Radio control model
R/C Flugmodell

INSTRUCTION MANUAL
MONTAGEANLEITUNG

DE HAVILLAND DHC 2 BEAVER

Designed for brushless electric motors (.46-.52 class glow conversion optional)
Entwickelt für Brushless Elektro Motoren (7,5 -8,5cc Glühzündermotor Einbau möglich)

Kenmore air version

NEXA

TECHNISCHE DATEN

Spannweite	1620mm
Länge	1115mm
Elektroantrieb	(siehe nächste Seite)
Verbrennerantrieb	7.5cc 2-T / 8.5cc 4-T
Fernsteuerung	5 Kanal / 4 -5 Servos

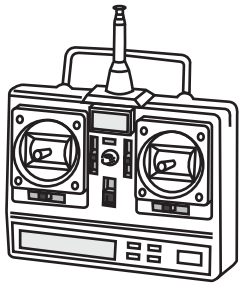
SPECIFICATIONS

Wingspan	63.7in.
Length	43.9 in.
Electric Motor	(See next page)
Glow Engine	.46 2Stroke / .52 4-Stroke
Radio	5 Channel / 4 -5 Servos

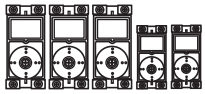
WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if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

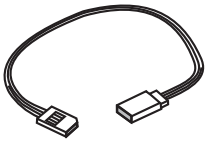
REQUIRED FOR OPERATION (Purchase separately)
BENÖTIGTE KOMPONENTEN (Nicht im Lieferumfang enthalten)



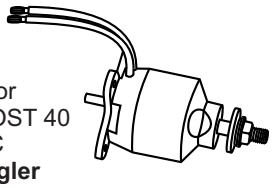
Minimum 5 channel radio
for airplane / 5 servo
Motor x1, rudder x1, elevator x1
aileron x2 (mini servo)
Minimum 5 Kanal
Fernsteuerung / 5 servo



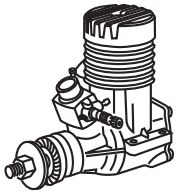
Propeller 11x8 for electric motor / 11x6 for glow engine
Luftschraube 11x8 für Elektromotor / 11x6 für Verbrennungsmotor



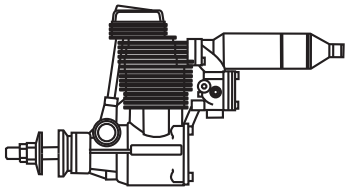
Extension cord
Servoverlängerungskabel



Brushless Motor
PICHLER BOOST 40
Brushless ESC
Brushless Regler
Battery / Flugakku **LEMONRC 3700-11.1V**



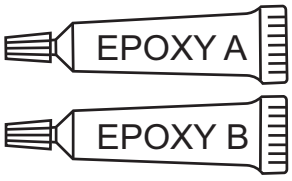
.46 cu.in. (7.5cc)



.52 cu.in (8.5cc)

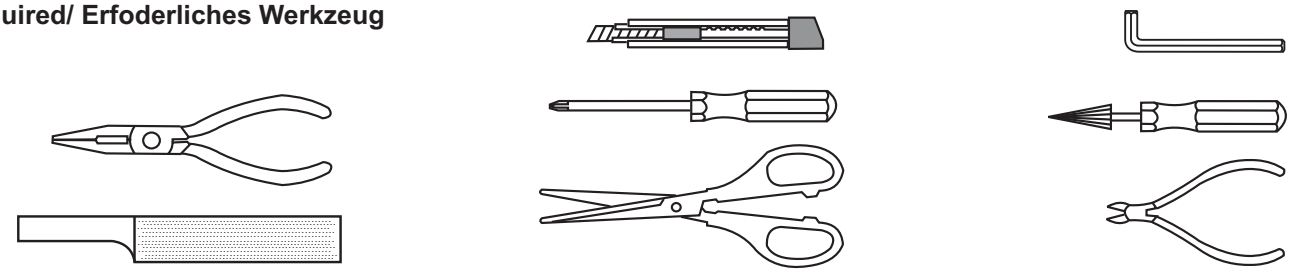
Cyanoacrylate Glue
Sekundenkleber

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 Temeratureinflüsse erschlaffen oder Falten werfen z.b bei zu starker Sonnenenstrahlung oder Hitze.
Stellen Sie das Modell zunächst an einen kühlen Platz für eine bestimmte Zeit. Danach können 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

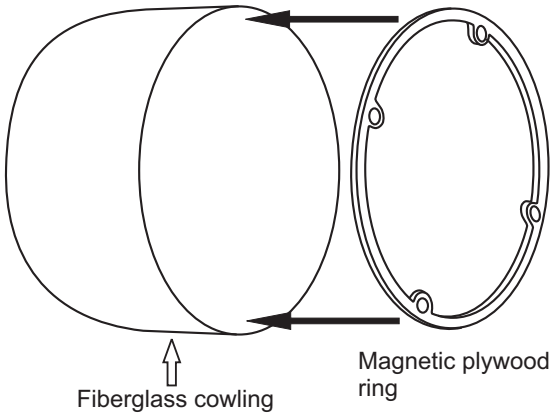
1.0mm = 3/64”	3.0mm = 1/8”	10mm = 13/32”	25mm = 1”
1.5mm = 1/16”	4.0mm = 5/32”	12mm = 15/32”	30mm = 1-3/16”
2.0mm = 5/64”	5.0mm = 13/64”	15mm = 19/32”	45mm = 1-51/64”
2.5mm = 3/32”	6.0mm = 15/64”	20mm = 51/64”	

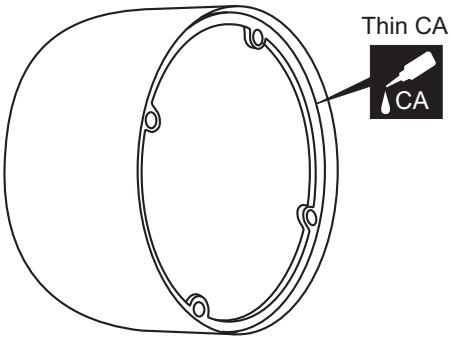
SAFETY NOTES BEFORE ASSEMBLING

This model is highly pre-fabricated and can be built in a very short time. However, the work which you have to carry out is important and must be done carefully.
The model will only be strong and fly well if you complete your tasks competently - so please work slowly, accurately and check every joints, maybe apply more glue to be safe.

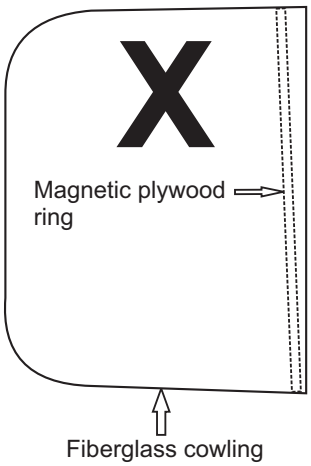
Read through the manual before you begin, so you will have an overall idea of what to do.

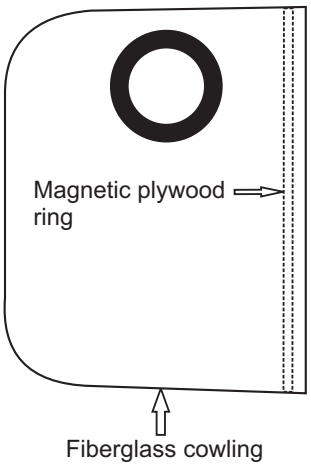
DHC-2 Beaver 1- Cowling

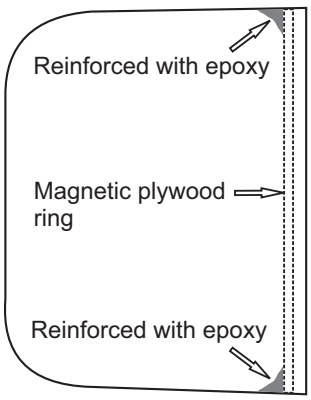


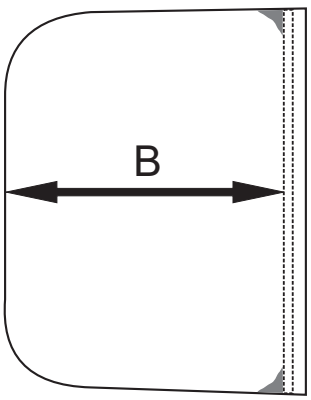


Secure the magnetic plywood ring in place using the thin CA glue.

