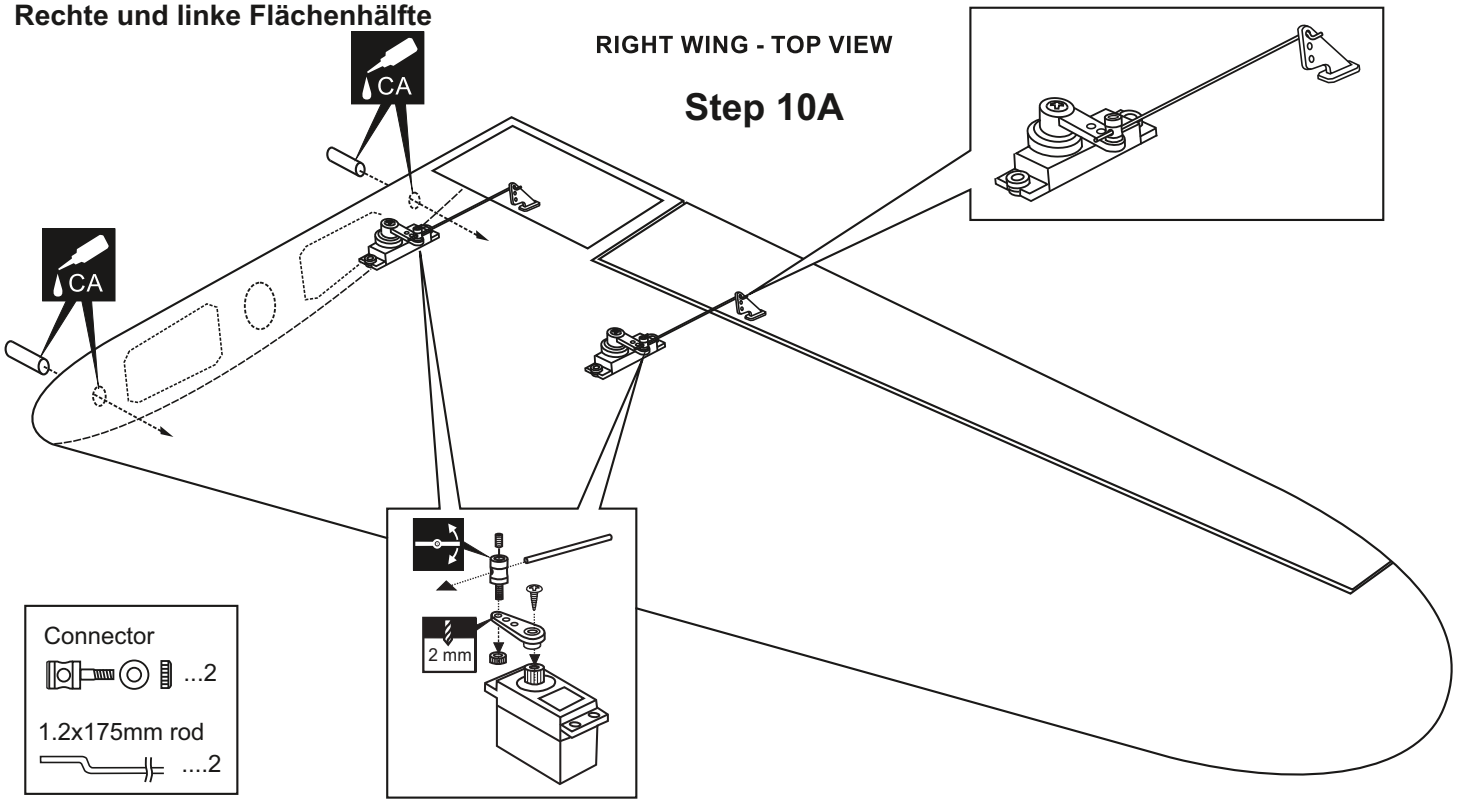
# 10- RIGHT (LEFT) WING

**Rechte und linke Flächenhälfte**

**Rechte Flächenhälfte von oben**

**RIGHT WING - TOP VIEW**

**Step 10A**

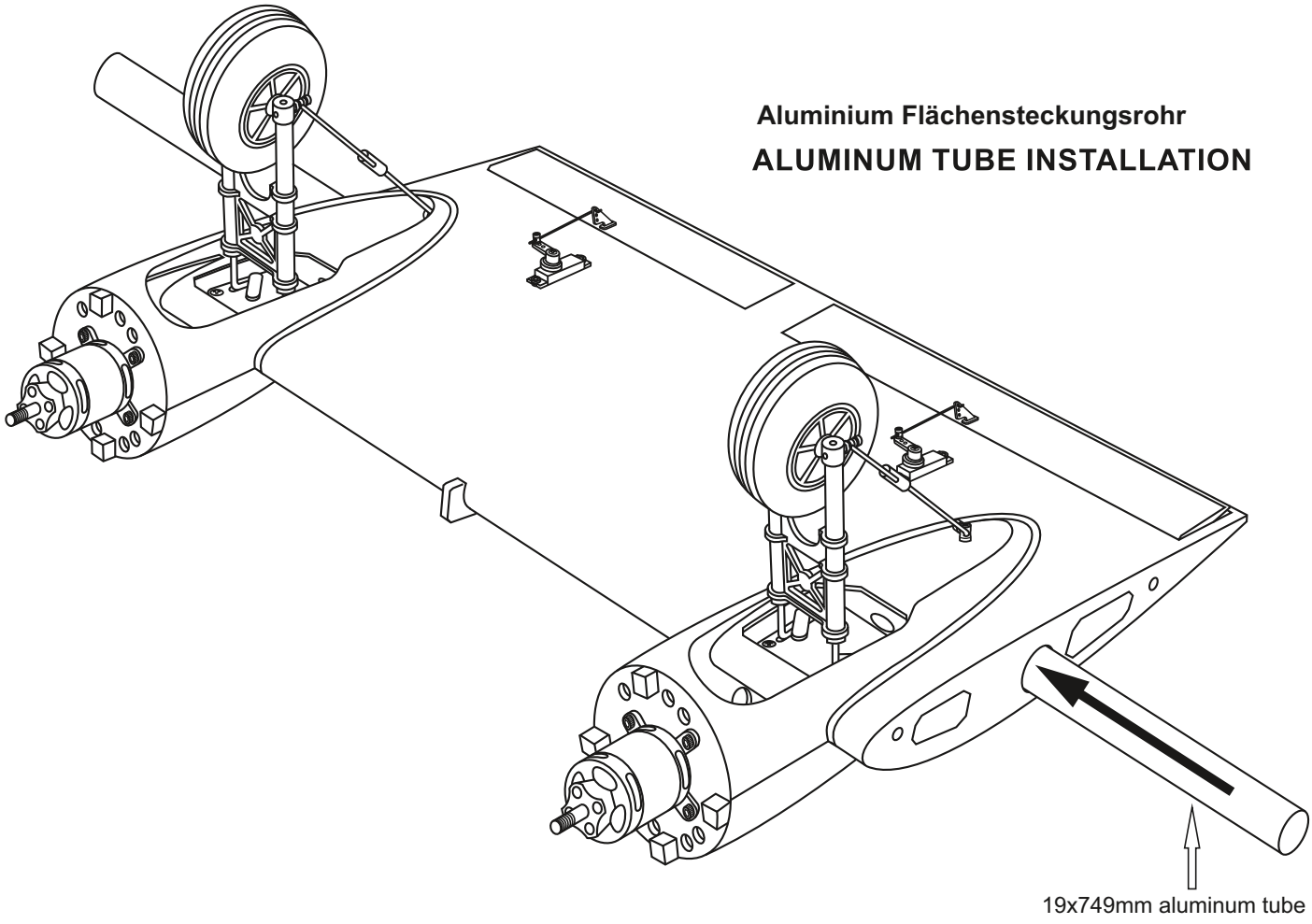



