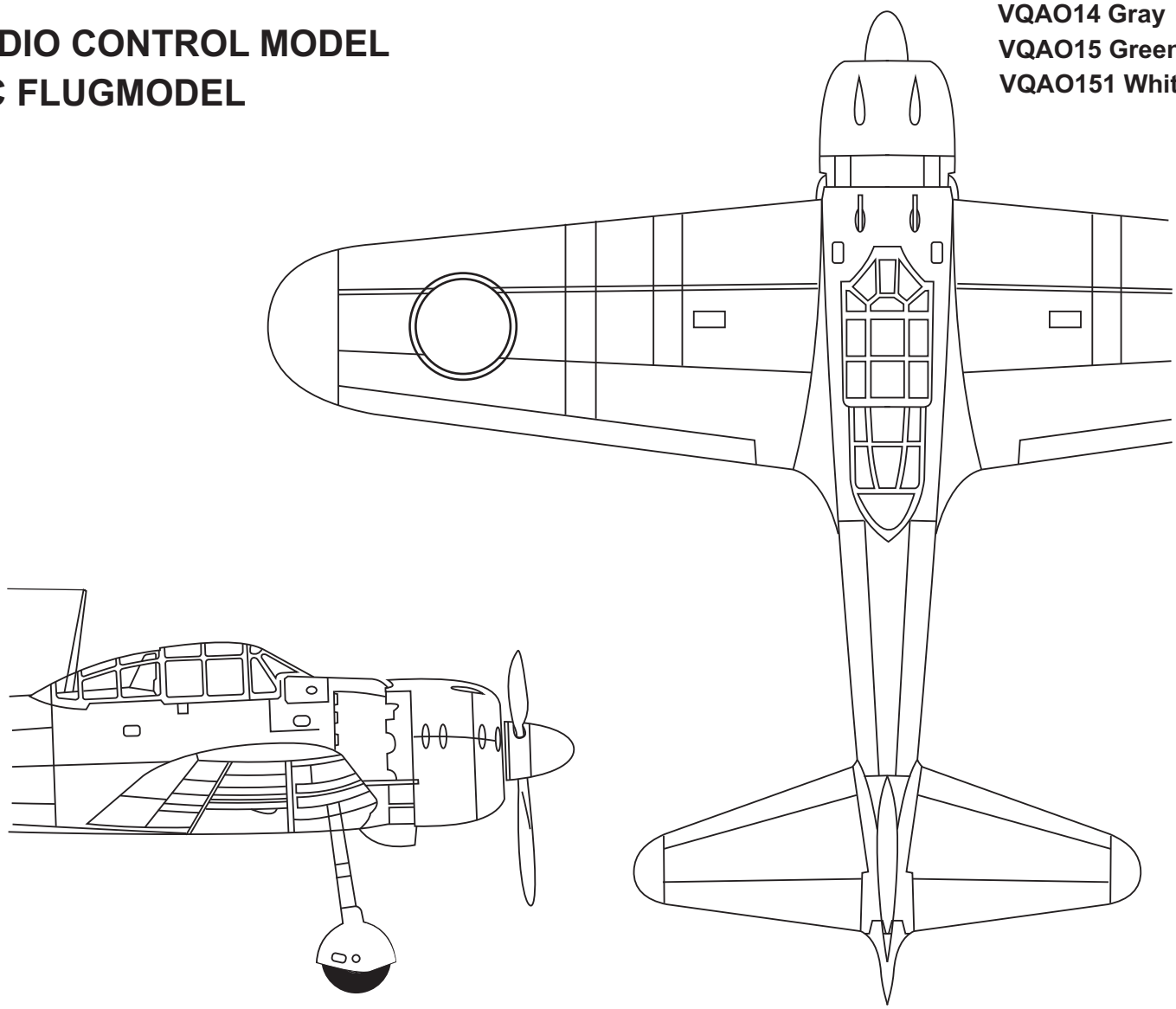
RADIO CONTROL MODEL
R/C FLUGMODEL

VQAO14 Gray
VQAO15 Green
VQAO151 White



BUILDING INSTRUCTIONS / MONTAGEANLEITUNG

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

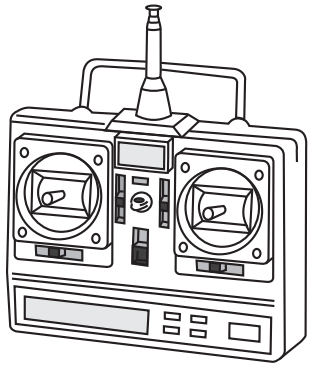
MITSUBISHI A6M5
"ZERO"

NEXA

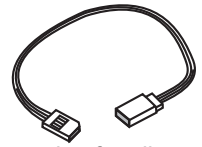
WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if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

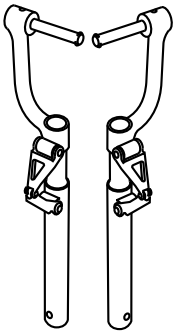
OPTIONAL ACCESSORIES / BENOTIGTES ZUBEHOR



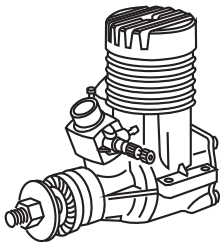
10.5x6 for .40 - 2 cycle engine
11x6 for .46 - 2 cycle engine
12x6 for .60 - 4 cycle engine
12x7 for .70 - 4 cycle engine
13x8 for Brushless Motor



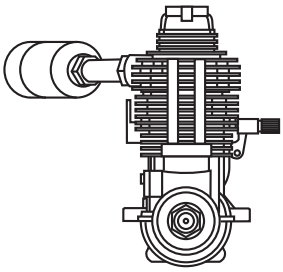
Extension for aileron flap and retract servo.



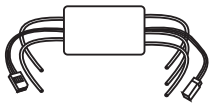
NXA1017-116



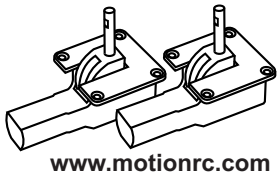
.46 ~ .50 - 2 cycle



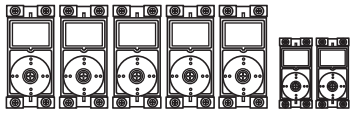
.60 ~.70 - 4 cycle



ESC 60-70A

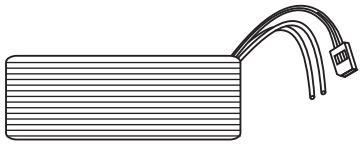


www.motionrc.com

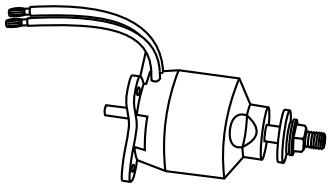


Minimum 6 channel radio
for airplane with 7 servos
.Motor control x1 .Aileron x2
.Flap x2 (mini servo)
.Elevator x1 .Rudder x1

Silicone tube



Li-Po Battery

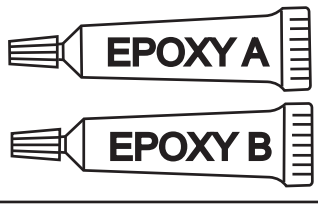


650-800W Brushless Motor

GLUE (Purchase separately)

Silicon sealer

Cyanoacrylate
Glue
Klebstoff



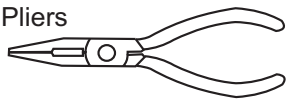
Epoxy Glue (5 minute type)
Epoxy-Klebstoff (5min-Typ)

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

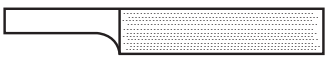
TOLLS REQUIRED (Purchase separately)

Hobby knife

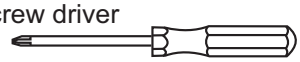
Needle nose Pliers



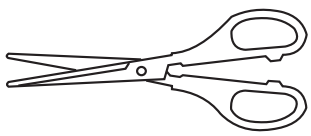
Sander



Phillip screw driver



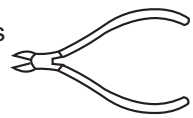
Scissors



Hex Wrench

Awl

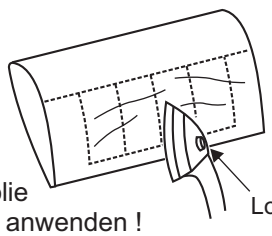
Wire Cutters



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 !



Low setting

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

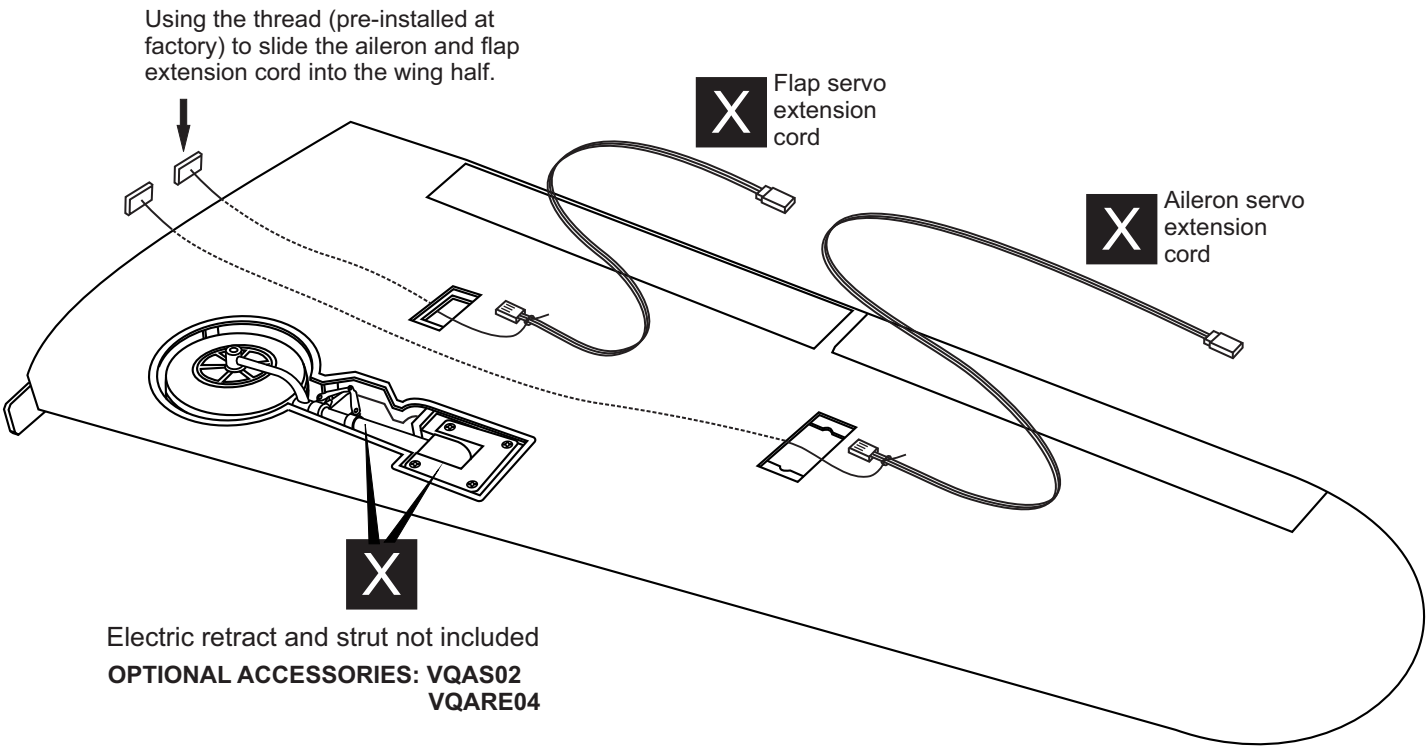
Linke und rechte Seite wird gleichermaßen zusammengebaut

Nicht enthalten. Teile müssen separat gekauft werden.

CONVERSION TABLE

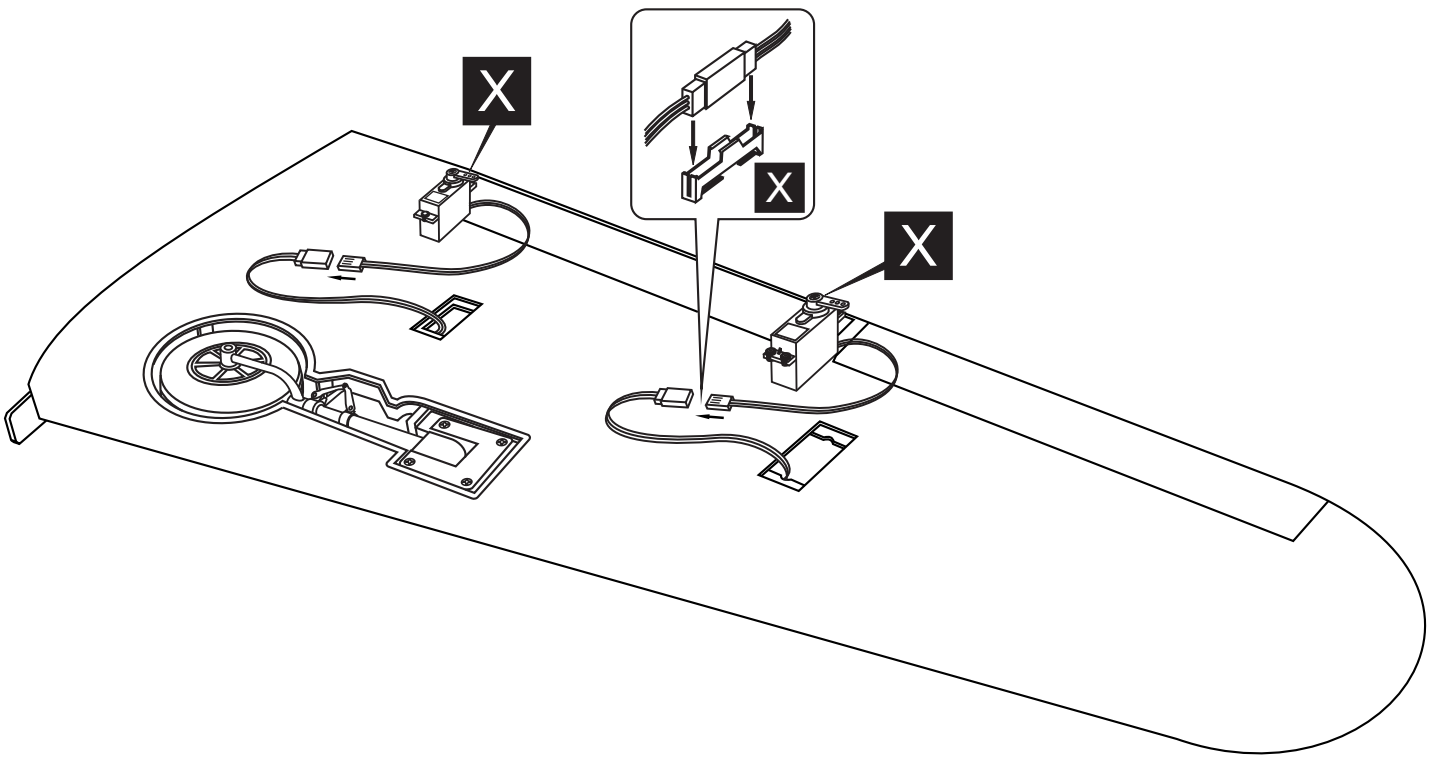
1.0mm = 3/64”	3.0mm = 1/8”	10mm = 13/32”	25mm = 1”
1.5mm = 1/16”	4.0mm = 5/32”	12mm = 15/32”	30mm = 1-3/16”
2.0mm = 5/64”	5.0mm = 13/64”	15mm = 19/32”	45mm = 1-51/64”
2.5mm = 3/32”	6.0mm = 15/64”	20mm = 51/64”	