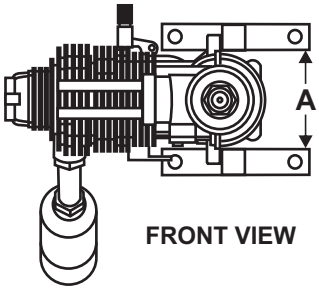




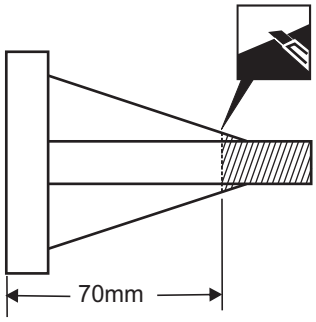




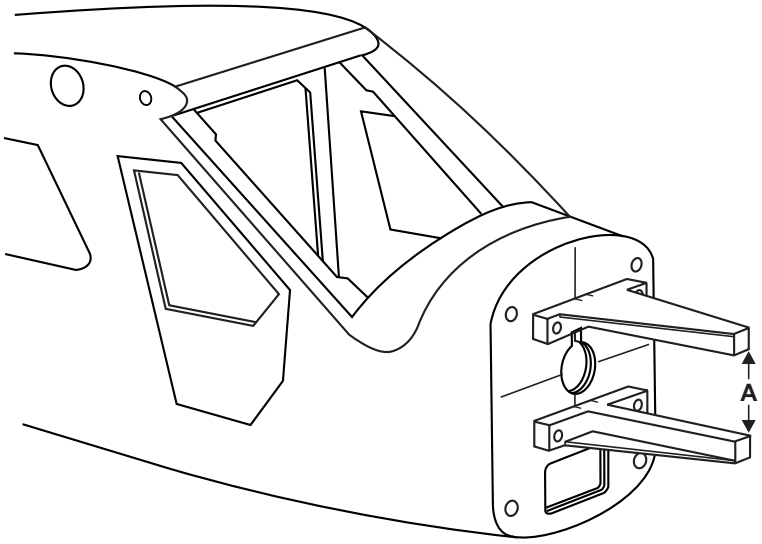
DHC-2 Beaver 2- Engine mount

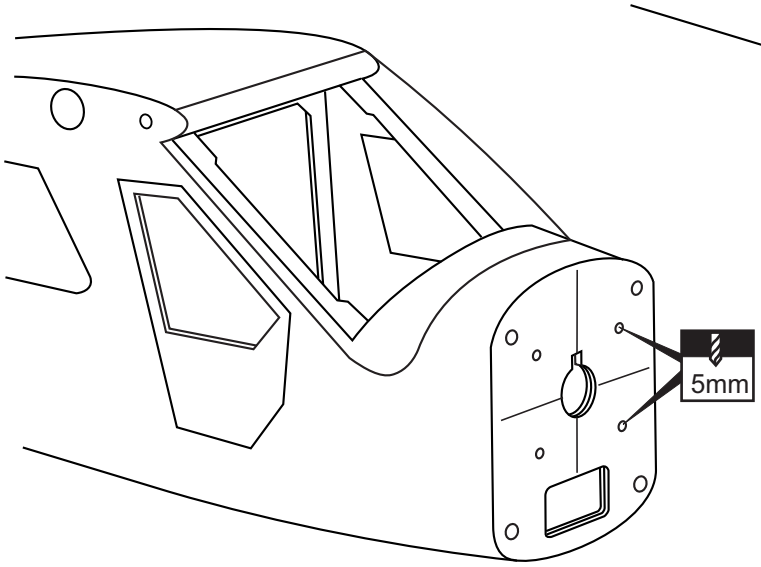


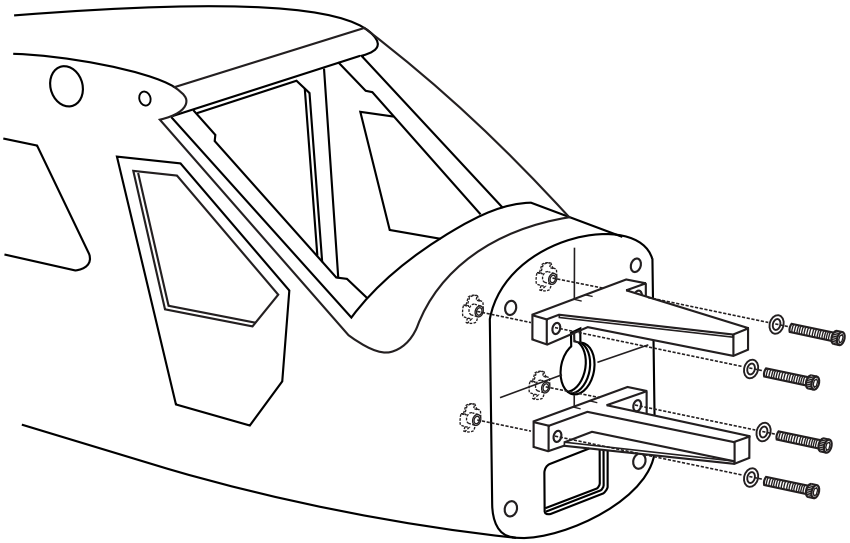
Engine mount



1





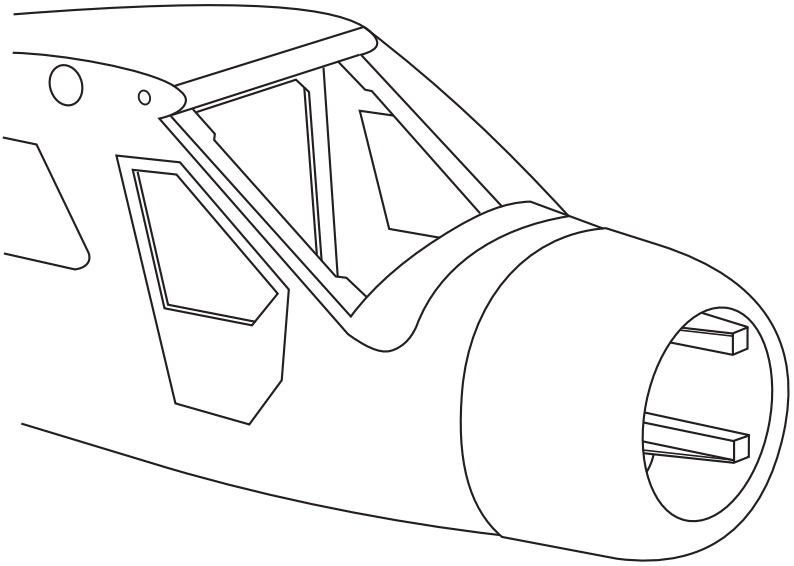


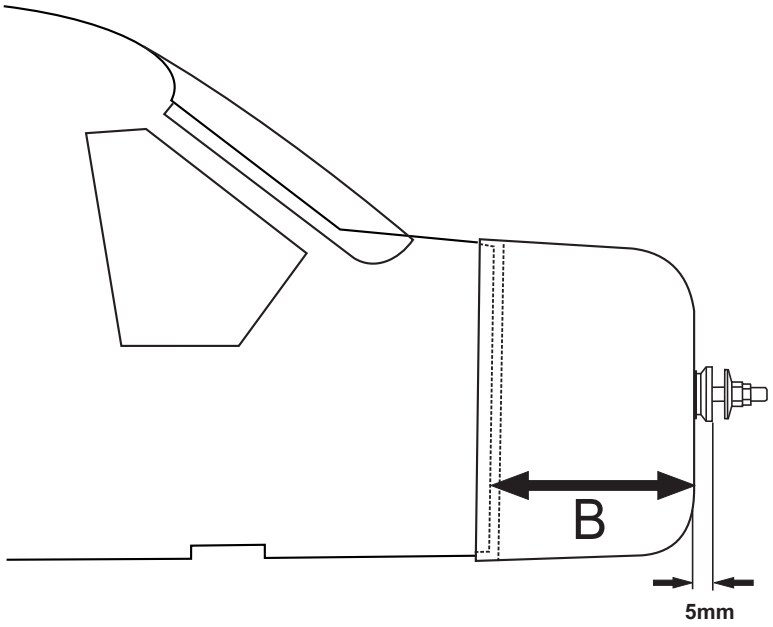
4x25mm hex bolt 4

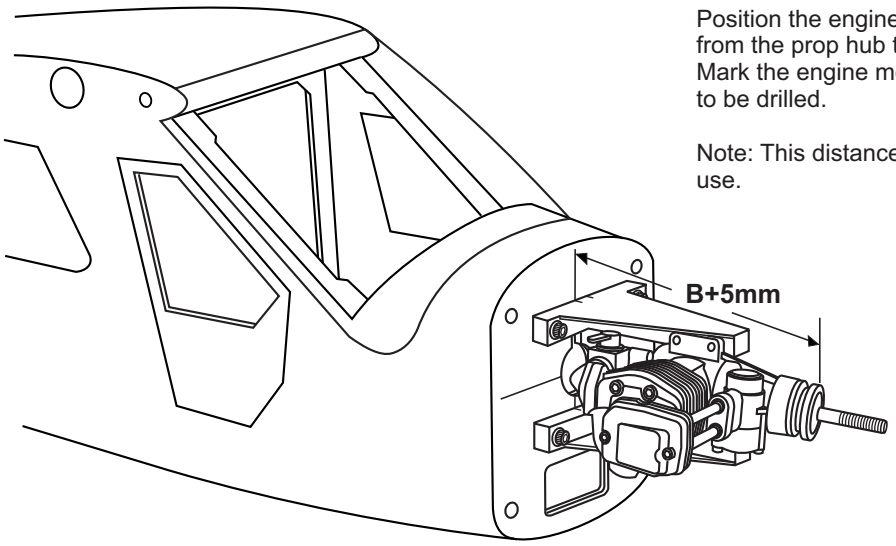
....4

4mm blind nut 4

DHC-2 Beaver 3- Engine mount





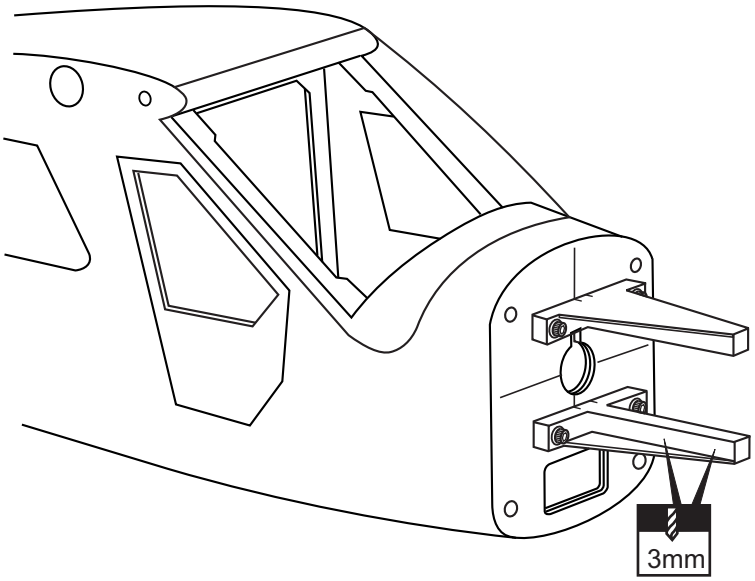


Position the engine to the engine mounts so the distance from the prop hub to the fire-wall is **B+5mm** (*).
Mark the engine mounting plate where the four holes are to be drilled.

Note: This distance (*) depends on the type of engine you use.

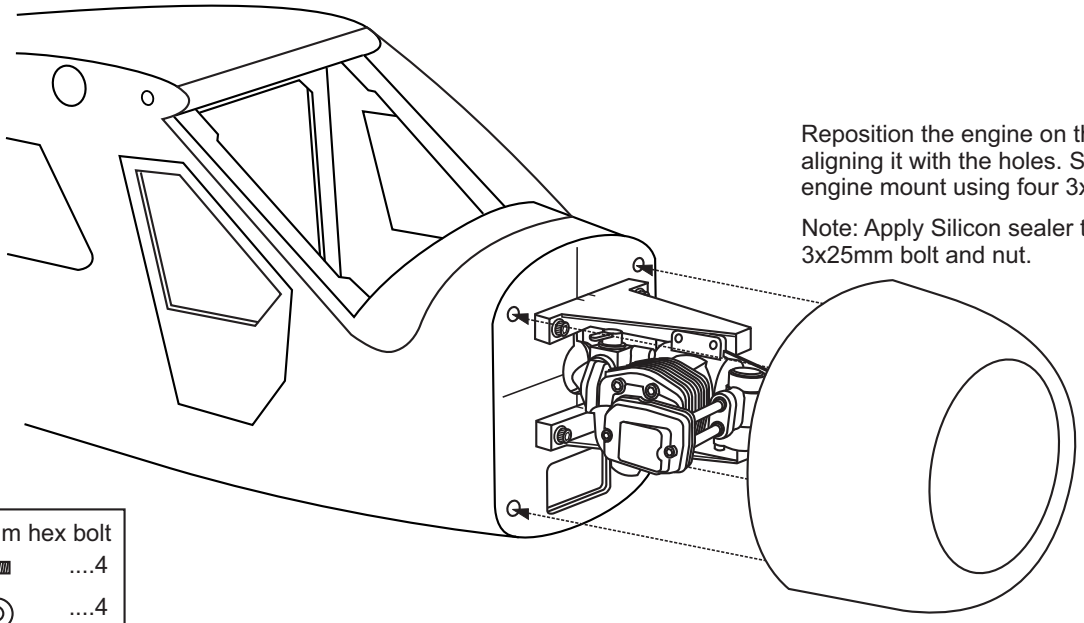
! Engine thrust on balk head is already adjust at factory
Sturz und Zug beachten!

DHC-2 Beaver 4- Engine mount



Remove the engine and drill a 3mm holes through the beam at each of the four marks made above.

Marking sure that you drill the hole perpendicular to the beam of the engine mount.



Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 3x25mm hex bolts.

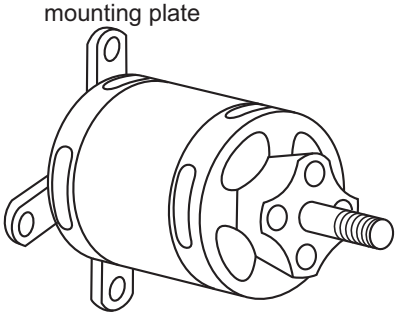
Note: Apply Silicon sealer to each of the 3x25mm bolt and nut.

3x25mm hex bolt	
	4
	4

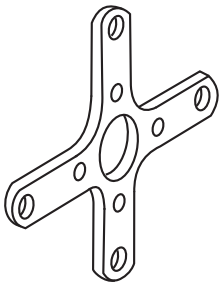
5- Electric motor mount

- Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled (1).
- Remove the aluminum motor mounting plate and drill a 3mm hole through the plywood at each of the four marks marked (2).

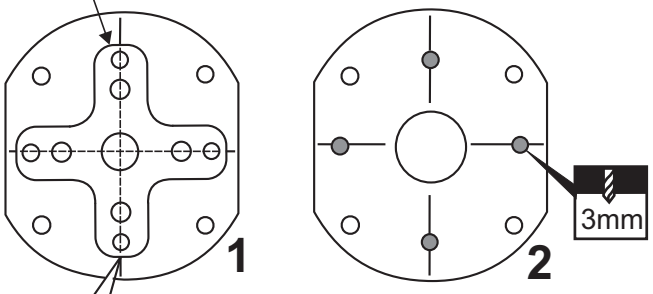
Aluminum motor mounting plate



Aluminum motor mounting plate



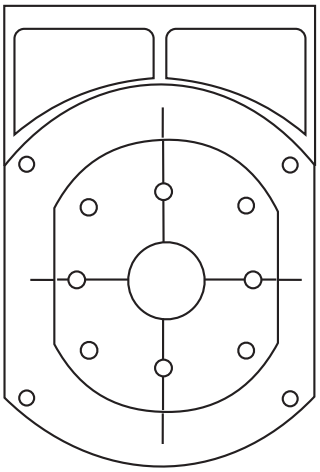
Aluminum motor mounting plate



! Align the mark on the plywood motor mount with the center lines on aluminum motor mount.

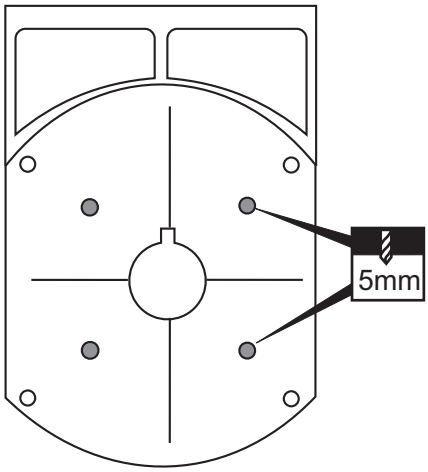
DHC-2 Beaver 6- Electric motor mount

Using a plywood motor mounting plate as a template, mark the fire wall where the four holes are to be drilled (3).



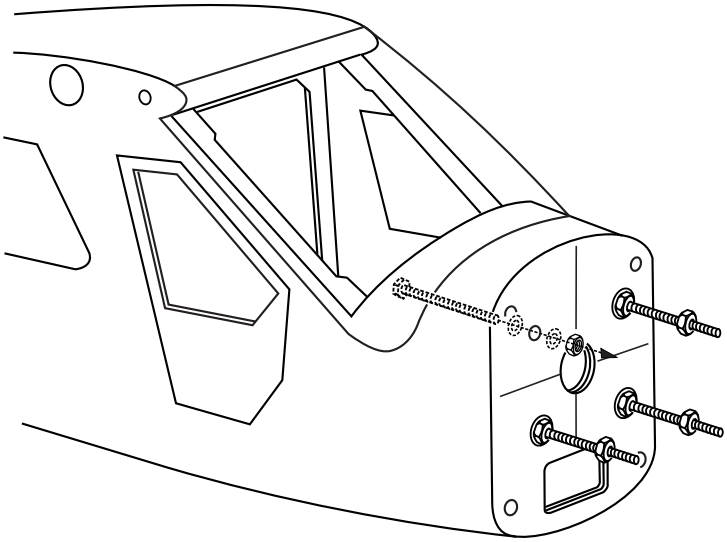
3

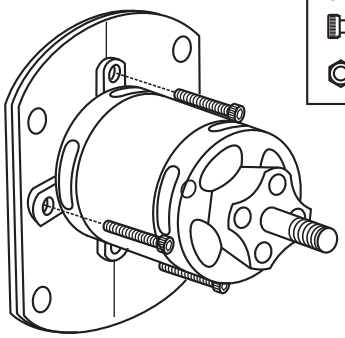
Remove the plywood motor mounting plate and drill a 5mm hole through the fire-wall at each of the four marks marked (4).



