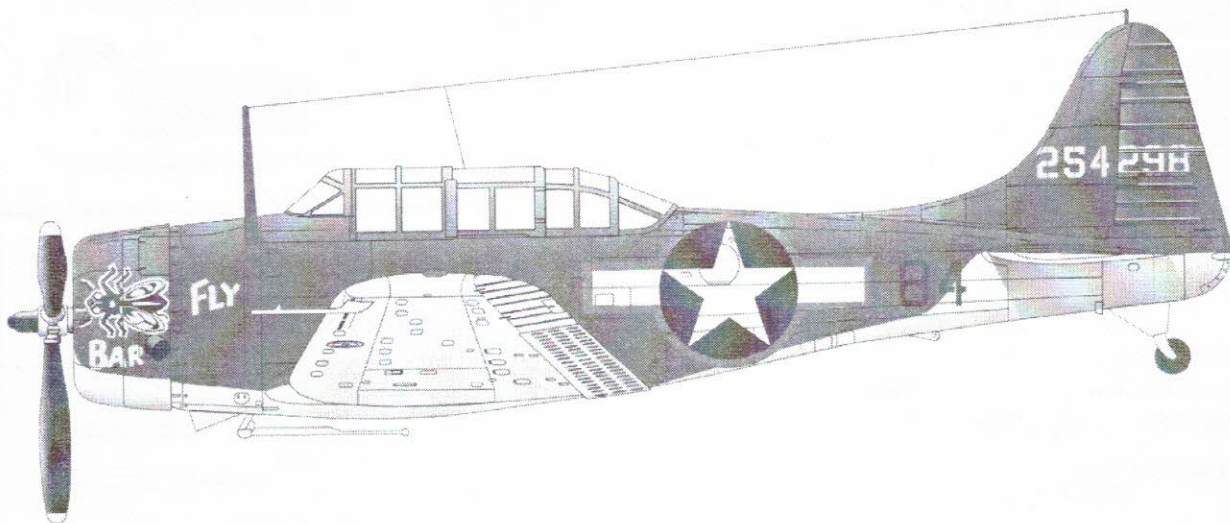


Radio control model / Flugmodell

# U.S ARMY DIVE BOMBER

# SBD DAUNTLESS

## "A-24 BANSHEE"



ALL BALSA, PLYWOOD CONSTRUCTION AND ALMOST READY TO FLY

## Instruction manual / Montageanleitung

### SPECIFICATIONS

Wingspan:.....1540mm (61.4in)  
 Length:.....1060mm (46 in)  
 Electric Motor:.....See next pager  
 Glow Engine:......46 2-T / .70 4-T  
 RTF Weight: 3.2Kg / 7.05lbs (Will vary with Equipment Used).  
 Radio:.....7-8 Channel / 7-8 Servos  
 Function: Ailerons-Elevator-Rudder-Throttle  
 Flaps-Optional Retractable Landing Gear.

### TECHNISCHE DATEN

Spannweite:.....1540mm  
 Länge:.....1060mm  
 Elektroantrieb.....(siehe nächste Seite)  
 Verbrennerantrieb:.....7.45cc - 11.5cc  
 Fluggewicht:.....3.2Kg  
 Fernsteuerung.....7-8 Kanal / 7-8 Servos

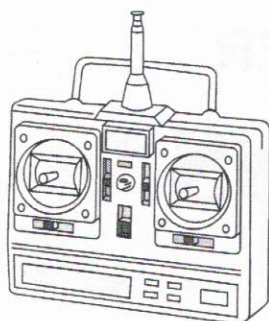
# NEXA

**WARNING!** This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control 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 inexperienced.

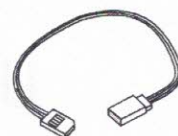
**ACHTUNG!** Dieses ferngesteuerte Modell ist KEIN Spielzeug! Es ist für fortgeschrittene Modellflugpiloten bestimmt, die ausreichende Erfahrung im Umgang mit derartigen Modellen besitzen. Bei unsachgemäßer Verwendung kann hoher Personen- und/oder Sachschaden entstehen. Fragen Sie in einem Modellbauverein 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)



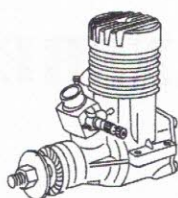
10.5x6 for .40 - 2 cycle engine  
11x6 for .46 - 2 cycle engine  
12x6 for .60 - 4 cycle engine  
12x7 for .70 - 4 cycle engine  
13x7 - 13x8 for electric motor



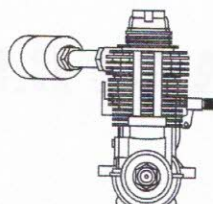
Extension cord for aileron servos: 50cm(x2)  
Extension cord for flap servos: 50cm(x2)  
Extension cord for retract servos: 30cm(x2)  
Extension cord for Rx battery pack: 20cm(x1)



Minimum 7 channel radio with 7 (6 for EP) standard servos and one servo mini.  
.Motor control x1(for GP) .Elevator x1  
.Rudder x1. Aileron x2. R-L Flap x2  
.Center flap x1mini



.46 ~ .50 - 2 cycle



.60 ~ .70 - 4 cycle



700-800W Brushless Motor



Silicone tube

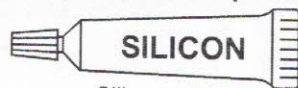


Spinner hub



5 cell 4500mAh LiPo battery

## GLUE (Purchase separately)



Silicon sealer



Cyanoacrylate Glue (thin type)



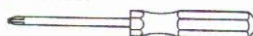
Epoxy Glue  
(30 minute type)

## TOLLS REQUIRED (Purchase separately)

Hobby knife



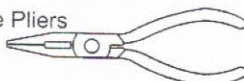
Phillip screw driver



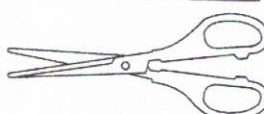
Hex Wrench



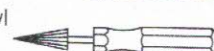
Needle nose Pliers



Scissors



Awl



Sander



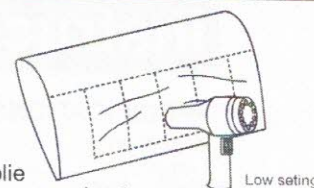
Wire Cutters



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

If exposed to direct sunlight and/or heat, wrinkles 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 Warmluftgebläse (Haartrockner) um evtl. Falten aus der Folie zu bekommen. Die Kanten können Sie mit einem Bügeleisen behandeln. Nicht zuviel Hitze anwenden!



Low setting

Symbols used throughout this instruction manual, comprise:



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



Take particular care here



Hatched-in areas: remove covering film carefully



Check during assembly that these parts move freely, without binding



Use epoxy glue



Apply cyano glue



Assemble left and right sides the same way.



Not included. These parts must be purchased separately



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



Hier besonders aufpassen



Schraffierte Stellen, Bespannfolie vorsichtig entfernen



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



Epoxy-Klebstoff verwenden



Sekundenkleber auftragen



Linke und rechte Seite wird gleichermaßen zusammengebaut



Nicht enthalten. Teile müssen separat gekauft werden.

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

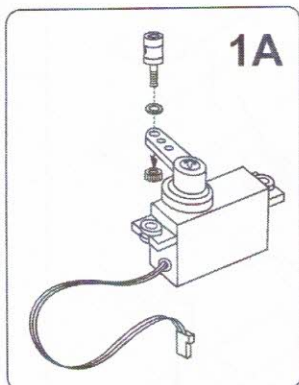
## CONVERSION TABLE

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

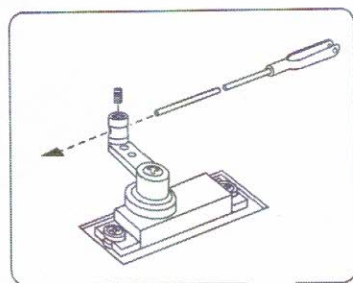


# 1-CENTER WING: Flap servo and linkage

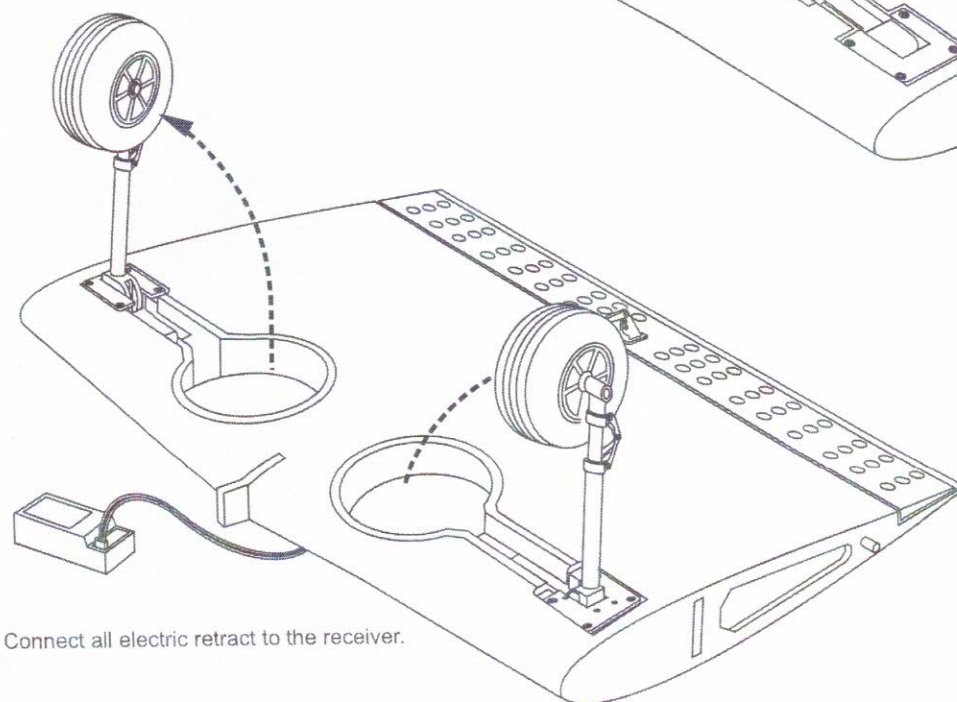
Note: The slot for control horn installation is pre-cut at factory.



