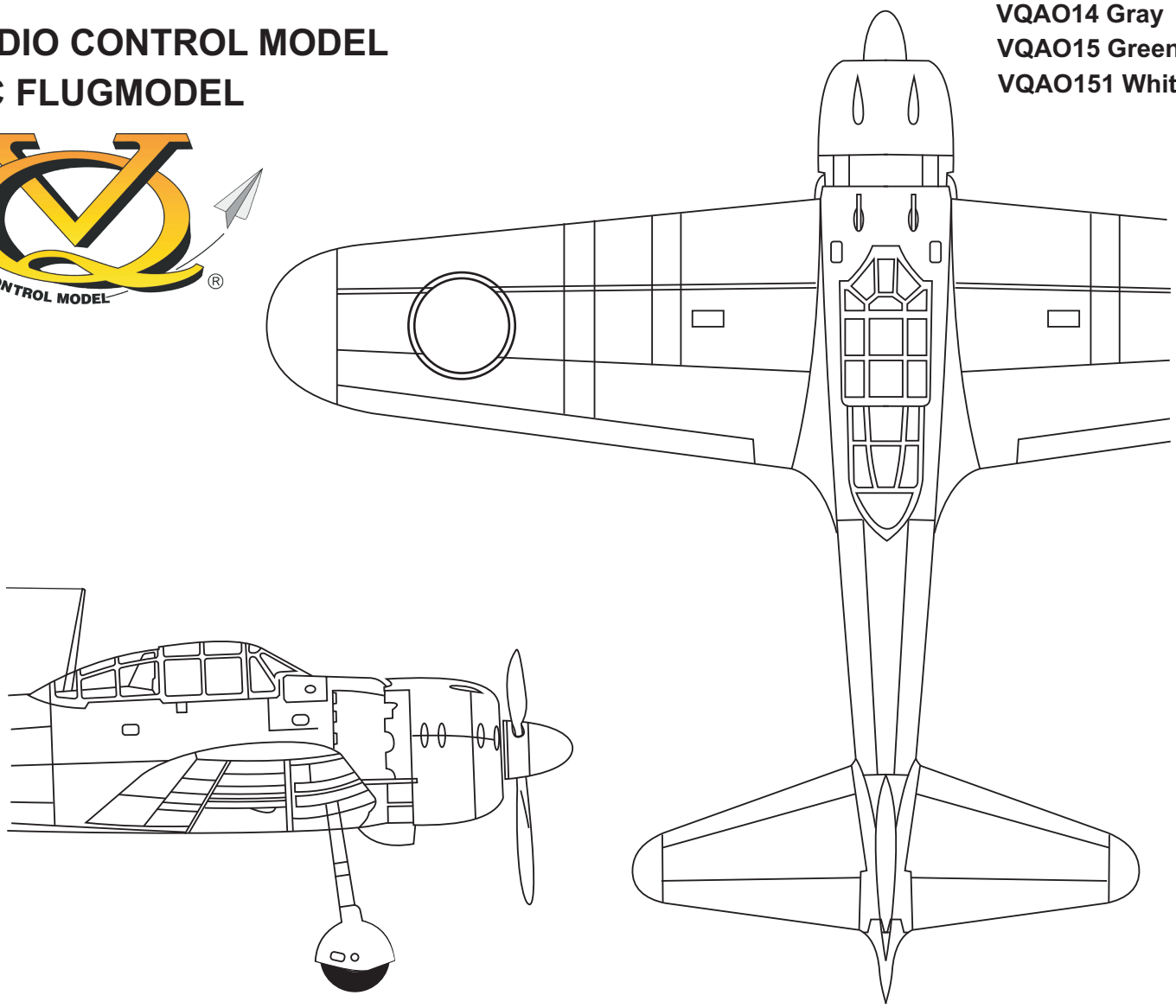
RADIO CONTROL MODEL
R/C FLUGMODEL

VQAO14 Gray
VQAO15 Green
VQAO151 White



BUILDING INSTRUCTIONS / MONTAGEANLEITUNG

MITSUBISHI A6M5

“ZERO”

SPECIFICATIONS

Wingspan	1580mm
Length	1160mm
Flying weight	2700g
Electric Motor	700 Watt
Glow Engine	7.5cc 2T / 11cc 4-T
Radio	5 Channel / 5 Servos

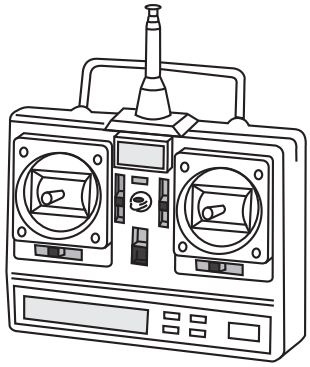
Technische Daten

Spannweite	1580mm
Länge	1160mm
Fluggewicht	2700g
Elektroantrieb	700 Watt
Verbrennerantrieb	7.5cc 2T / 11cc 4T
Fernsteuerung	5 Kanal / 5 Servos

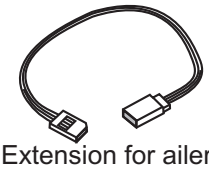
WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if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

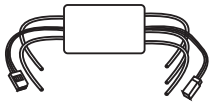
OPTIONAL ACCESSORIES / BENÖTIGTES ZUBEHÖR



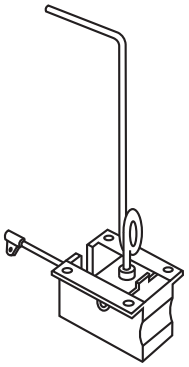
10.5x6 for .40 - 2 cycle engine
11x6 for .46 - 2 cycle engine
12x6 for .60 - 4 cycle engine
12x7 for .70 - 4 cycle engine
13x6 for Brushless Motor



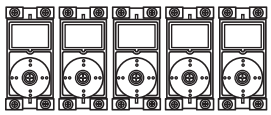
Extension for aileron servo, retract servo.



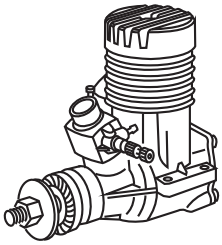
ESC-60A



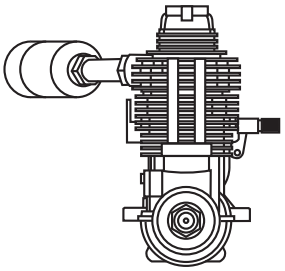
Retract landing gear VQAR04



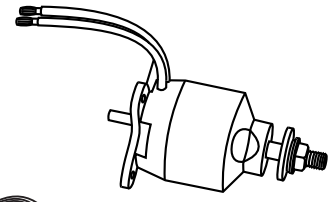
Minimum 5 channel radio for airplane with 5 servos
.Motor control x1 .Aileron x2
.Elevator x1 .Rudder x1



.46 ~ .50 - 2 cycle



.60 ~.70 - 4 cycle

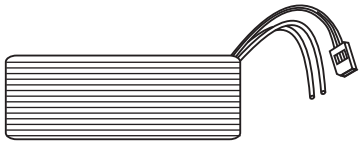


700 Watt Brushless Motor

Retract servo x1

Linkage Stopper x2 (for retract servo)

Silicone tube



Li-Po Battery

GLUE (Purchase separately)

Silicon sealer

Cyanoacrylate Glue Klebstoff

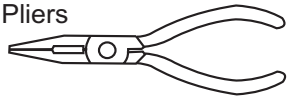
Epoxy Glue (5 minute type)
Epoxy-Klebstoff (5min-Typ)

Epoxy Glue (30 minute type)
Epoxy-Klebstoff (30min-Typ)

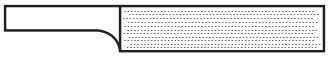
TOLLS REQUIRED (Purchase separately)

Hobby knife

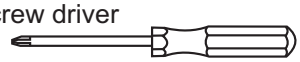
Needle nose Pliers



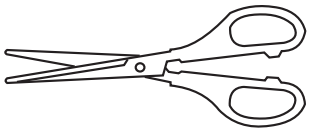
Sander



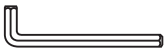
Phillip screw driver



Scissors

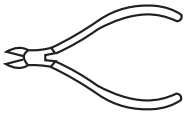


Hex Wrench



Awl

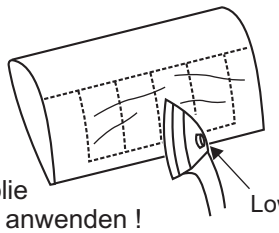
Wire Cutters



Masking tape - Straight Edged Ruler - Pen or pencil - Rubbing alcohol - 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 !



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.

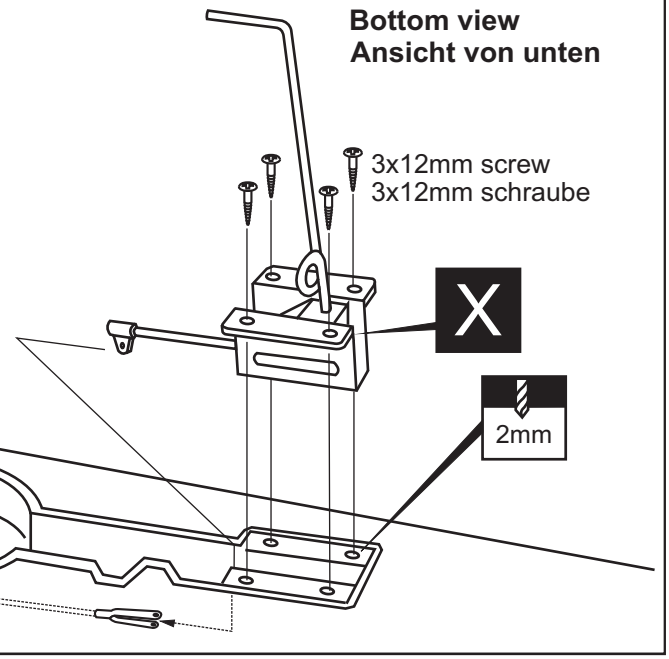
CONVERSION TABLE

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- Retract landing gear / Fahwerk

Trial fit the push rod into the wing. Join the pushrod to the retract gear arm and trial fit the retract into the wing.