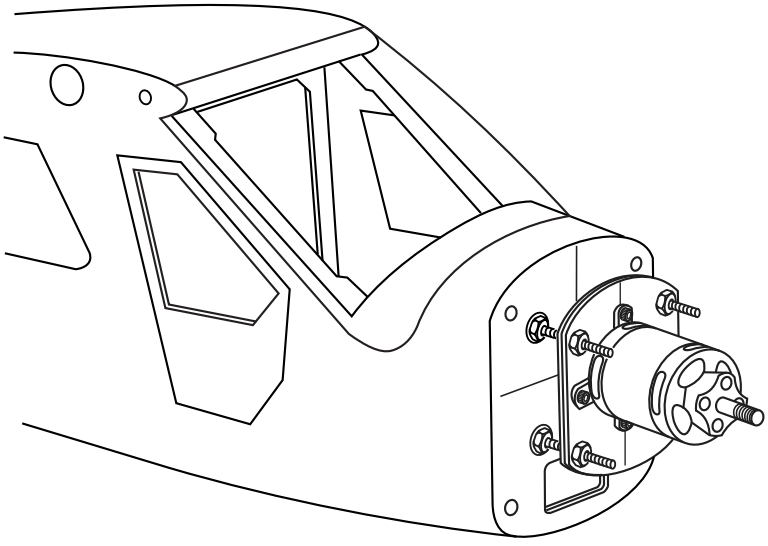
4

3x15mm hex bolt 4
....4

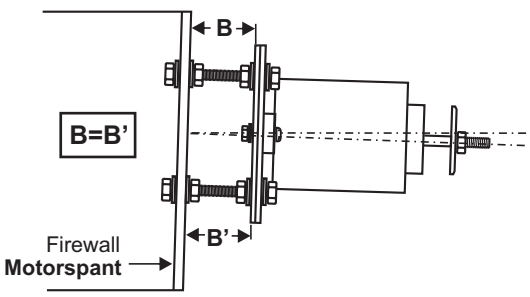




5x80 screw X4
5mm washer X16
5mm nut X12

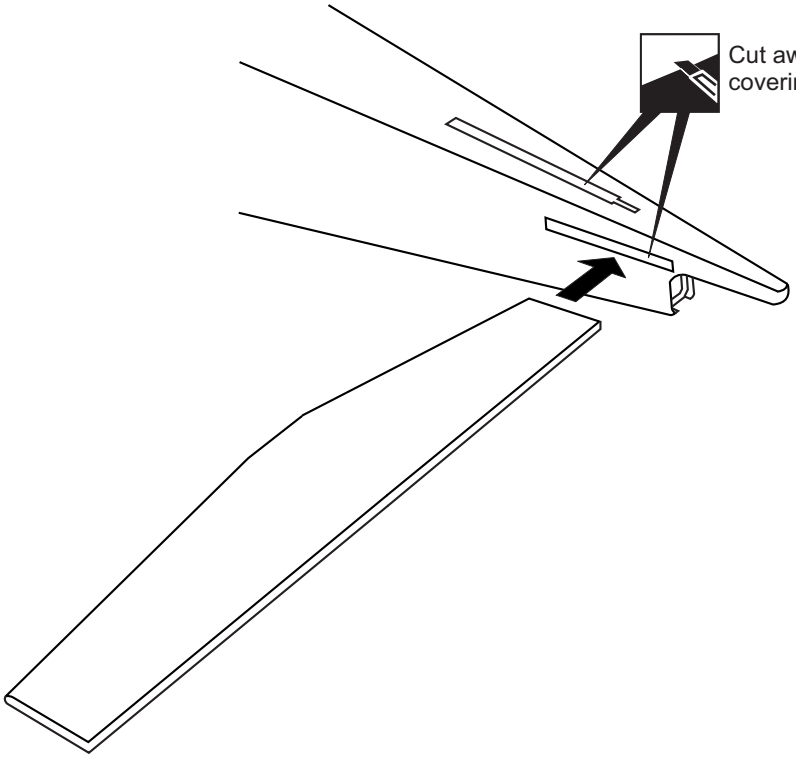


SIDE-VIEW / **Seitenansicht**

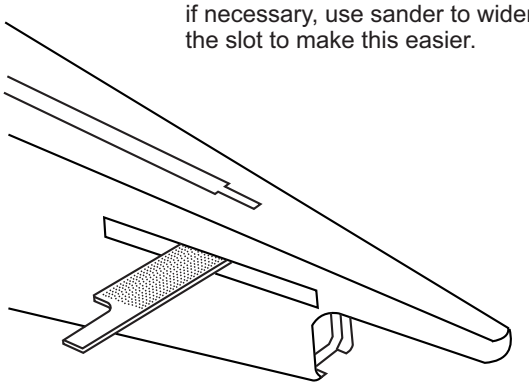


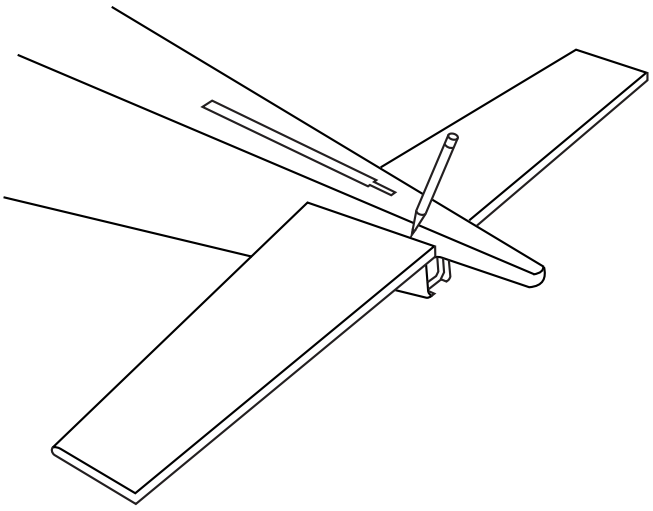
! Engine thrust on balk head is already adjust at factory
Sturz und Zug beachten!

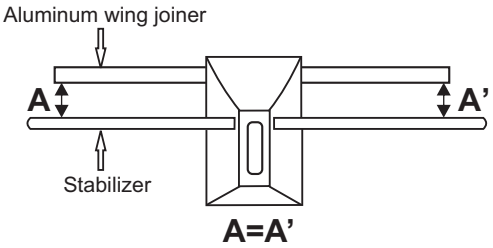
DHC-2 Beaver 7- Horizontal stabilizer

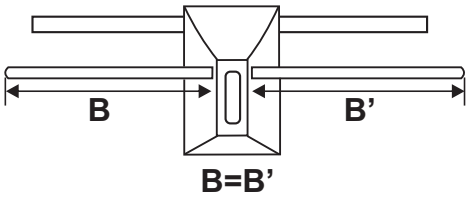


Insert the horizontal stabilizer into the slot on the fuselage, if necessary, use sander to widen the slot to make this easier.

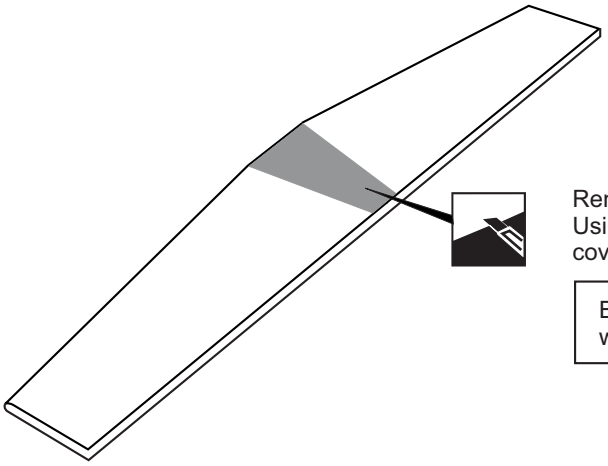








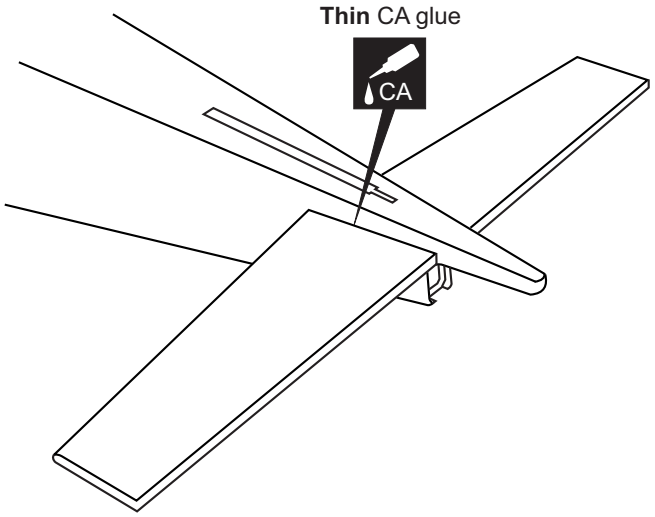
When you are satisfied with the alignment (A=A' and B=B'), use a pencil to trace around the top and bottom of the stabilizer where it meets the fuselage.



Remove the horizontal stabilizer from the fuselage. Using the sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above.

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

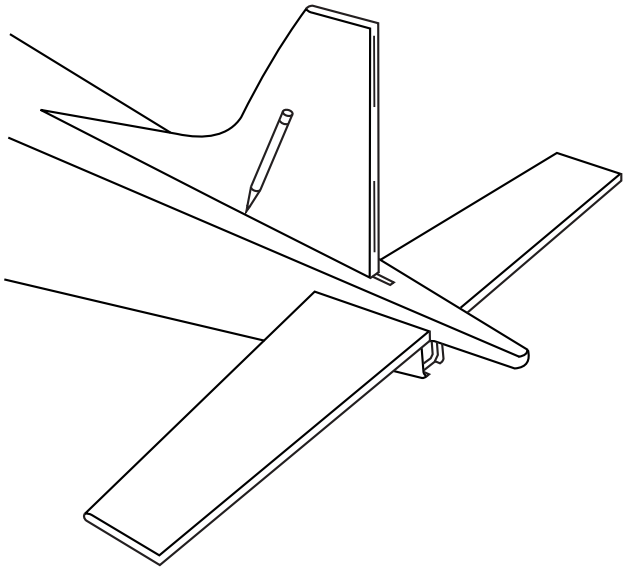
DHC-2 Beaver 8- Vertical stabilizer

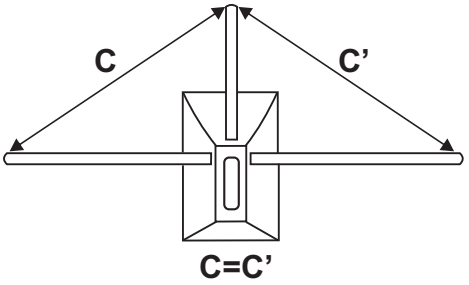


Use a small glue faucet, Apply the **thin CA** glue on the horizontal stabilizer where it contacts the fuselage **(both the top and bottom sides).**

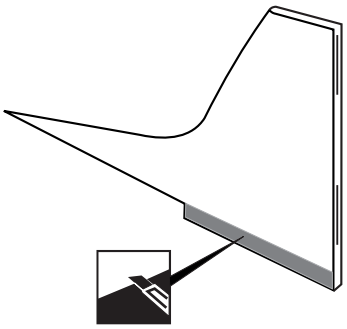
! Securely glue together. If coming off during flight, you lose control of your air plane.

! Vergewissern Sie sich, sauber geklebt zu haben. Andernfalls können Probleme mit der Flugeigenschaft auftreten!



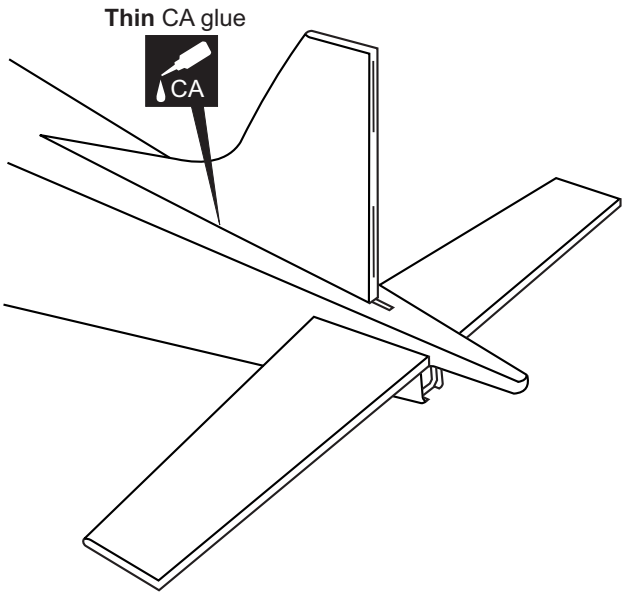


When you are satisfied with the alignment **(C=C')**, use a pencil to trace around the right and left of the stabilizer where the vertical stabilizer meet the fuselage.



Remove the vertical stabilizer from the fuselage. Using the sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above.