# 11- CENTER WING

**Tragflächenmittelstück**

**Aluminium Flächensteckungsrohr**

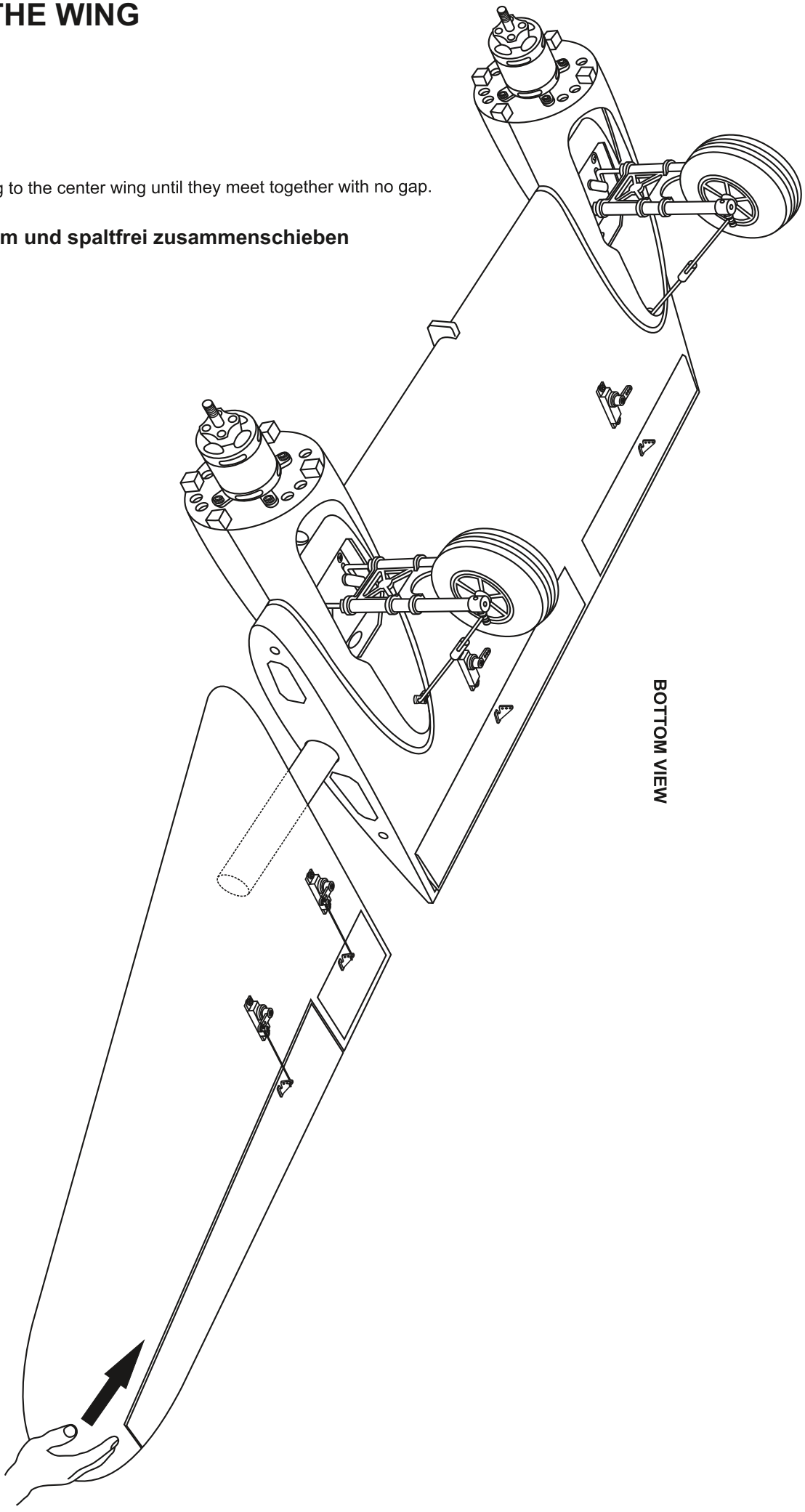
**ALUMINUM TUBE INSTALLATION**



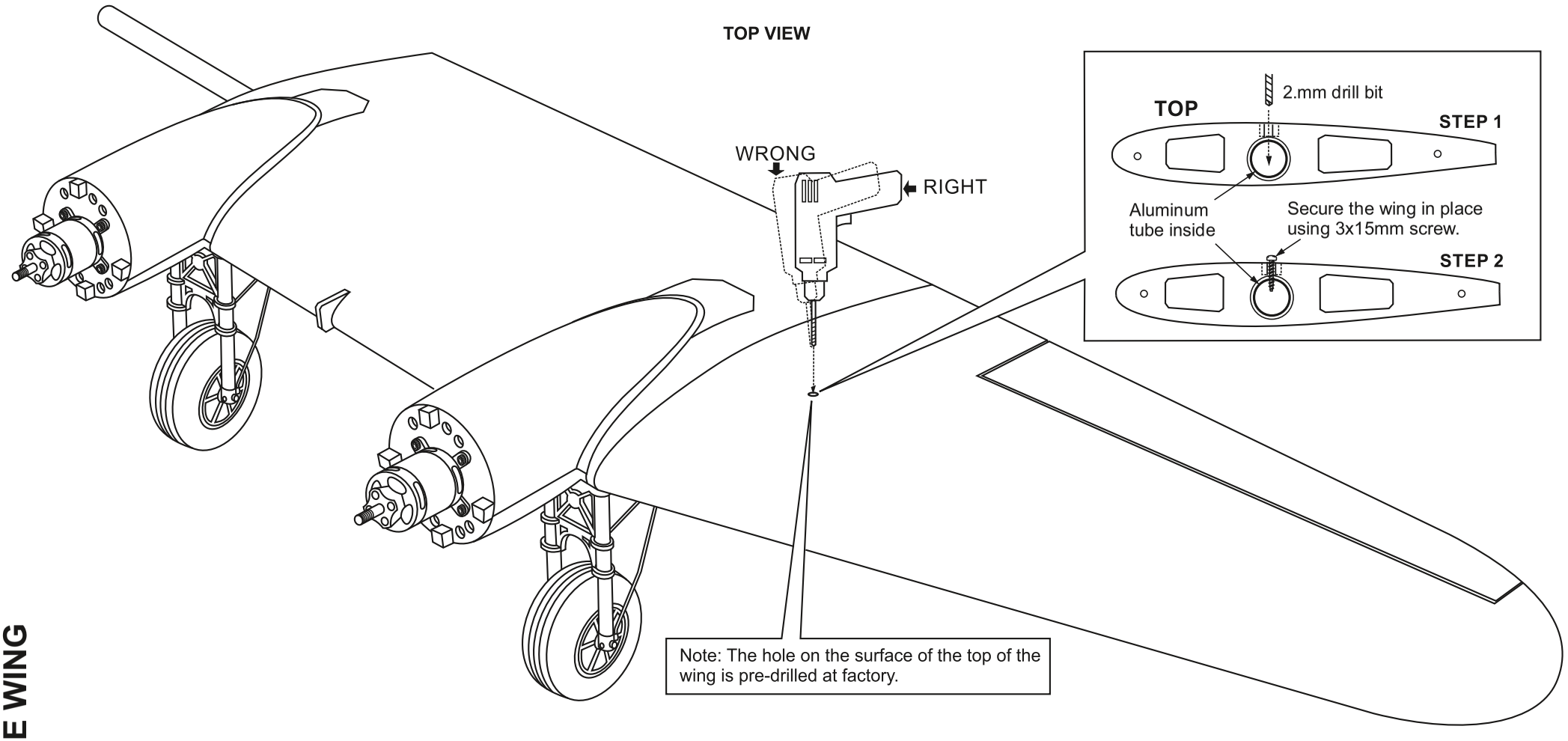
# 12- JOINING THE WING

Slowly, push the