After checking that the retract works smoothly, fix the retract on the wing with 3x12mm screws



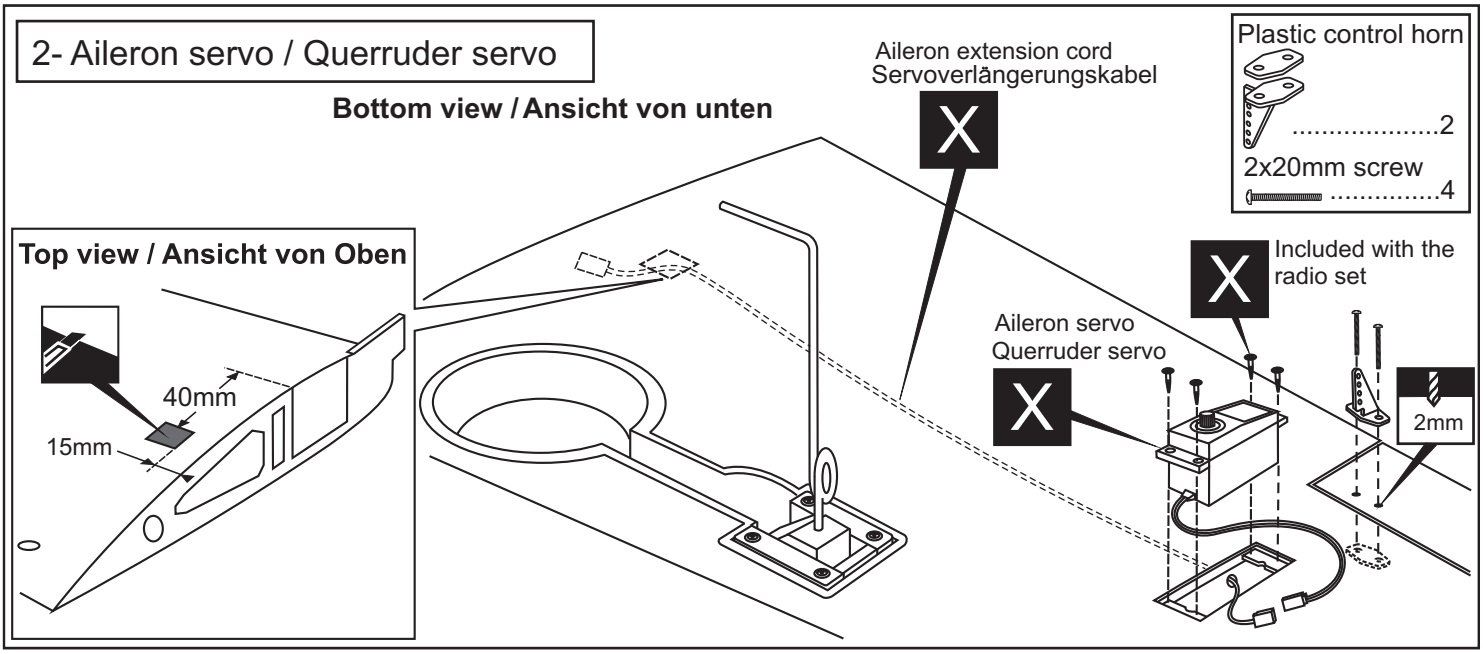
L/R

Retract pushrod
Fahrwerkanlenkgestänge

Steel clevis 2

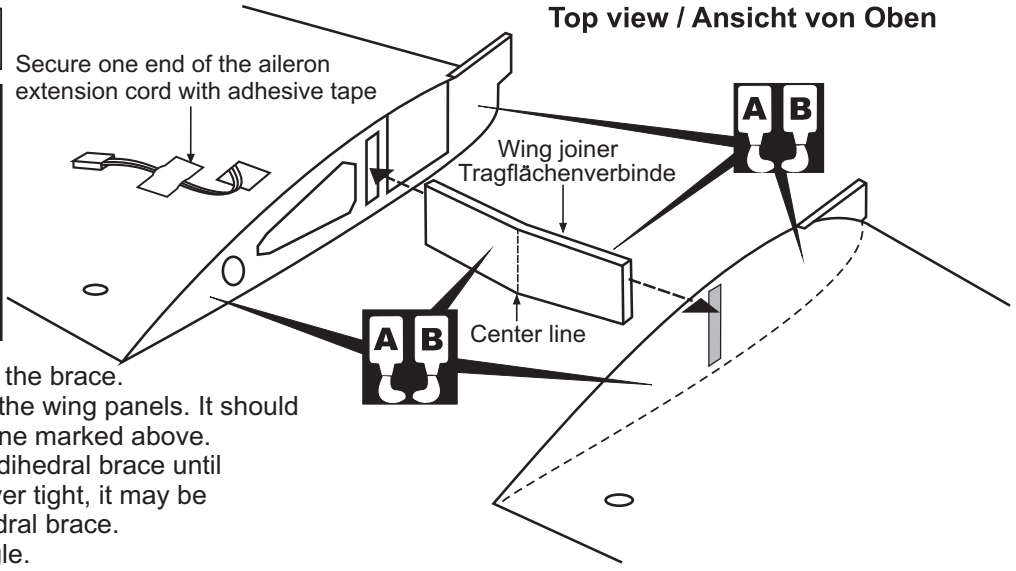
3x12mm screw 8

2- Aileron servo / Querruder servo



3- Joining the wing / Fläche

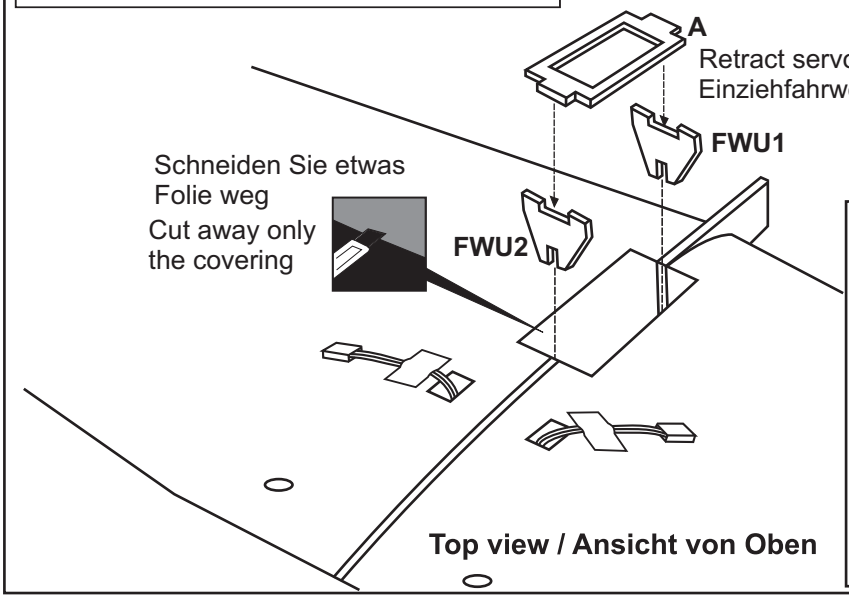
Use epoxy glue to bury the opening
Nehmen Sie Epoxykleber, um die Tragflachen fest miteinander zu Verbinden und streifen Sie den herausquellenden Kleber nach dem Verbinden mit einem fusselfreien Tuch SOFORT ab!

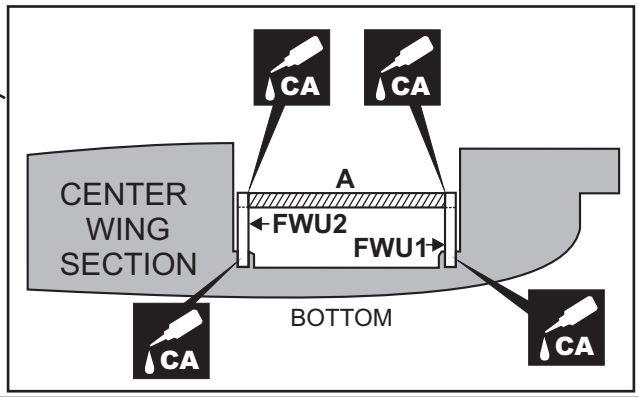


1- Using a pencil, mark the center of the brace.
2- Trial fit the wing joiner into one of the wing panels. It should insert smoothly up to the center line marked above.
3- Slide the other wing half onto the dihedral brace until the wing panel meet. If the fit is over tight, it may be necessary to lightly sand the dihedral brace.
4- Check for the correct dihedral angle.
5- Mix approximately 30 minute epoxy and apply a generous amount of epoxy into the wing joiner cavity of one wing half.
6- Coat one half of the dihedral brace with epoxy up to the center line. Install the epoxy-coated side of the dihedral brace into the wing joiner cavity up to the center line, marking sure that the “V” of the dihedral brace is positioned correctly
7- Do the same way with the other wing half.
8- Carefully slide the wing halves together, ensuring that they are accurately aligned. Firmly press the two halves together, allowing the excess epoxy to run out. Clear off the excess epoxy.

WARNING: Please do not clean off the excess epoxy on the wing with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

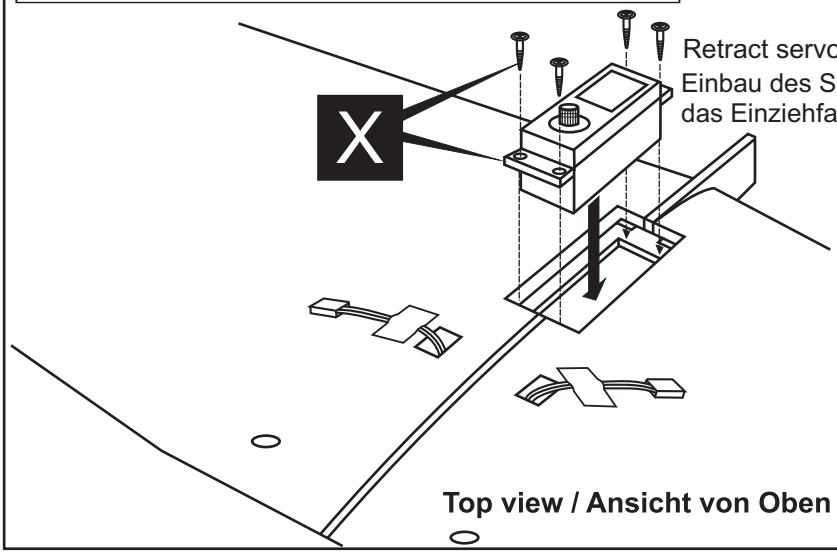
4- Servo mount / Servohalterung

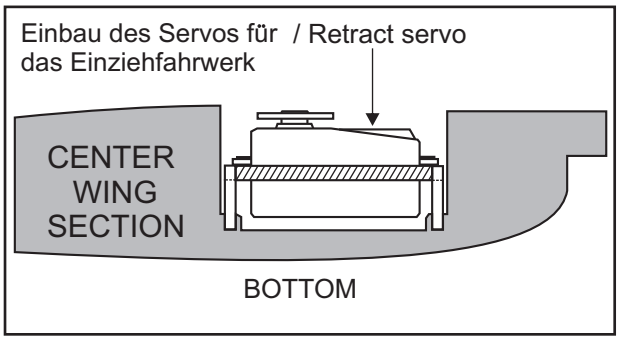




5- Retract servo / Einziehfahrwerk servo

Install the retract servo onto the retract servo mount and secure it in place with four screw (included with radio set).