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



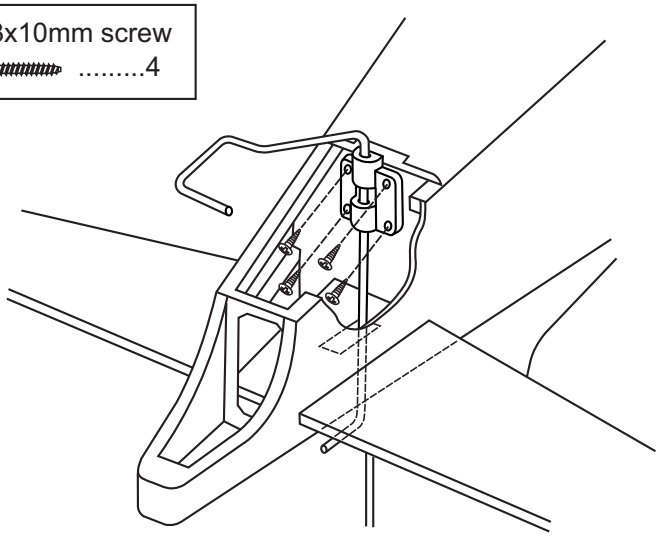
When you are satisfied with the alignment (C=C'), use a small glue faucet, Apply the **thin CA** glue on the vertical stabilizer where it contacts the fuselage **(both the left and right sides).**

! Securely glue together. If coming off during flight, you lose control of your air plane.

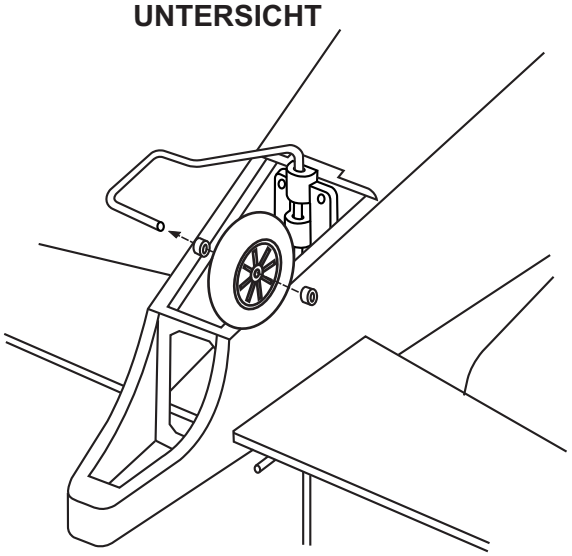
! Vergewissern Sie sich, sauber geklebt zu haben. Andernfalls können Probleme mit der Flugeigenschaft auftreten!

DHC-2 Beaver 9- Tail gear

3x10mm screw 4

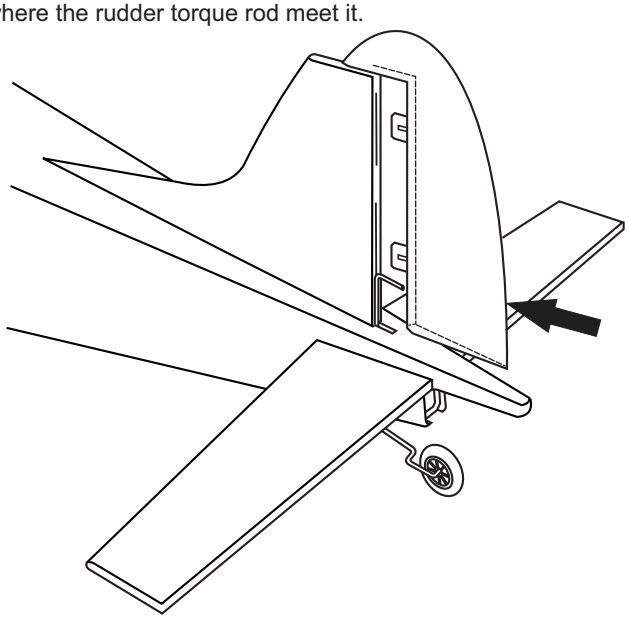


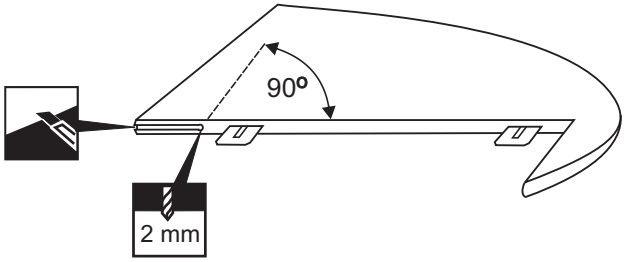
FUSELAGE - REAR - BOTTOM VIEW
UNTERSICHT



10- Rudder

Using a pencil, mark the leading edge of the rudder where the rudder torque rod meet it.



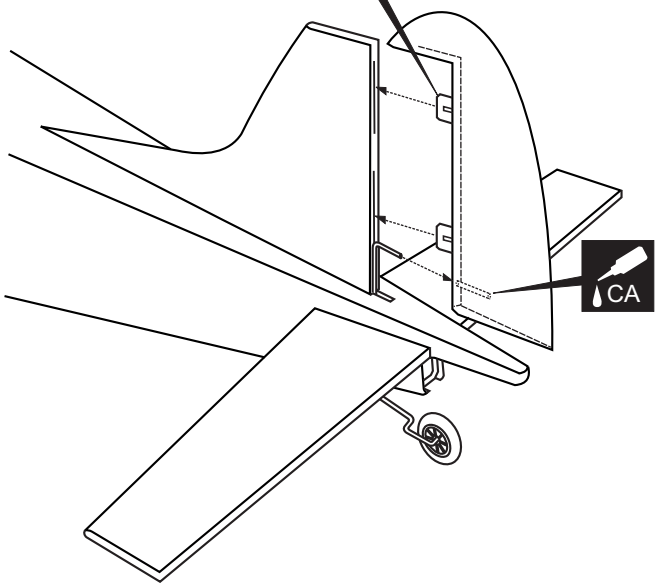


Cut away the covering material from over the rudder torque rod mounting slot in rudder. Drill a 2mm diameter hole in torque rod mounting slot, marking sure that you drill the hole perpendicular to the leading edge of the elevator half.

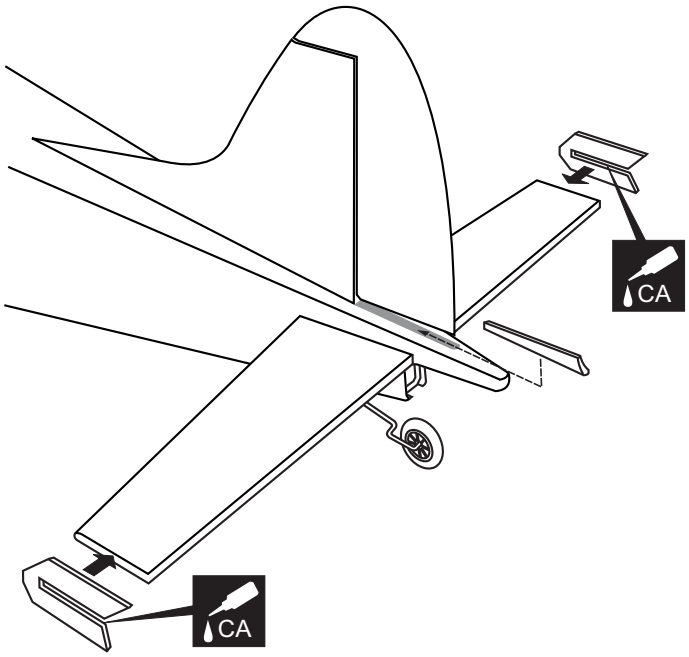
Thin CA glue

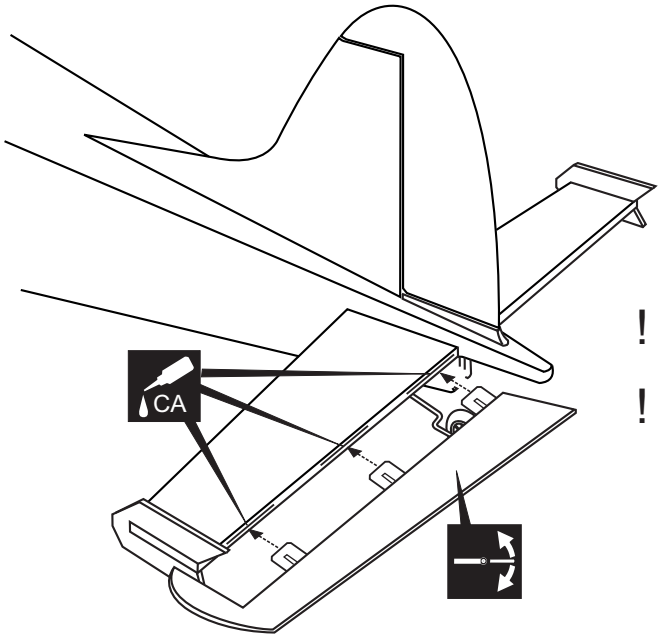
CA

Test-fit the rudder torque rods into the slot before applying glue.



DHC-2 Beaver 11- Elevator

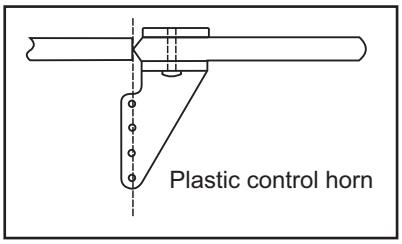


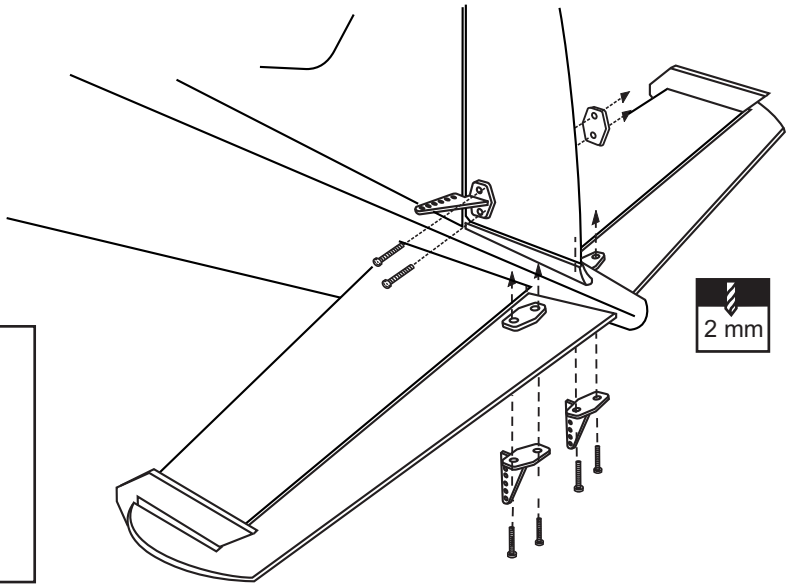


! Securely glue together. If coming off during flight, you lose control of your air plane.

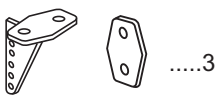
! Vergewissern Sie sich, sauber geklebt zu haben. Andernfalls können Probleme mit der Flugeigenschaft auftreten!