Connector  
.....1



2x170mm pushrod and clevis  
.....1



BOTTOM-VIEW

Center flap  
servo

1B

Control horn  
.....1

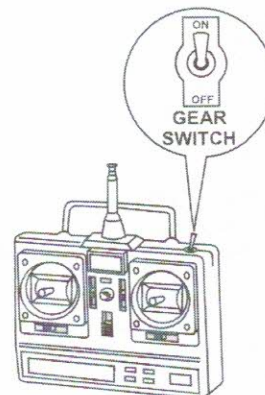


Thin CA

Thin CA

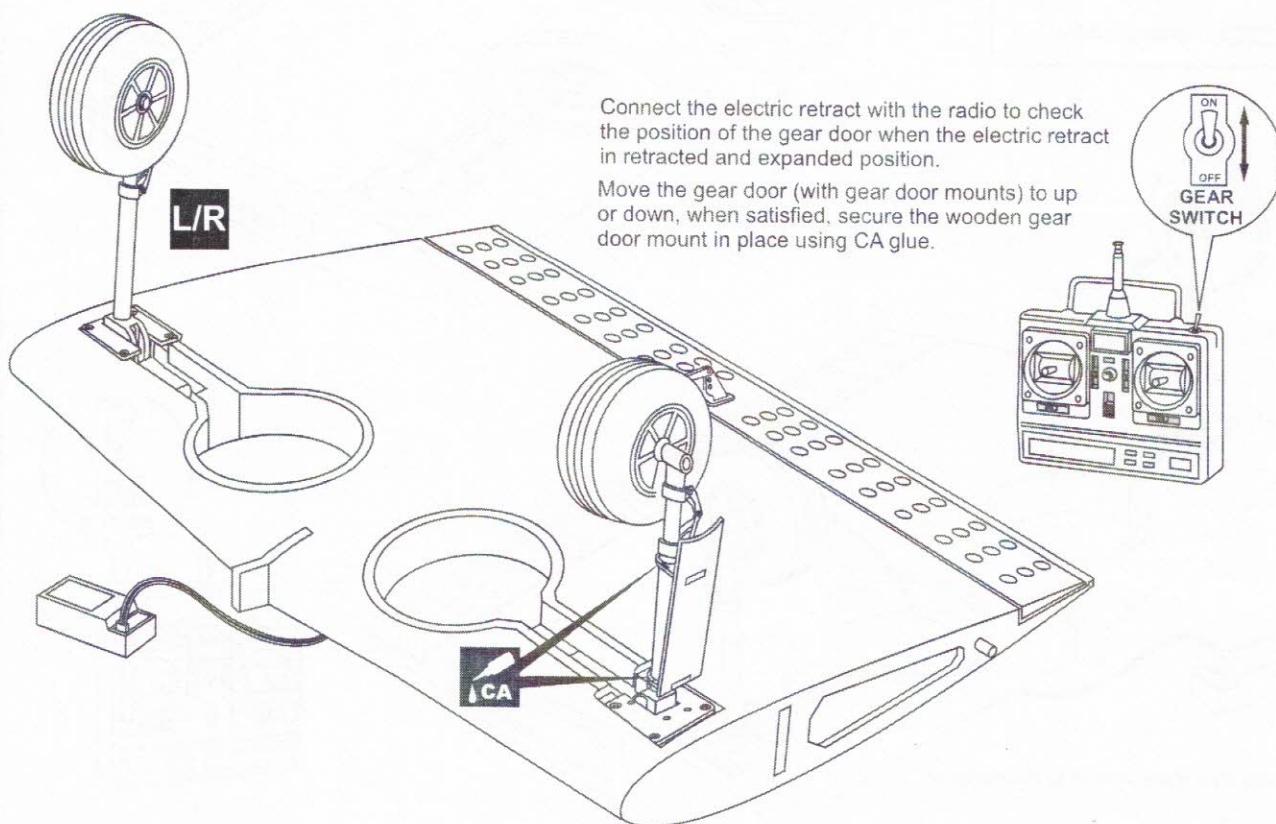
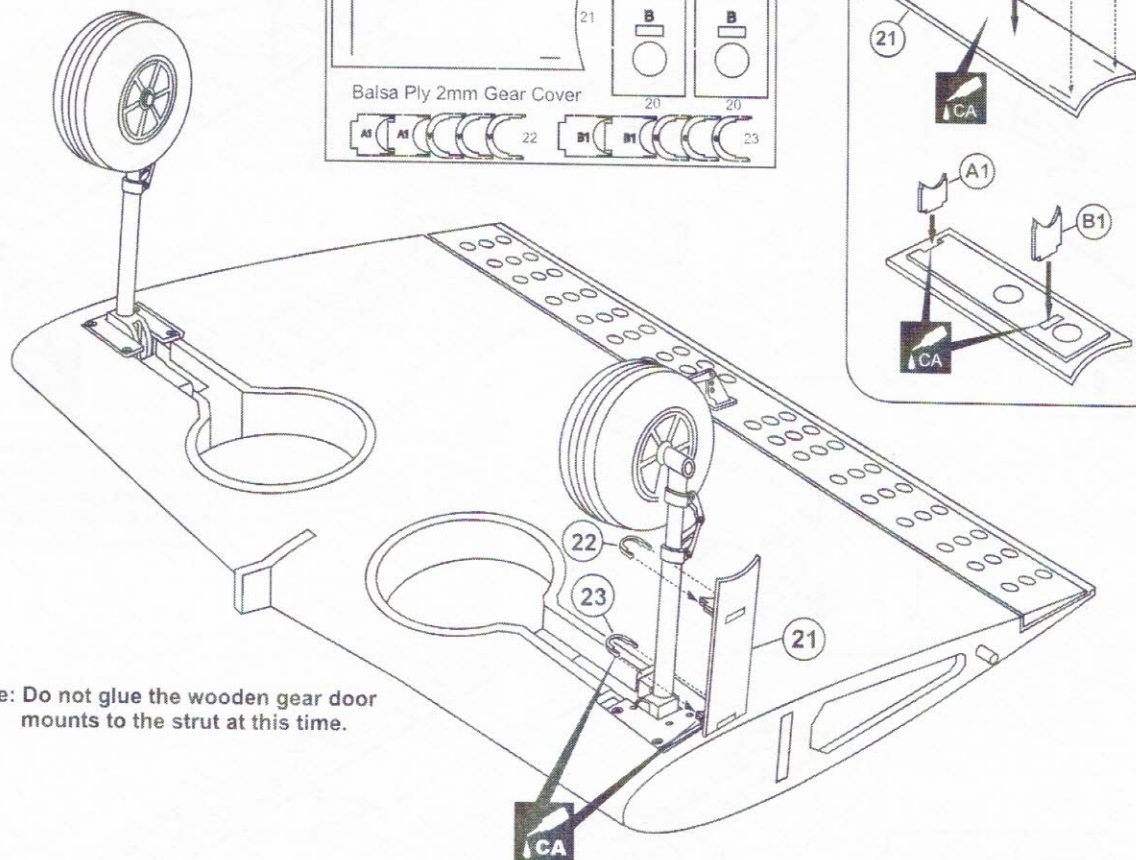
Push the wooden dowel to the  
hole up to the center line.  
Ensure that the dowel is  
rectangular with the rip

L/R



Connect all electric retract to the receiver.

## 2-CENTER WING: Gear door installation





### 3-JOINING THE WINGS (It is the same with Retractable or Fixed gear)

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, making sure that the "V" of the dihedral brace is positioned correctly. Apply the generous amount of epoxy into the wing cavity of the outer wing. Smear epoxy on all sides of the exposed area of the dihedral brace and uniformly coat both wing roots with epoxy. Carefully slide the wing halves together, ensuring that they are accurately aligned.

3A

3B

3C



30 min. Epoxy



Using a pencil, mark the center of the brace. This mark will serve as the center line when joining the wing halves.



Firmly press the two wing halves together, allowing the excess epoxy to run out. Using kerosene and paper towel, clean off the excess epoxy.

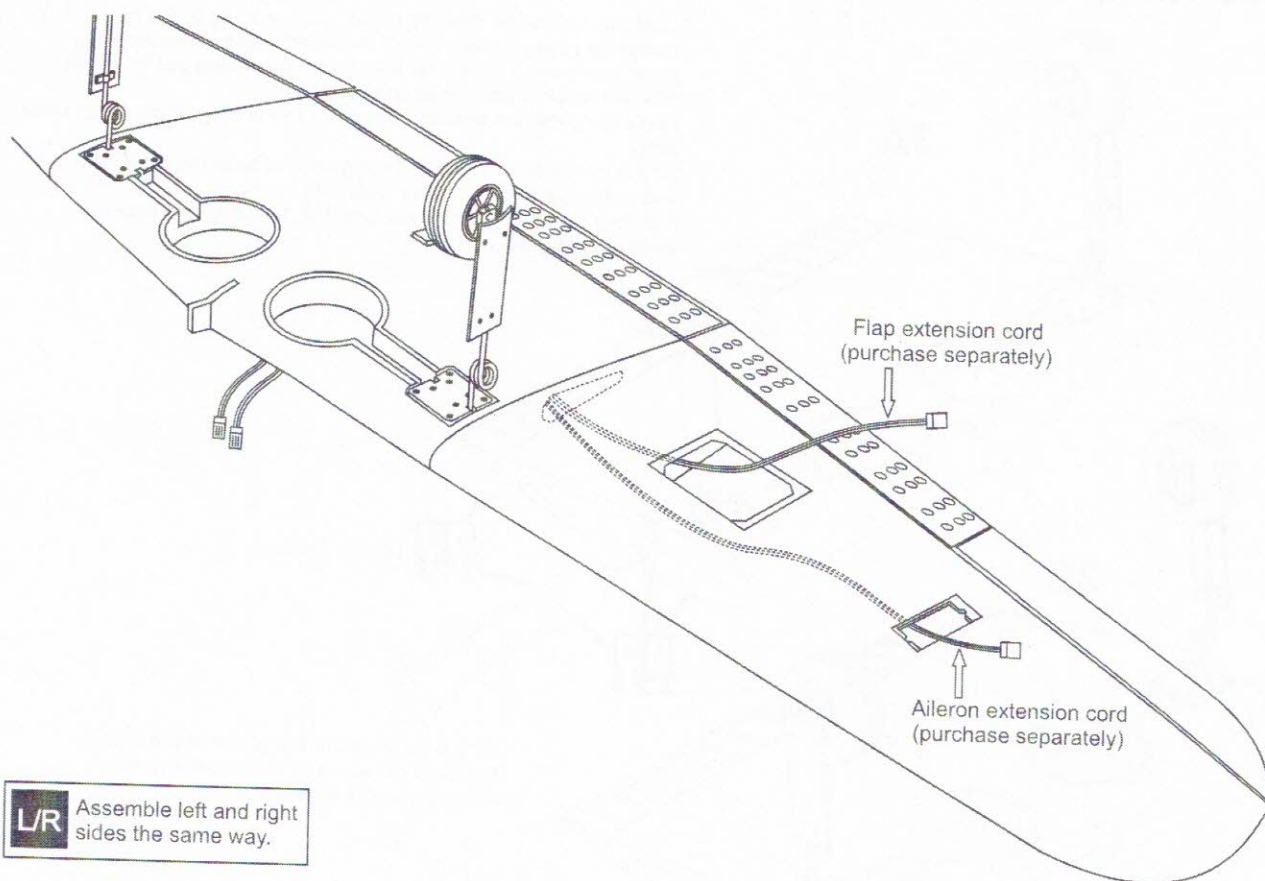
**IMPORTANT:** Please do not clean off the excess epoxy on the wing with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