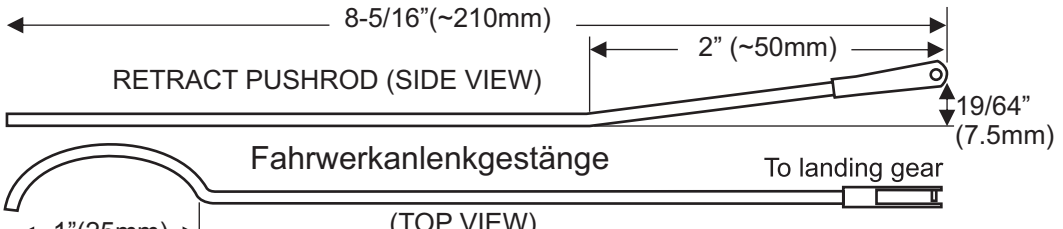


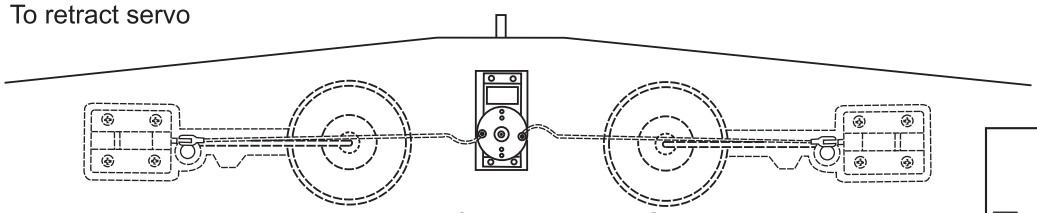


6- Linkages / Ruderanlenkung

Instruction how to build in the retracting landing gear
(This Gearis OPTIONAL)

Einbauhilfe bei Anbringen eines Einziehfahrwerks (Optional bestellbar; nicht im Baukasten enthalten!)

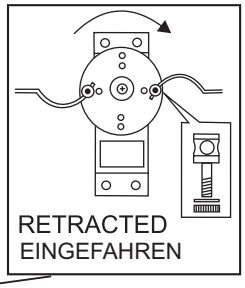


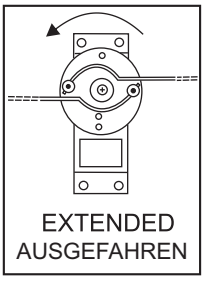


Top view / Ansicht von Oben

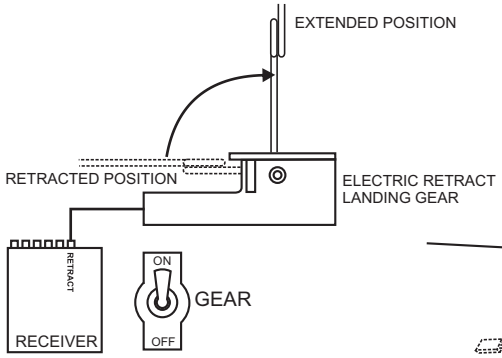
With the retract and retract servo in the retracted position, mark the position where each of the pushrod will attach to the servo arm, a small piece of masking tape works well for this. Cut off the excess length each rod.

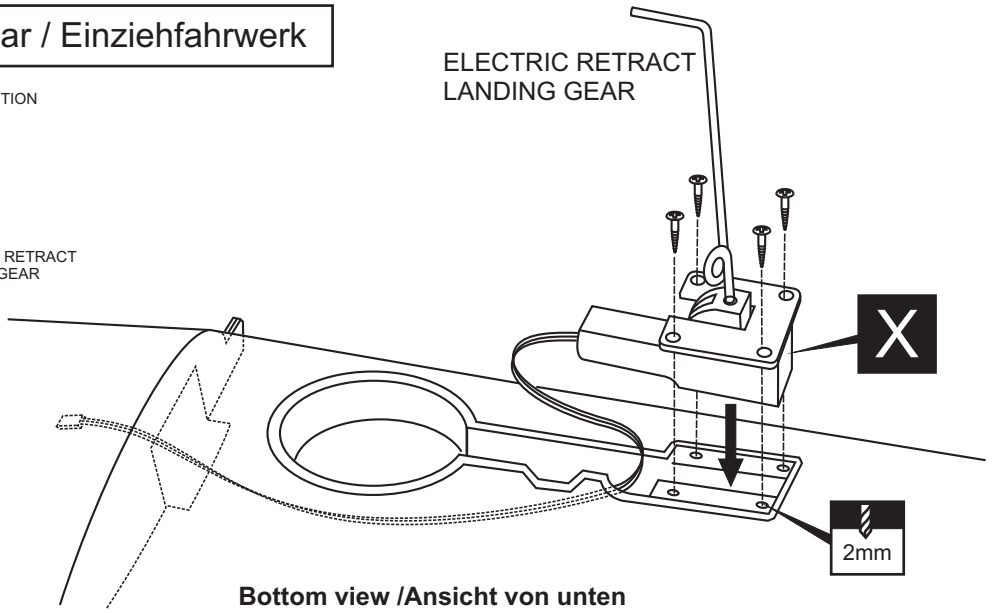
Link the servo and retract gear arm with push rod. Be sure to adjust the stroke so that the landing gear locks in both up and down position.