left wing to the center wing until they meet together with no gap.

**Flächenteile langsam und spaltfrei zusammenschieben**



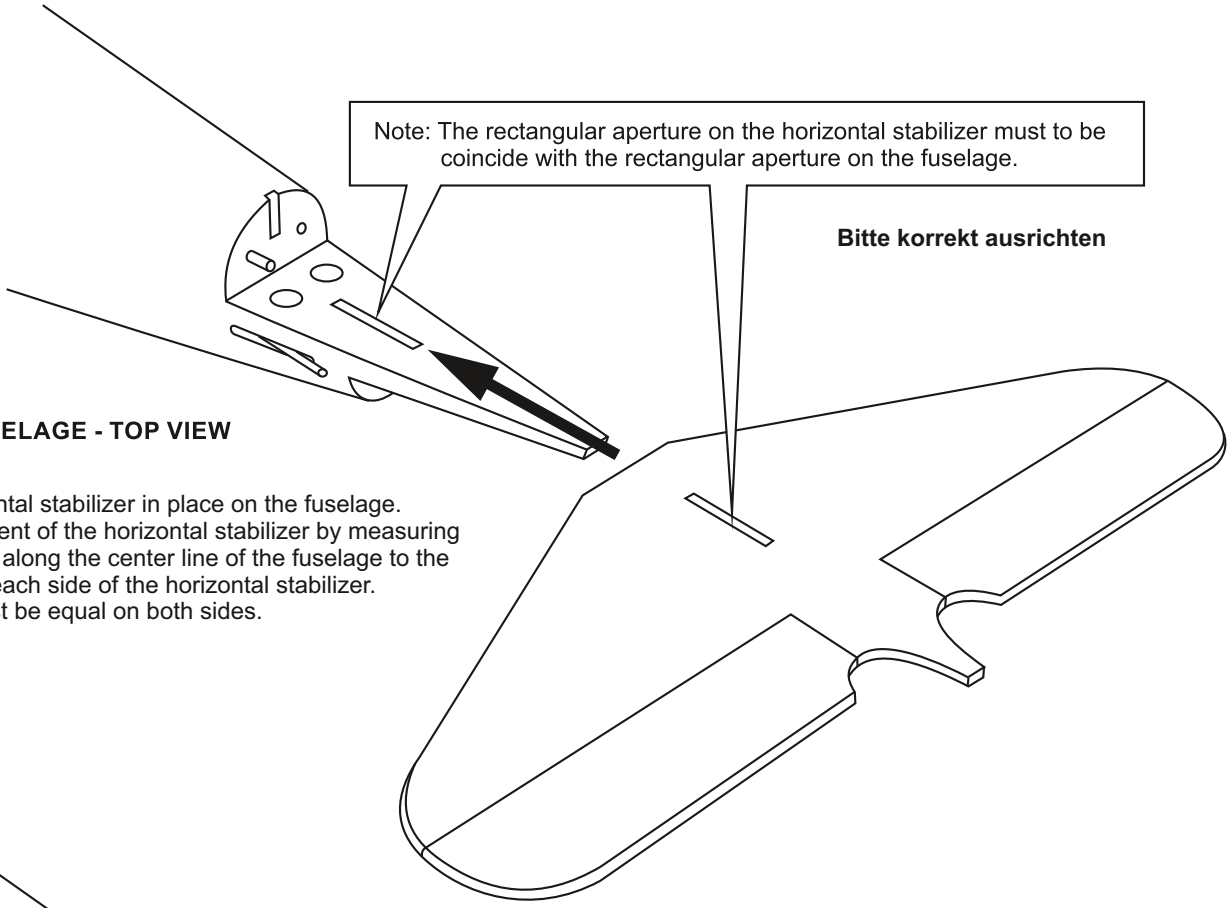
# 13- JOINING THE WING




Do the same way with the right wing.