12- Control horn



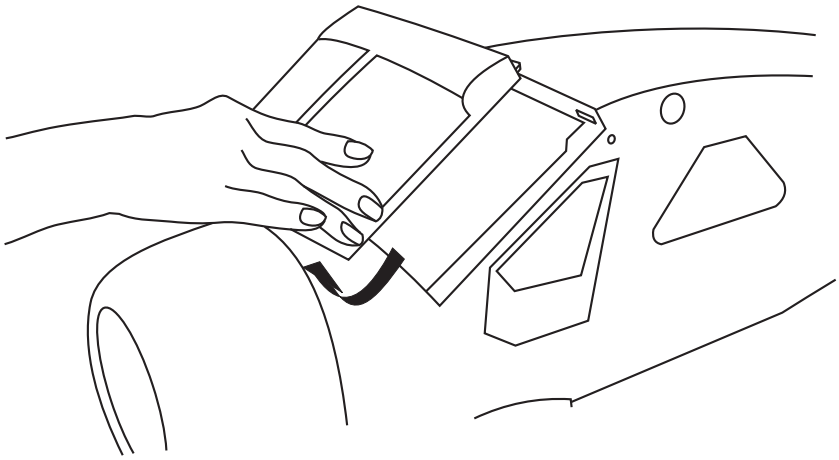


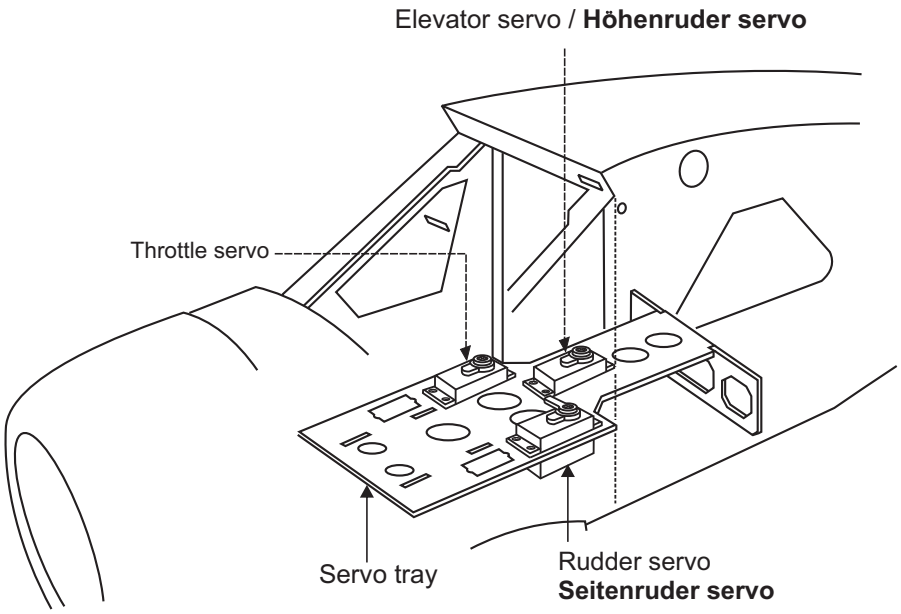
Plastic control horn
and back plate

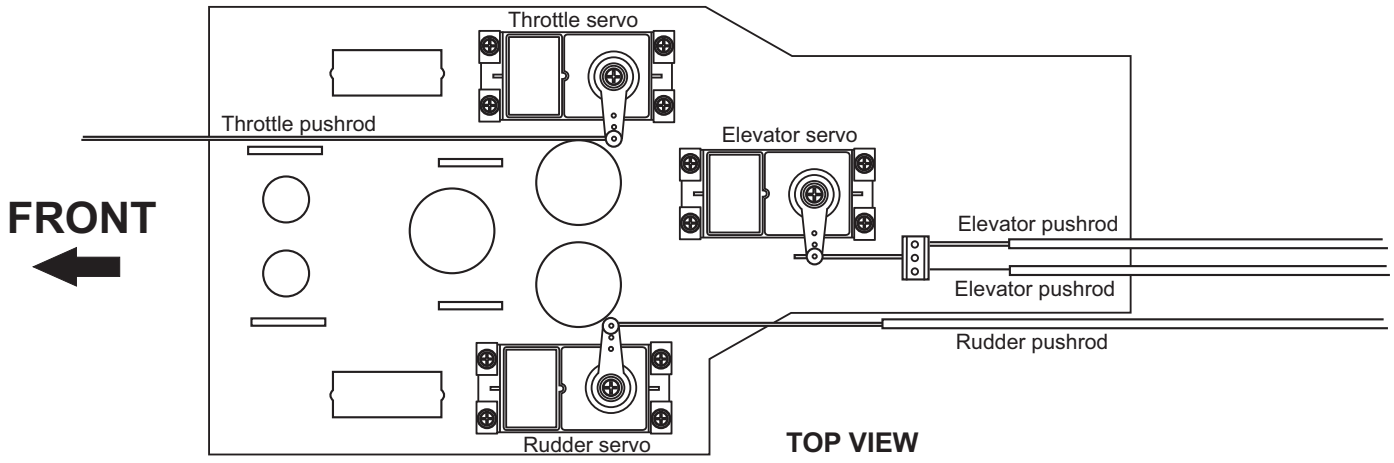


2x15mm screw

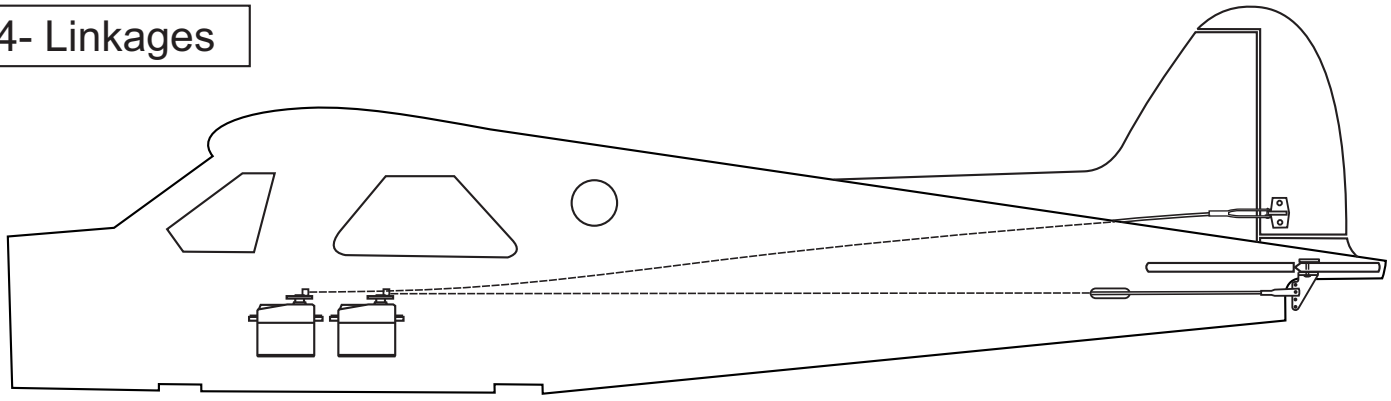
DHC-2 Beaver 13- Servo







14- Linkages



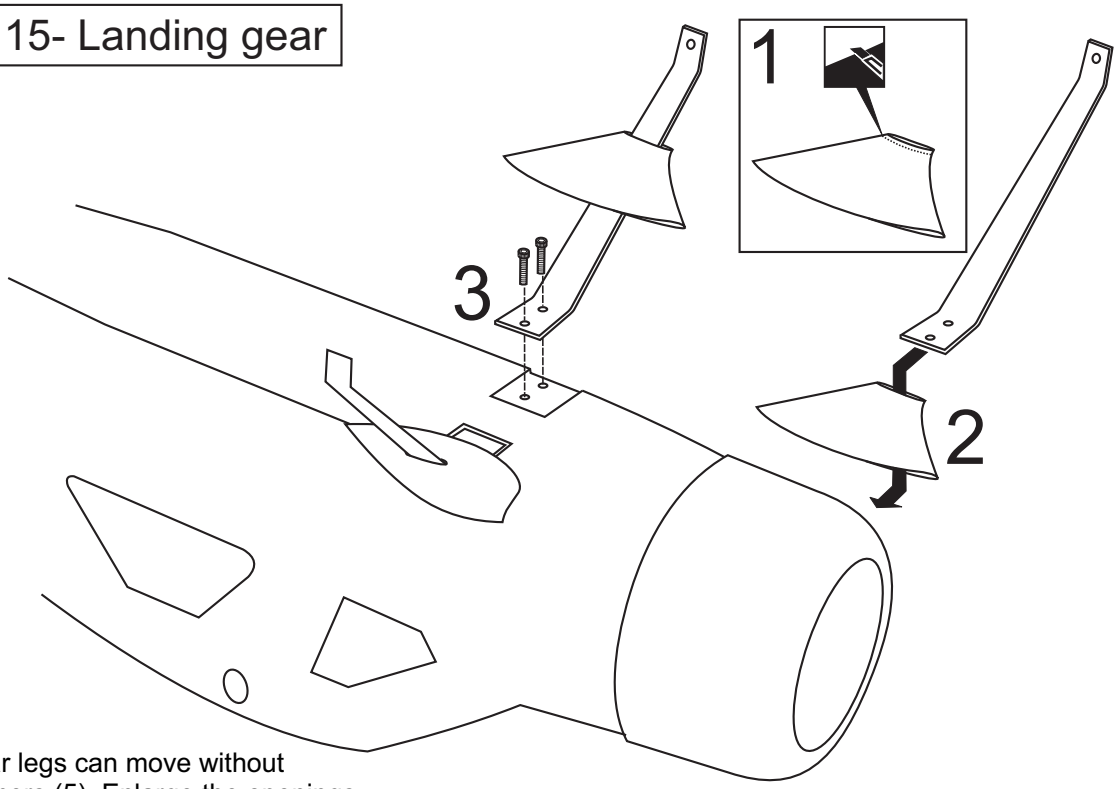
DHC-2 Beaver 15- Landing gear

3X15mm hex bolt 4

4x40mm bolt 4

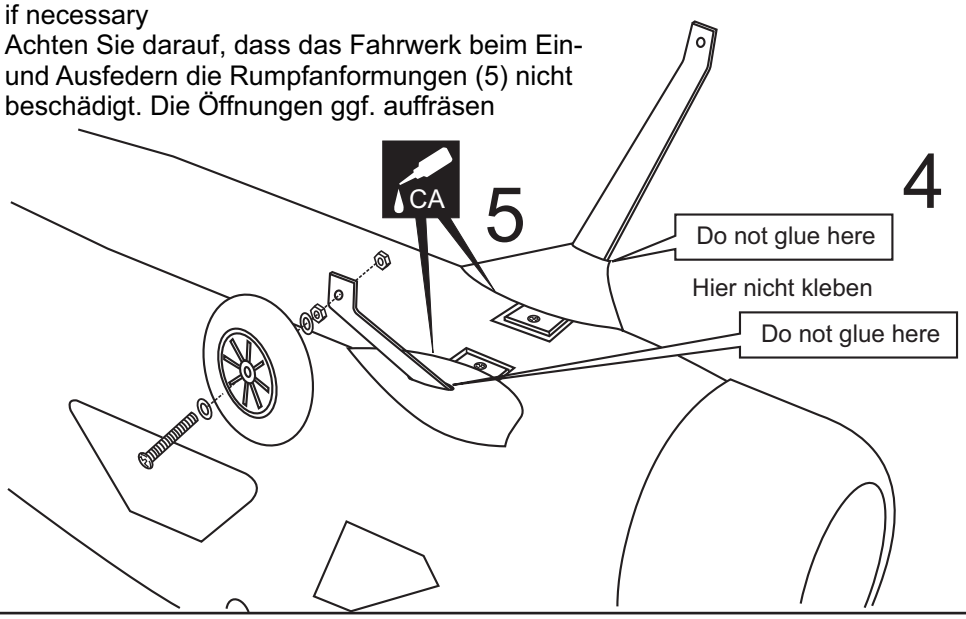
4mm nut 4

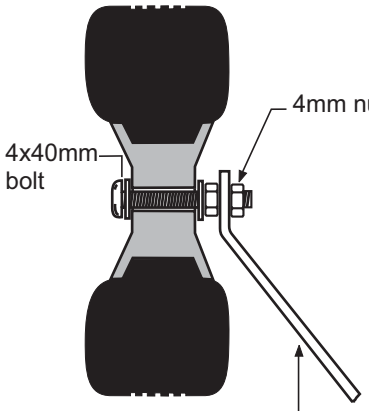
4mm washer 6



Make sure the landing gear legs can move without damaging the fuselage fomers (5). Enlarge the openings if necessary

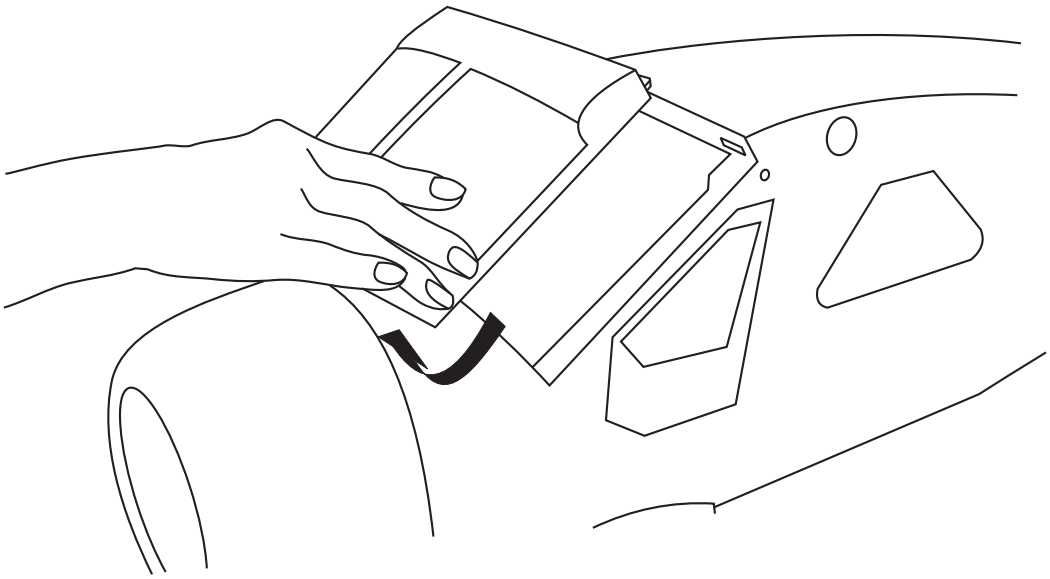
Achten Sie darauf, dass das Fahrwerk beim Ein- und Ausfedern die Rumpfanformungen (5) nicht beschädigt. Die Öffnungen ggf. auffräsen