7- Electric retract landing gear / Einziehfahrwerk





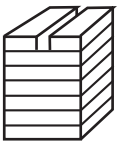
Bottom view /Ansicht von unten

8- Fixed gear / Starres Fahrwerk

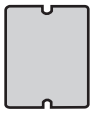
3x12mm screw 8

3x20mm screw 16

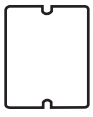
Nylon gear strap 4



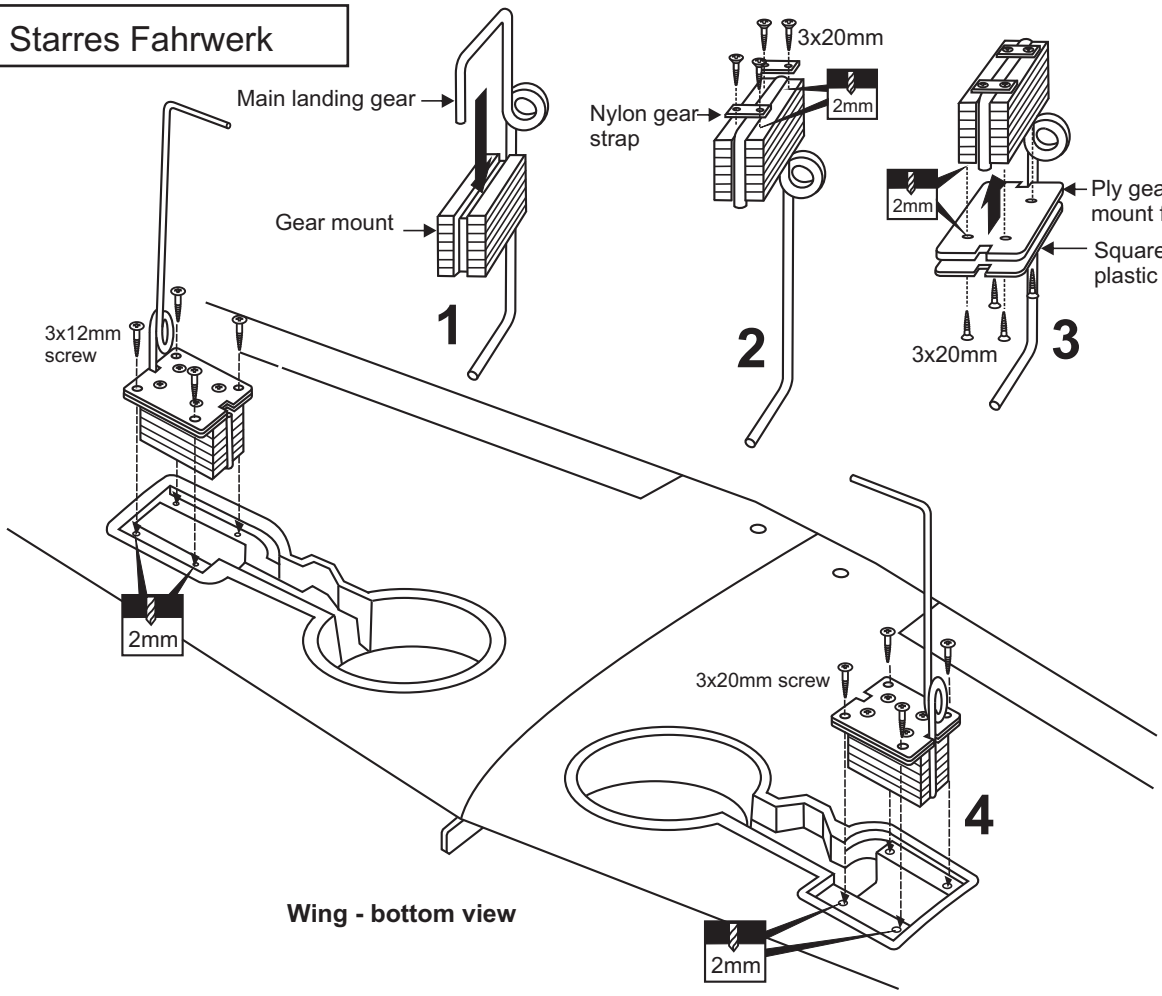
Gear mount x 2



Ply gear mount plate x 2

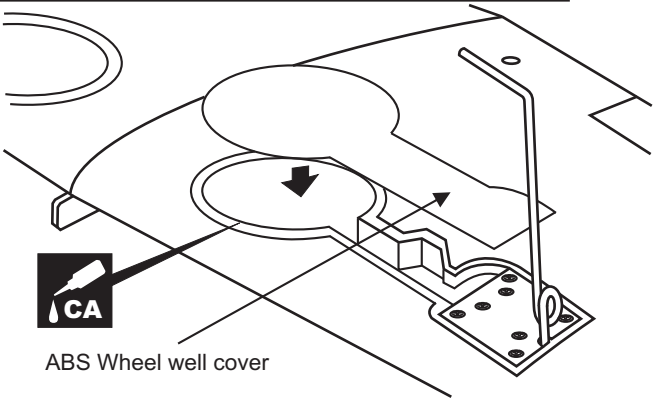


Square plastic x 2

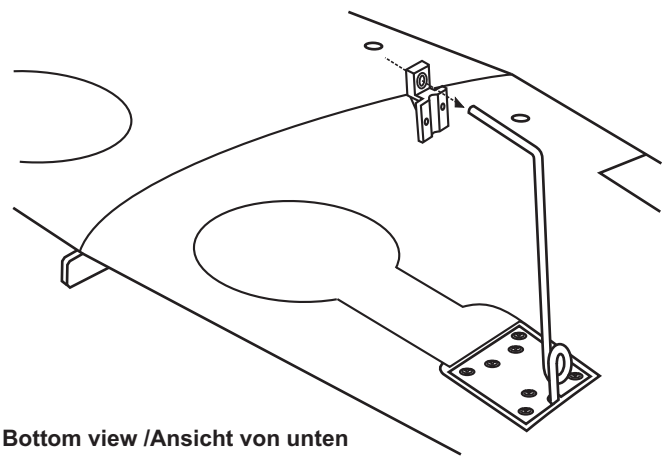


Wing - bottom view

9- Fixed gear / Starres Fahrwerk

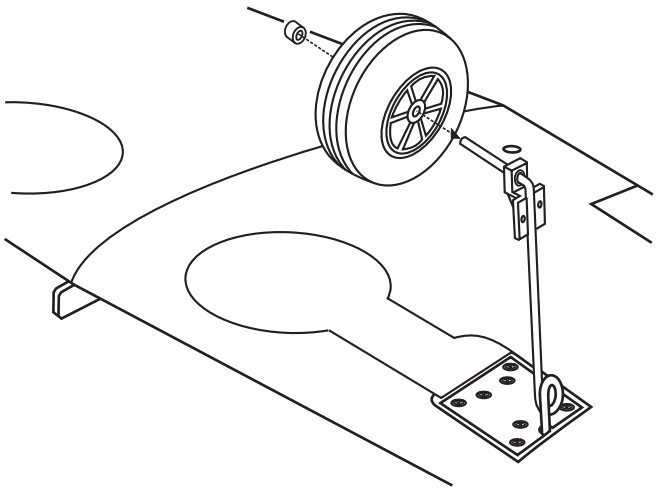


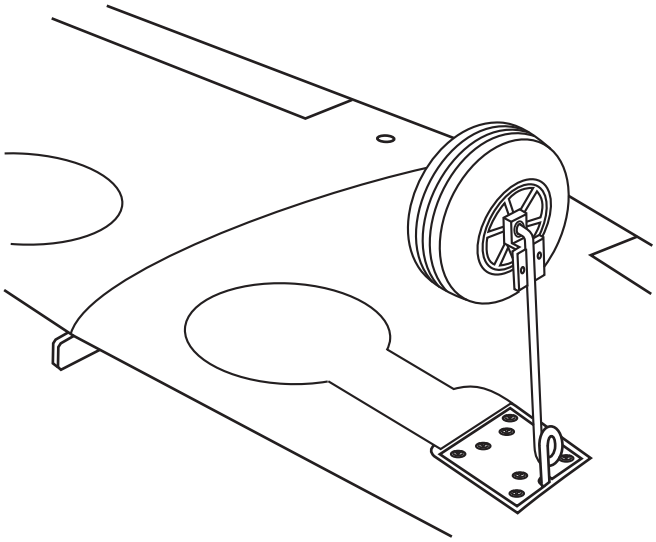
ABS Wheel well cover



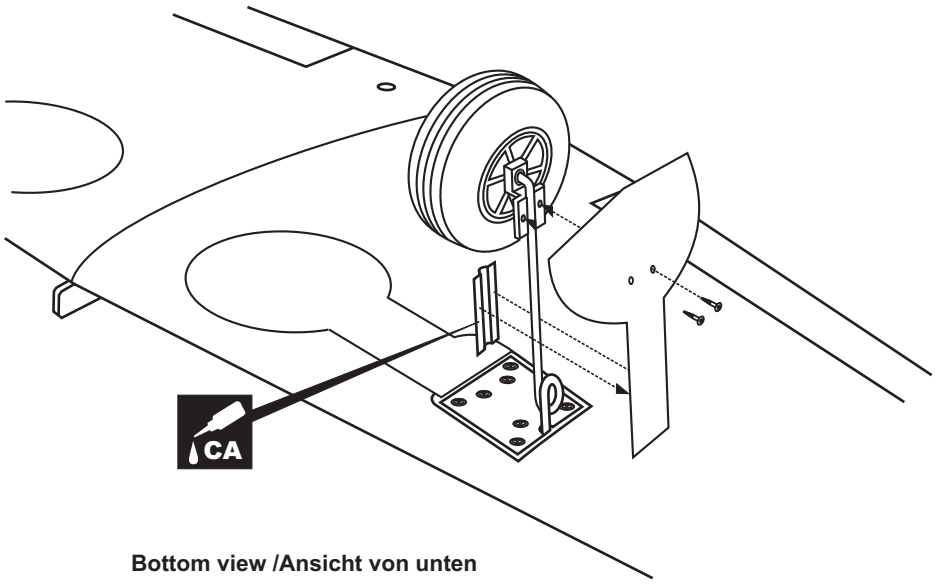
Bottom view /Ansicht von unten

10- Fixed gear / Starres Fahrwerk





Bottom view /Ansicht von unten



Bottom view /Ansicht von unten

2x6mm screw 4

...2

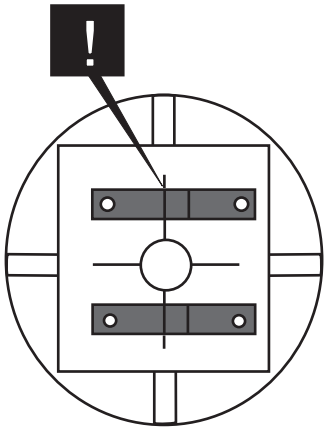
4mm collar 2

11- Engine mount / Motoreinbau

Blind-nut 4

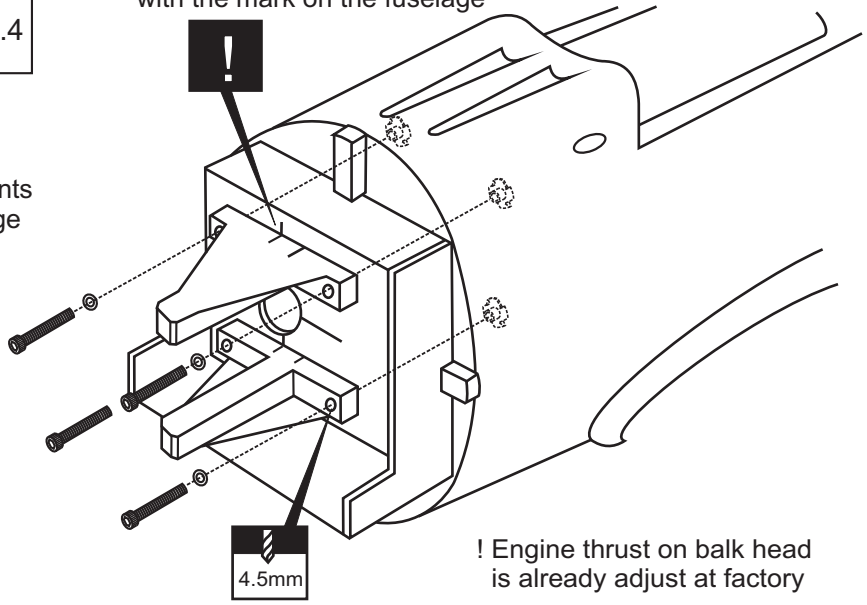
5/32x1”
4x25mm screw ...4

! Align the mark on both mounts with the mark on the fuselage



FRONT-VIEW **Vorderansicht**

! Align the mark on both mounts with the mark on the fuselage



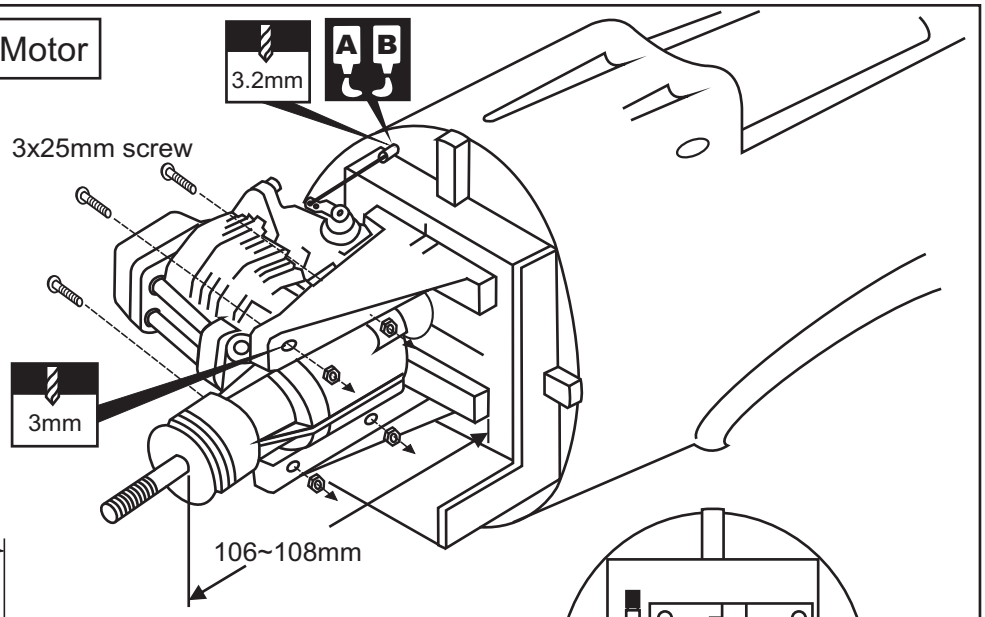
! Engine thrust on balk head is already adjust at factory

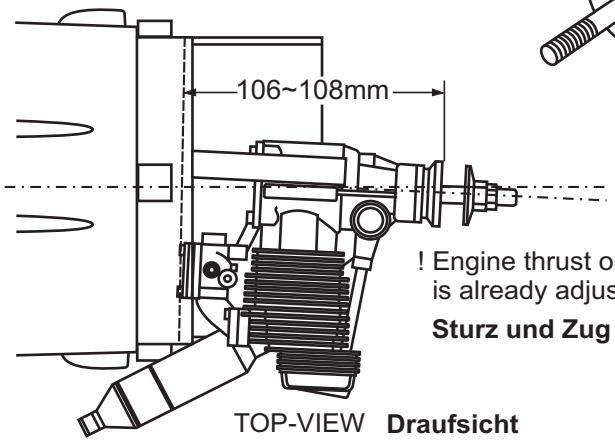
Sturz und Zug beachten!