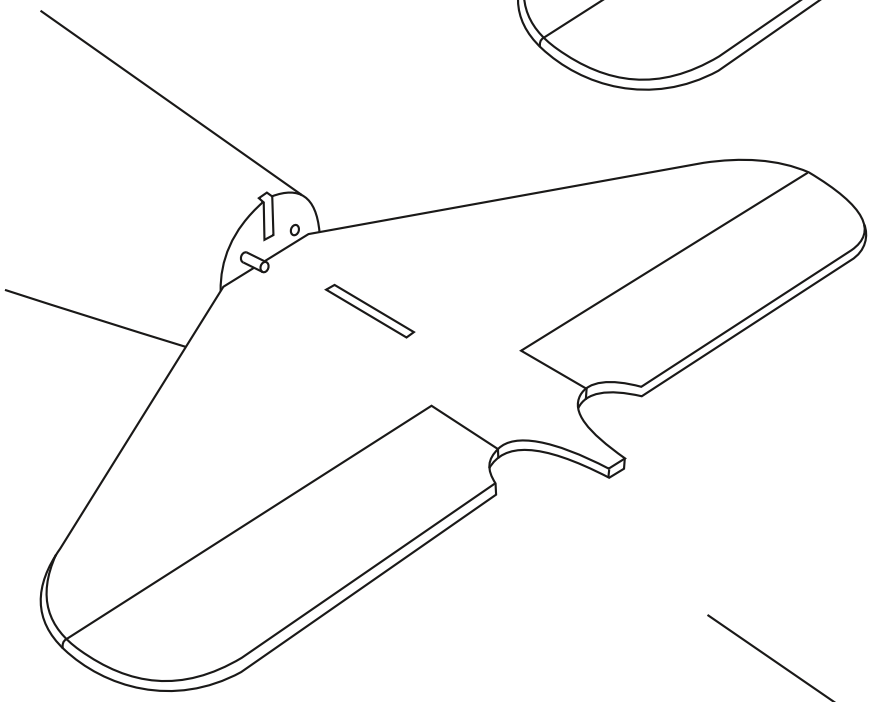
3x15mm screw .....2

# 14- HORIZONTAL STABILIZER

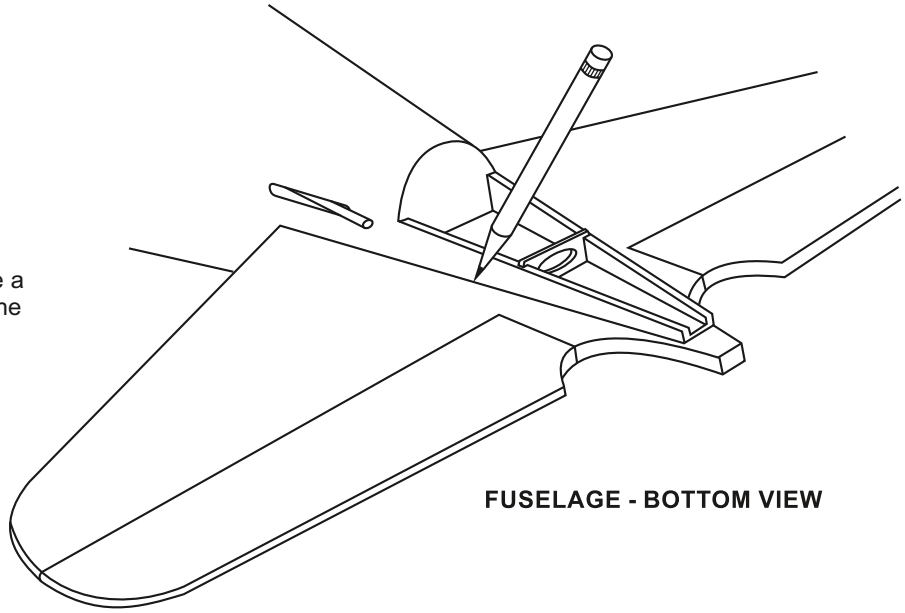



**FUSELAGE - TOP VIEW**

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.



When you are satisfied with the alignment, use a pencil to carefully trace around the bottom of the stabilizer where it meets the fuselage

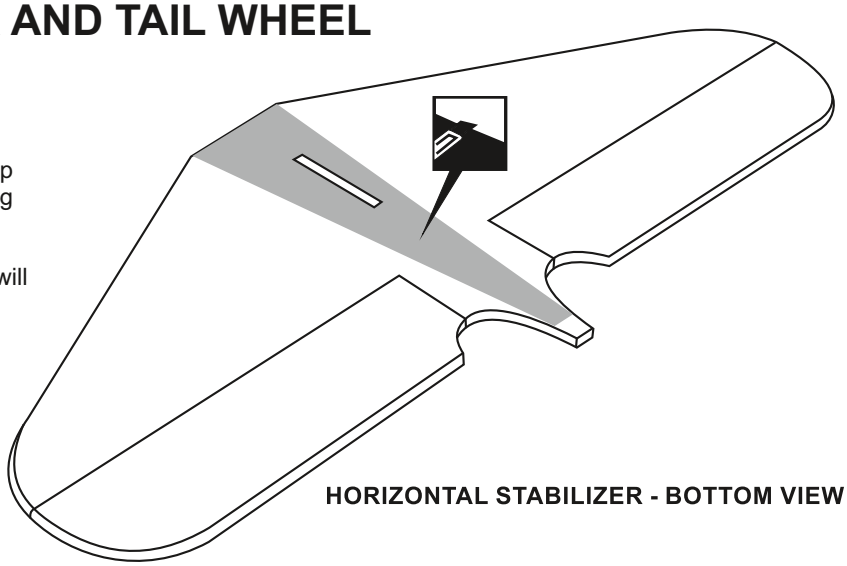


**FUSELAGE - BOTTOM VIEW**

# 15- HORIZONTAL STABILIZER AND TAIL WHEEL

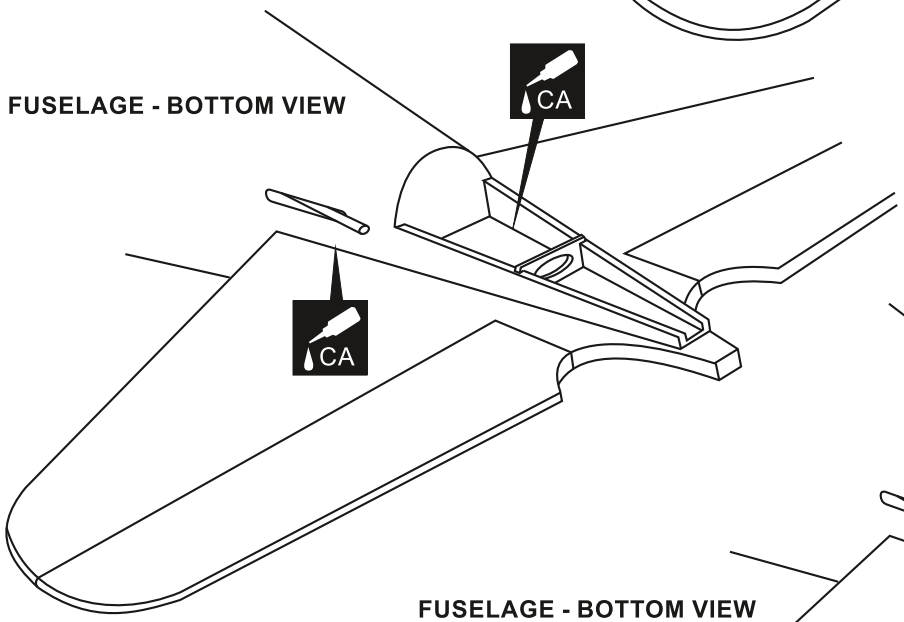
Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering inside the lines which were marked.