Hauptfahrwerk

16- Hatch

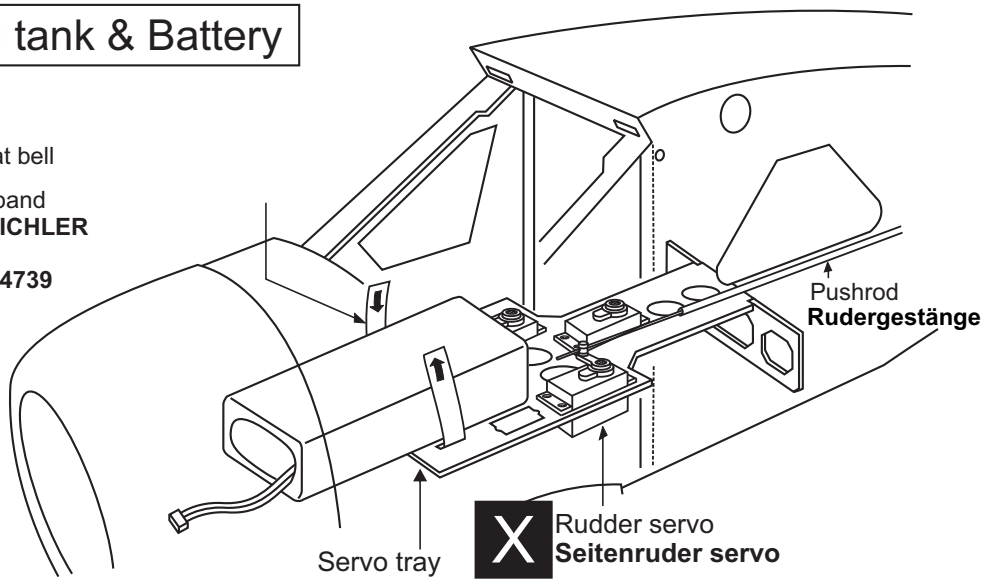


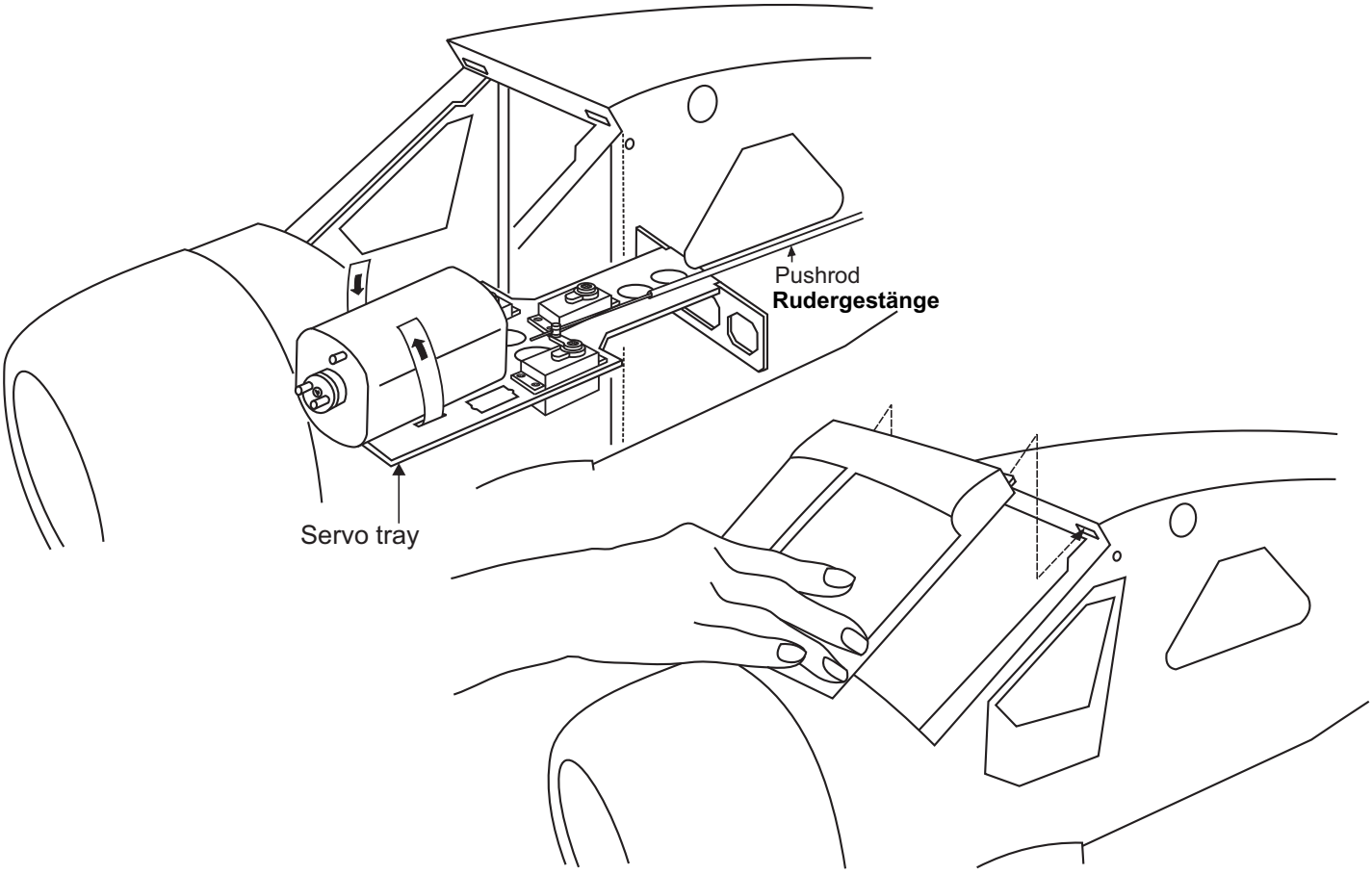
DHC-2 Beaver 17- Fuel tank & Battery

Tipp

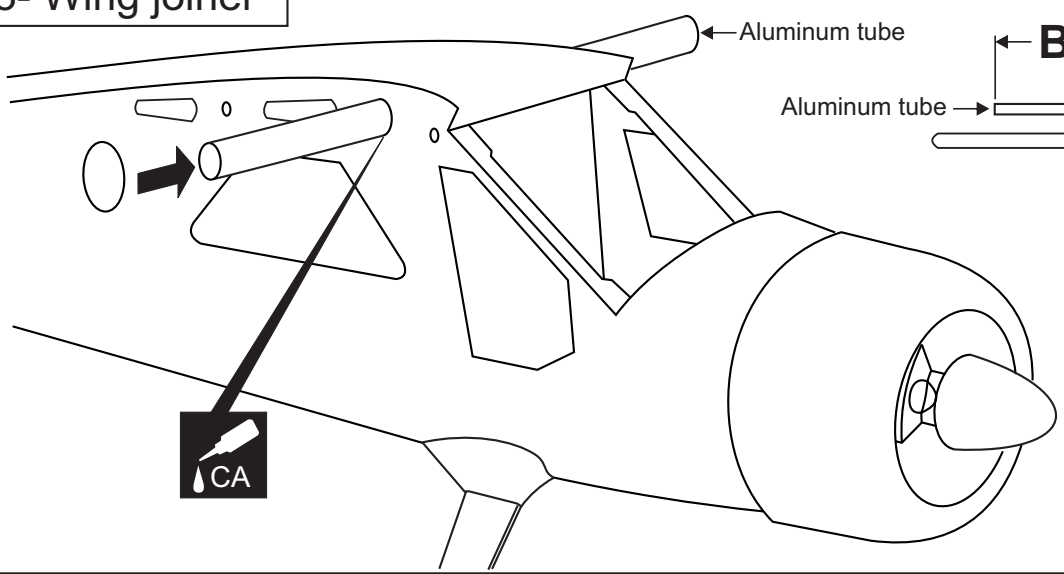
X Battery seat bell

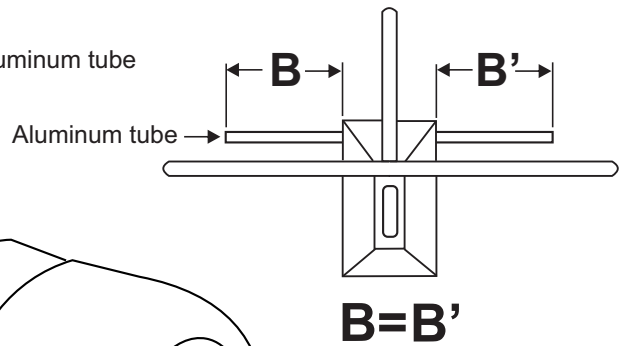
Akku Kiettband
aus dem **PICHLER**
Sortiment
Best.Nr. C4739





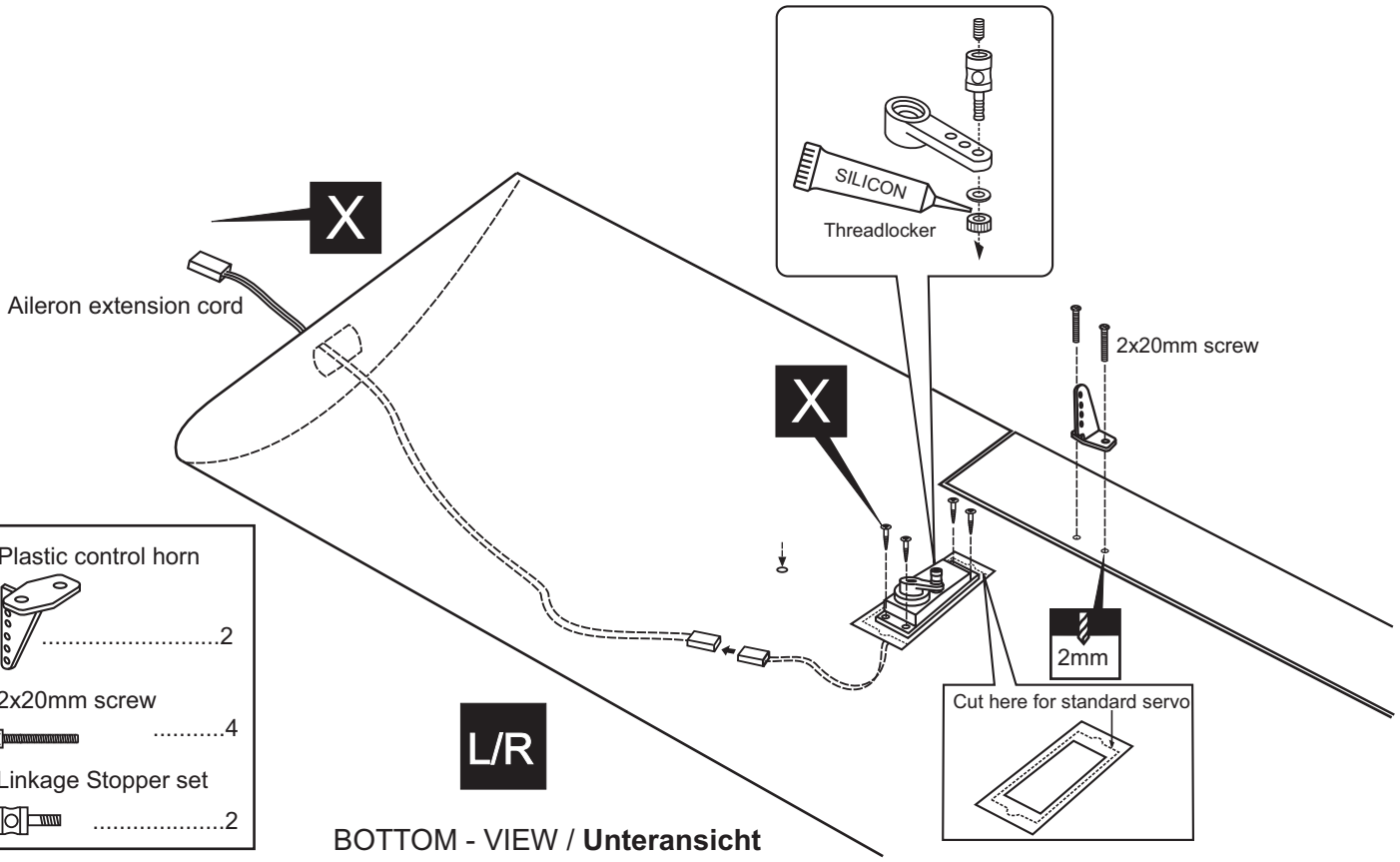
18- Wing joiner





B=B'