12- Four-stroke engine / 4T Motor

3x25mm screw 4

Nut.....4

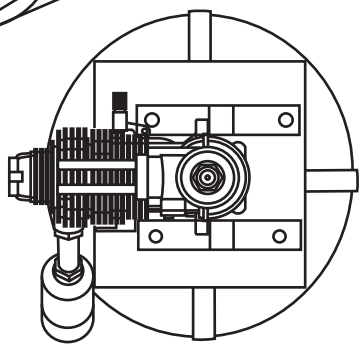




TOP-VIEW **Draufsicht**

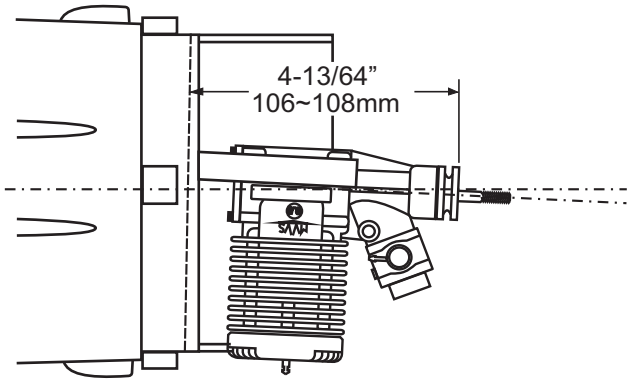
! Engine thrust on balk head is already adjust at factory

Sturz und Zug beachten!



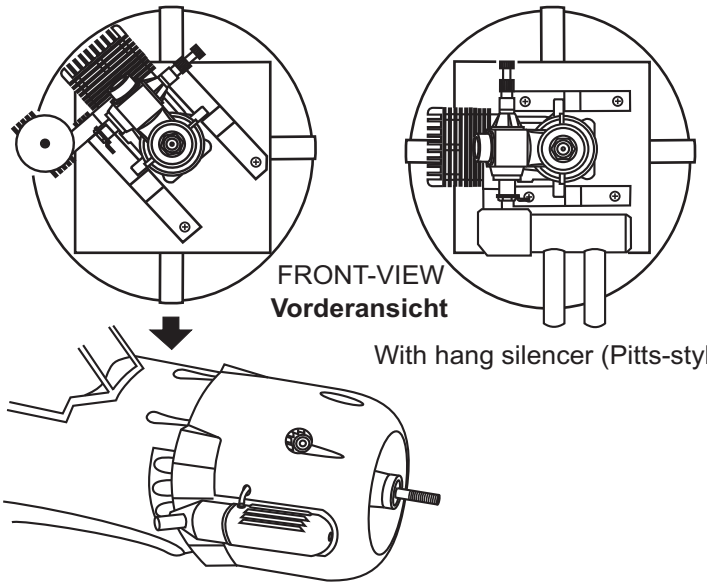
FRONT-VIEW **Vorderansicht**

13- Two-stroke engine / 2T Motor



TOP-VIEW **Draufsicht**

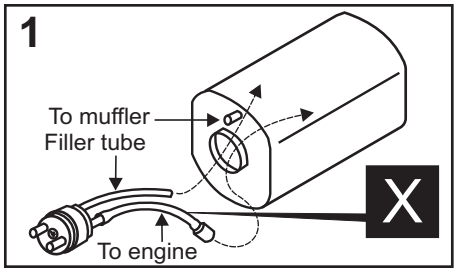
! Engine thrust on balk head is already adjust at factory

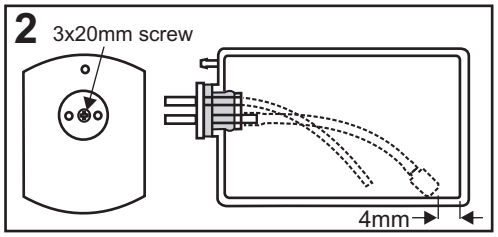


FRONT-VIEW **Vorderansicht**

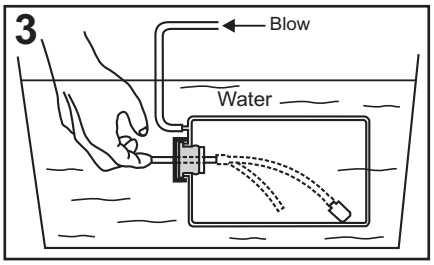
With hang silencer (Pitts-style)

14- Fuel tank installation / Tankeinbau



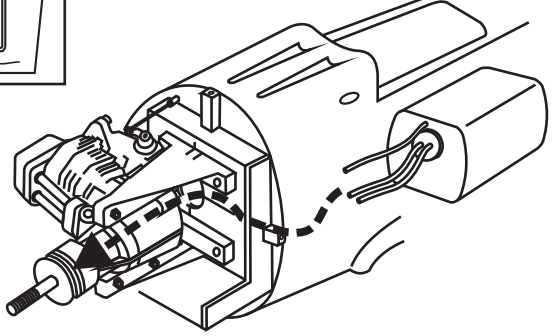


After confirming the direction . Insert this assembly, clunk end first, into the fuel tank and tighten and screw the fuel tank cap on firmly.



Checking for leaks - block the vents and blow into the feed - if in doubt submersing the tank in a blow of water will show up any problems.

! Secure install the fuel tank, ensuring it will not rattle during flights.



15- Electric motor/Elektromotor

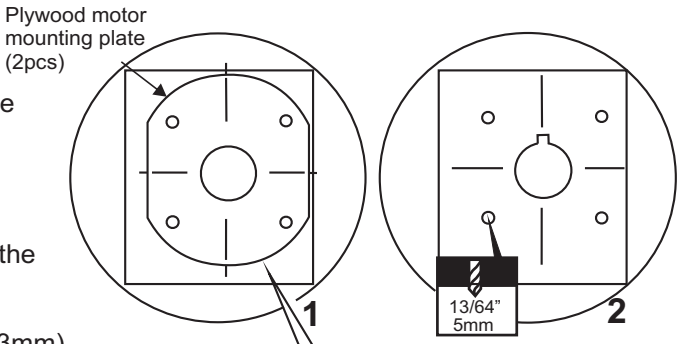
- Using a plywood motor mounting plate as a template, mark the fire wall where the four holes are to be drilled (1).
- Remove the plywood motor mounting plate and drill a 13/64"(5mm) hole through the fire-wall at each of the four marks marked (2).
- Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled (3).
- Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked (4).

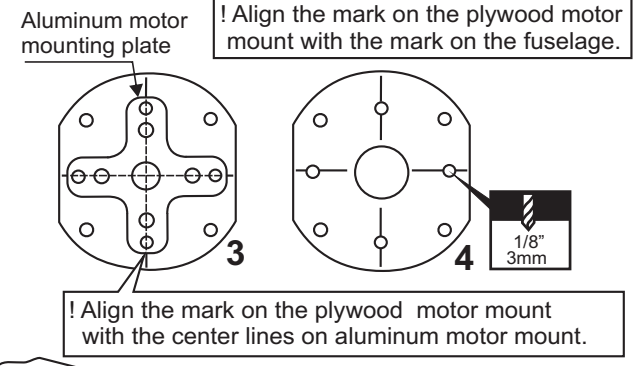
-Push the four 5x70mm bolts through the fire-wall as shown (5).

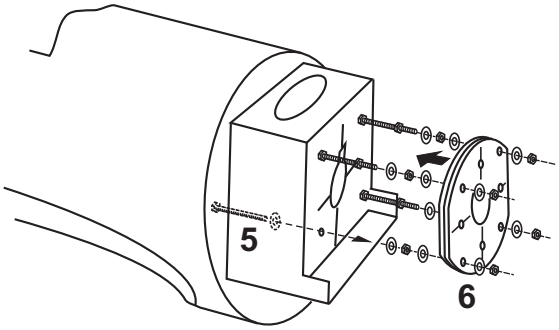
- Reposition the plywood motor mounting plate (2pcs) and secure it in place with eight 5mm nuts and washers (6).
  Note: B=B'(Side-view) and A=A'(Top-view)

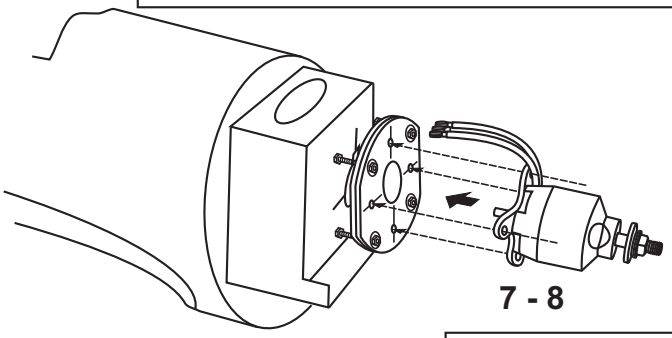
-Attach the aluminum motor mounting plate on to the motor and secure it in place with four screws (included with motor set) (7).

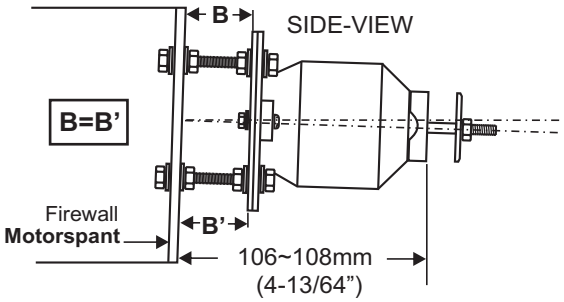
-Attach the motor on to the plywood motor mounting plate and secure it in place with four 3x15mm (1/8x19/32") screws(8).