**WARNING:** Securely glue together, if coming off during flights, you lose control of your plane which lead to accidents.

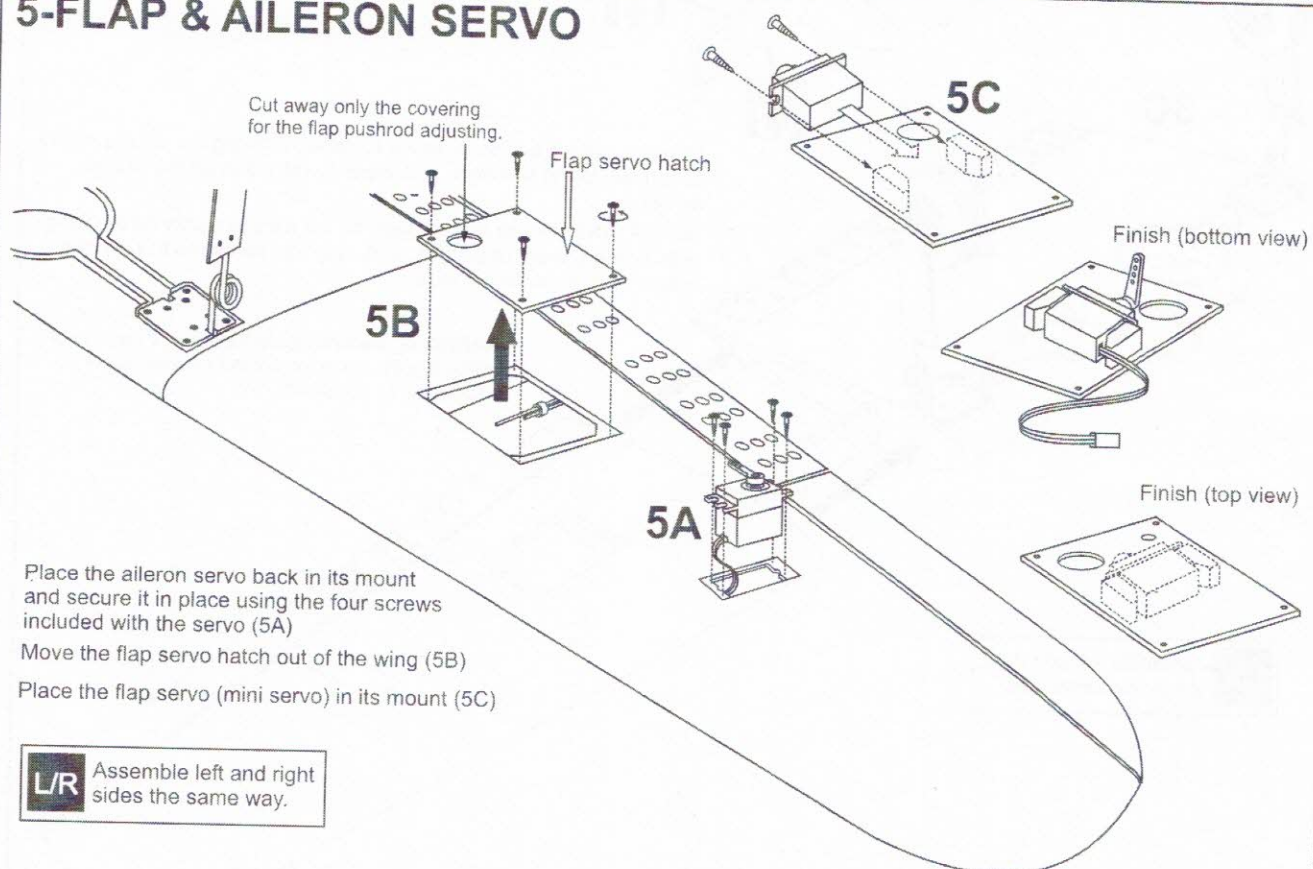
LR

Assemble left and right wings the same way.

## 4-JOINING THE WINGS



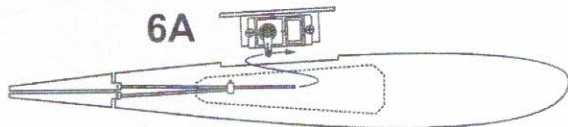
## 5-FLAP & AILERON SERVO





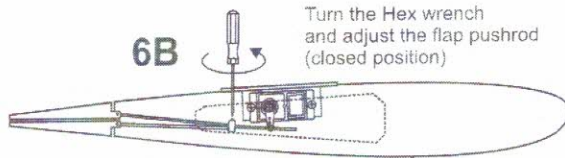
## 6-LINKAGES

6A



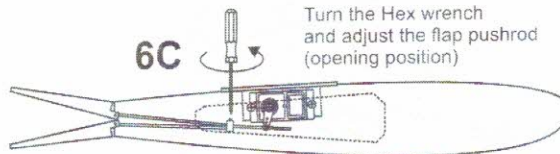
Slide the flap push-rod to the hole of the connector on the servo arm.

6B



Turn the Hex wrench and adjust the flap pushrod (closed position)

6C



Turn the Hex wrench and adjust the flap pushrod (opening position)






L/R

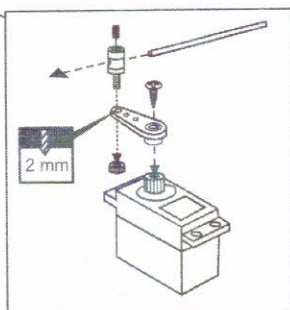
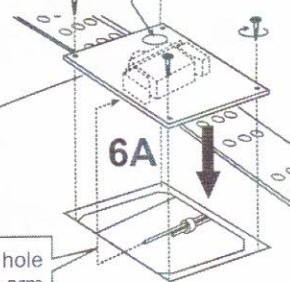
Assemble left and right sides the same way.

The hole for flap adjust

6A

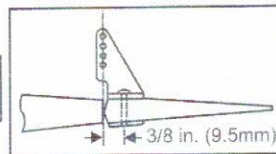
Slide the flap push-rod to the hole of the connector on the servo arm.

-  .....2
-  .....2
-  .....4
-  .....2
-  .....4



8D

2mm



## 7-ENGINE

Turn the black plastic screw on both side of the fuselage to pull the canopy hatch out of the fuselage (7A)

7A

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 (7C)

! 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.

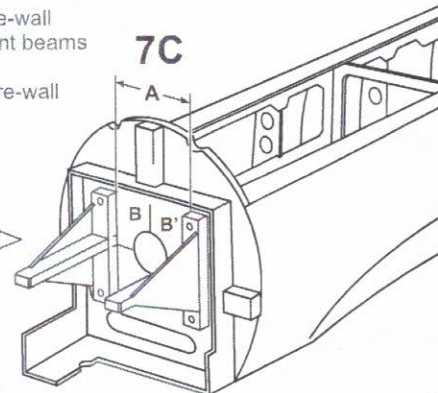
Carefully remove the engine mount beams and drill a 6mm hole through the fire-wall at each of the four marks made above (7D)

FRONT-VIEW

A

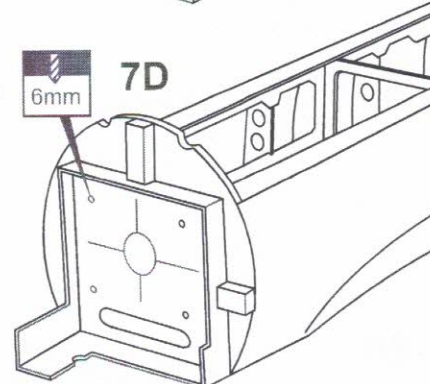
B=B'

7C



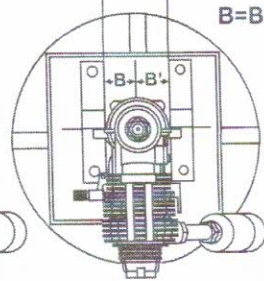
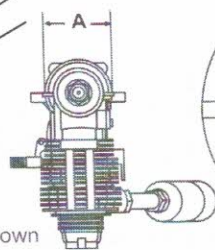
7D

6mm



7B

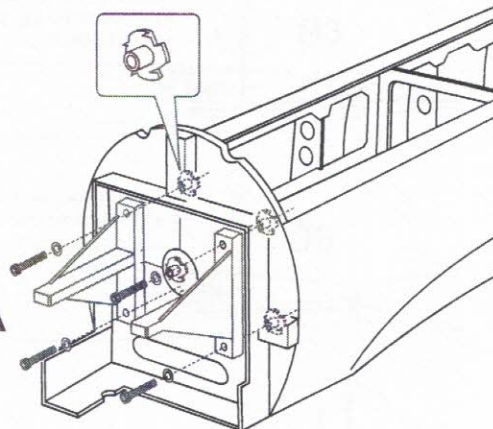
Cut the wood along the line as shown (7B) in case of 4T engine using





## 8-ENGINE (4T)

8A



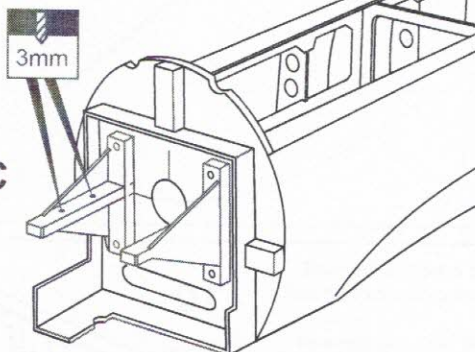
Insert the blind-nut with the wooden washer onto each of the four holes made above.