DHC-2 Beaver 19- Aileron linkage

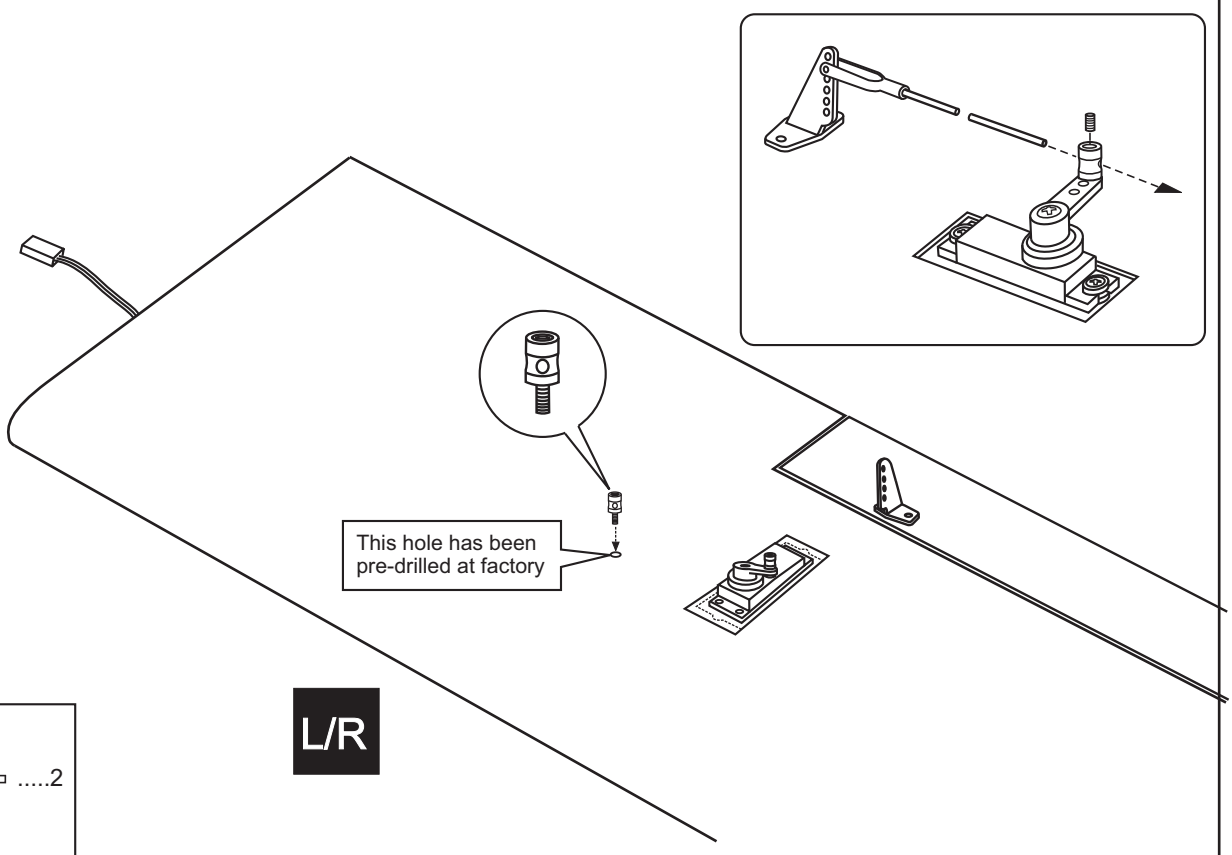


Plastic control horn 2

2x20mm screw 4

Linkage Stopper set 2

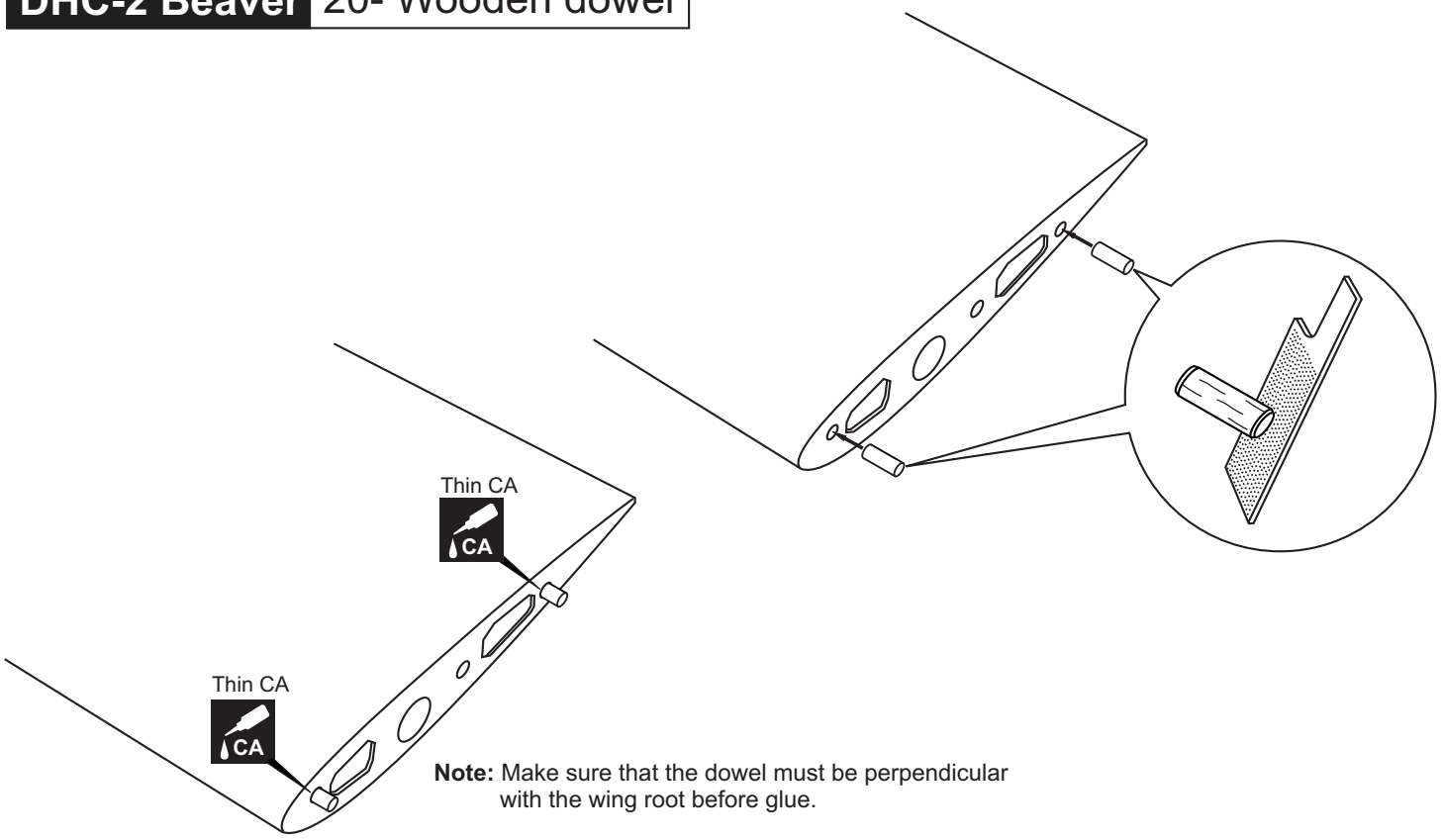
BOTTOM - VIEW / **Unteransicht**



2x175mm rod 2

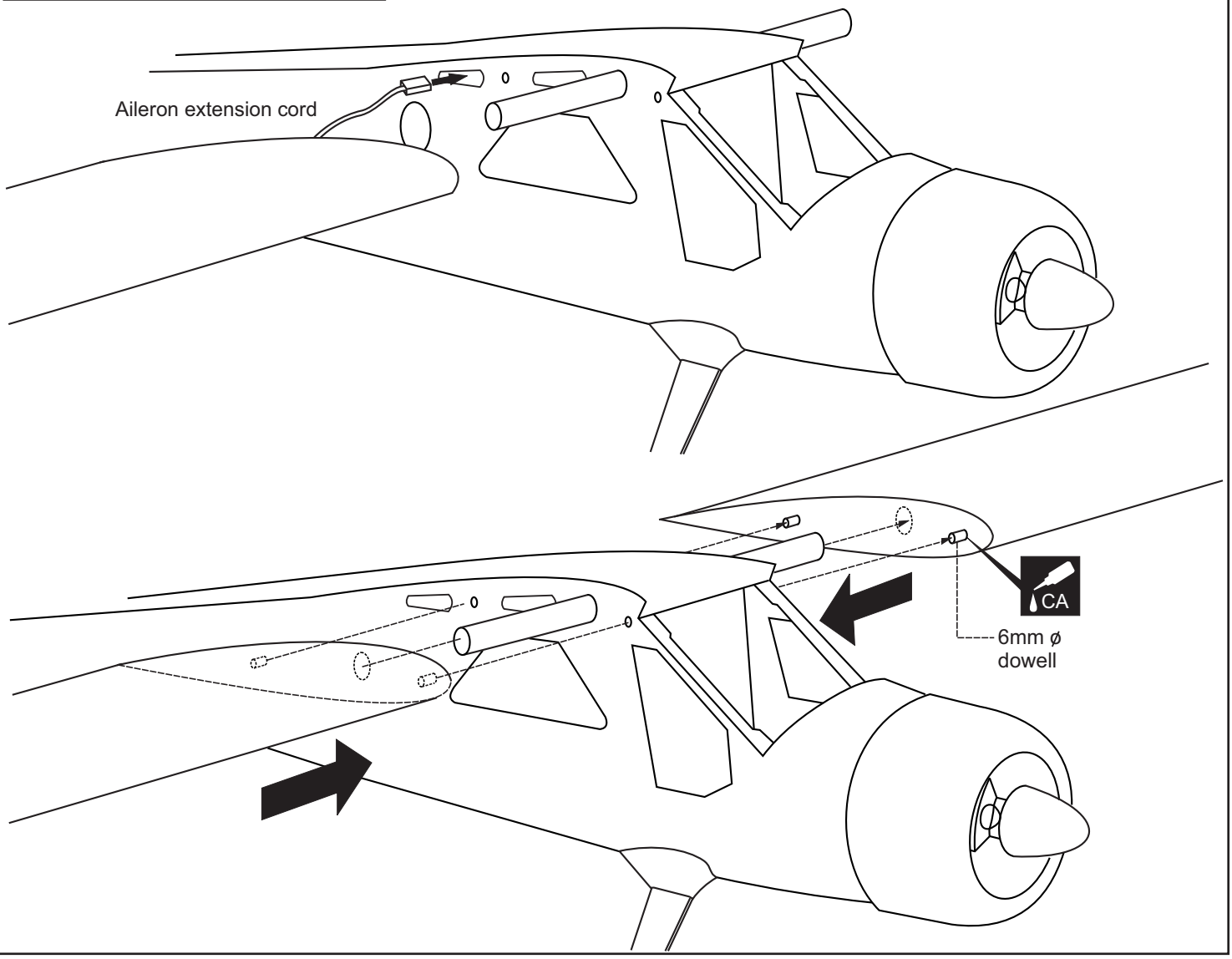
2mm connector 2

DHC-2 Beaver 20- Wooden dowel



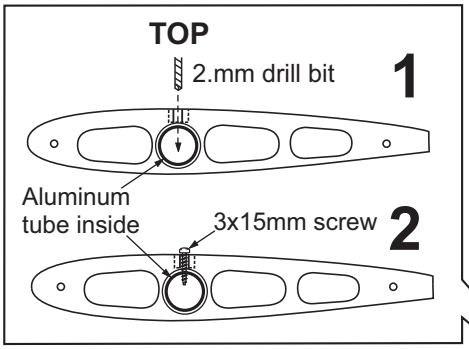
Note: Make sure that the dowel must be perpendicular with the wing root before glue.

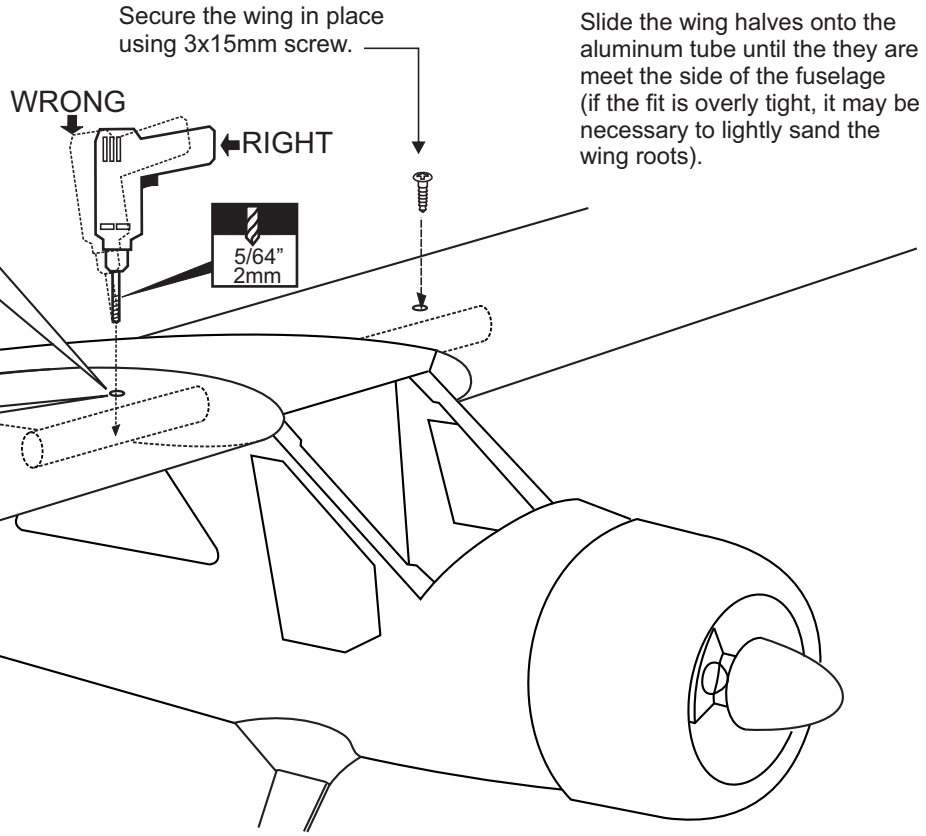
21- Joining the wings



DHC-2 Beaver 22- Joining the wings

3x15mm screw 2





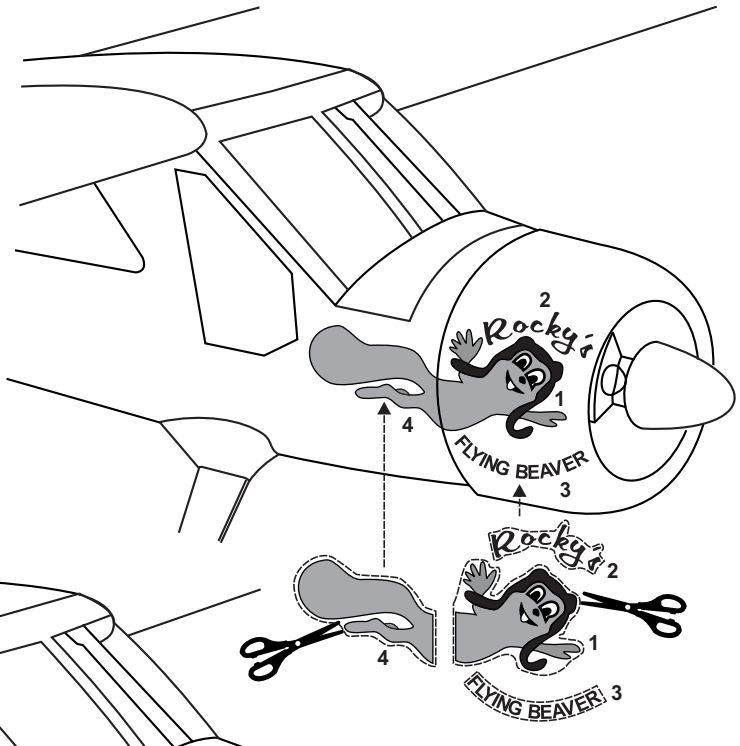
Slide the wing halves onto the aluminum tube until the they are meet the side of the fuselage (if the fit is overly tight, it may be necessary to lightly sand the wing roots).