A6M5 ZERO MAIN WING: Extension cord & Servo



Electric retract and strut not included

OPTIONAL ACCESSORIES: VQAS02
VQARE04

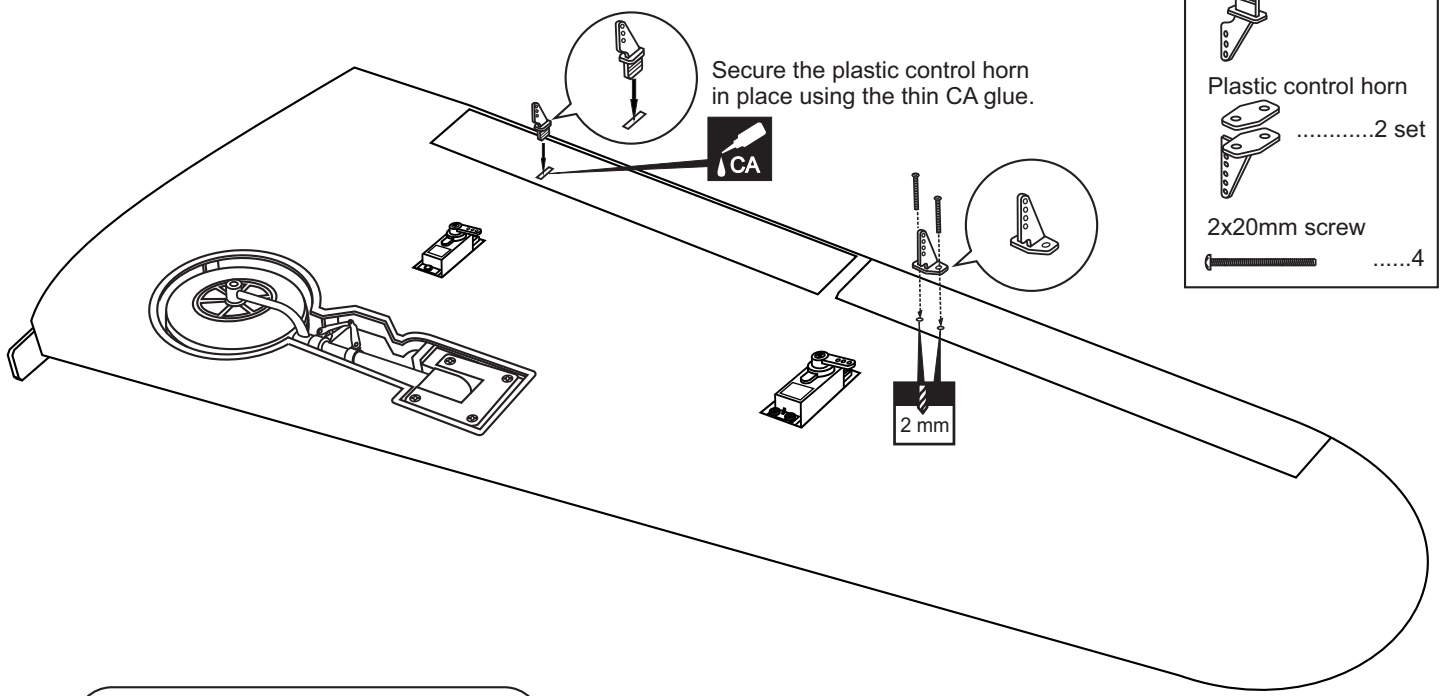


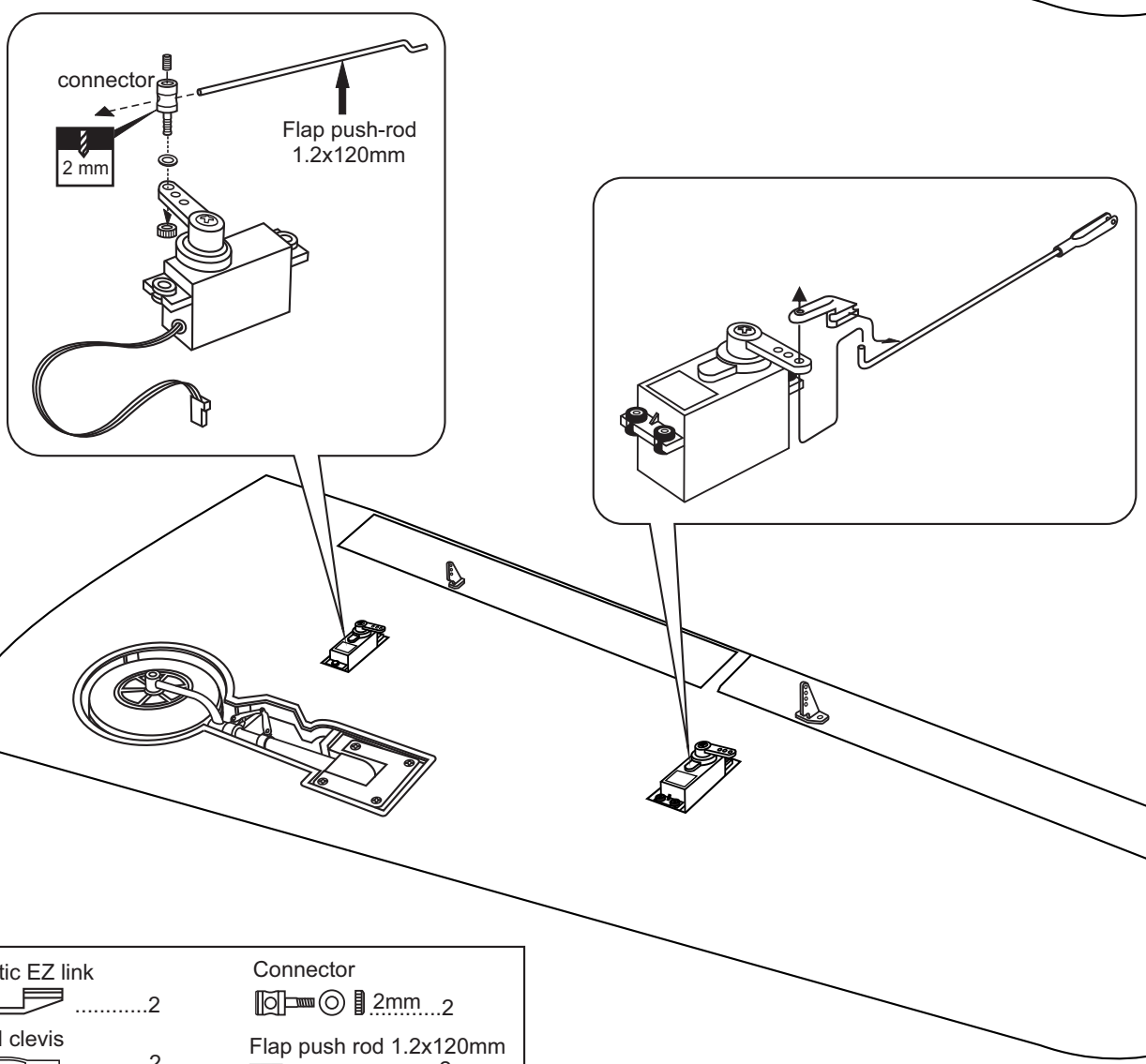
A6M5 ZERO MAIN WING: Control horn & Linkages

Plastic control horn
.....2 set

Plastic control horn
.....2 set

2x20mm screw
.....4





Plastic EZ link
.....2

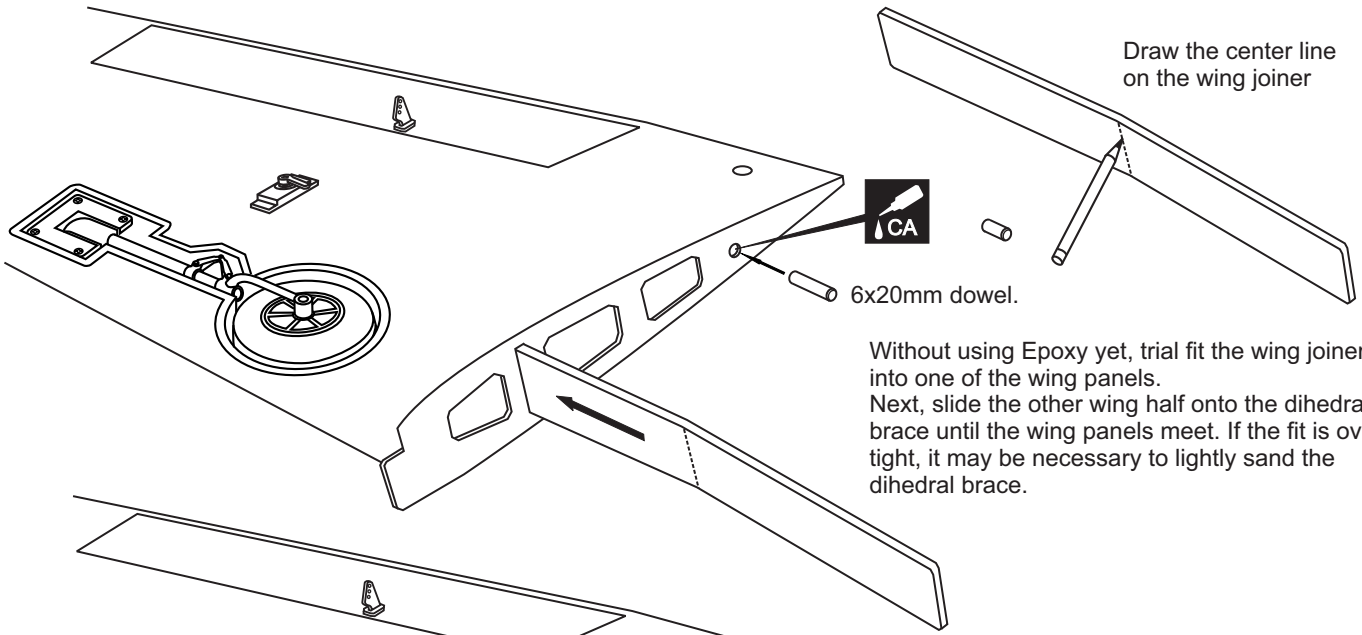
Steel clevis
.....2

Aileron push rod 2x175mm
.....2

Connector
2mm 2

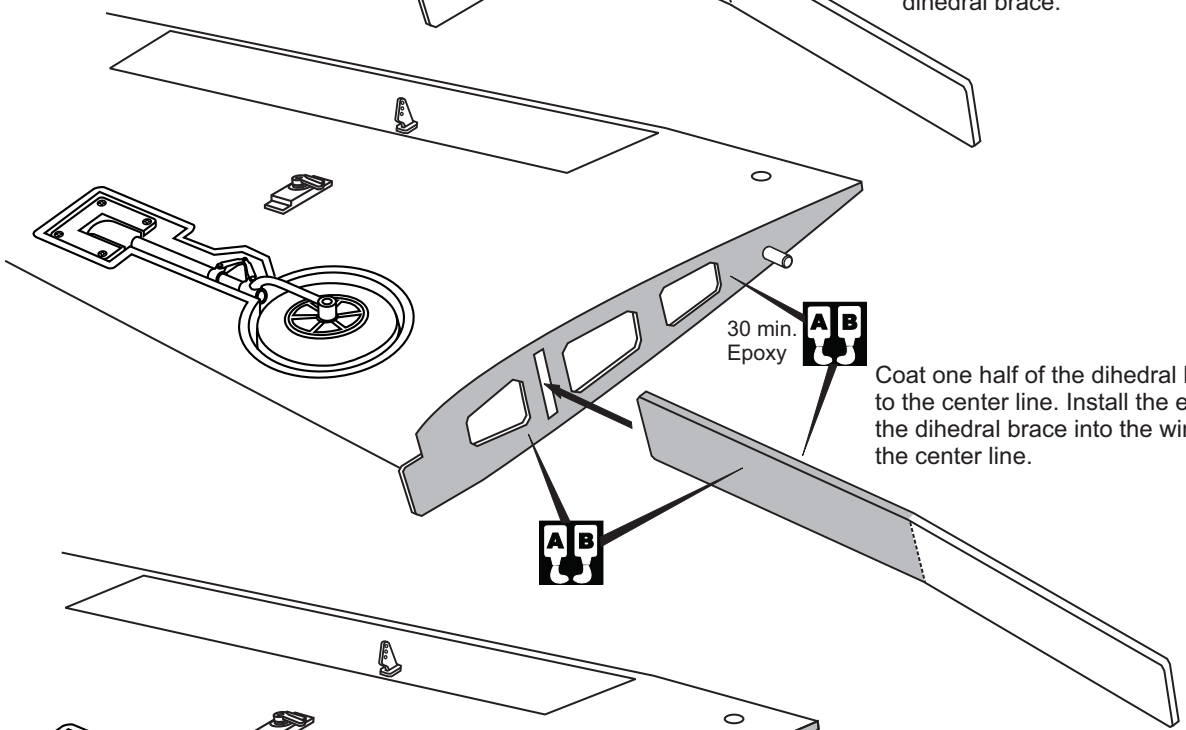
Flap push rod 1.2x120mm
.....2

A6M5 ZERO MAIN WING: Joining the wing halves

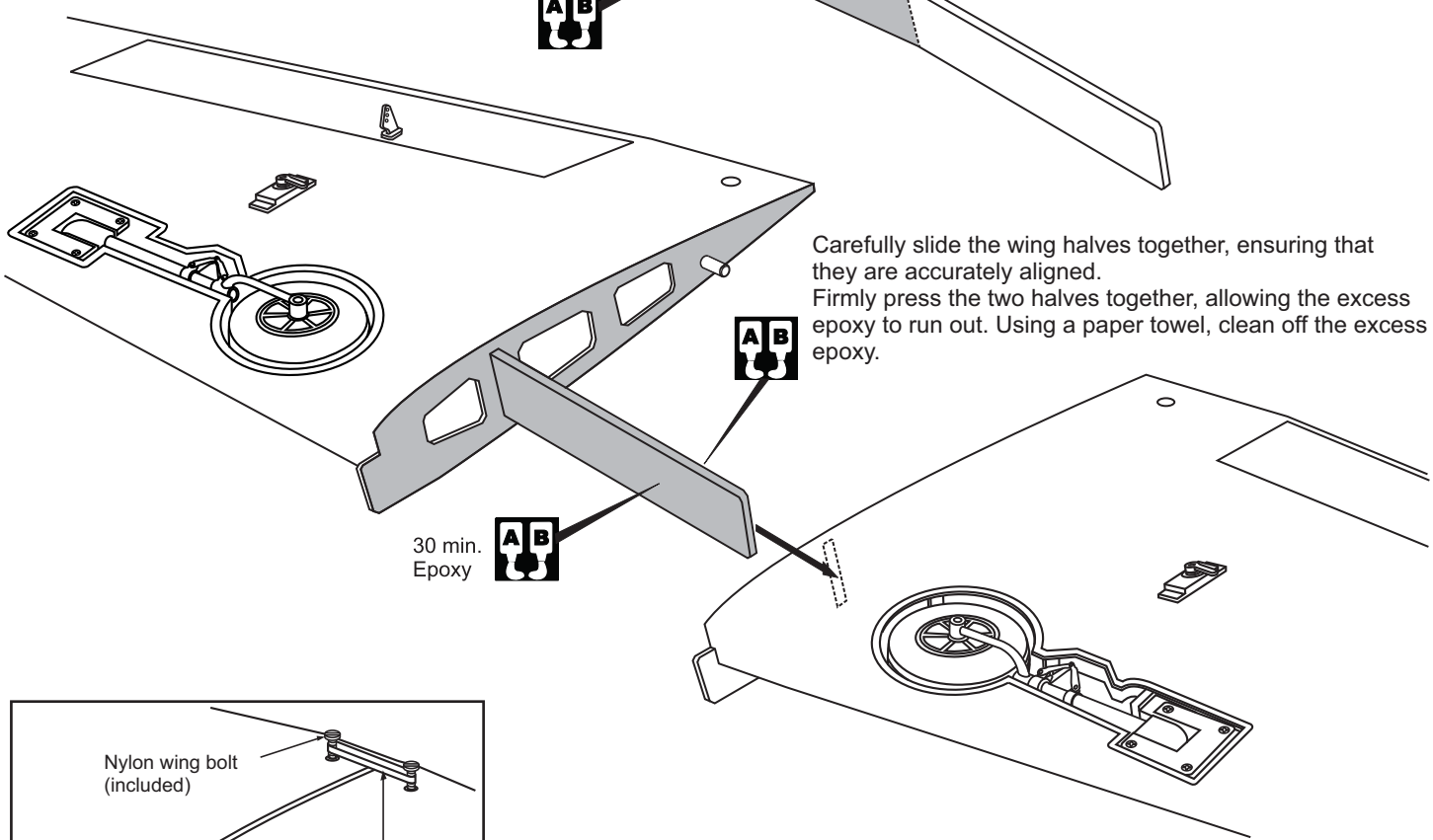


Draw the center line on the wing joiner

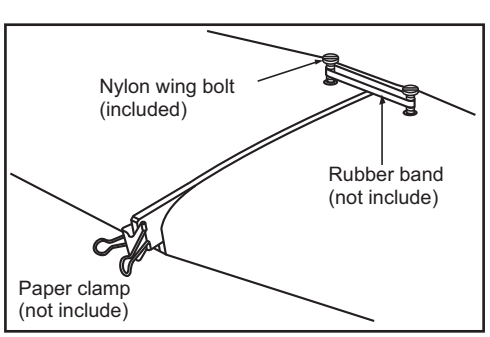
Without using Epoxy yet, trial fit the wing joiner into one of the wing panels.
Next, slide the other wing half onto the dihedral brace until the wing panels meet. If the fit is overly tight, it may be necessary to lightly sand the dihedral brace.



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.

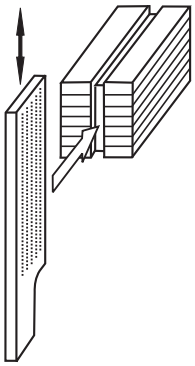


Carefully slide the wing halves together, ensuring that they are accurately aligned.
Firmly press the two halves together, allowing the excess epoxy to run out. Using a paper towel, clean off the excess epoxy.