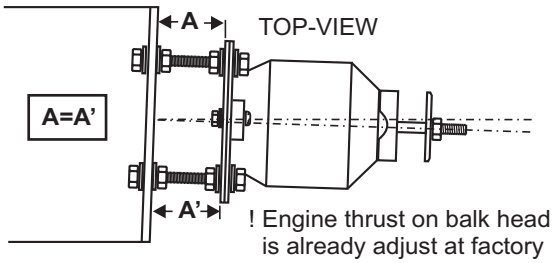




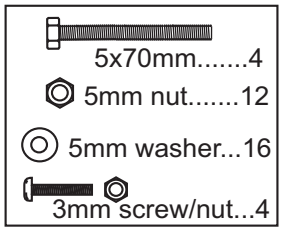






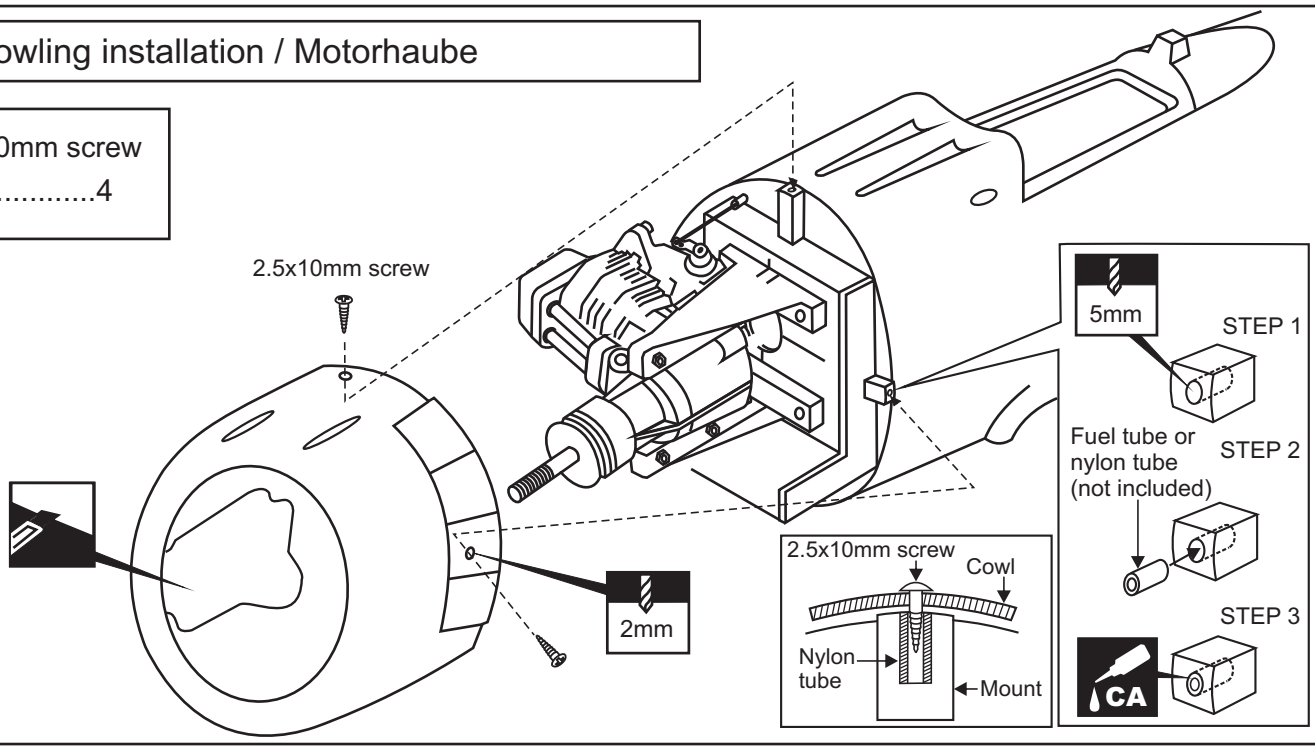


! Engine thrust on balk head is already adjust at factory



16- Cowling installation / Motorhaube

2.5x10mm screw 4



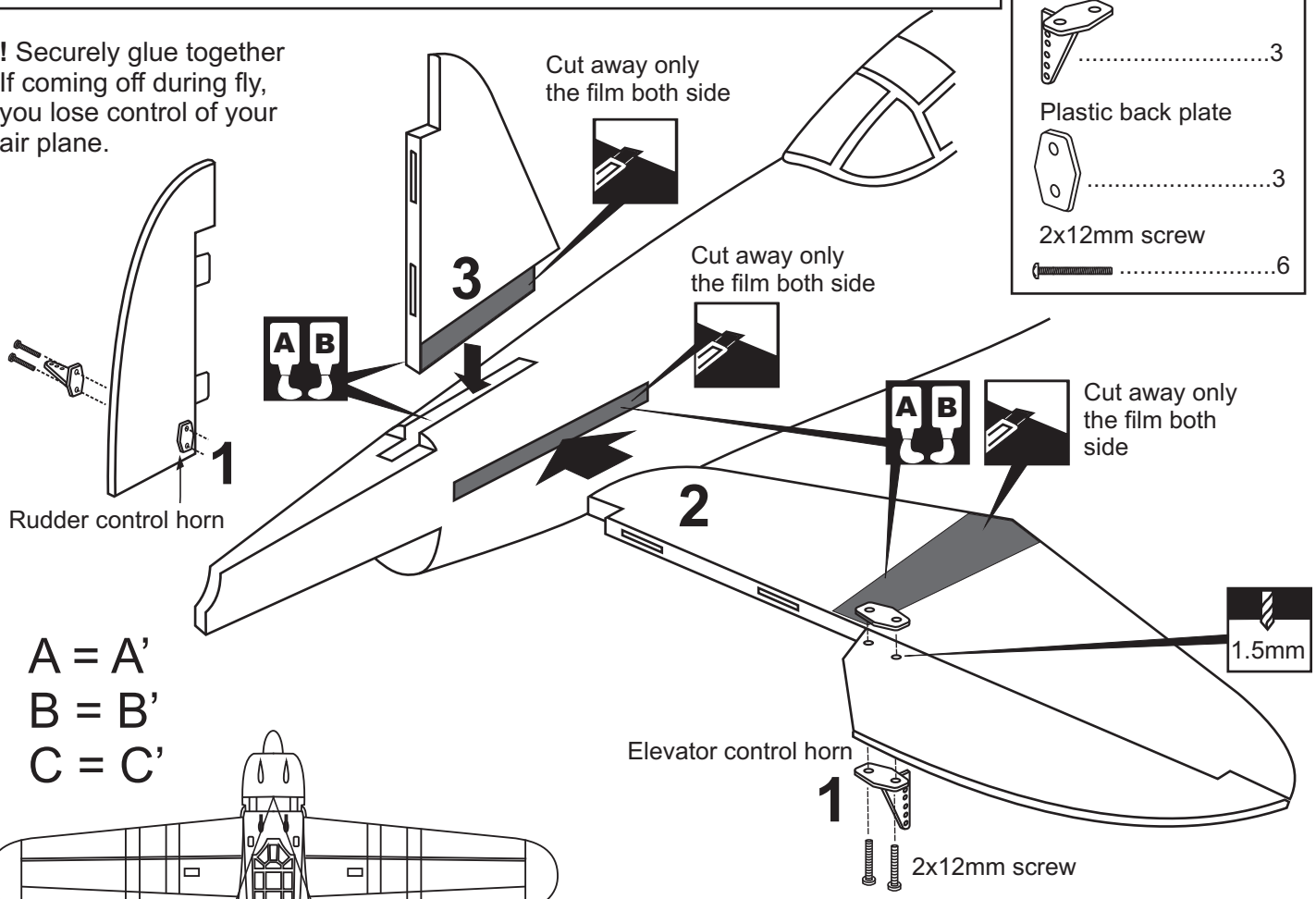
17- Vertical-Horizontal Stabilizers / Hohenleiwerk - Seitenleiwerk

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

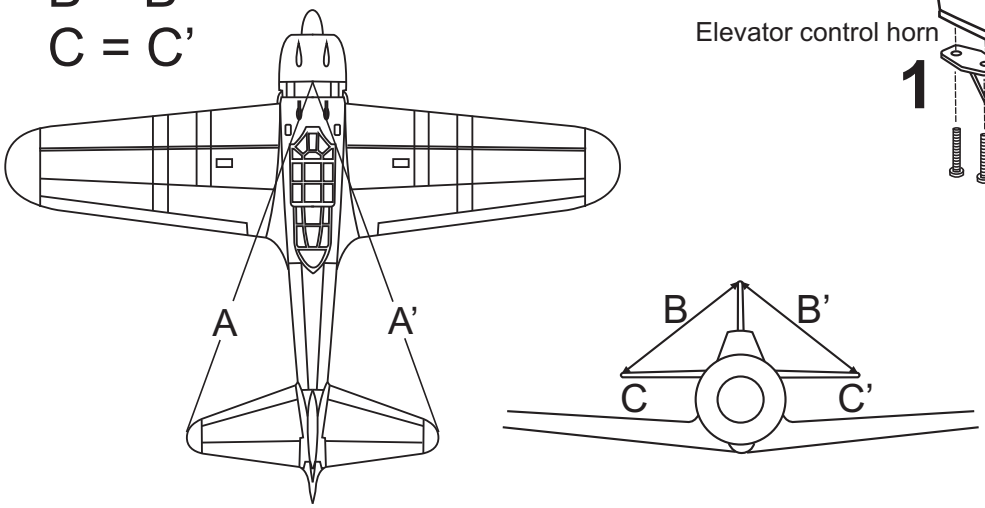
Plastic control horn 3

Plastic back plate 3

2x12mm screw 6



A = A'
B = B'
C = C'



STEP 1: Attach the control horn on the rudder and elevator

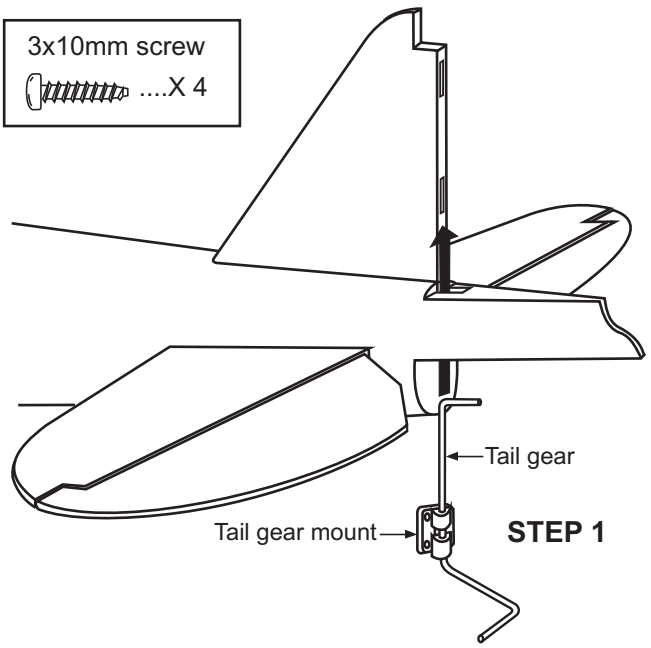
STEP 2: Installing the stabilizer (A=A' and C=C')

STEP 3: Installing the vertical fin (B=B')