Note: all holes (2 holes) on the surface of the top of the wing are pre-drilled at factory.

L/R Assemble left and right side the same way

23- Sticker & Wing brace

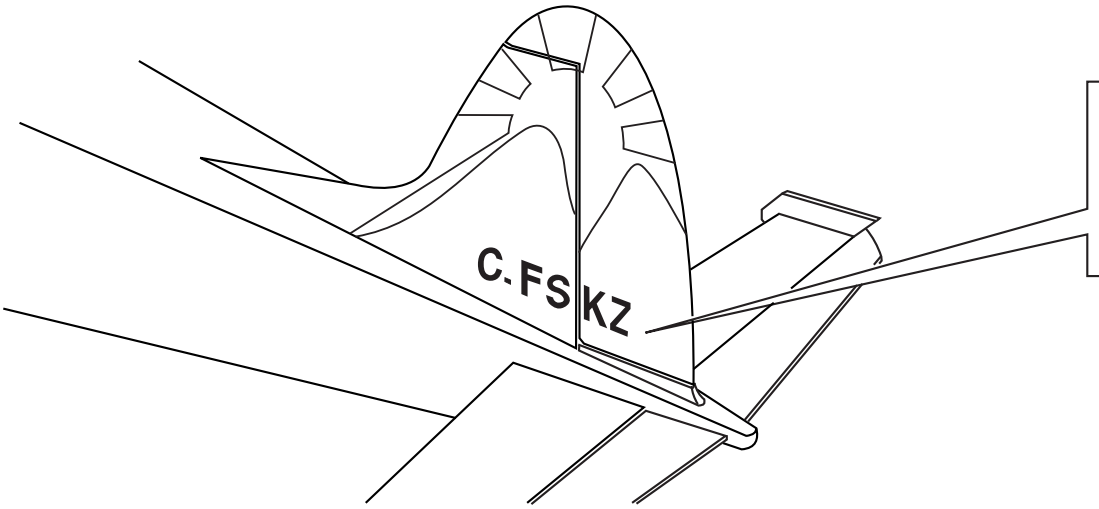
Note: Cut out the stickers and apply them in the proper area.
Do not peel the backing paper off all at once.
Peel off one corner of the backing and cut off with scissors.
Arrange sticker on model and when satisfied adhere the corner without backing.
Carefully peel back the rest of the backing while at the same time adhering the rest of the sticker.
Try not to make air bubbles, if there are some, carefully puncture sticker (center of bubble) but not model surface with the tip of the knife or sharp pin and squeeze out the air.
At curves stretch sticker and apply a little heat so that no ceases occur.
Cut off the excess that is produced.



(Kenmore Air version)

Note: All holes on the bottom of the wing and holes on the side of the fuselage are pre-drilled at factory.

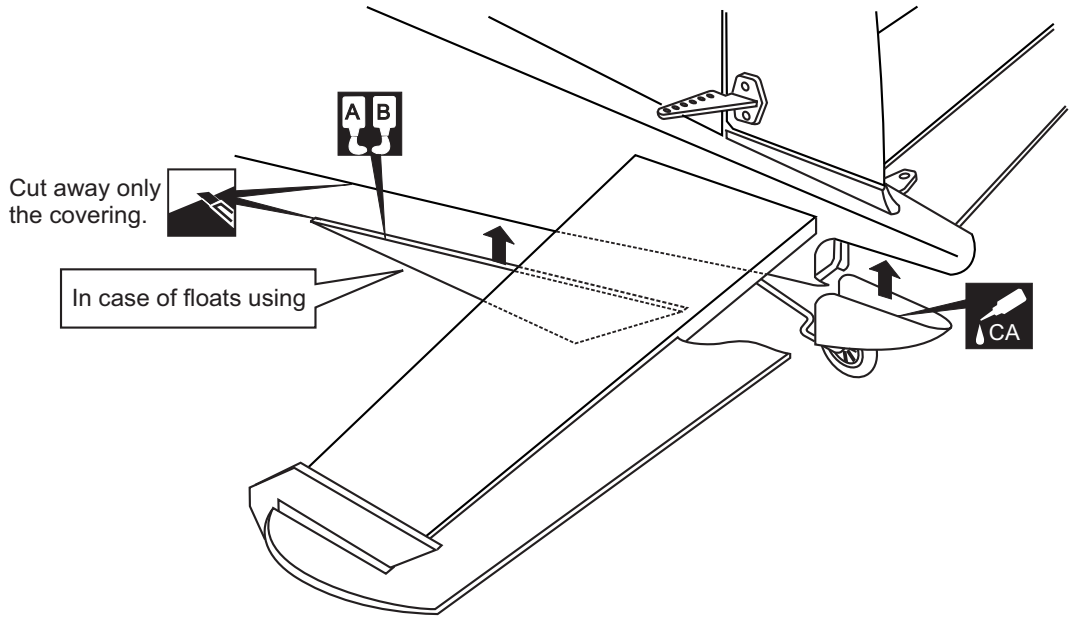
Linkage Stopper set 4

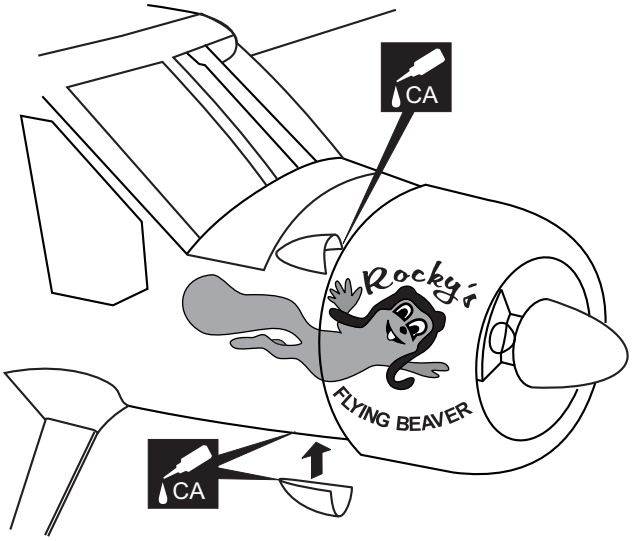


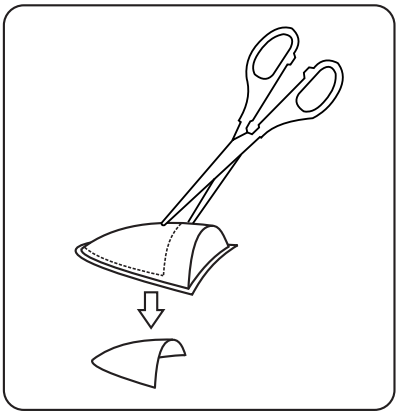
C-FSKZ

DECAL SHEET

(Whistler Air version)

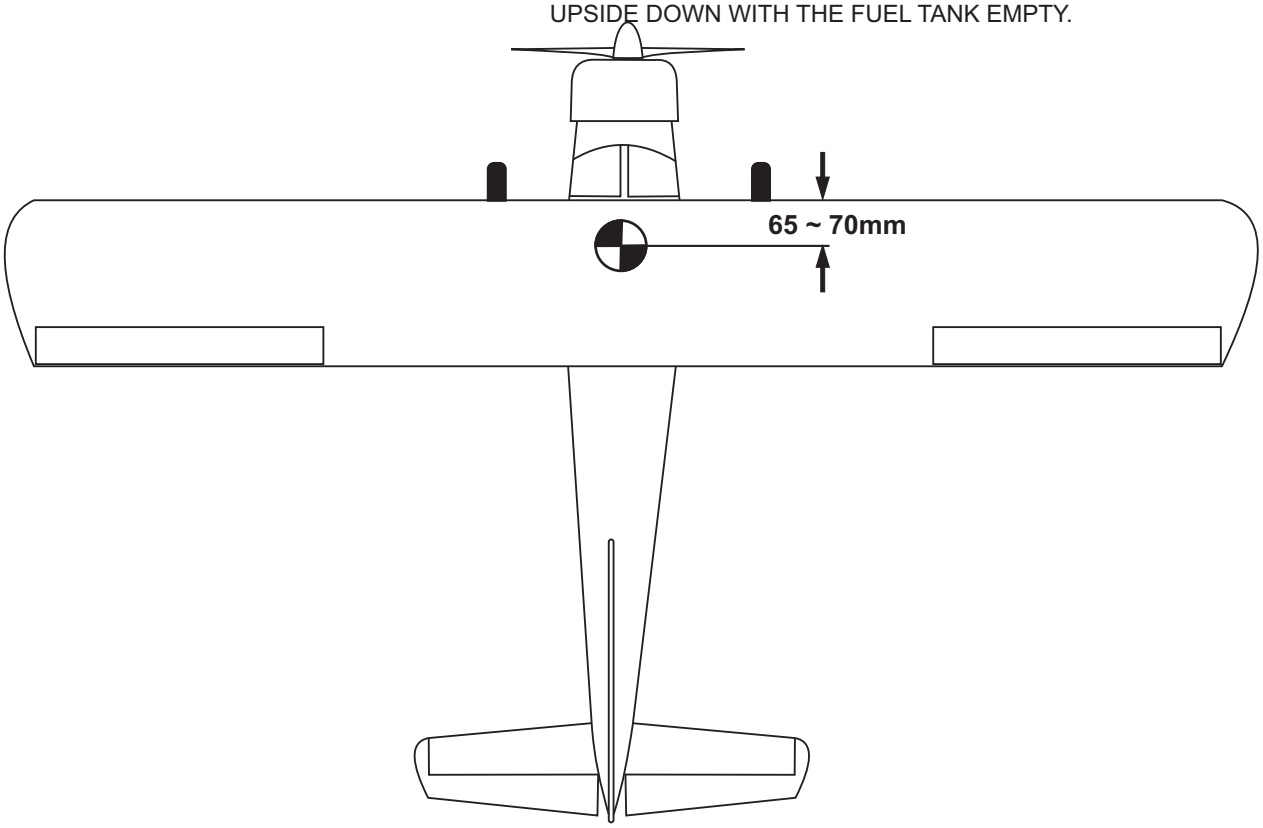






DHC-2 Beaver 25- Balance

THE CENTER OF GRAVITY IS LOCATED 65-70mm BACK FROM THE LEADING EDGE OF THE WING, AT THE FUSELAGE. BALANCE A PLANE UPSIDE DOWN WITH THE FUEL TANK EMPTY.



1- Mount the wing to the fuselage. Using a couple of pieces of masking tape, place them on the top side of the wing (62mm) back from the leading edge, at the fuselage sides.

2- Lift the airplane. Place your fingers on the masking tape and carefully lift the plane.

3- If the nose of the plane falls, the plane is heavy nose. To correct this, move the battery pack further back in the fuselage. If the tail of plane falls, the plane is tail heavy. To correct this, move the battery forward or if this is not possible, stick weight onto the firewall.
When balanced correctly, the airplane should level or slightly nose down when you lift it up with your fingers.

LATERAL BALANCE:

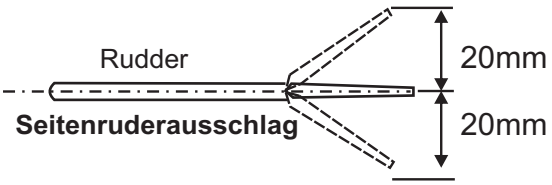
After you have balanced a plane on the CG, you should laterally balance it. Doing this will help the airplane track straighter.

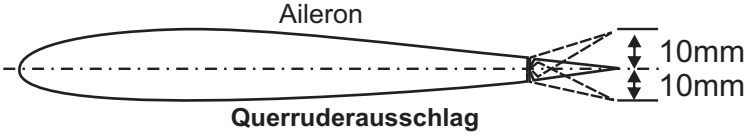
1- Turn the airplane upside down. Attach one loop of heavy string to the engine crankshaft and one to the tail wheel wire. With the wing level, carefully lift the airplane by the string. This may require two people to make easier.

2- If one side of the wing fall, that side is heavier than the opposite. Add small amounts of lead weight to the bottom side of the lighter wing half's wing tip. Follow this procedure until the wing stays level when you lift the airplane.

DO NOT try to fly an out-of-balance model ! **Überprüfen Sie vor dem Flug den Schwerpunkt.**

26- Control surface





IMPORTANT: Flying your model at these throws will provide you with the greatest chance for successful first flights. If, after you have become accustomed to the way the Beaver flies, you would like to change the throws to suit your taste that is fine. However, too much control throw could make the model difficult to control, so remember, "more is not always better".