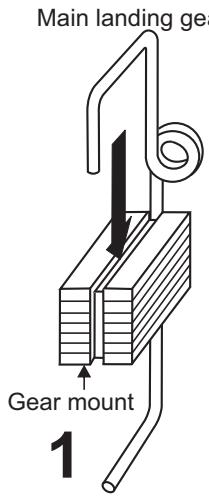


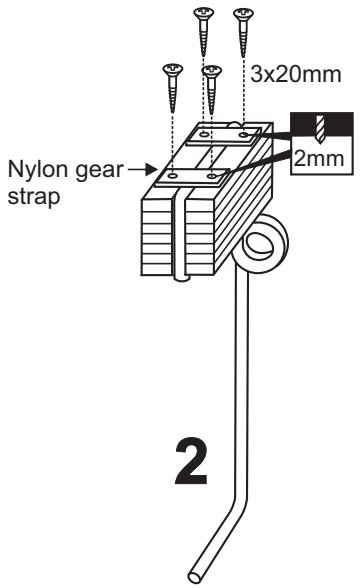
Hold the wing halves together with paper clamp and rubber band.

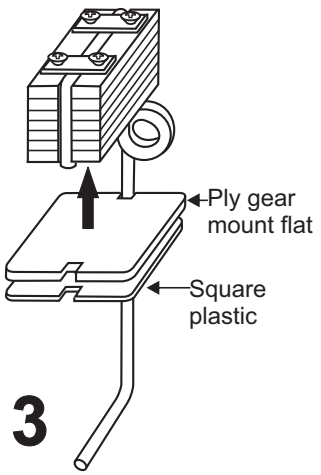
A6M5 ZERO MAIN WING: Fixed gear assembly

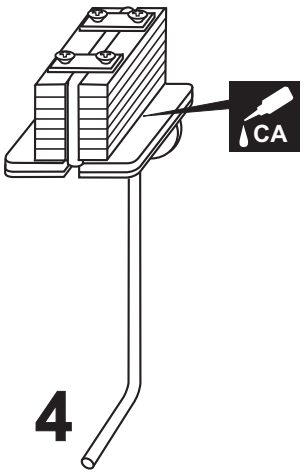


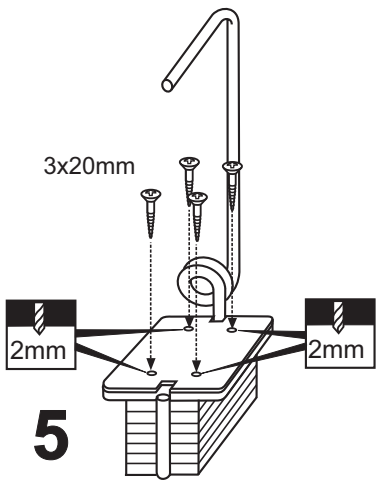
Insert the main landing gear into the slot on the gear mount, if necessary, use sander to widen the slot to make this easier.

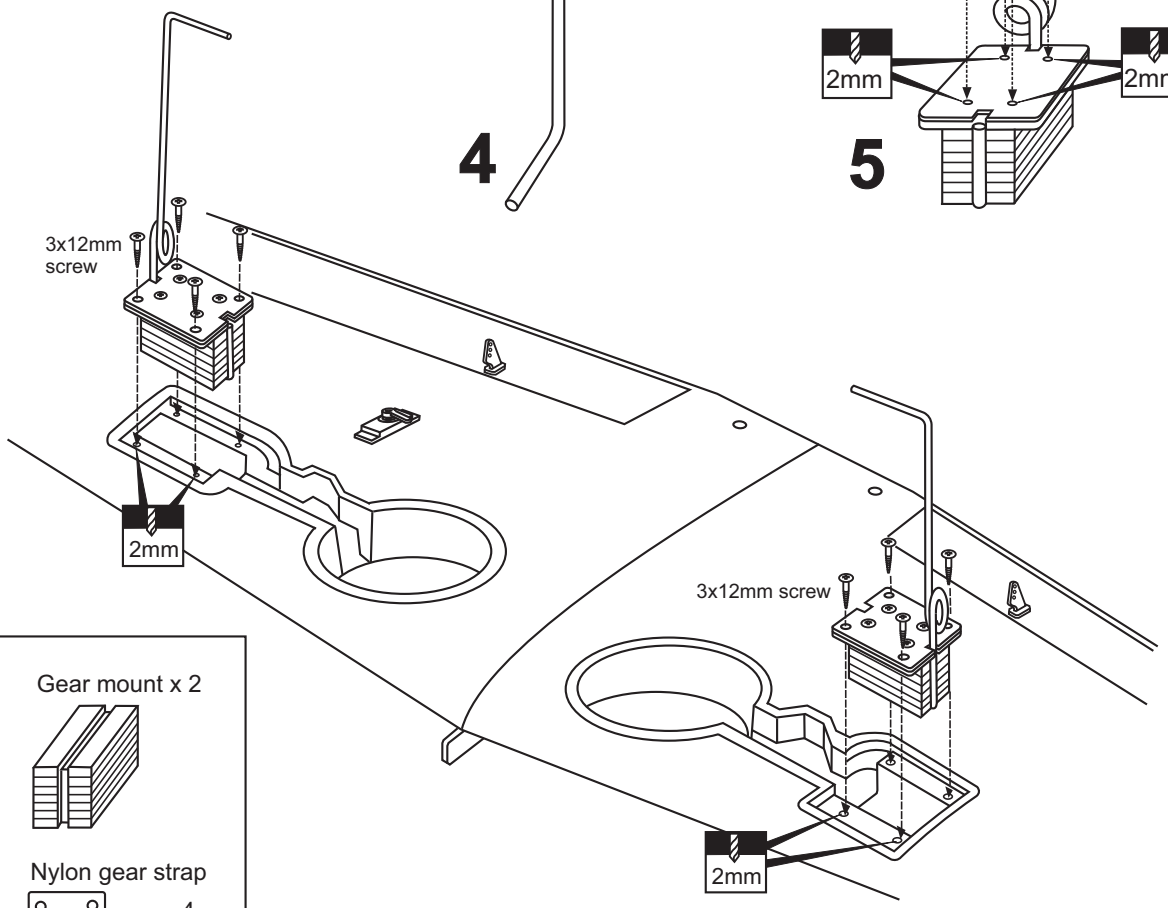






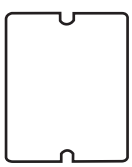






Ply gear mount plate x 2

Square plastic x 2



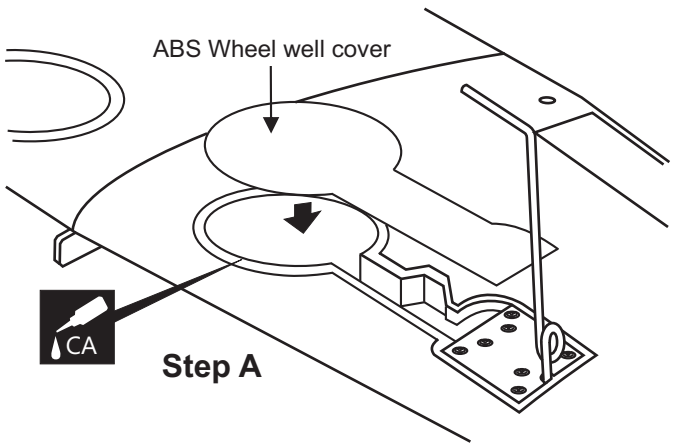
Gear mount x 2

Nylon gear strap 4

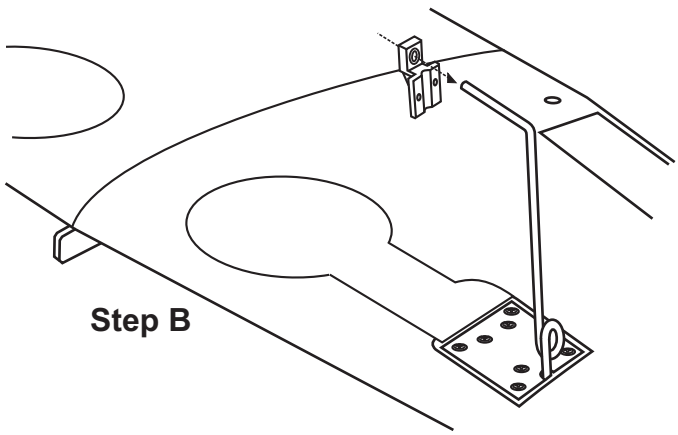
3x12mm screw 8

3x20mm screw 16

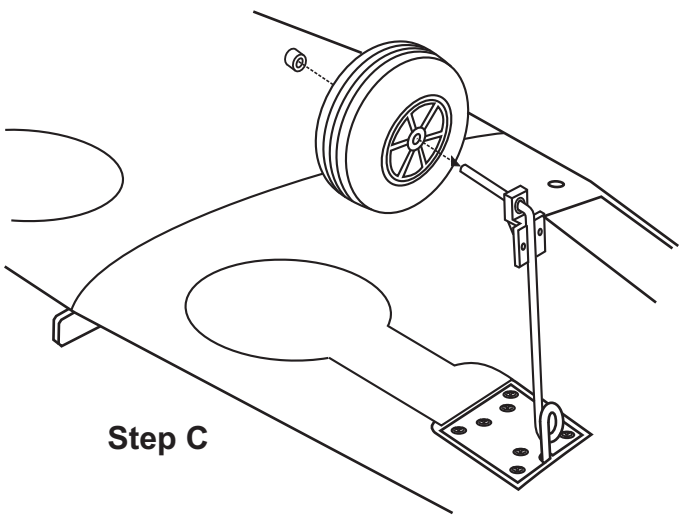
MAIN WING: Wheel and wheel cover



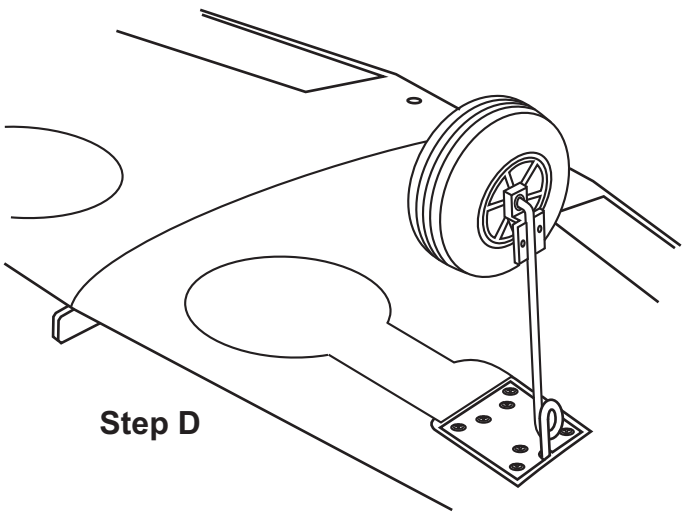
Step A



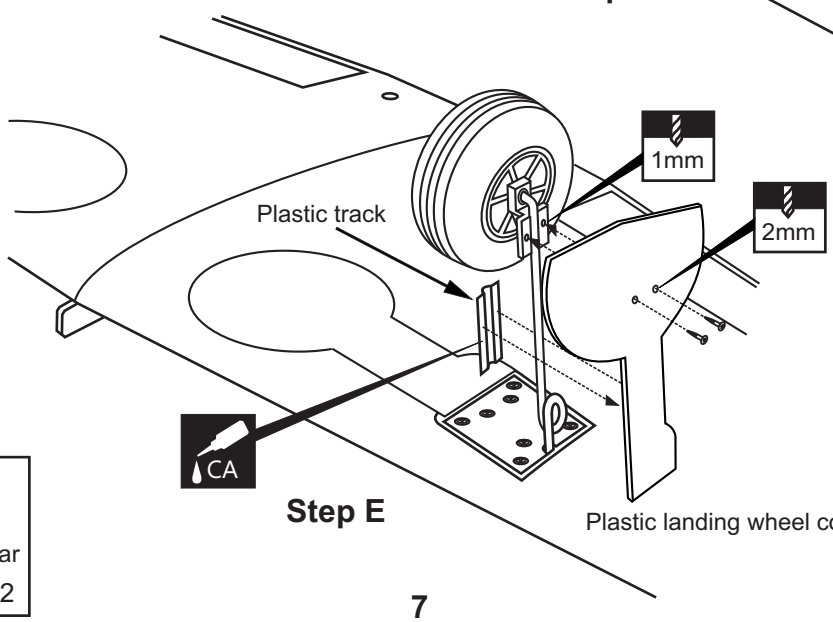
Step B



Step C



Step D



Step E

Plastic landing wheel cover

2x6mm screw 4

4mm collar

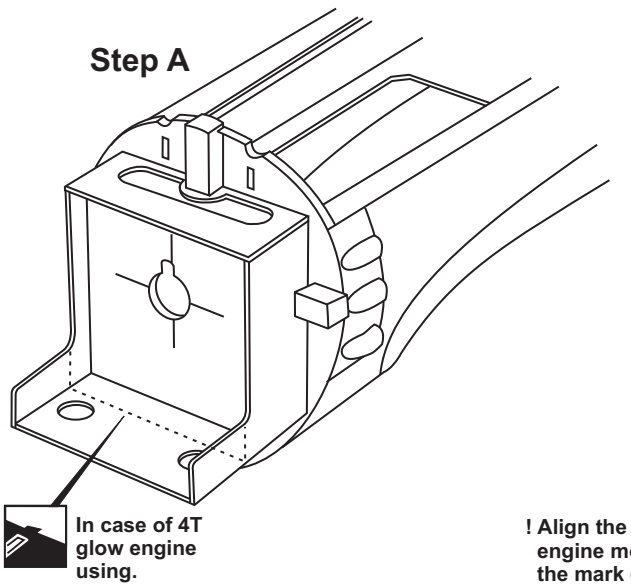
...2 2

FUSELAGE: Engine mounts installation

Push left (or right) the magnetic fuel tank hatch and full it out of the fuselage.

Cut the wood along the line as shown (**1A**) **in case of 4T engine using**

Step A



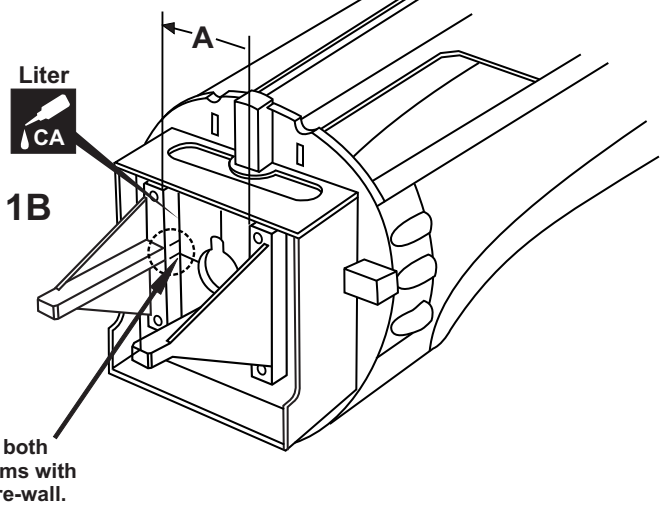
In case of 4T glow engine using.

Attach the engine mount beams onto the fire-wall so the distance between of two engine mount beams is “A”,and B=B’ as show.
Secure the engine mount beams onto the fire-wall with litter CA glue (1B)

! Align the mark on both engine mount beams with the mark on the fuselage

Using a pencil or felt tipped pen, mark the fire wall where the four holes are to be drilled(1B))

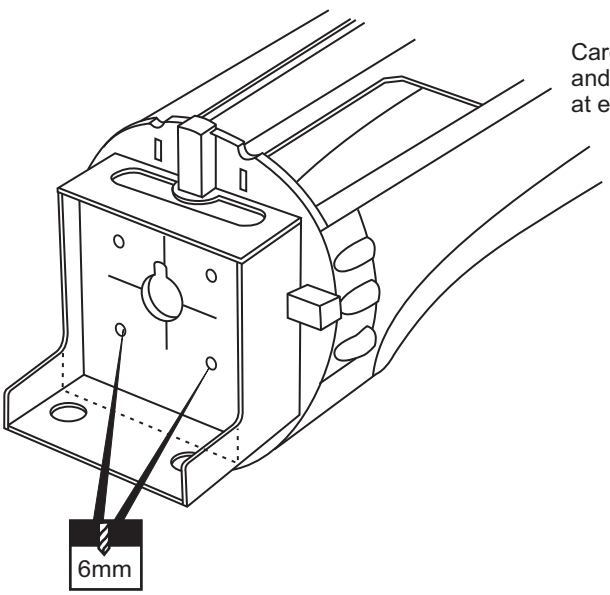
Step B

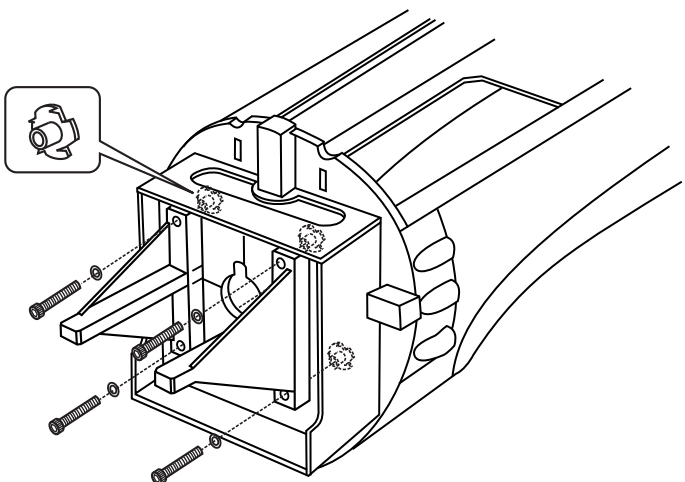


! Align the mark on both engine mount beams with the mark on the fire-wall.