Reposition the engine mount beams on to the fire-wall and secure them with four 4x25mm screw (8A).

Position the engine to the engine mounts so the distance from the prop hub to the fire-wall is 110-115mm. Mark the engine mounting plate where the four holes are to be drilled (8B).

Remove the engine and drill a 3mm holes through the beam at each of the four marks made above (8C).

8C



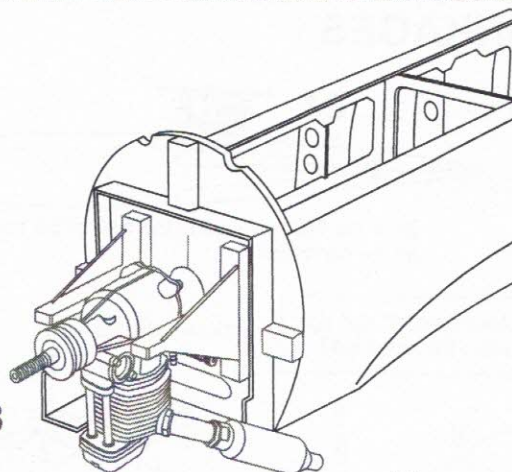
4x25mm screw - washer

.....4

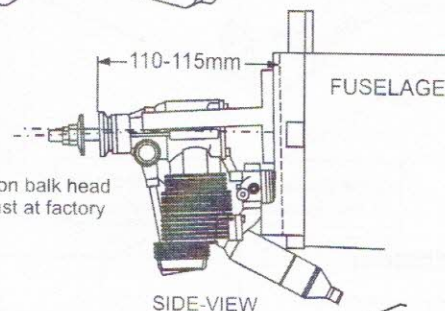
Blind-nut - wooden washer

.....4

8B

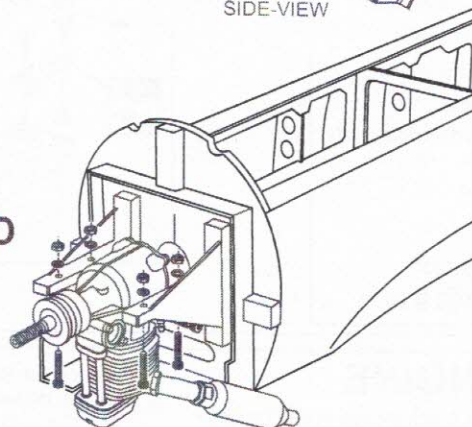


! Engine thrust on balk head is already adjust at factory



SIDE-VIEW

8D



Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 3x25mm screws (8D).

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

3x25mm screw

.....4

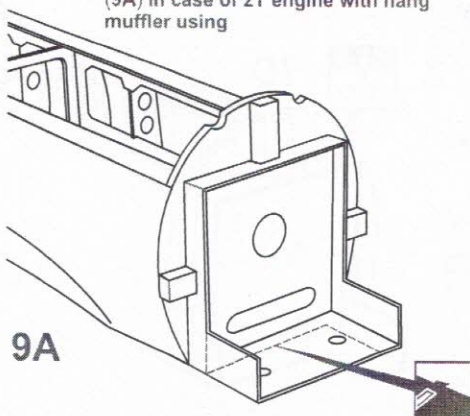
Washer

.....4

## 9-ENGINE (2T)

Cut the wood along the line as shown (9A) in case of 2T engine with hang muffler using

9A



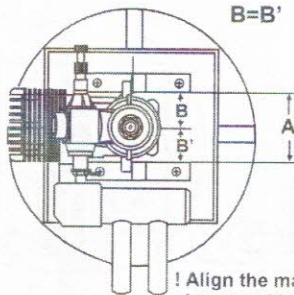
Attach the engine mount beams onto the fire-wall so the distance between of two engine mount beams is "A", and B=B' as show.

Secure the engine mount beams onto the fire-wall with litter CA glue (9B).

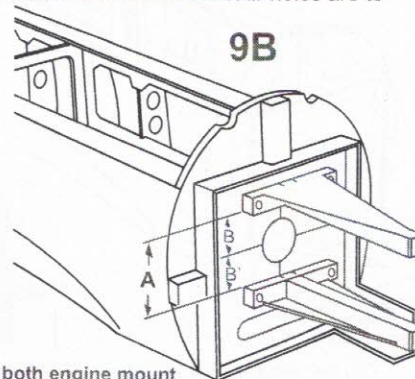
Using a pencil or felt tipped pen, mark the fire wall where the four holes are to be drilled (9B).

FRONT-VIEW

B=B'



9B

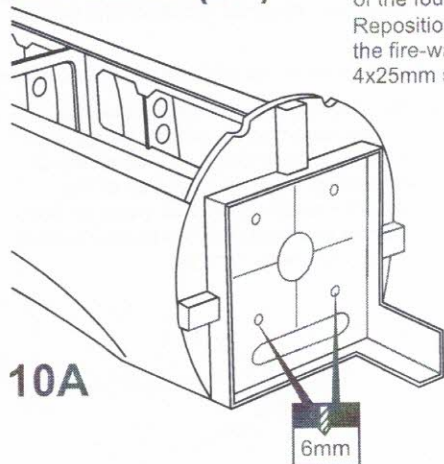


! Align the mark on both engine mount beams with the mark on the fuselage



## 10-ENGINE (2T)

Insert the blind-nut with the wooden washer onto each of the four holes made above.  
Reposition the engine mount beams on to the fire-wall and secure them with four 4x25mm screw (10B).



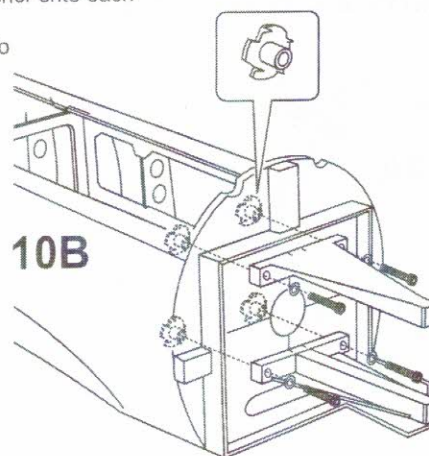
10A

Carefully remove the engine mount beams and drill a 6mm hole through the fire-wall at each of the four marks made above (10A).

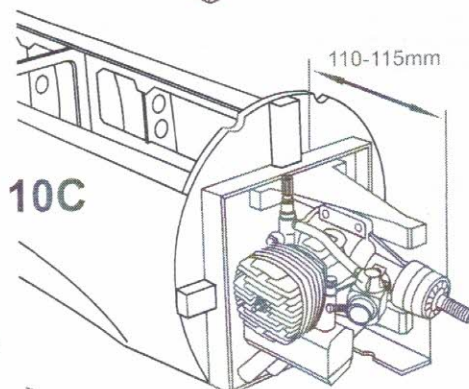
Position the engine to the engine mounts so the distance from the prop hub to the fire-wall is 110-115mm. Mark the engine mounting plate where the four holes are to be drilled (10C).

Remove the engine and drill a 3mm holes through the beam at each of the four marks made above (10D).

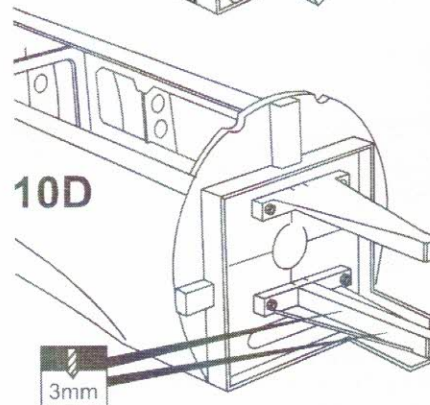
Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 3x25mm screws (10E).



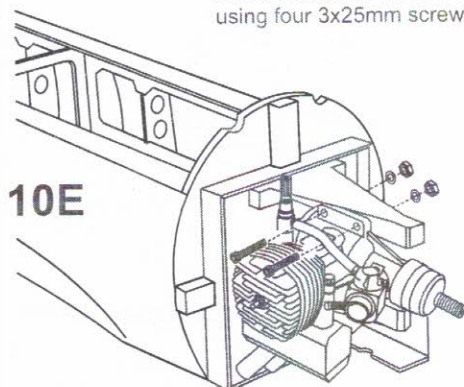
10B



10C

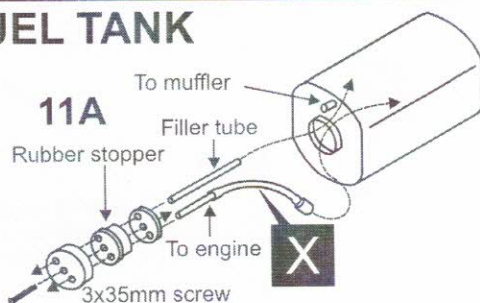


10D

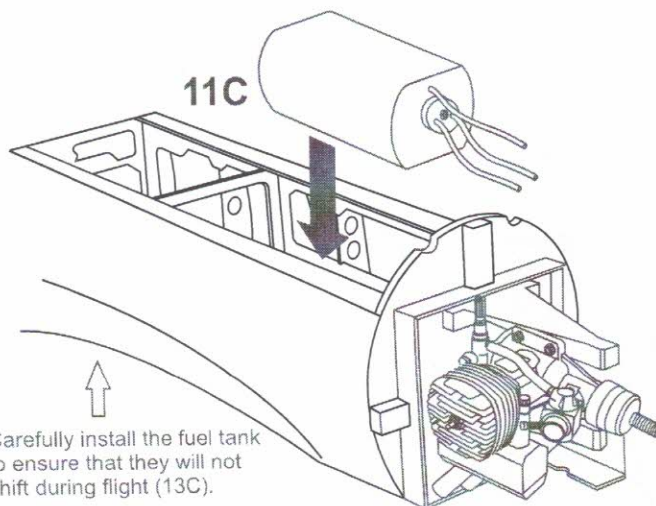


10E

## 11-FUEL TANK

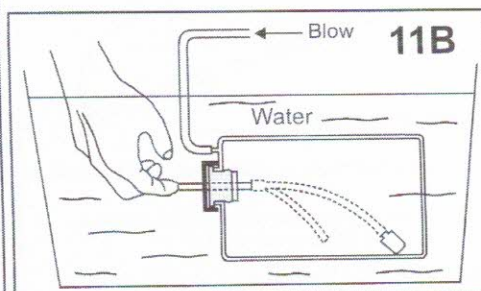


11A



11C

Carefully install the fuel tank to ensure that they will not shift during flight (11C).