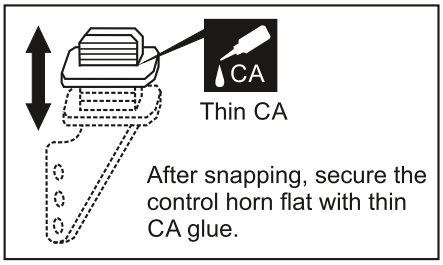
Be cautious not to cut into the wood - this will weaken the structure.



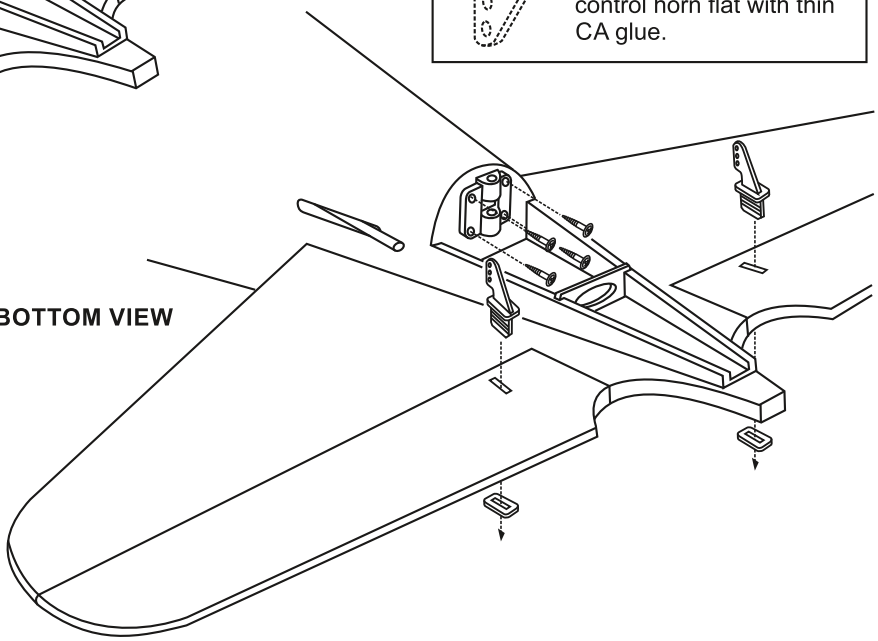
**HORIZONTAL STABILIZER - BOTTOM VIEW**

**FUSELAGE - BOTTOM VIEW**



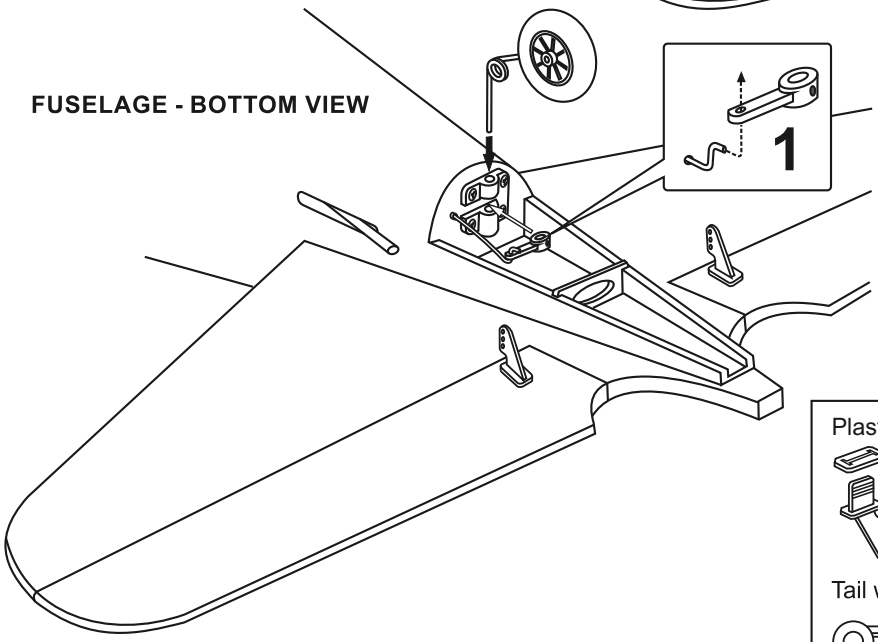




**FUSELAGE - BOTTOM VIEW**



Note: The holes for the elevator control horns are pre-cut at factory. Cut away only the covering.

**FUSELAGE - BOTTOM VIEW**




1- Insert the tail wheel pushrod into the hole on the tail gear control horn (as show).