Step C

Carefully remove the engine mount beams and drill a 6mm hole through the fire-wall at each of the four marks made above (1C)



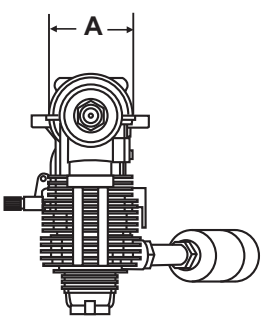


1D

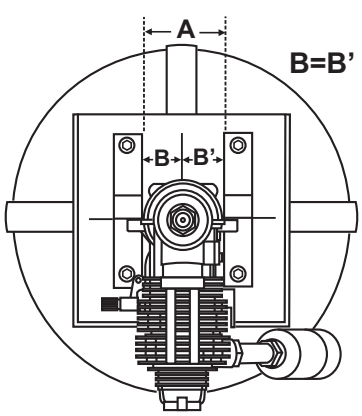
Step D

Insert the blind-nut onto each of the four holes make above (1D).

Reposition the engine mount beams on to the fire-wall and secure them with four 4x25mm screw (1D)

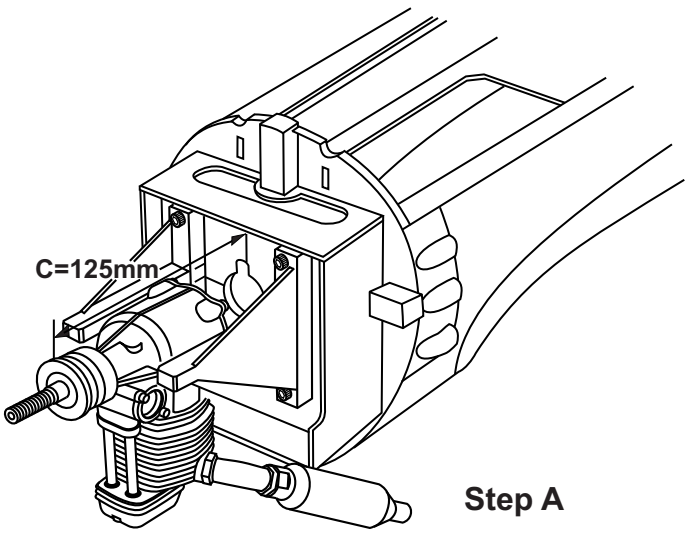


FRONT-VIEW

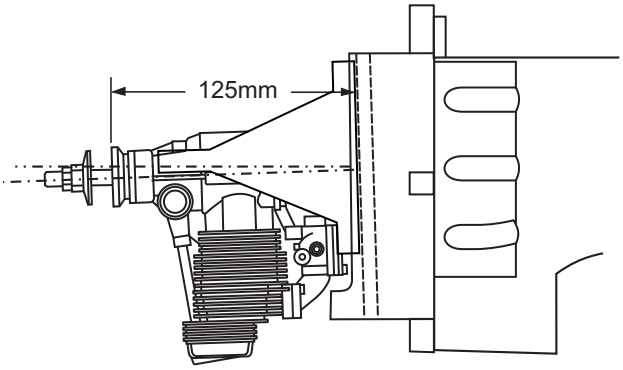


4x25mm screw - washer	
	4
Blind-nut	
	4

FUSELAGE: Engine installation



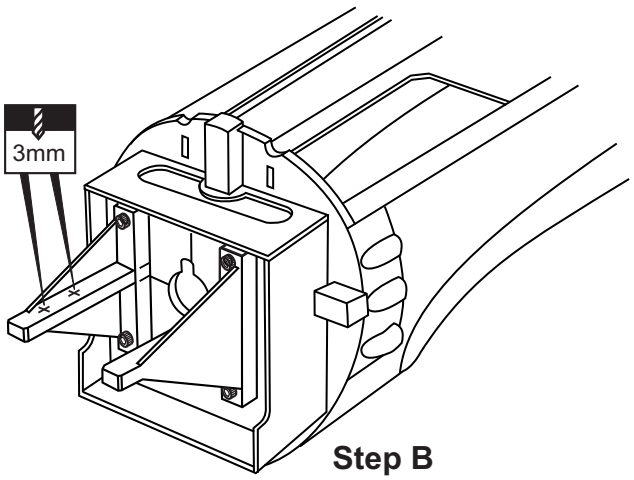
Step A



! Engine thrust on balk head is already adjust at factory

FUSELAGE SIDE-VIEW

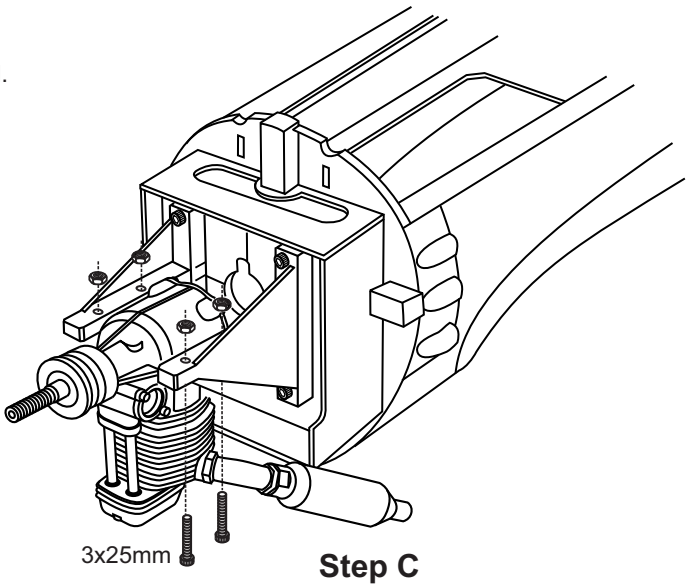
Position the engine to the engine mounts so the distance from the prop hub to the fire-wall is 125mm.
Mark the engine mounting plate where the four holes are to be drilled.



Step B

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.

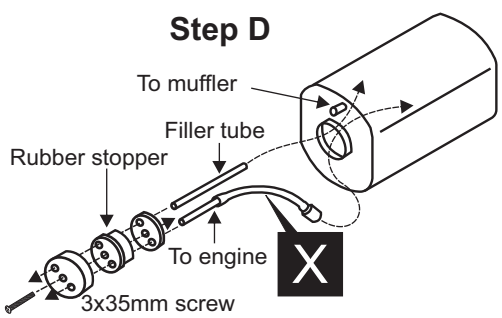


Step C

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

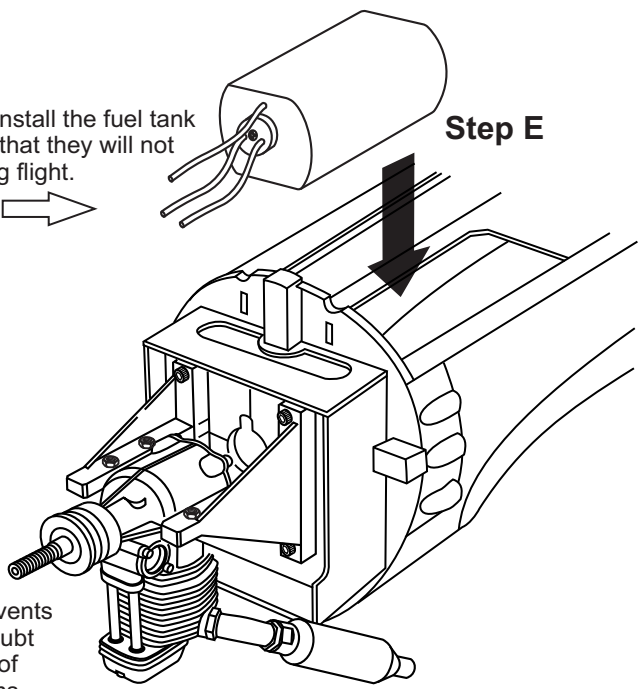
Note: Apply Silicon sealer to each of the 3x25mm screw and nut.

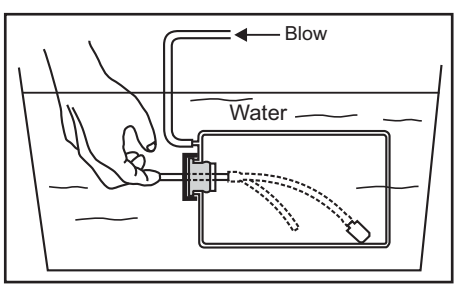
Step D



Carefully install the fuel tank to ensure that they will not shift during flight.

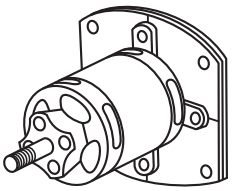
Step E





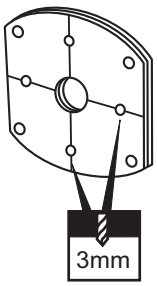
Checking for leaks - block the vents and blow into the feed - if in doubt submersing the tank in a blow of water will show up any problems.

FUSELAGE: Electric motor installation



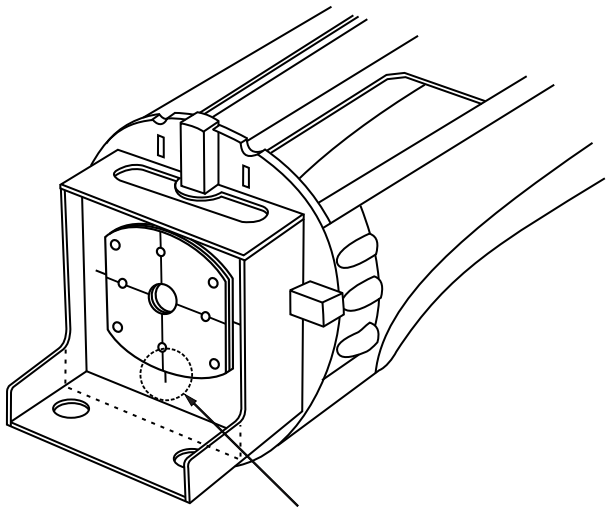
Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled.

Step A



Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked .

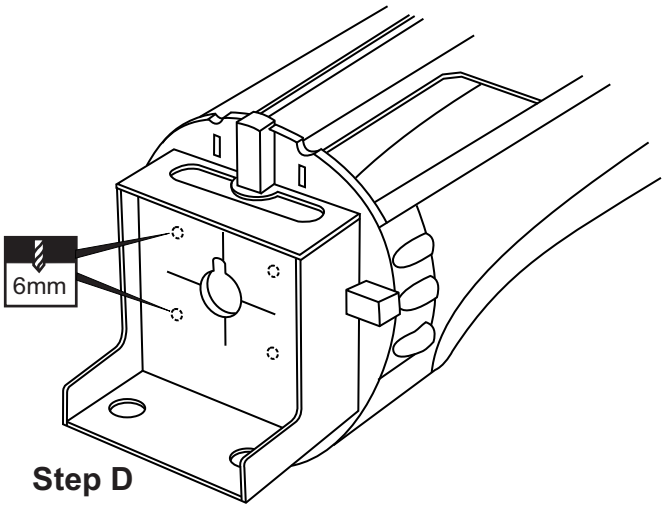
Step B



! Align the mark on wooden motor mounting plate with the mark on the fire-wall.

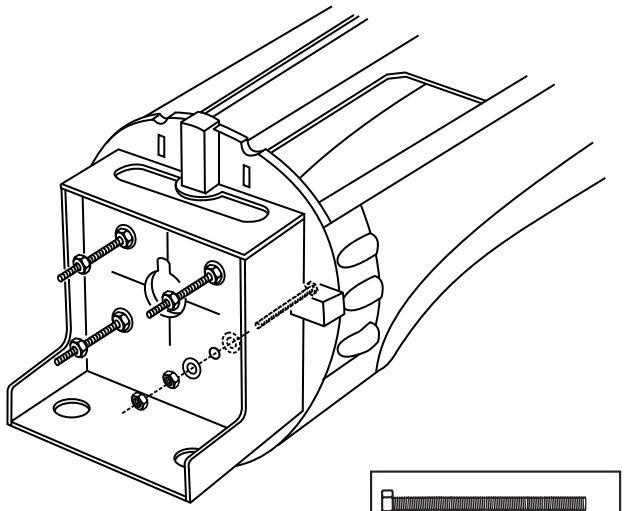
Step C

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



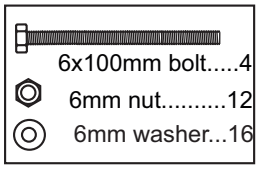
Step D

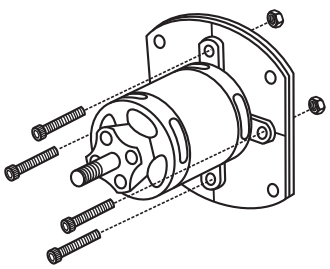
Remove the wooden motor mounting plate and drill a 6mm hole through the fire-wall at each of the four marks marked (3D) .



Step E

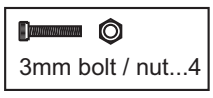
Attach the four 5x70mm bolts and nuts to the fire-wall as shown (3E).



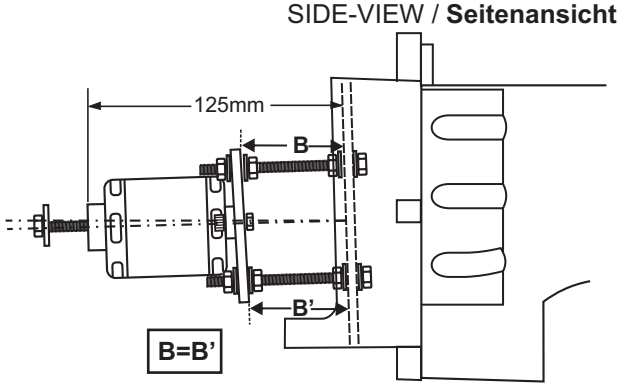


Step F

Secure the Motor to the wooden motor mounting plate using the four 3mm bolts.