11B

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 (11B).

## 12-HORIZONTAL STABILIZER

Cut away only the covering

12A



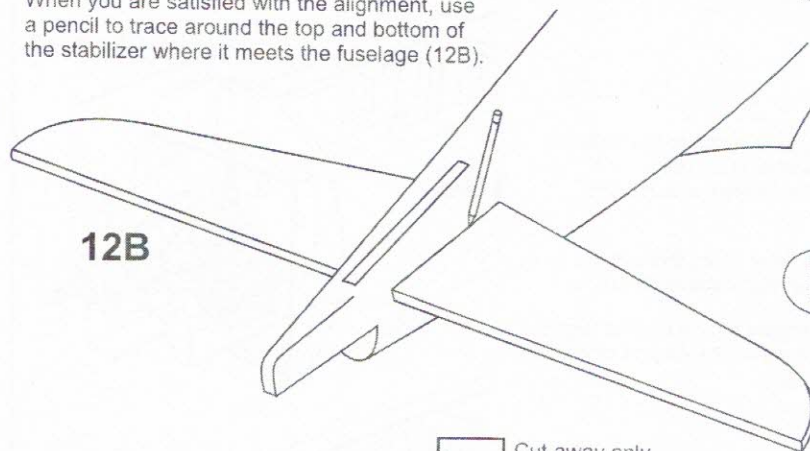
Using a sharp hobby knife, carefully cut away the covering around of all slots for the horizontal stabilizer and vertical fin installation.

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

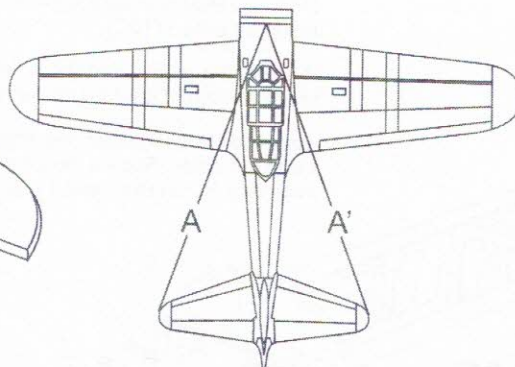
Push the horizontal stabilizer into the slot on the fuselage as show. Check the alignment of the horizontal stabilizer by measuring from a fixed point along the center line of the fuselage to the leading edge on each side of the horizontal stabilizer. The distance must be equal on both sides. If not, adjust the stabilizer until the measurements are the same (see picture below:  $A=A'$ ).

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 (12B).

12B



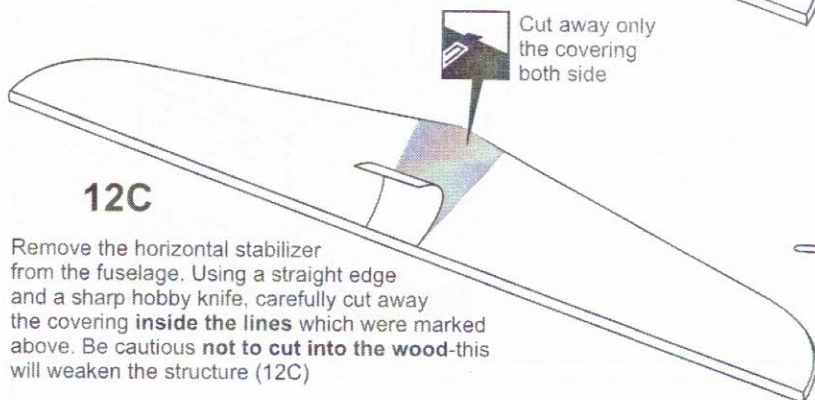
$A = A'$



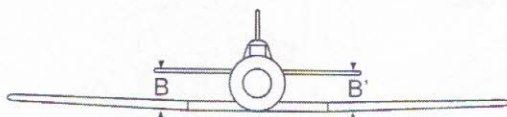
Cut away only the covering both side

12C

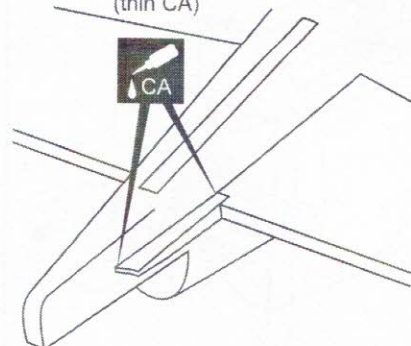
Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above. Be cautious **not to cut into the wood**-this will weaken the structure (12C)



$B = B'$



Apply CA glue both side (thin CA)

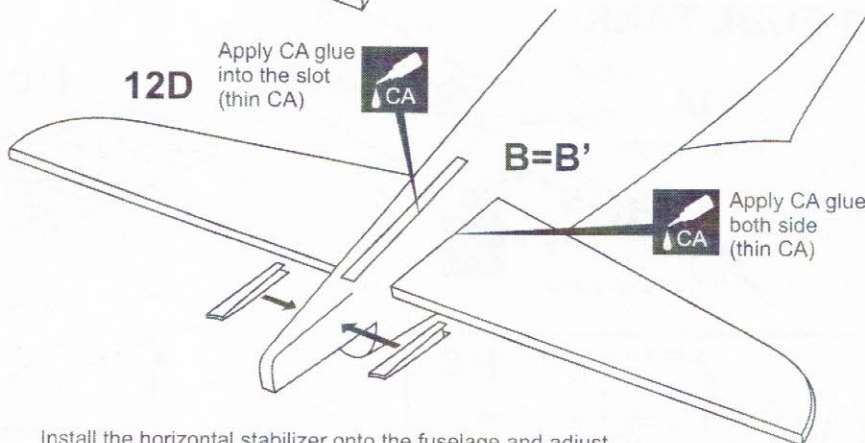


12D

Apply CA glue into the slot (thin CA)



$B = B'$



Apply CA glue both side (thin CA)

Install the horizontal stabilizer onto the fuselage and adjust the alignment as described in steep 12A.

Note: it is important to ensure that the horizontal stabilizer is also level in regards to the fuselage.

Apply the thin CA along the area where the covering was removed in the previous step and to the fuselage where the horizontal stabilizer mounts (12D).

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

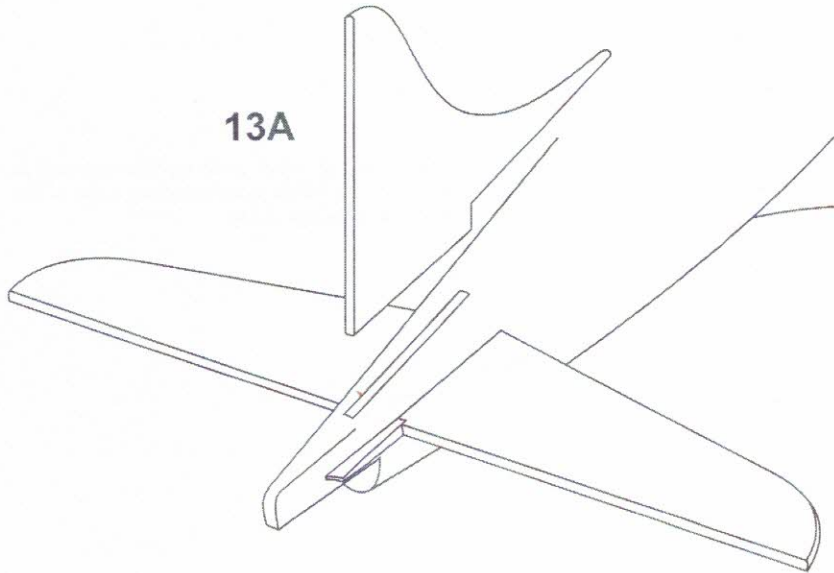


## 13-VERTICAL STABILIZER

Pull the rudder out of the vertical fin.

Carefully, push the vertical fin into the slot on the fuselage as shown (13A).

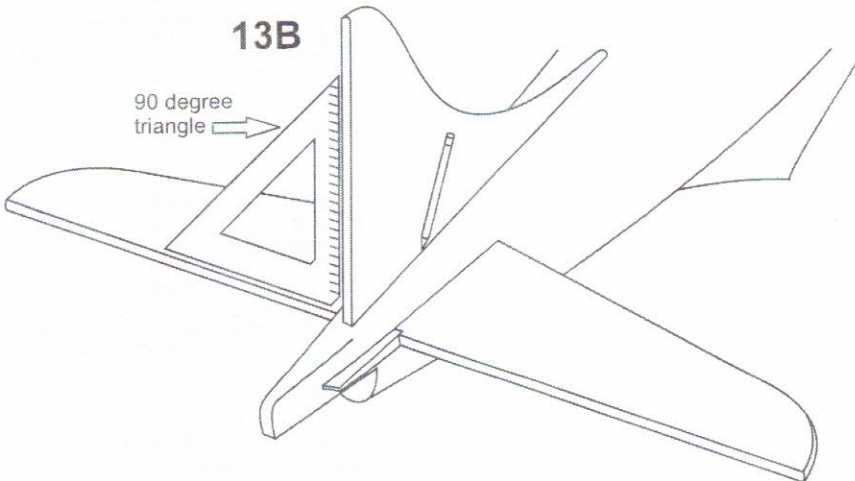
13A



Trial fit the vertical fin in position. Using a 90 degree triangle, ensure that the vertical stabilizer is perpendicular to the horizontal stabilizer (13B).