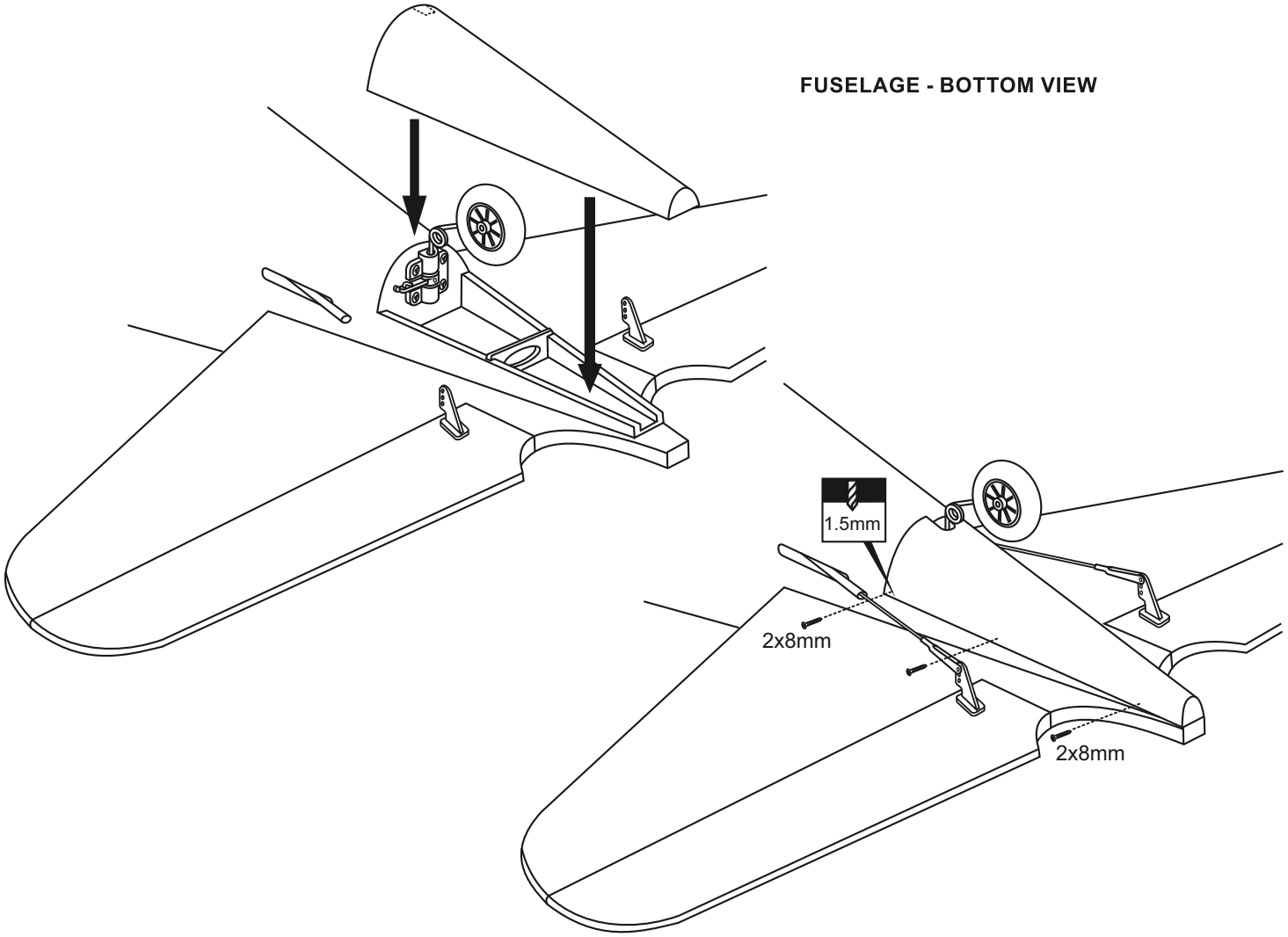
2- Install the tail wheel control horn in place.

3- Instal the tail wheel gear in place.

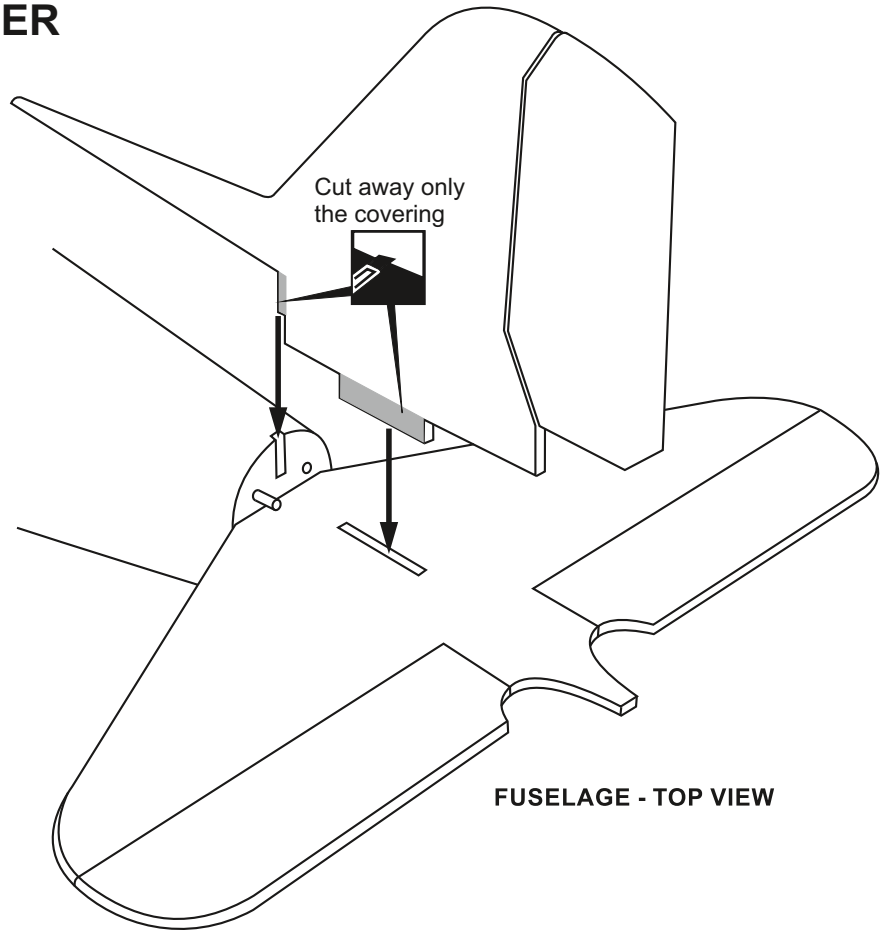
4- Secure the tail wheel control horn in place using a 2mm screw set, Ensure smooth non-binding movement.

| Plastic control horn | Tail gear mount | 3x10mm screw |
|---|---|---|
| .....2 | .....1 | .....4 |
| **Tail wheel control horn** | **2mm I.D collar** | |
| .....1 | .....1 | |

# 16- TAIL WHEEL COVER



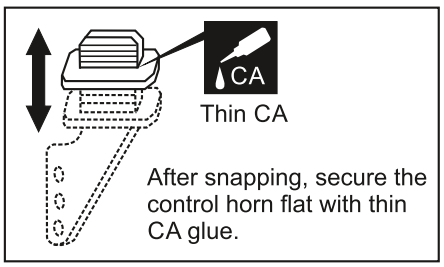

# 17- VERTICAL STABILIZER




Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering inside the lines which were marked.