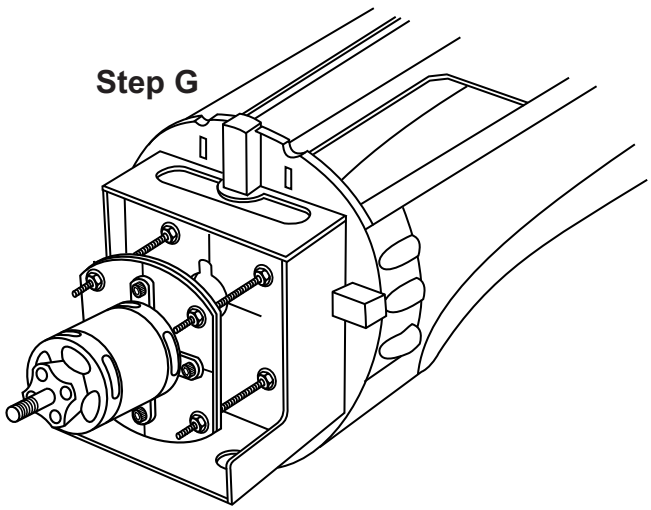


SIDE-VIEW / **Seitenansicht**

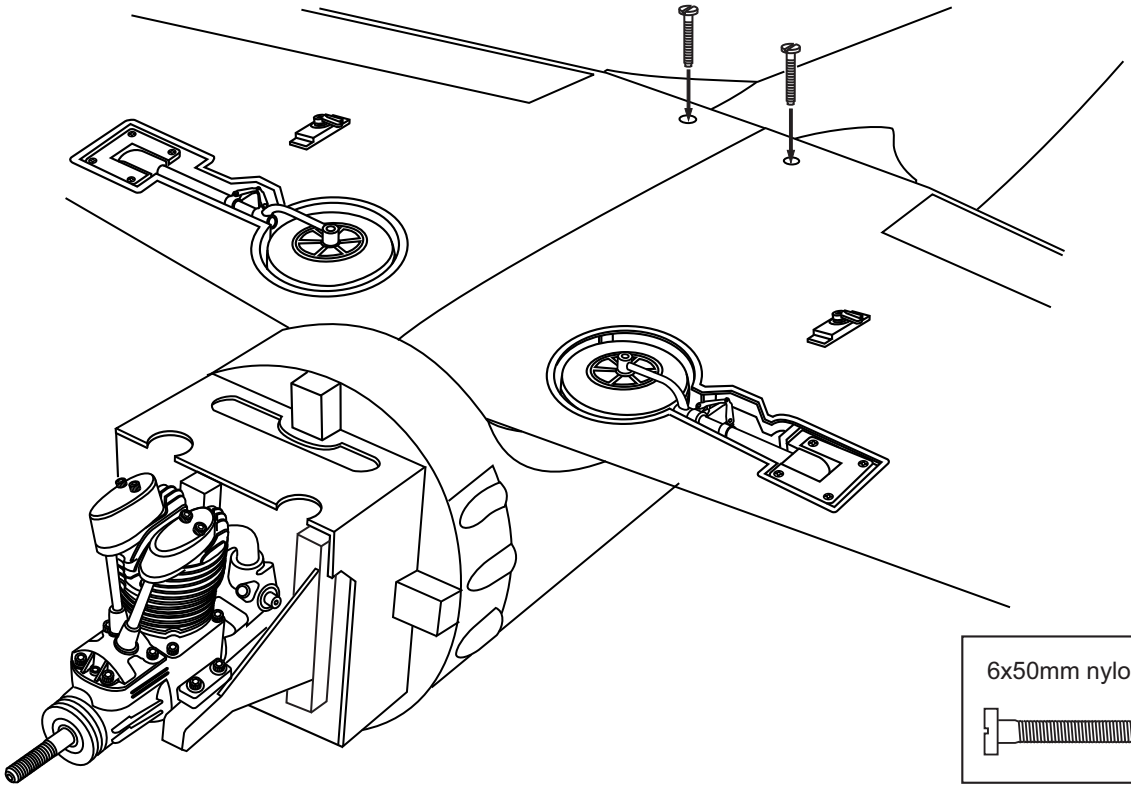


! Motor thrust on balk head is already adjust at factory

Step G



A6M5 ZERO Attach the wing to the fuselage

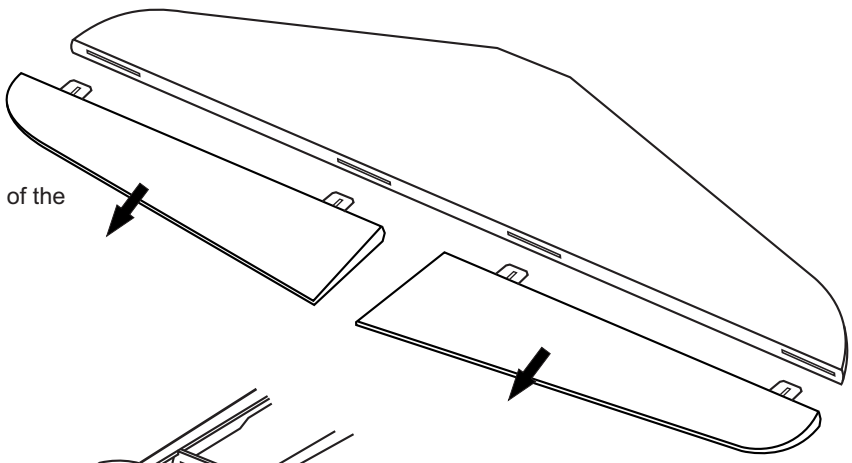


6x50mm nylon bolt

.....2

A6M5 ZERO HORIZONTAL STABILIZER

Remove the left and right elevator out of the horizontal stabilizer.

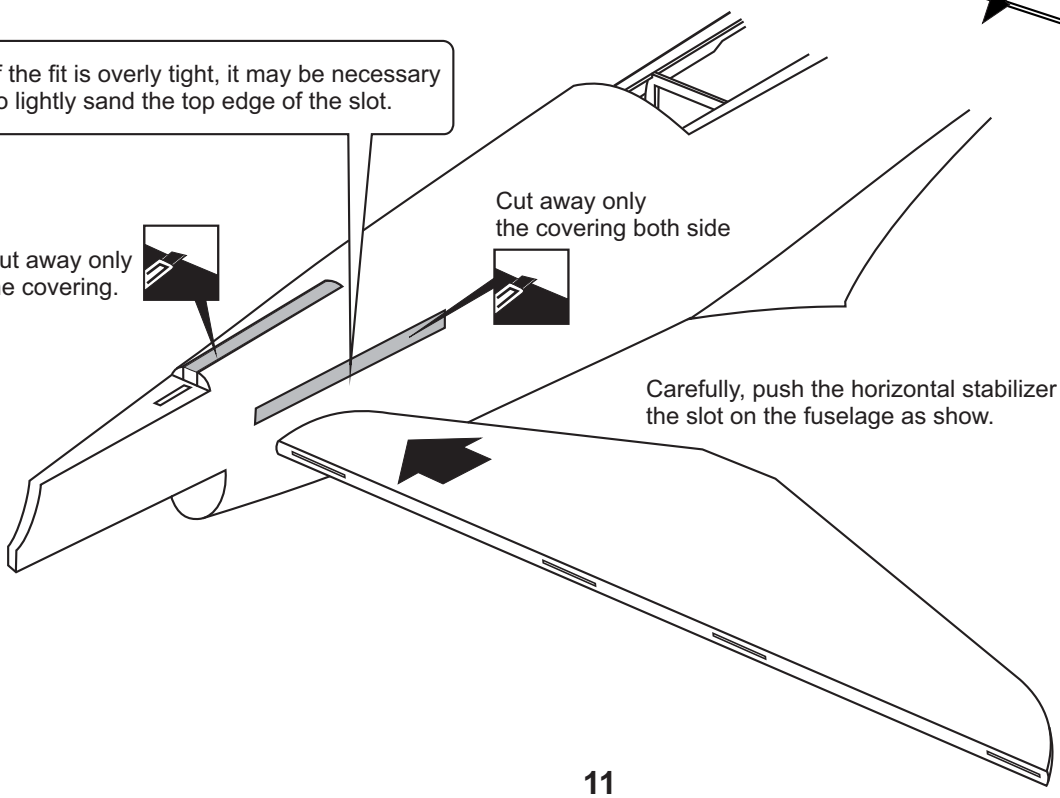


If the fit is overly tight, it may be necessary to lightly sand the top edge of the slot.

Cut away only the covering both side

Cut away only the covering.

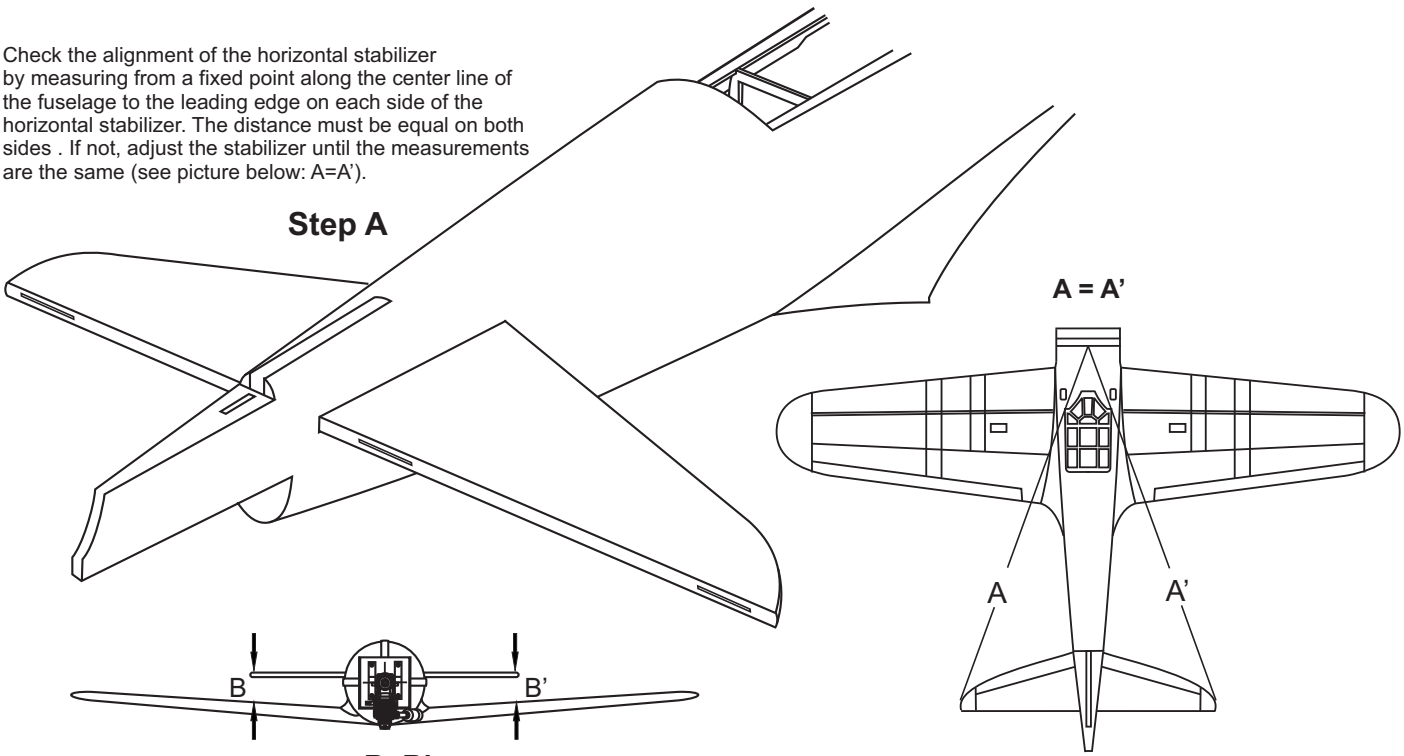
Carefully, push the horizontal stabilizer into the slot on the fuselage as show.



Determination of installation location

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 . If not, adjust the stabilizer until the measurements are the same (see picture below: A=A').

Step A

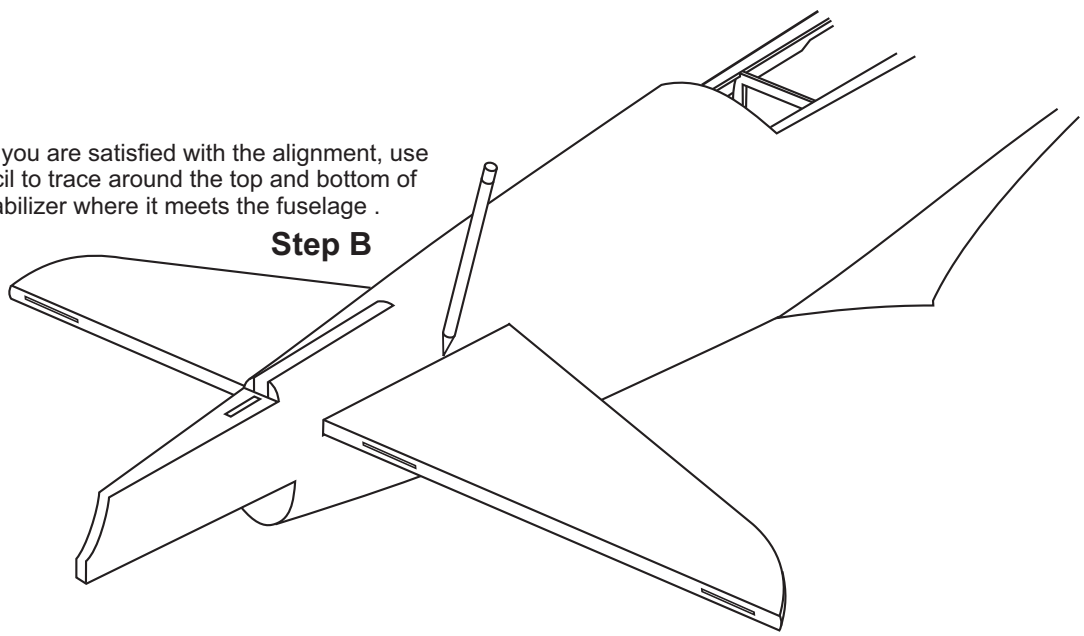


B=B'

Note: it is important to ensure that the horizontal stabilizer is also level in regards to the wing. The distance must be equal on both sides. If not, adjust the stabilizer until the measurements are the same (B=B').

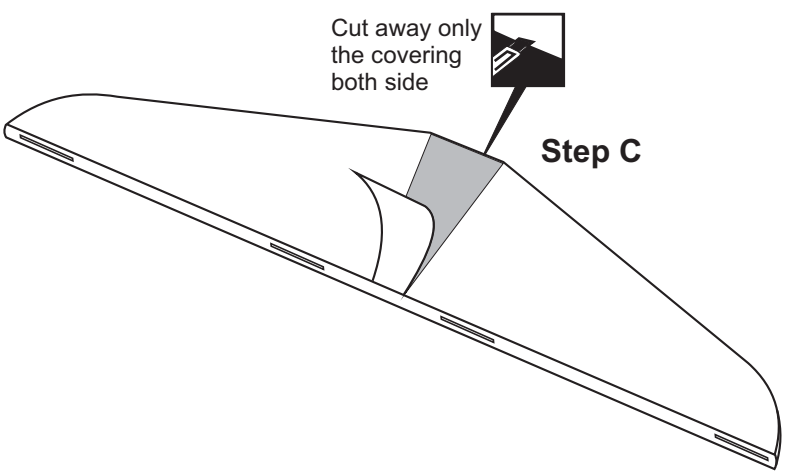
When you are satisfied with the alignment, use a pencil to trace around the top and bottom of the stabilizer where it meets the fuselage .

Step B



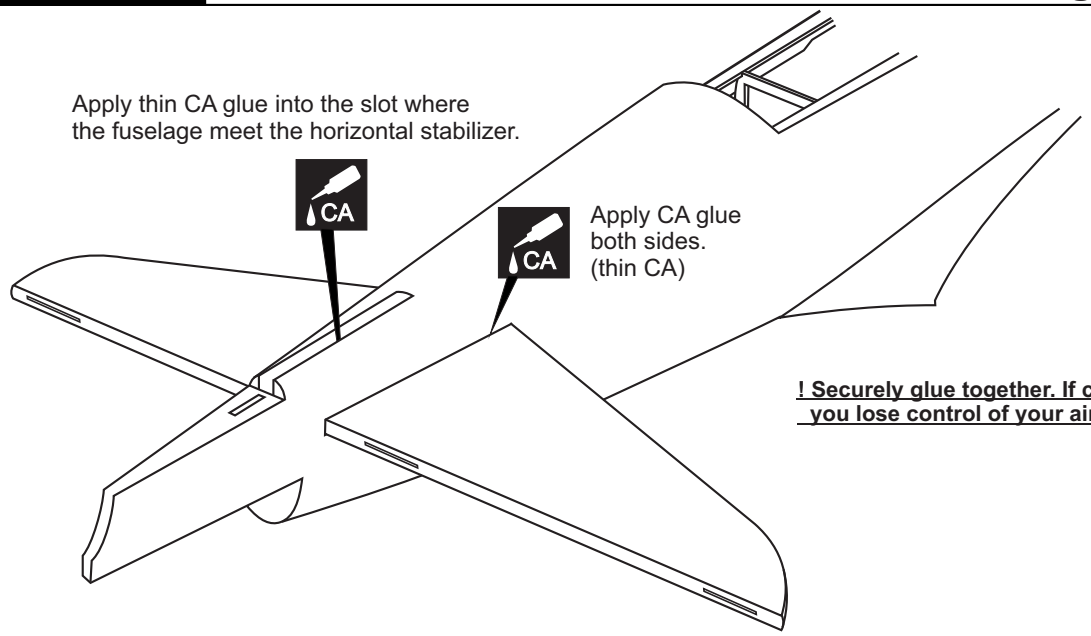
Cut away only the covering both side

Step C



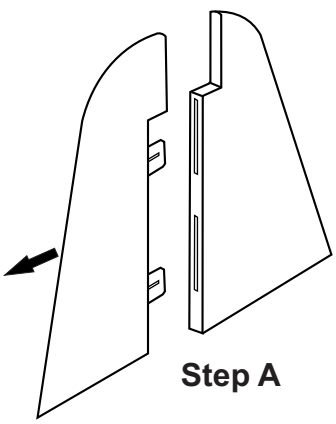
Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above. Be cautious **not to cut into the wood**-this will weaken the structure **.**