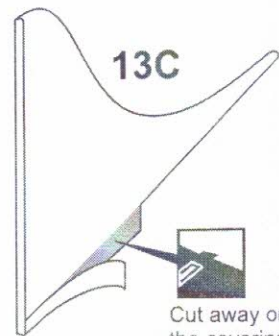
Using a pencil, trace around the vertical stabilizer where it meets the fuselage. Remove the vertical stabilizer from the fuselage. Using a sharp hobby knife, carefully cut away the covering **below the lines** which were drawn in the previous step. **Do not cut into the woods** as this will affect the structural integrity of the stabilizer (13C).

13B

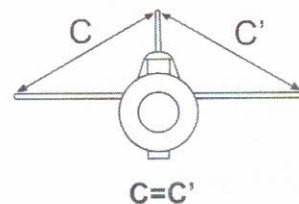


90 degree triangle

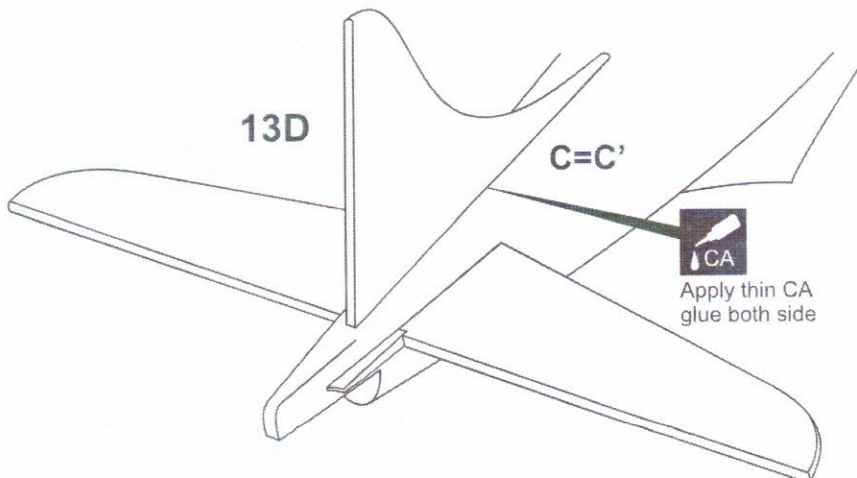
13C



Cut away only the covering both side



13D



C=C'

Apply thin CA glue both side

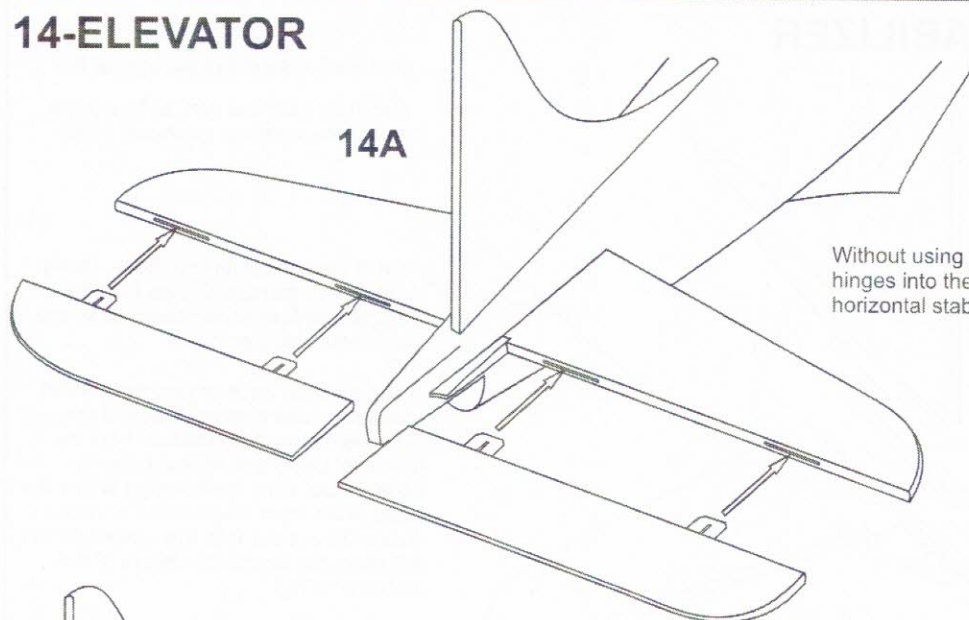
Insert the vertical fin into the fuselage, precisely align the vertical stabilizer as described in step 13B.

Apply the thin CA glue on the vertical stabilizer where it contacts the fuselage (13D).

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

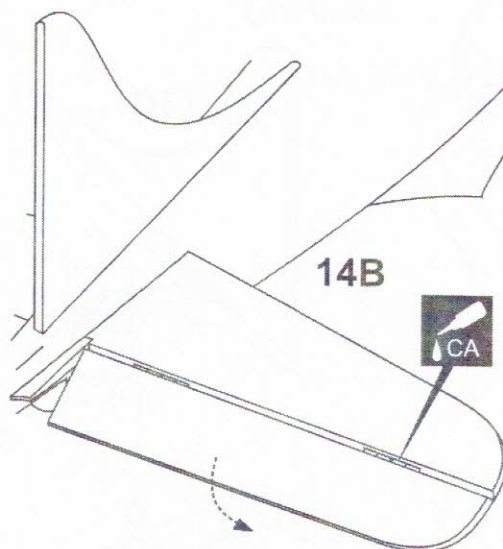
## 14-ELEVATOR

14A



Without using glue yet, push the elevator and its hinges into the hinge slots in trailing edge of the horizontal stabilizer (14A).

14B



Apply thin CA glue on the top (and bottom) of the hinges.

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

TOP-SIDE

HORIZONTAL STABILIZER

Apply a thin layer of petroleum jelly



Apply thin CA glue on the top (and bottom) of the hinges.

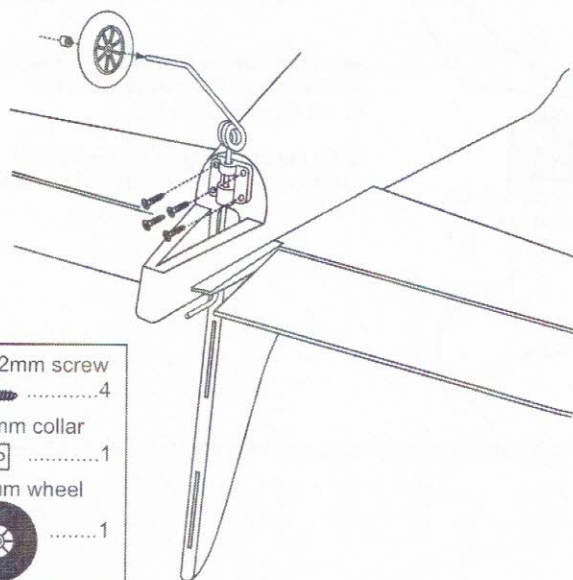
TOP-SIDE

HORIZONTAL STABILIZER

Do the same way with the bottom side of elevator and with the second elevator and rudder.

## 15-RUDDER

15A



3X12mm screw

.....4

2.2mm collar

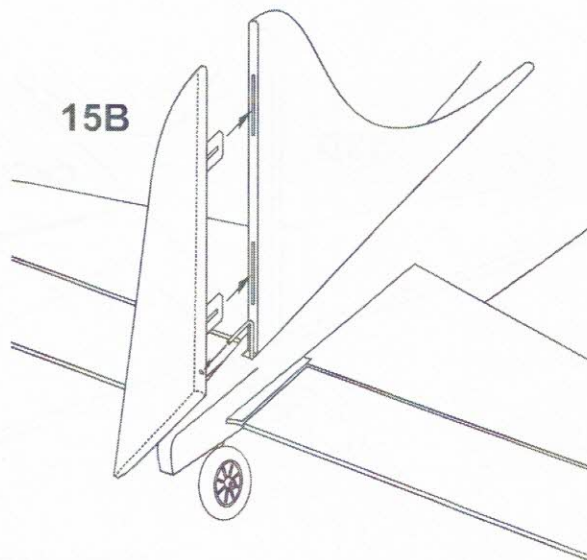
.....1

25mm wheel

.....1



15B

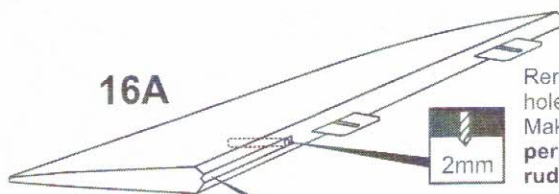


Without using glue yet, push the rudder and its hinges into the hinge slots in the trailing edge of the vertical stabilizer. When satisfied with the alignment, mark the mounting hole position, where the tail gear rod meet the rudder with a pencil.



## 16-RUDDER

16A



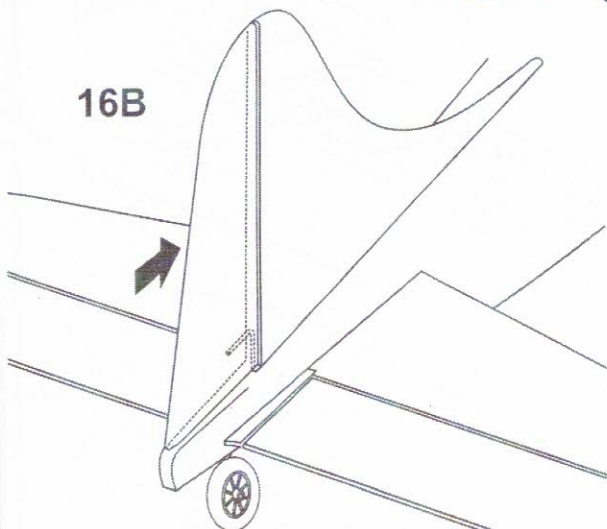
Remove the rudder and drill a 2mm diameter hole on the mark you made above. Making sure that you drill the hole **perpendicular to the leading edge of the rudder.**



Cut the long slot along the hinge line on the trailing edge of the rudder for the tail gear rod hidden on it.