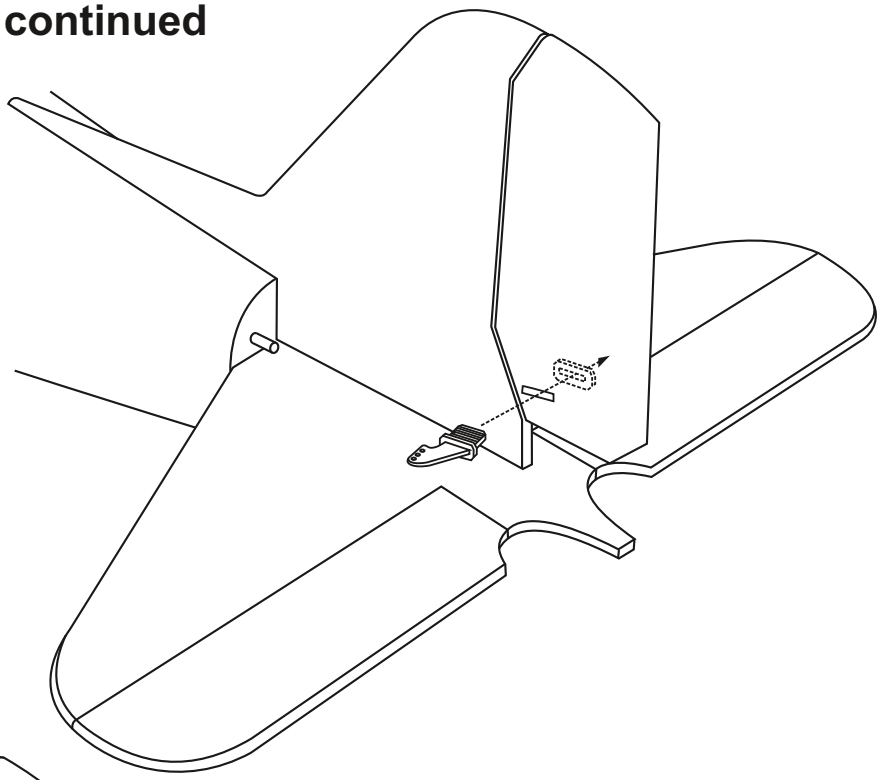
Be cautious not to cut into the wood - this will weaken the structure.

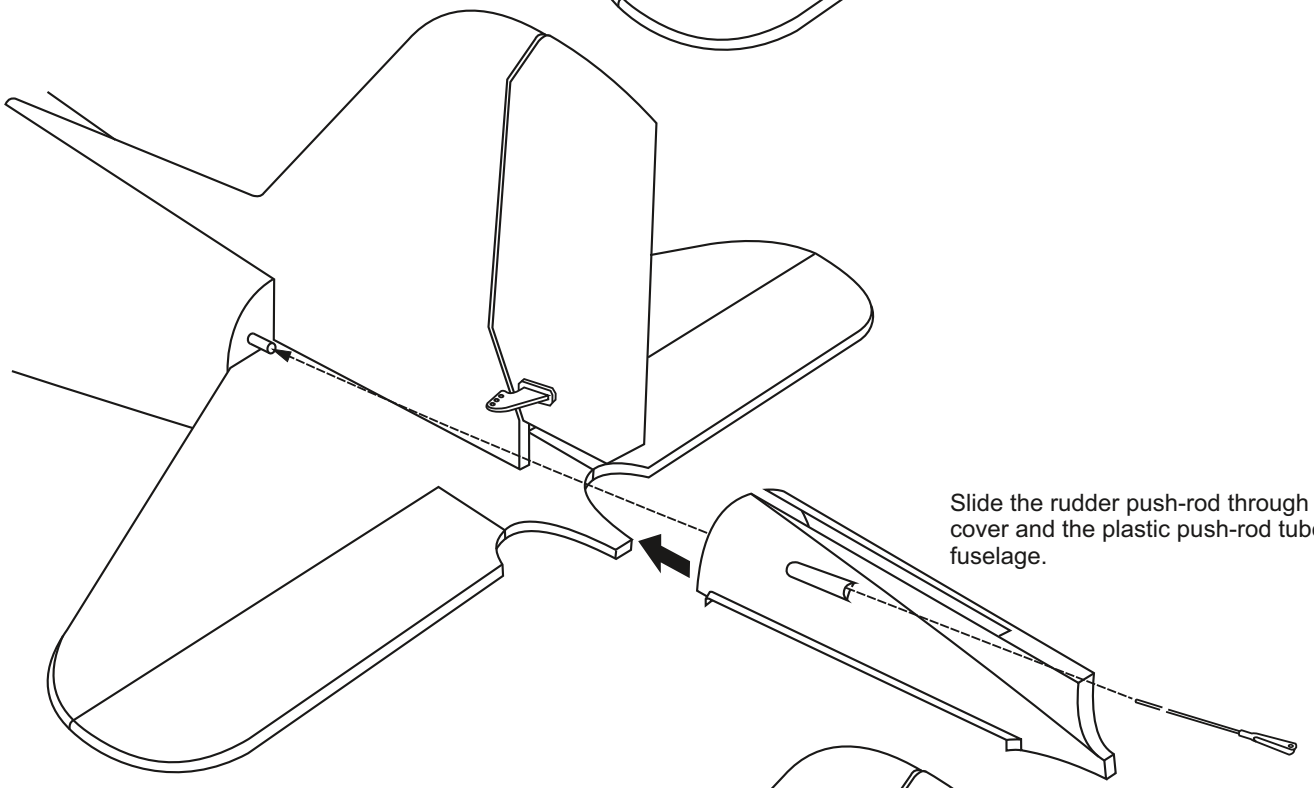
# 18- VERTICAL STABILIZER continued



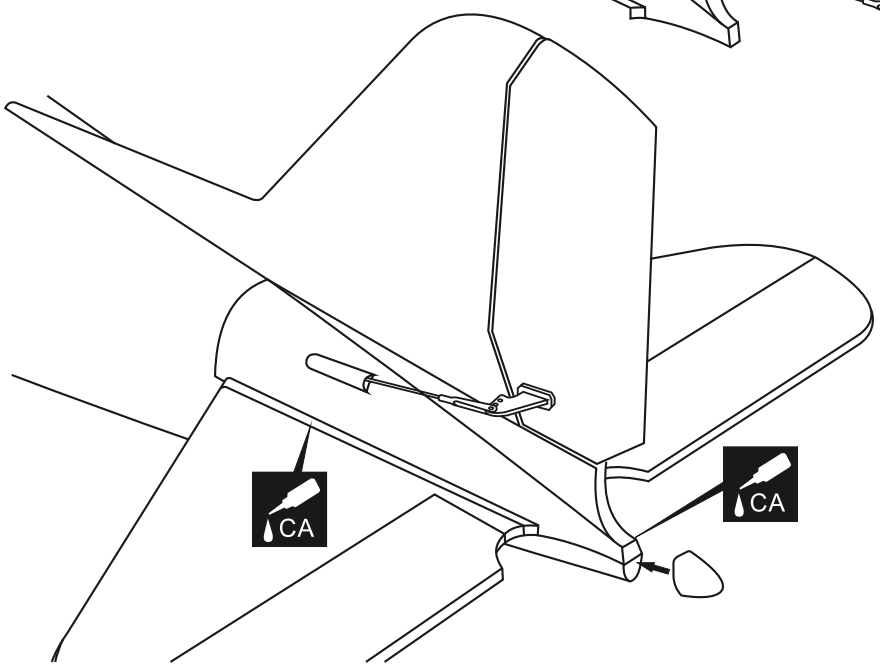

Thin CA

After snapping, secure the control horn flat with thin CA glue.