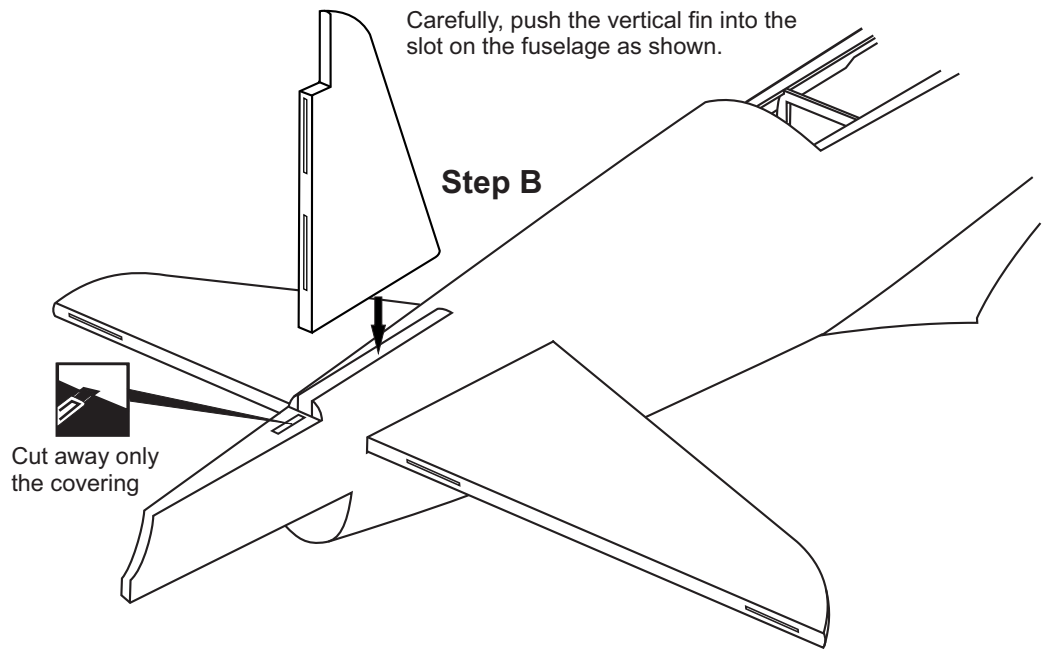
A6M5 ZERO Glue the horizontal stabilizer to the fuselage

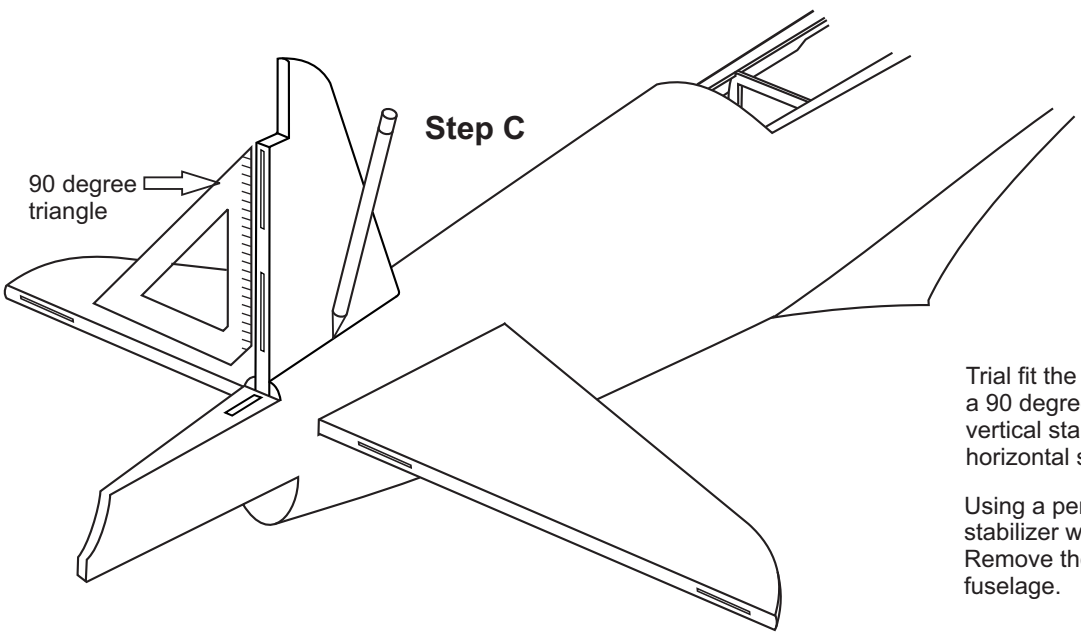


! Securely glue together. If coming off during fly, you lose control of your air plane.

A6M5 ZERO Determination of installation location





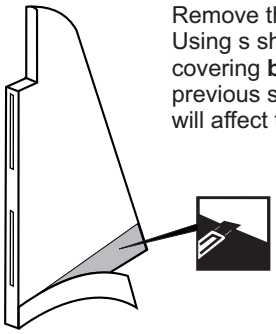


Trial fit the vertical fin in position. Using a 90 degree triangle, ensure that the vertical stabilizer is perpendicular to the horizontal stabilizer.

Using a pencil, trace around the vertical stabilizer where it meets the fuselage. Remove the vertical stabilizer from the fuselage.

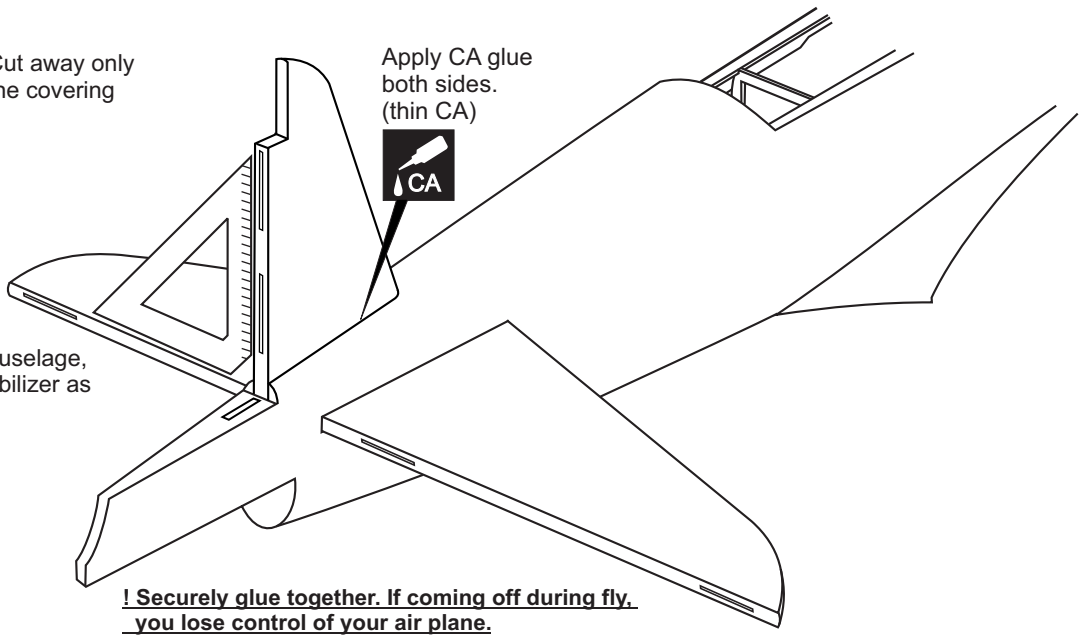
A6M5 ZERO Glue the vertical stabilizer to the fuselage

Remove the vertical stabilizer from the fuselage. Using s sharp hobby knife, carefully cut away the covering **below the lines** which were drawn in the previous steep. **Do not cut into the woods** as this will affect the structural integrity of the stabilizer .



Cut away only the covering

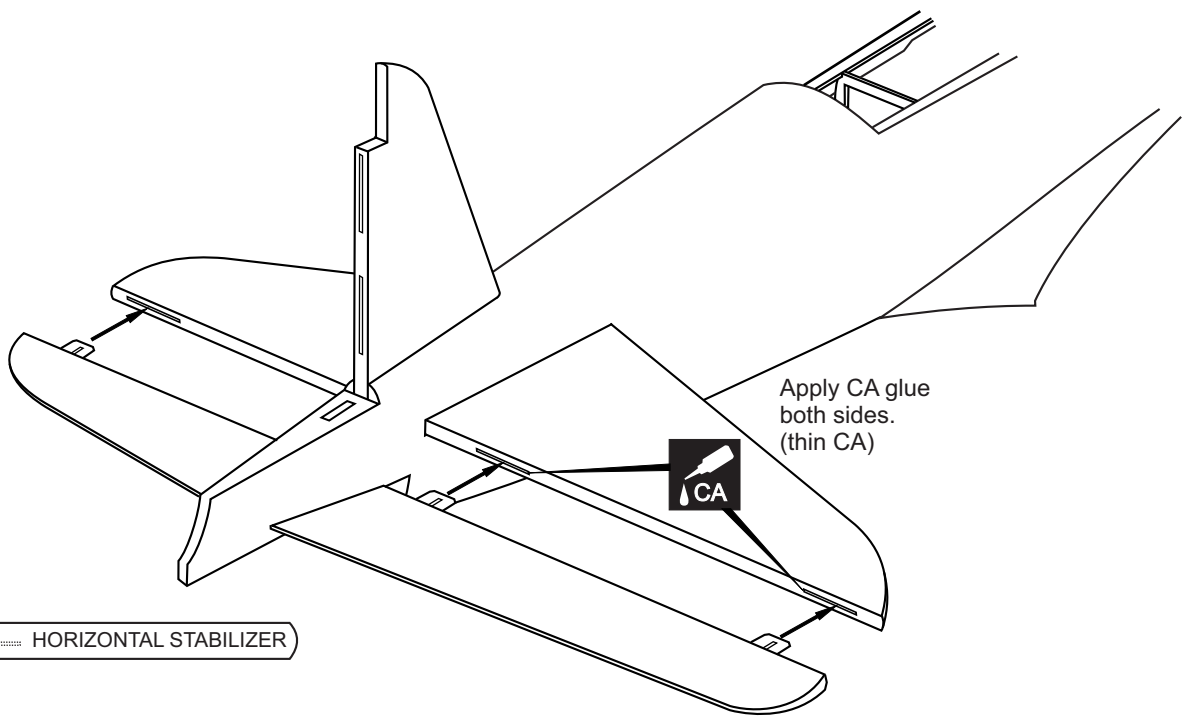
Apply CA glue both sides. (thin CA)



Insert the vertical fin into the fuselage, precisely align the vertical stabilizer as described in previous step.

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

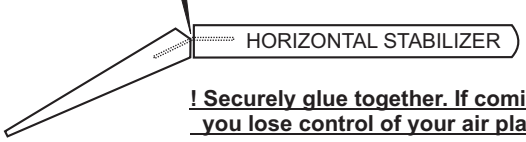
A6M5 ZERO Glue the elevator to the horizontal stabilizer



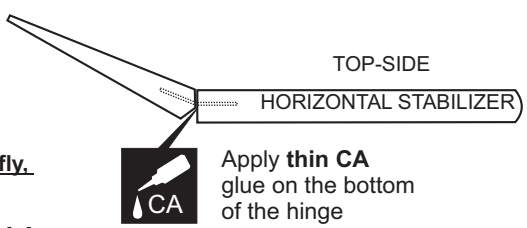
Apply CA glue both sides. (thin CA)

Apply a thin layer of petroleum jelly

Apply **thin CA** glue on the top of the hinge

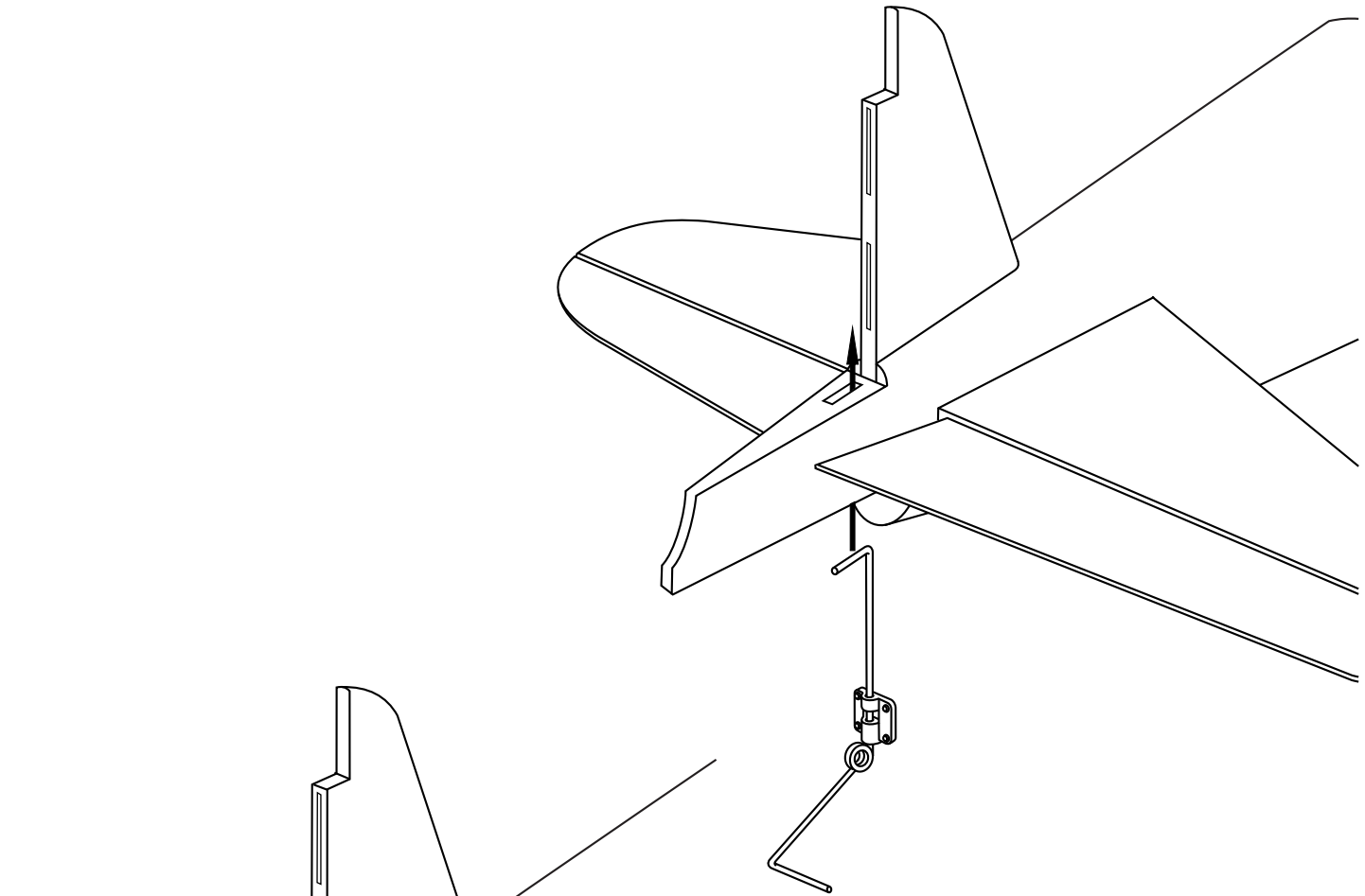


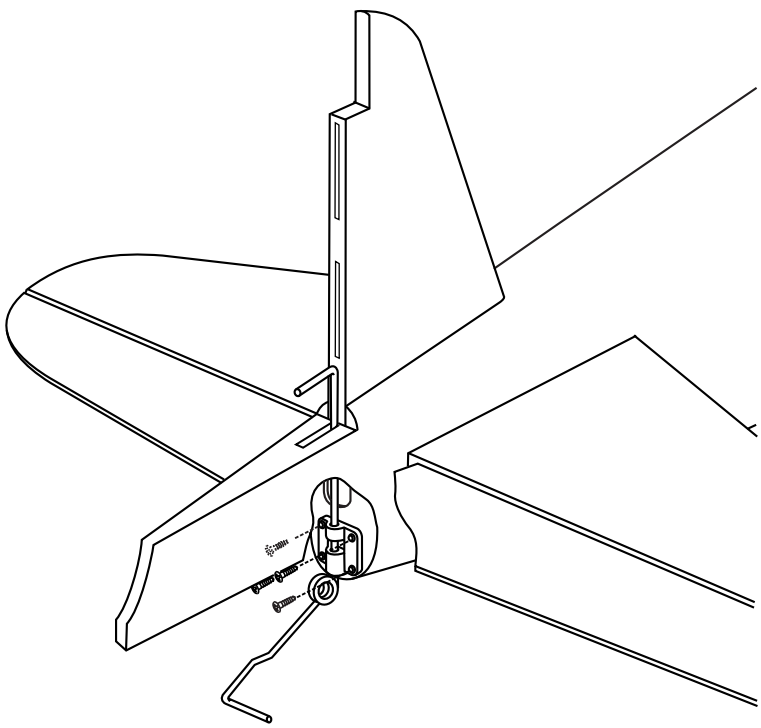
! Securely glue together. If coming off during fly, you lose control of your air plane.