16B



Apply **thin CA** glue on the Left (and right) of the hinges.

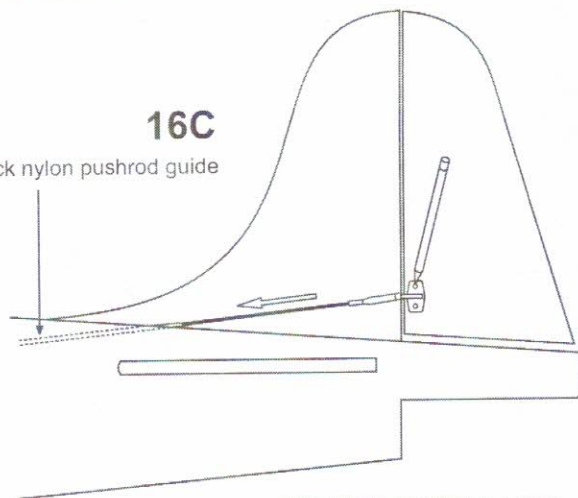
TOP-SIDE

VERTICAL STABILIZER

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

16C

Black nylon pushrod guide



Control horn Alignment



Push the rudder pushrod into the black nylon pushrod guide as shown (16C).

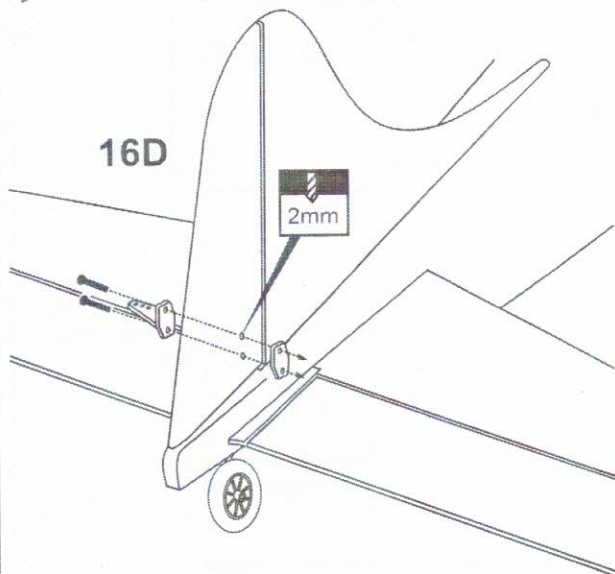
Using the back plate of control horn as a template, mark the mounting hole positions, where the rudder clevis meets the rudder with a felt tipped or a pencil (16C).

Remove the back plate control horn and drill two 2mm holes through the rudder (16D).

Attach the rudder control horn using the hardware provided (two 2x15mm screws and a back plate). (16D)

Do the same way with the elevator control horn.

16D



Plastic control horn



3

Plastic back plate

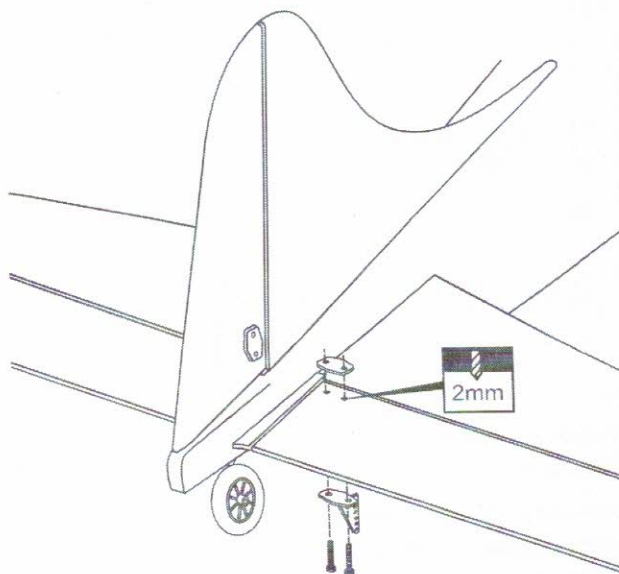


3

2x12mm screw



6

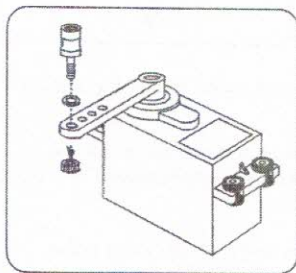


# 17-CANOPY HATCH & LINKAGES

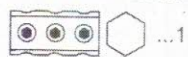
3X25mm nylon bolt



Connector



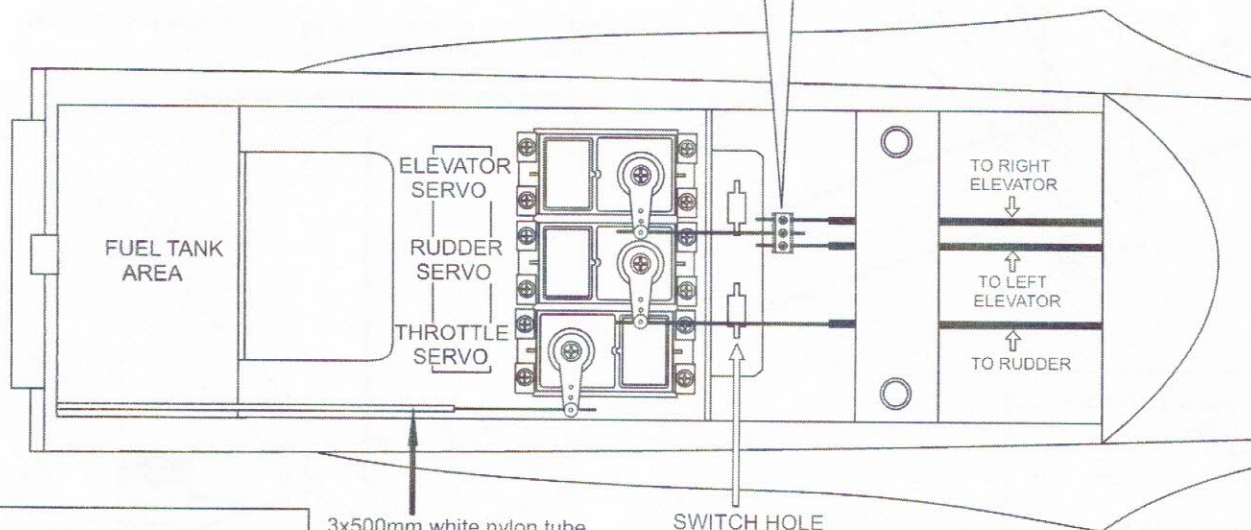
3 holes connector



To left and right  
elevator control horn

3 holes connector

Elevator servo



1.2x500mm pushrod (Throttle)



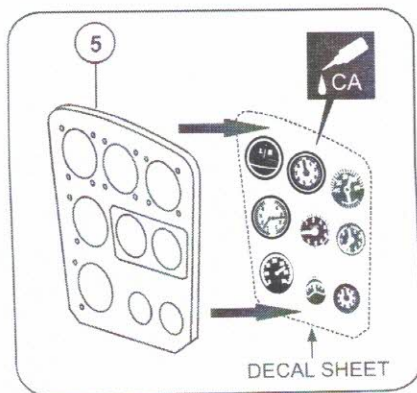
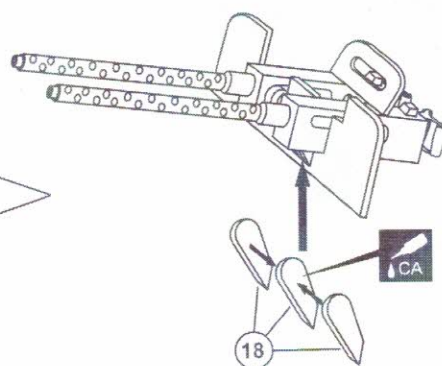
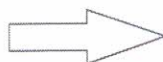
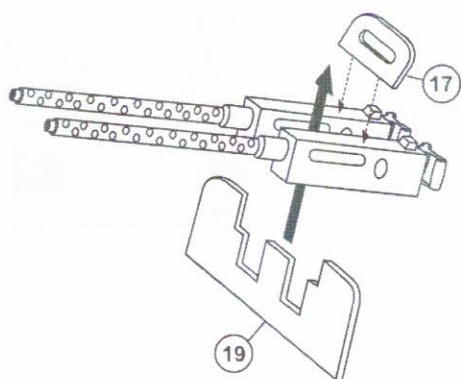
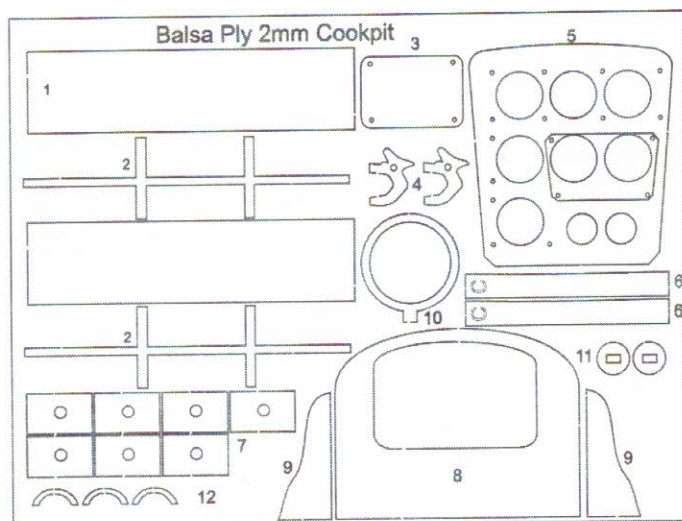
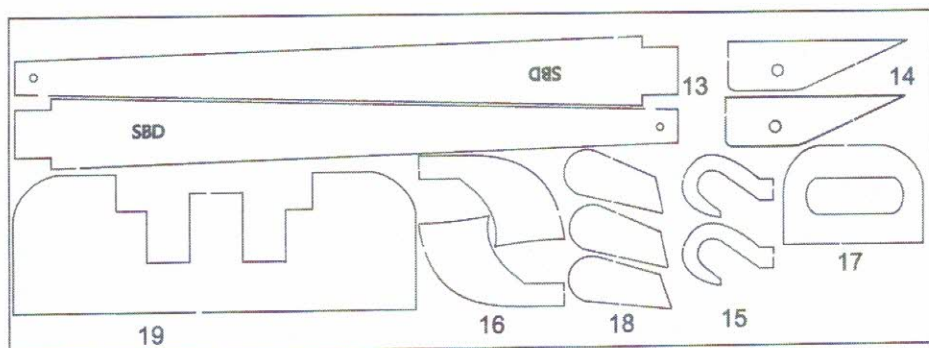
2x950mm pushrod and clevis