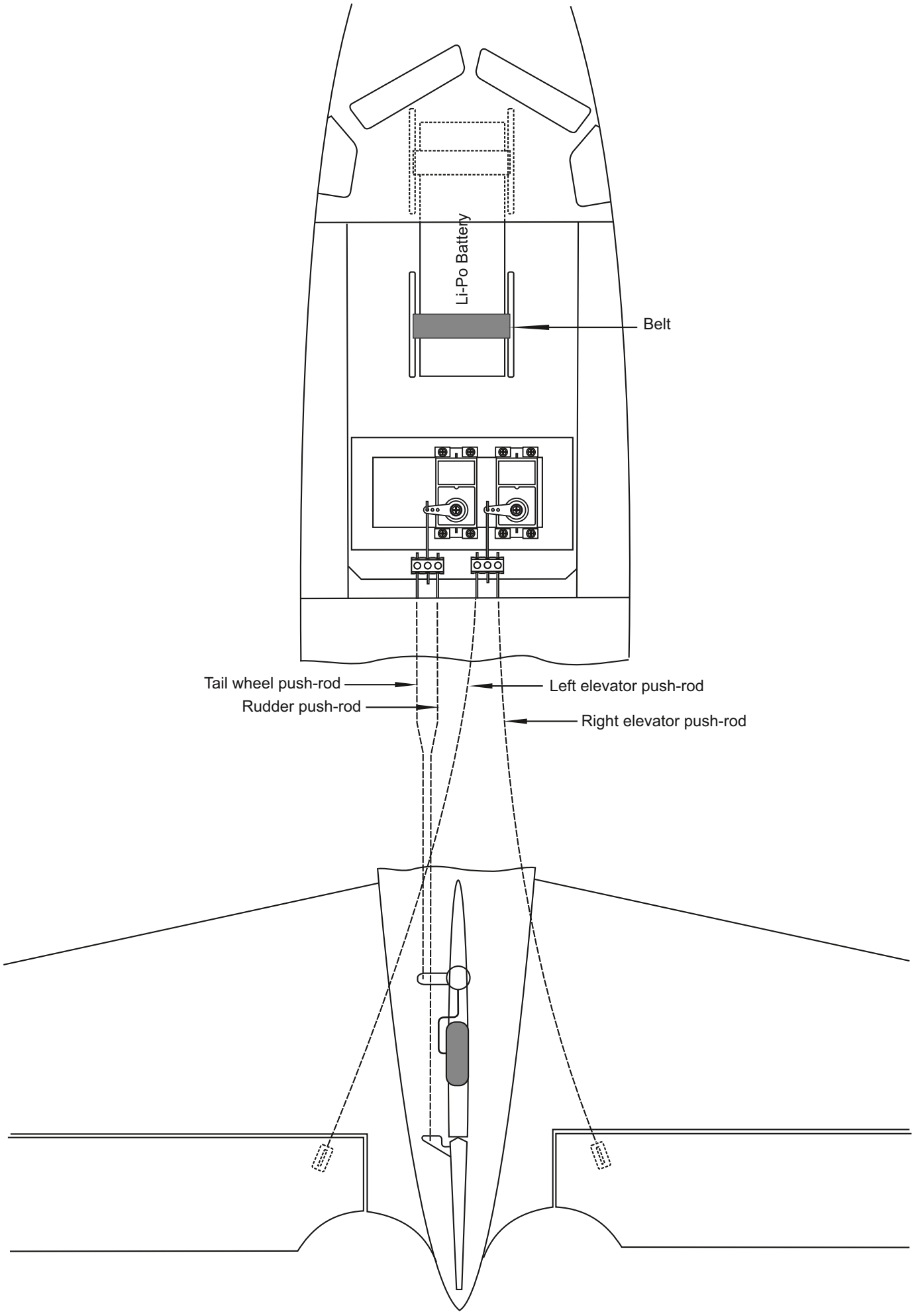




Slide the rudder push-rod through the plastic cover and the plastic push-rod tube into the fuselage.

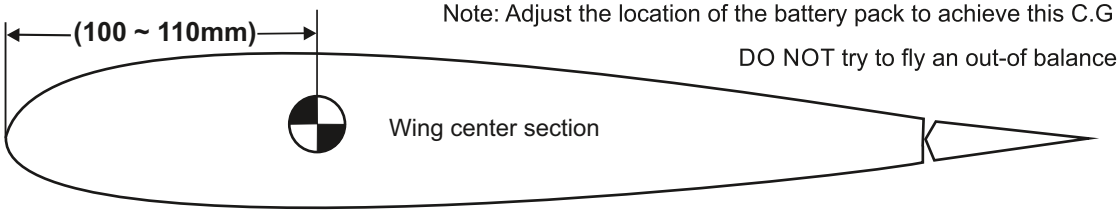


# 19- LINKAGES


Li-Po Battery
Belt
Tail wheel push-rod
Rudder push-rod
Left elevator push-rod
Right elevator push-rod

# 20- BALANCE AND CONTROL SURFACE

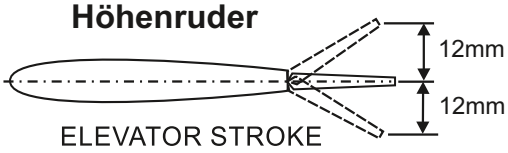
## Schwerpunkt und Ruderausschläge



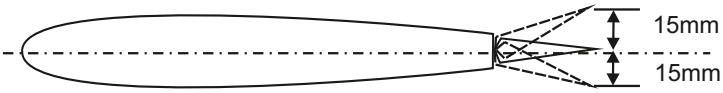

Note: Adjust the location of the battery pack to achieve this C.G location.

DO NOT try to fly an out-of balance model!

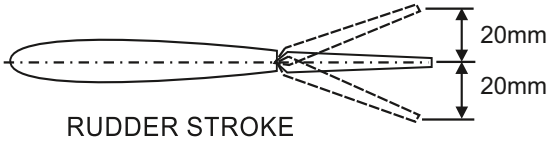
**Höhenruder**




ELEVATOR STROKE

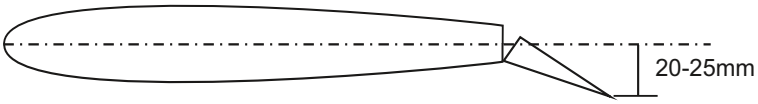



AILERON STROKE **Querruder**




RUDDER STROKE

**Seitenruder**




FLAP STROKE **Landeklappen**

Adjust the travel of the control surfaces to achieve the values stated in the diagrams.
These value will be suitable for average flight requirements. Adjust the values to suit your particular needs.