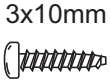
Apply **thin CA** glue on the bottom of the hinge

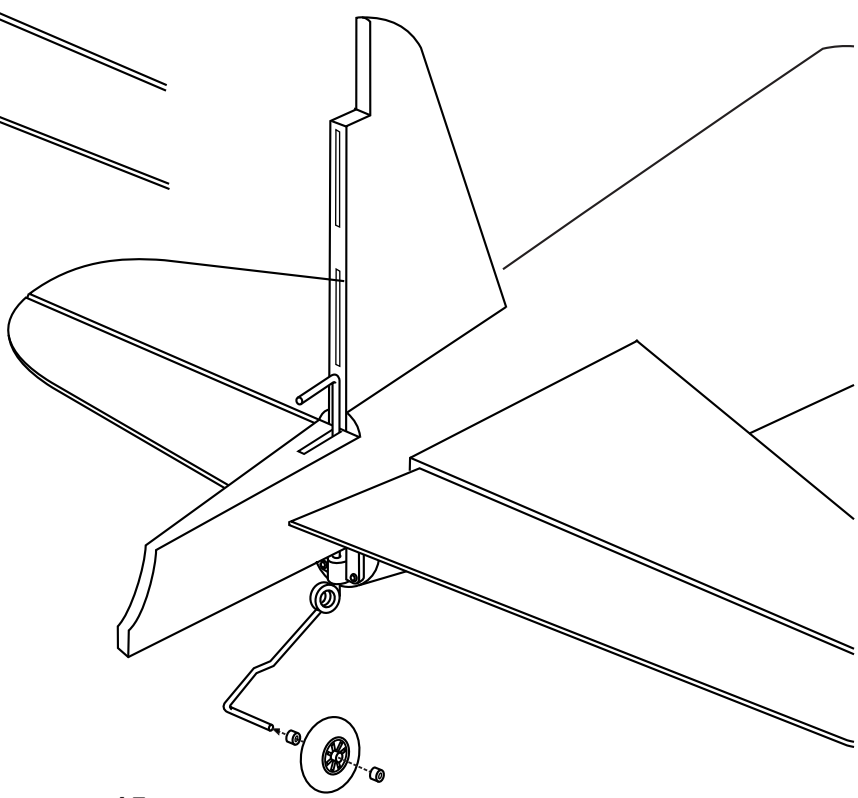
A6M5 ZERO FUSELAGE: Tail gear installation





3x10mm screw

 ....X 4



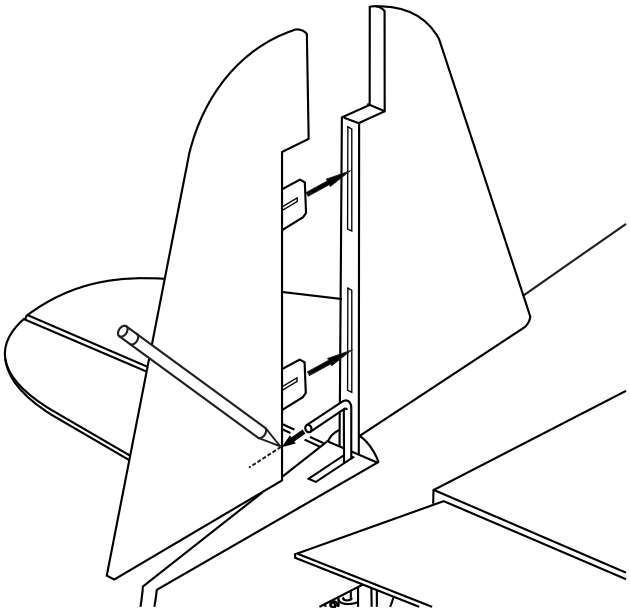
2.2mm collar

 1

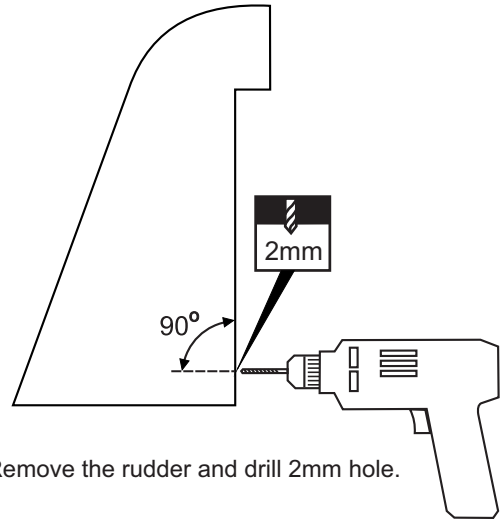
25mm wheel

 1

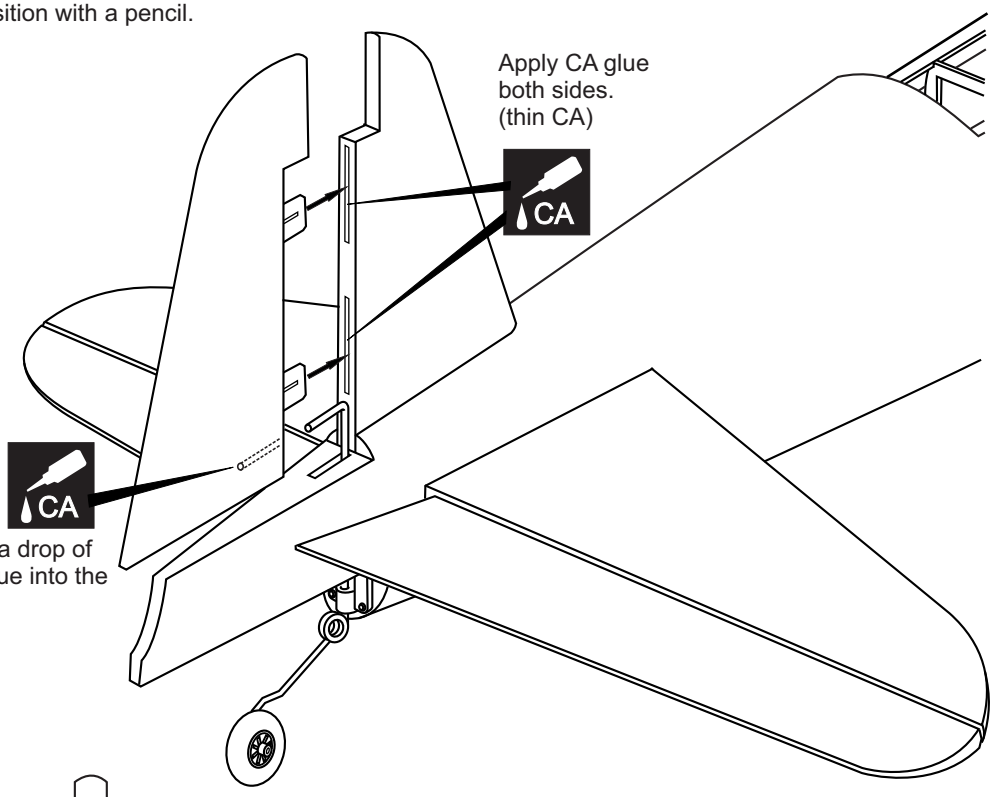
A6M5 ZERO Glue the rudder to the vertical stabilizer



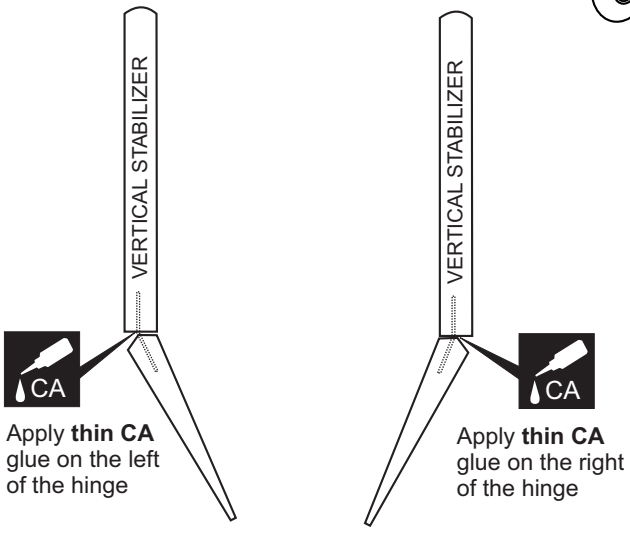
Place the rudder on the trailing edge of vertical stabilizer as show. Mark the mounting hole position with a pencil.



Remove the rudder and drill 2mm hole.



Drop a drop of CA glue into the hole

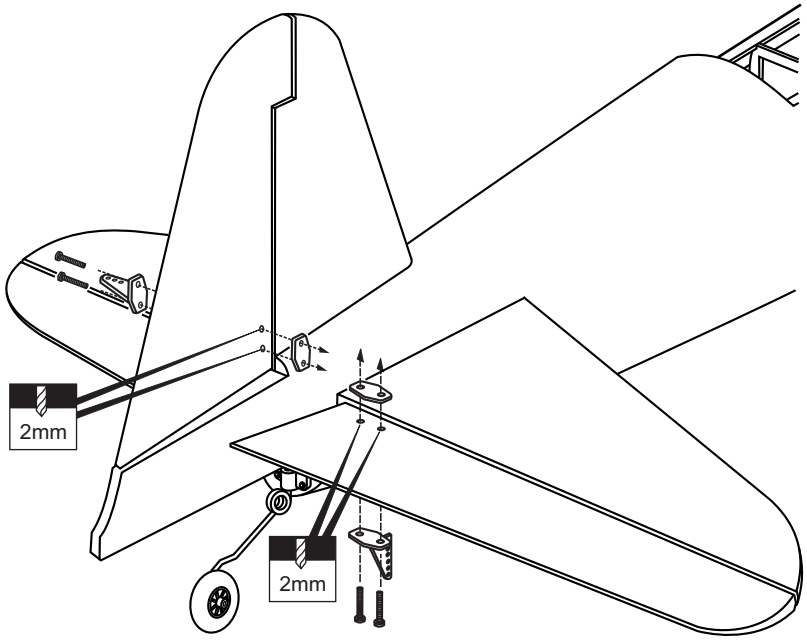


Apply **thin CA** glue on the left of the hinge

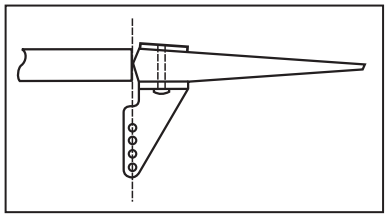
Apply **thin CA** glue on the right of the hinge

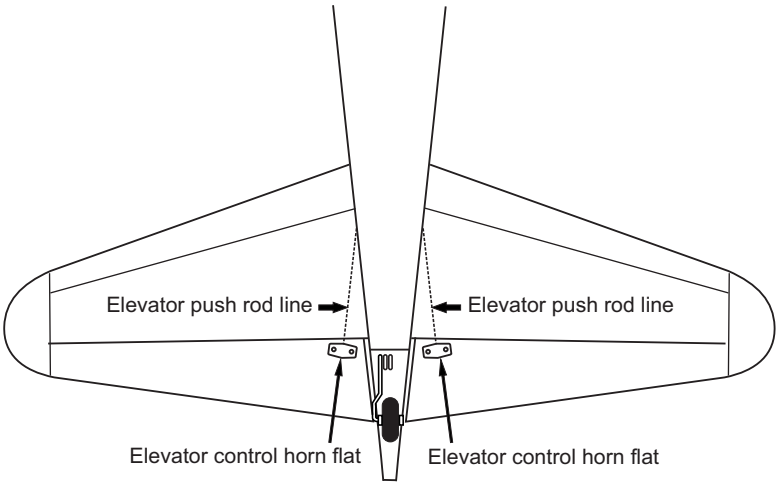
! Securely glue together. If coming off during fly, you lose control of your air plane.

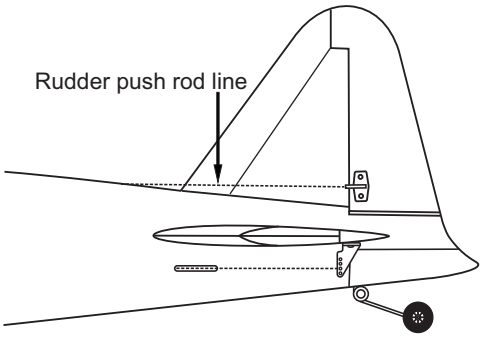
A6M5 ZERO Attach the control horns



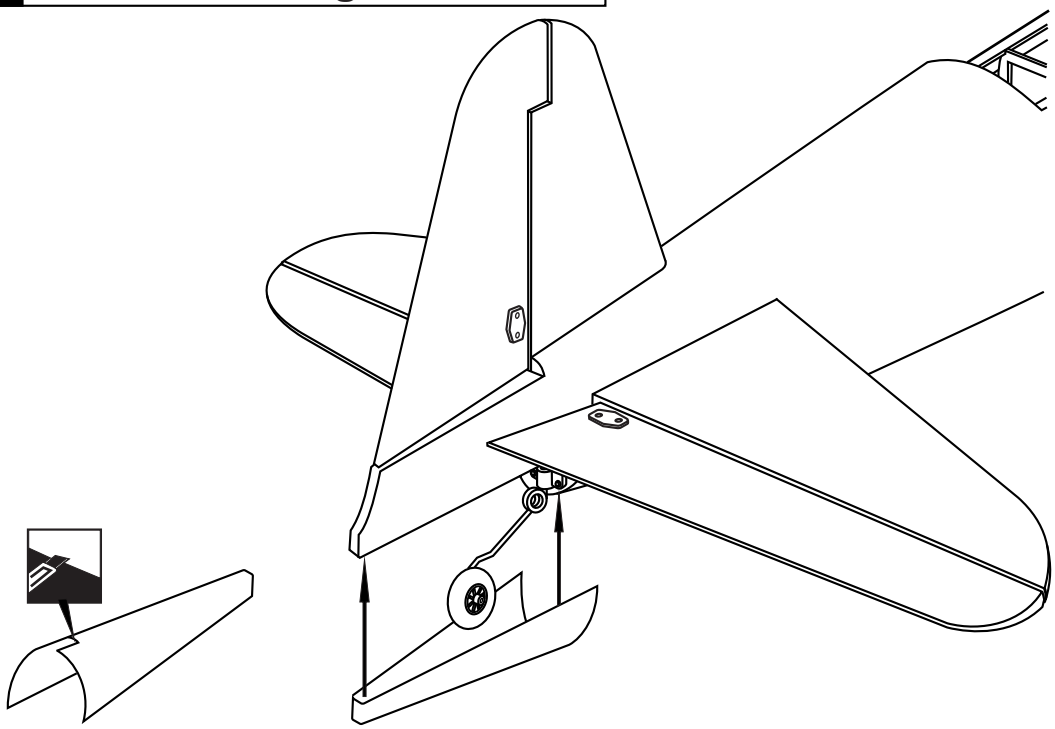
Control horn
.....3
2x12mm screw
.....6







A6M5 ZERO Attach the tail gear shield

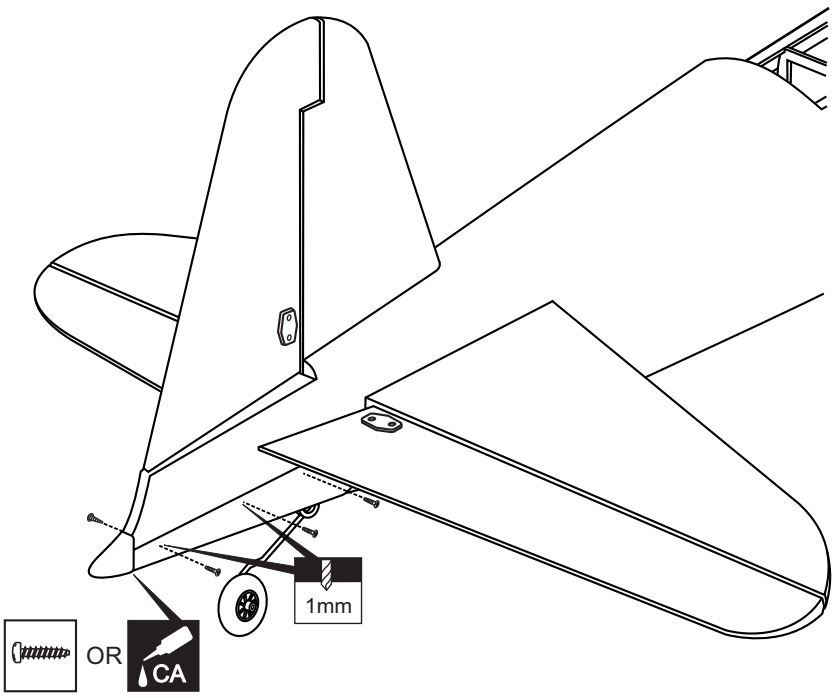


A6M5 ZERO Attach the tail gear shield

2x8mm screw
....X 6

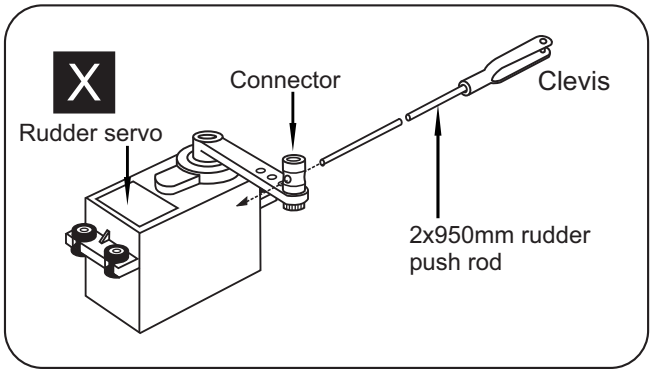
Place the ABS tail gear cover on the bottom of fuselage as show and secure it in place using six 2x8mm screw.