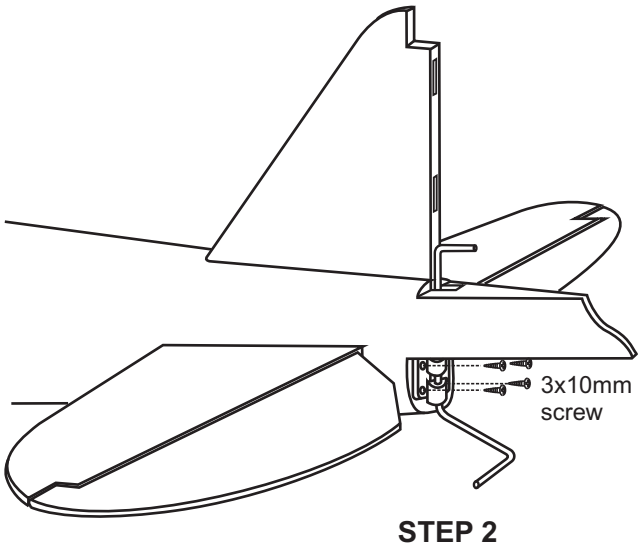
STEP 4: Installing other elevator

18- Tail gear / Heckspornrad

3x10mm screw ....X 4



STEP 1



STEP 2

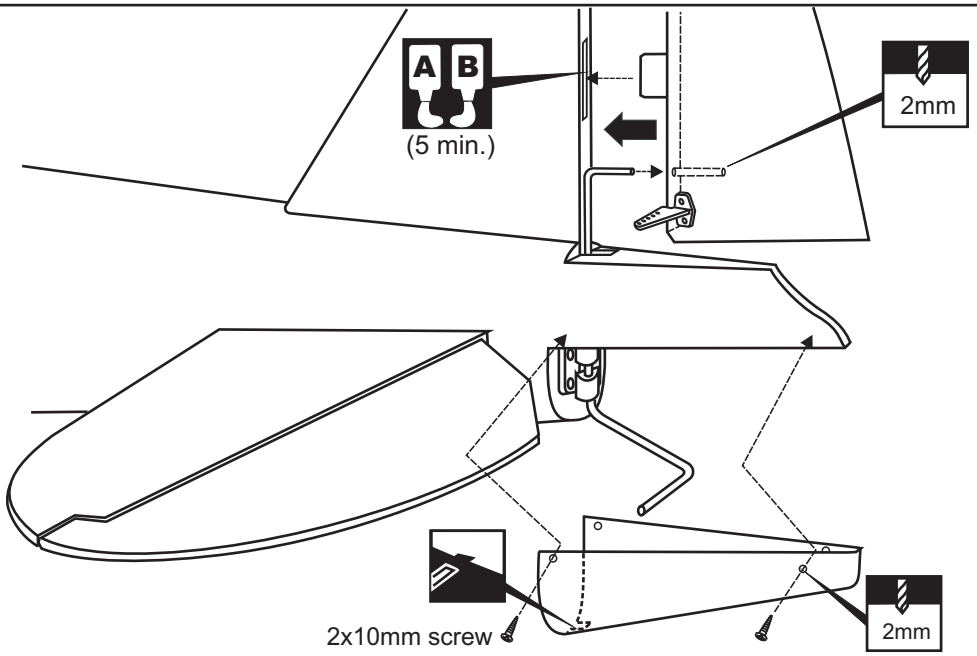
19 Tail gear cover

2x10mm screw X4

Place the rudder on the trailing edge of vertical stabilizer as show (make sure the rudder move freely without binding) . Mark the mounting hole position with a pencil. Remove the rudder and drill 2mm hole as show.

Replace the rudder on the trailing edge of vertical stabilizer and secure it in place using 5 minute epoxy.

Place the ABS tail gear cover on the bottom of fuselage as show and secure it in place using four 2x10mm screw



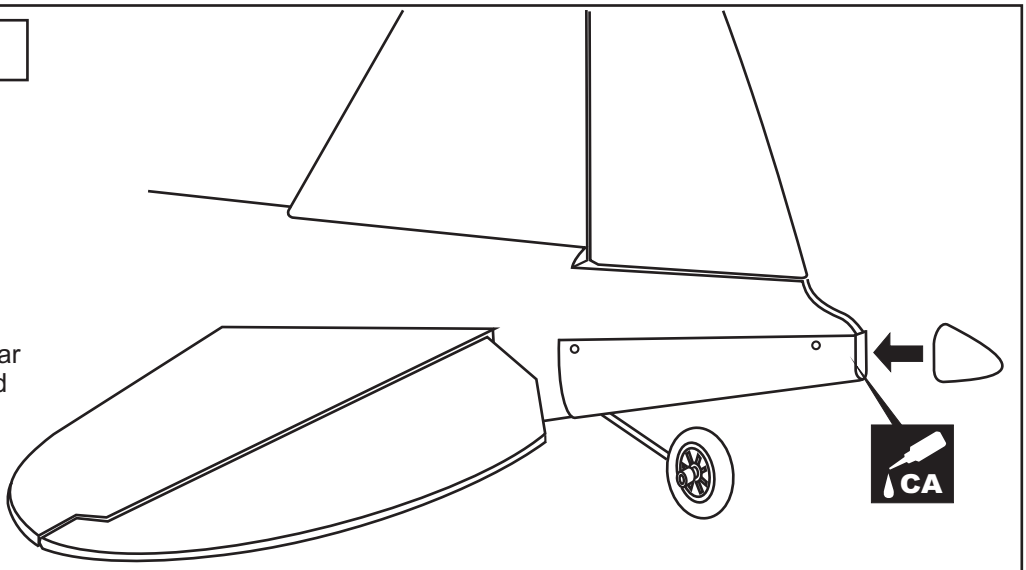
20- Tail wheel / Spornrad

2.2mm collar 1

25mm wheel 1

Slide the tail wheel onto the tail gear axle and secure it with the supplied 2mm collar.

Attach the ABS tail cover in place and secure it with litter CA glue or screws (screws not included)

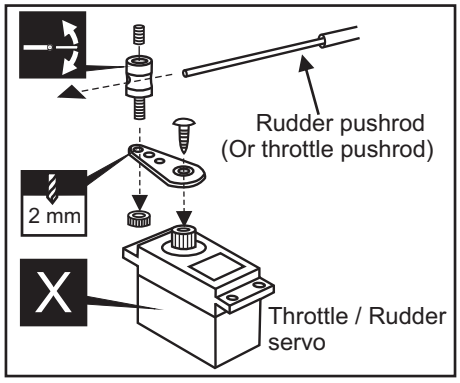


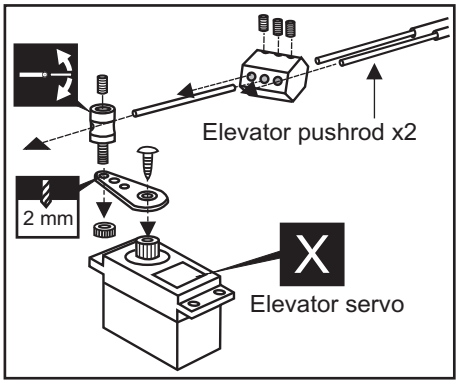
21 Servo installation / Servoeinbau

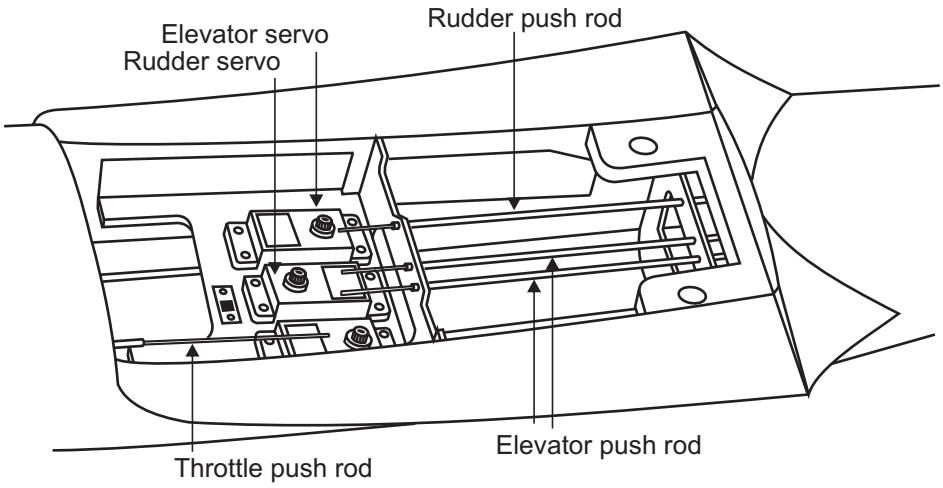
Connector 3

Connector 1

NOTE: Place of servos may be change depend of engine (Four-stoke or two-stroke engine)