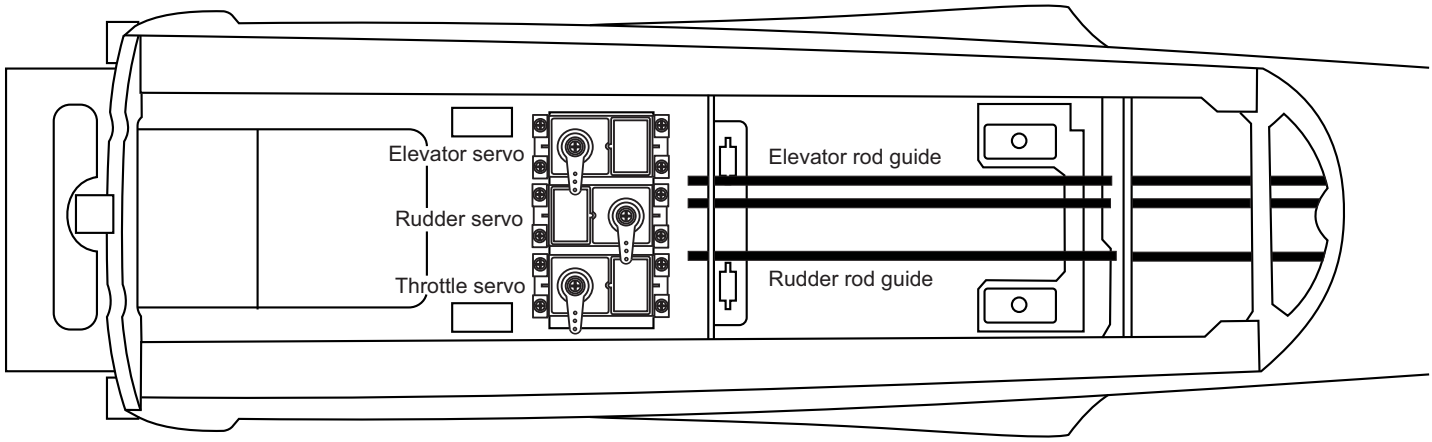
Attach the ABS tail cone in place and secure it with litter CA glue or screws (screws not included)

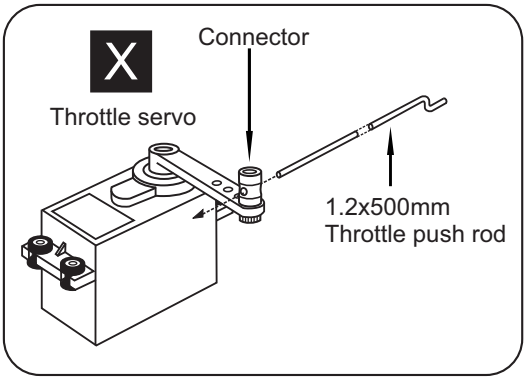


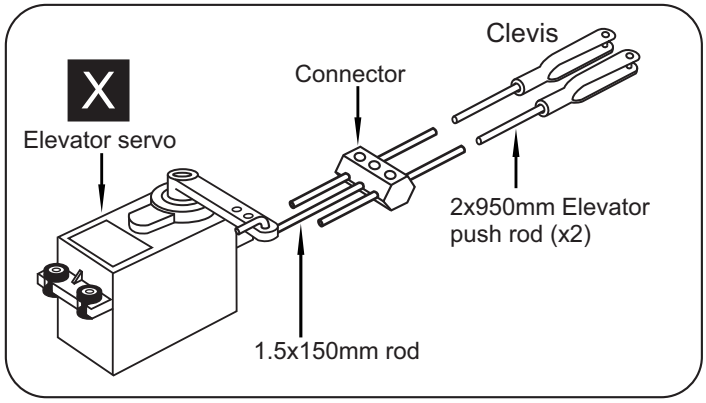
A6M5 ZERO Installing the linkages

Connector
..... 2
Connector
..... 1
2x950mm rod with clevis
..... 3
1.5x120mm rod....1
1.2x120mm rod....1





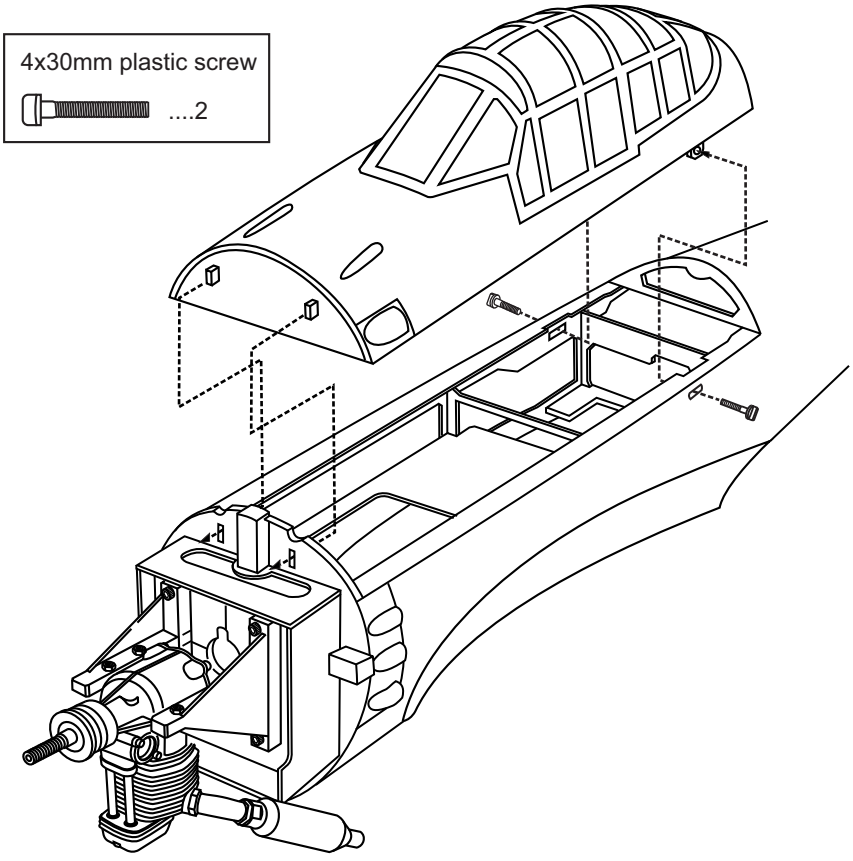


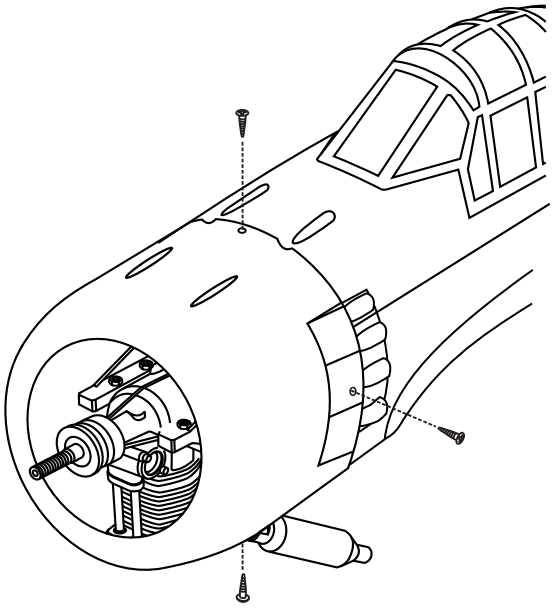


A6M5 ZERO Canopy hatch and Cowl installation

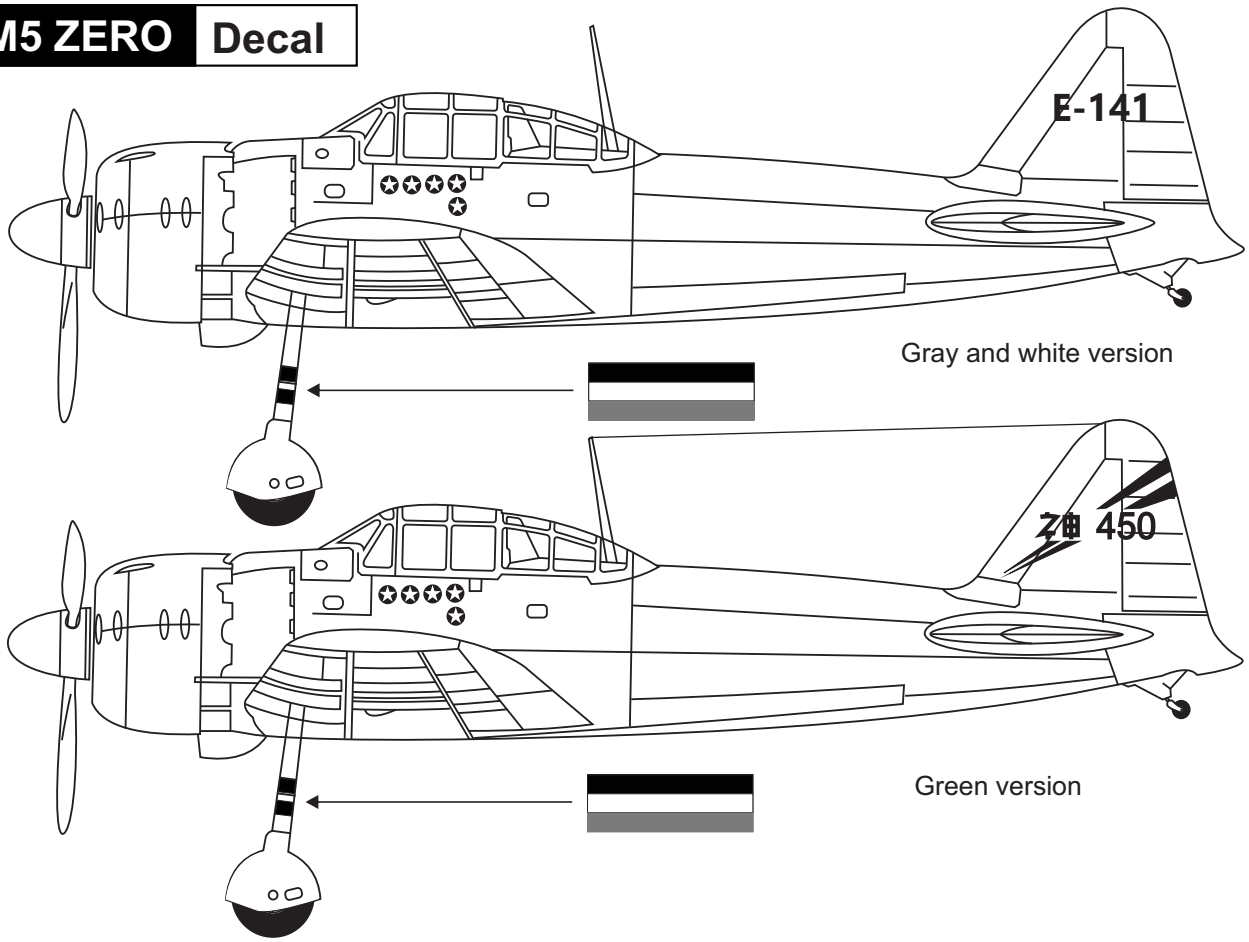
4x30mm plastic screw 2

2.5x10mm screw ....X 4





A6M5 ZERO Decal

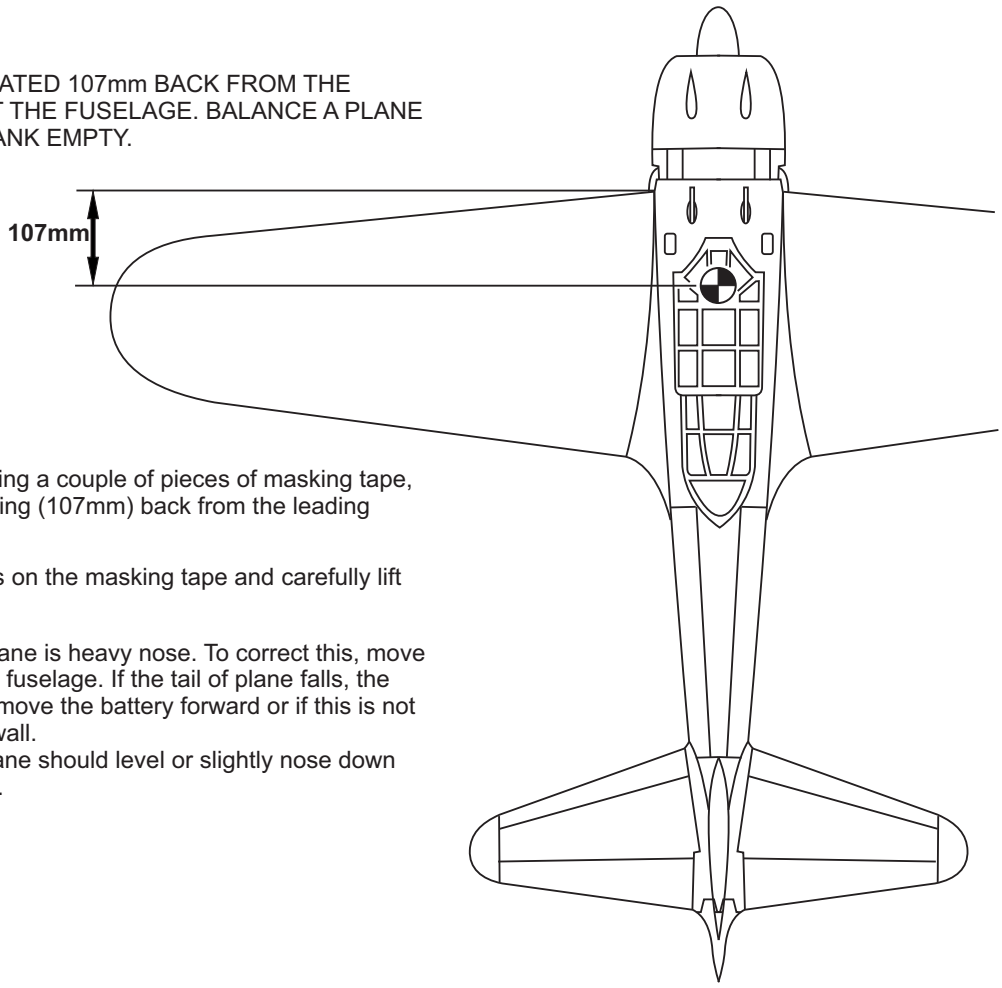


Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once.
Peel off one corner of the backing and cut off with scissors. Arrange sticker on model and when satisfied adhere the corner without backing.
Carefully peel back the rest of the backing while at 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.**

A6M5 ZERO Balance and control throw recommendation

THE CENTER OF GRAVITY IS LOCATED 107mm 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 (107mm) 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:

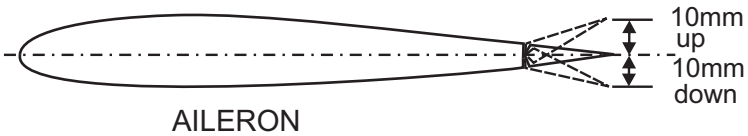
After you have balanced a plane on the CG, you should laterally balance it. Doing this will help the airplane track straighter.

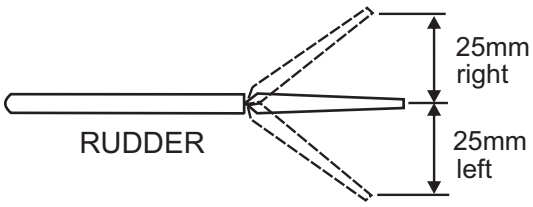
1- Turn the airplane upside down. Attach one loop of heavy string to the engine crankshaft and one to the tail wheel wire. With the wing level, carefully lift the airplane by the string. This may require two people to make easier.

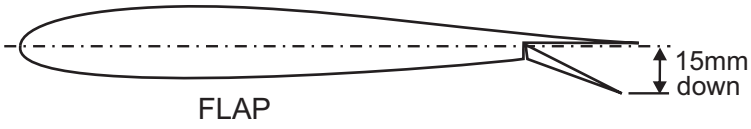
2- If one side of the wing fall, that side is heavier than the opposite. Add small amounts of lead weight to the bottom side of the lighter wing half's wing tip. Follow this procedure until the wing stays level when you lift the airplane.

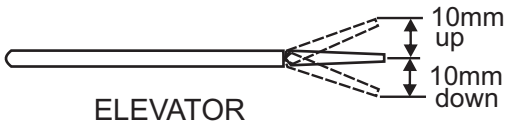
DO NOT try to fly an out-of-balance model !

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 A6M 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".

LOW RATE

Aileron	: 10mm up / down
Elevator	: 10mm up / down
Rudder	: 25mm right / left
Flap	: 15mm down

HIGH RATE

Aileron	: 12mm up / down
Elevator	: 12mm up / down
Rudder	: 30mm right / left
Flap	: 25mm down