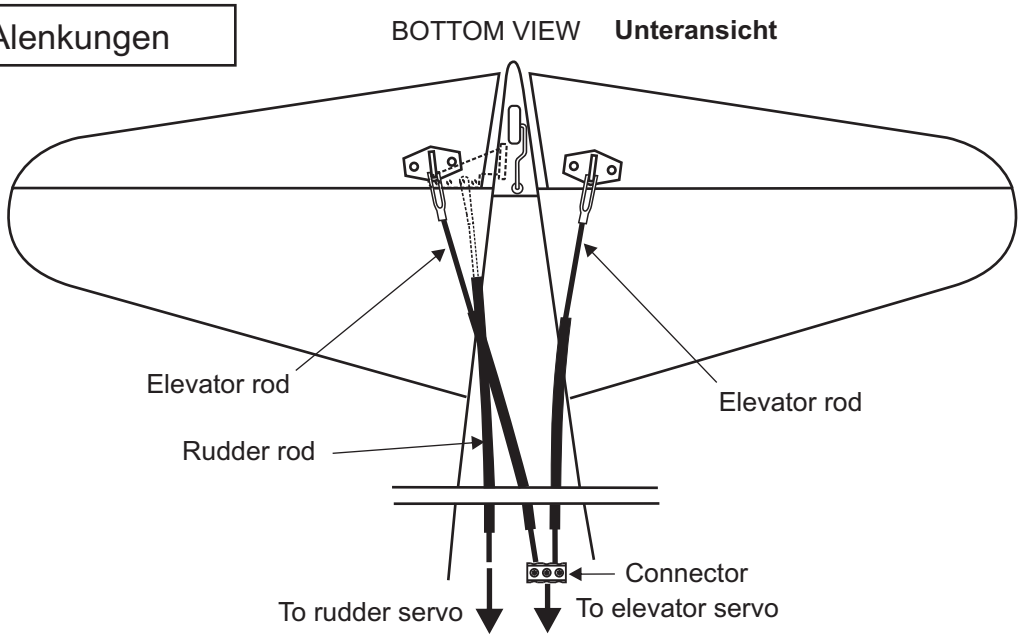




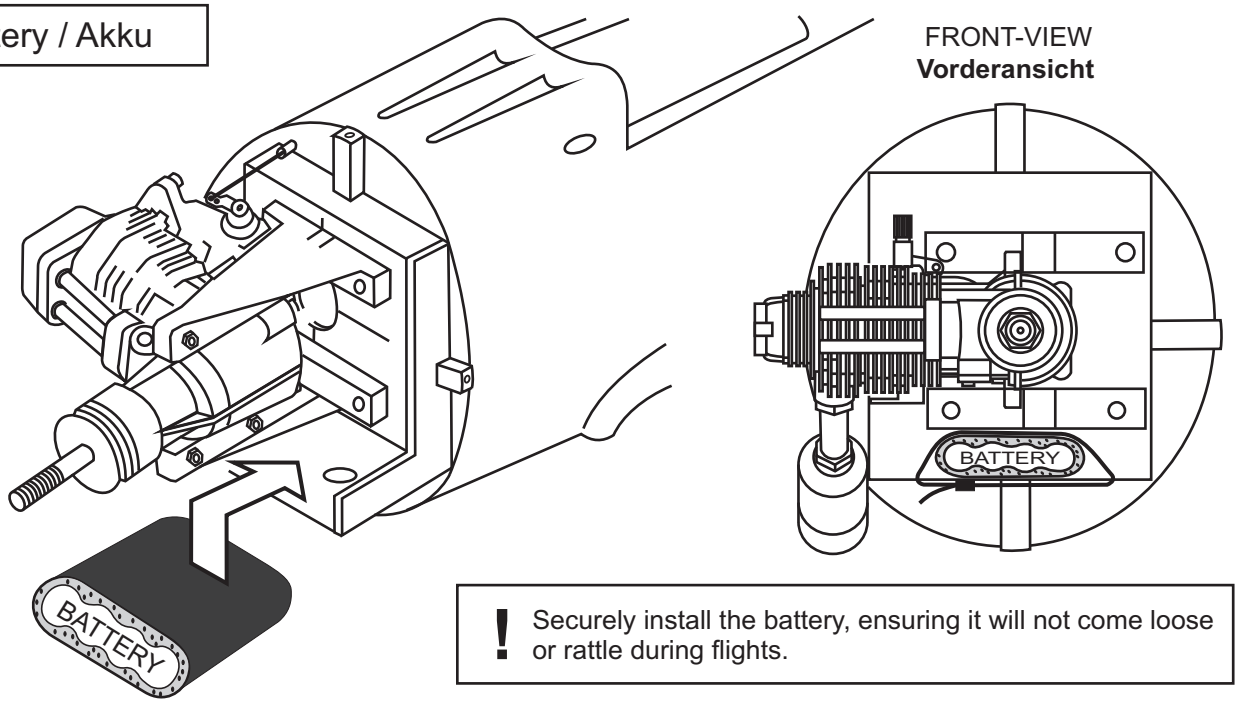


BOTTOM VIEW **Unteransicht**

22- Linkages / Alenkungen

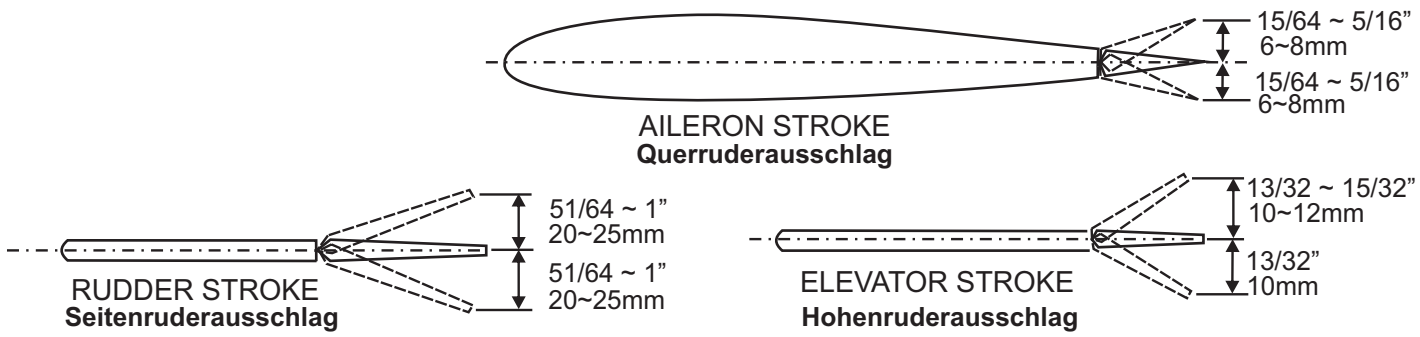


23- Battery / Akku



! Securely install the battery, ensuring it will not come loose or rattle during flights.

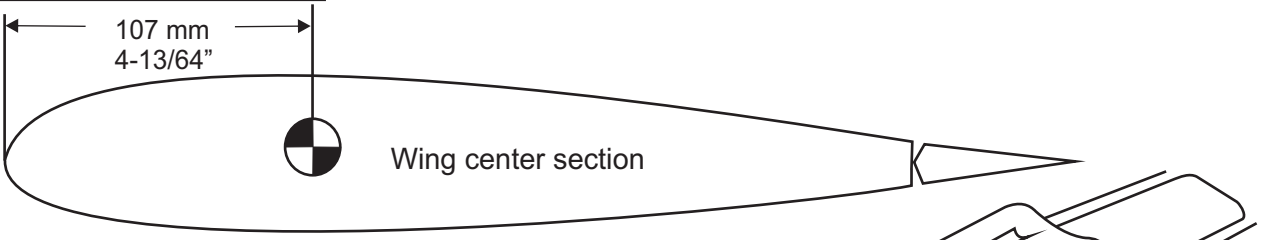
24- Control Surface / Ruderausschläge



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 Zero 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”.

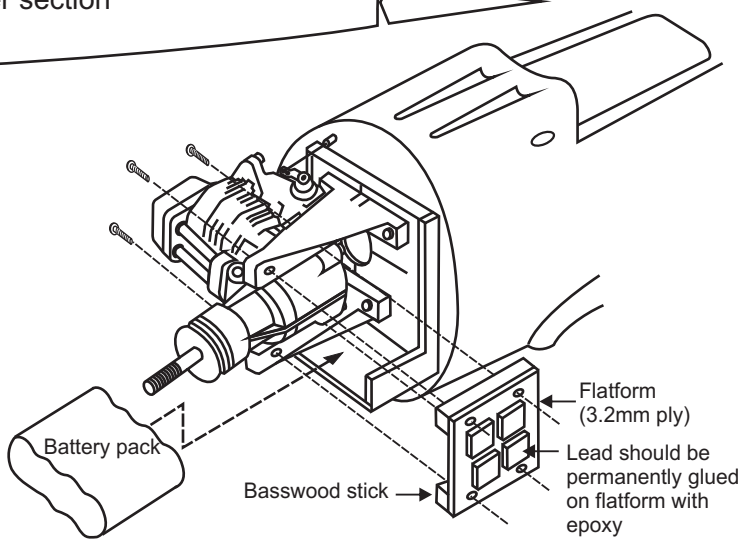
25- Balance / Schwerpunkt

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

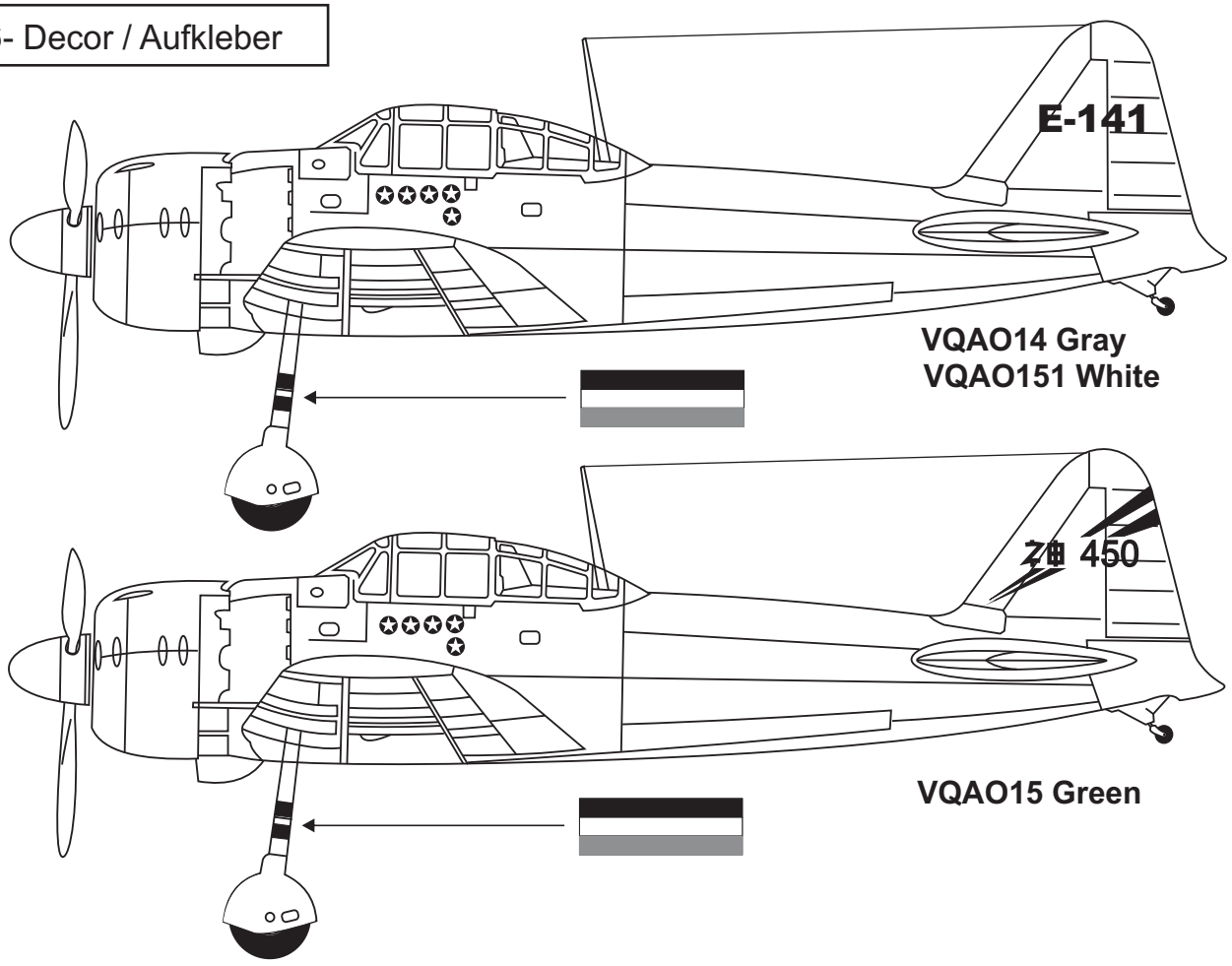


How to add noseweight

To get the correct C.G., Several strips of lead weight were required in the nose of this model . To minimize the amount of weight required, it is desirable to position the weight as far forward as possible. This can be done by making a platform form leftover basswood stick and 3.2mm (1/8”) ply wood. Using 4x35mm bolts to mount the engine would also be long enough to mount the flatform. The lead should be permanently glued on with epoxy.
IMPORTANT: Recheck the C.G. After the weight has been installed.



26- Decor / Aufkleber



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.

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 Änderungen und Irrtümer vorbehalten !