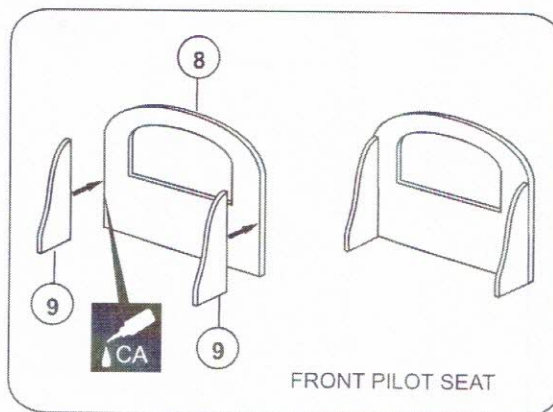
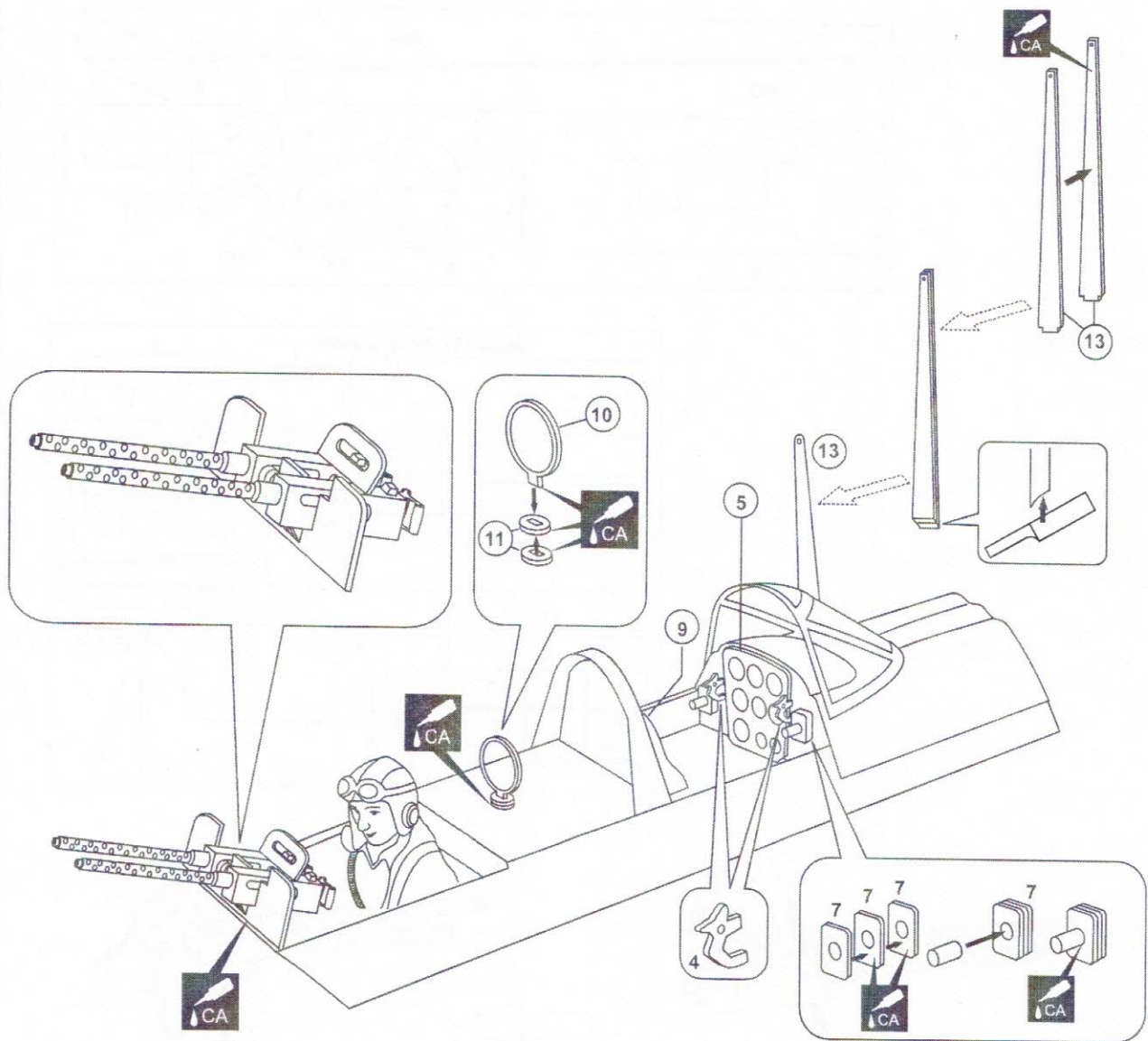
FUSELAGE - TOP VIEW



# 18-DECOR

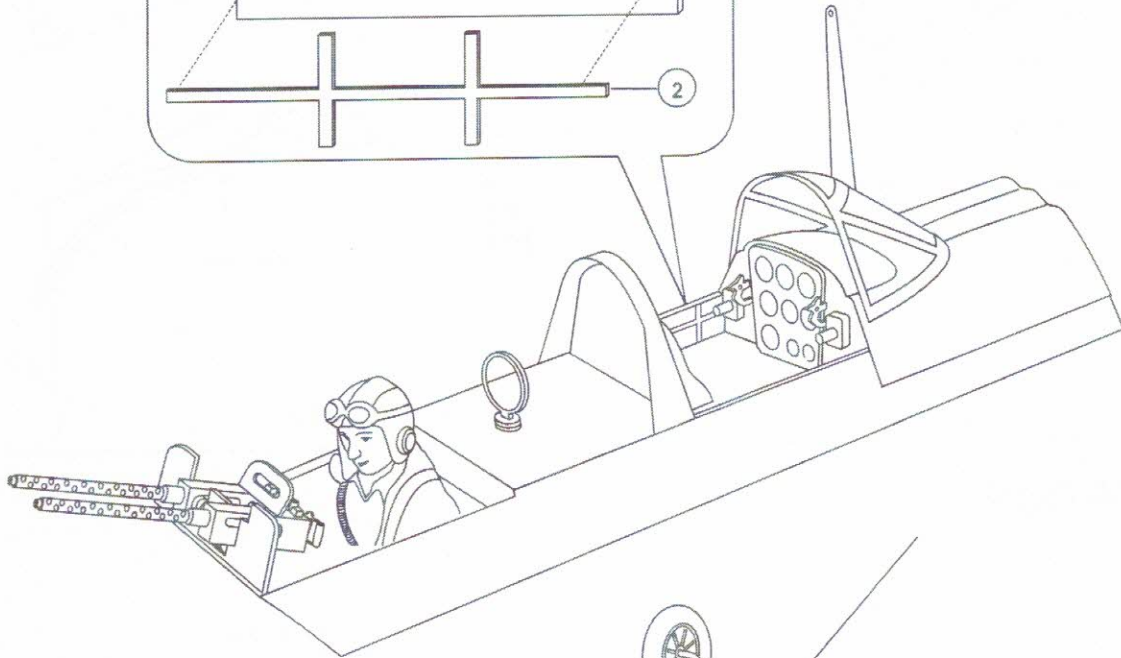
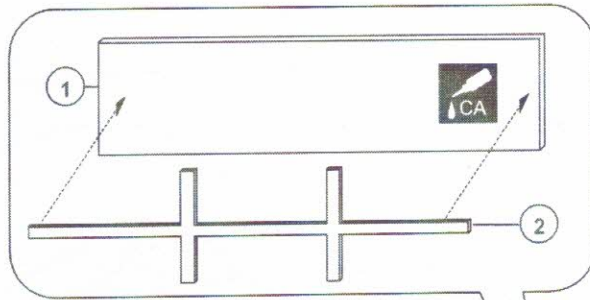



# 19-DECOR

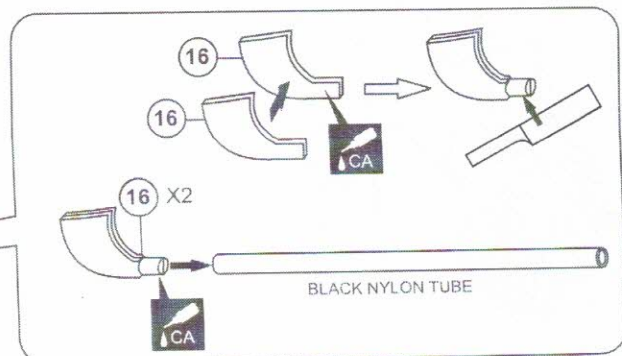
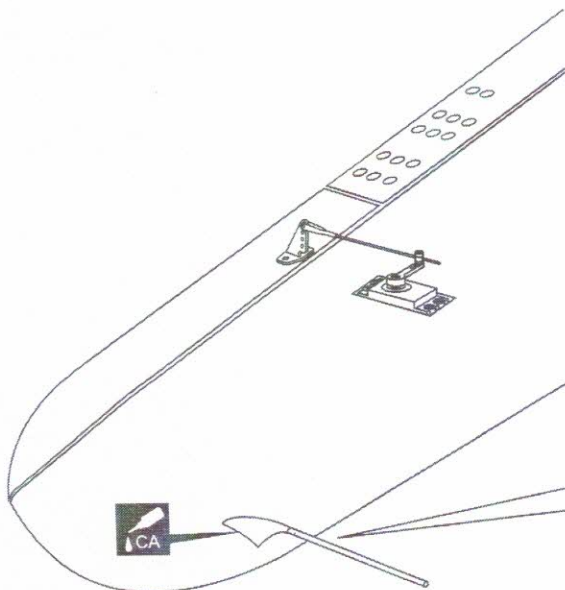
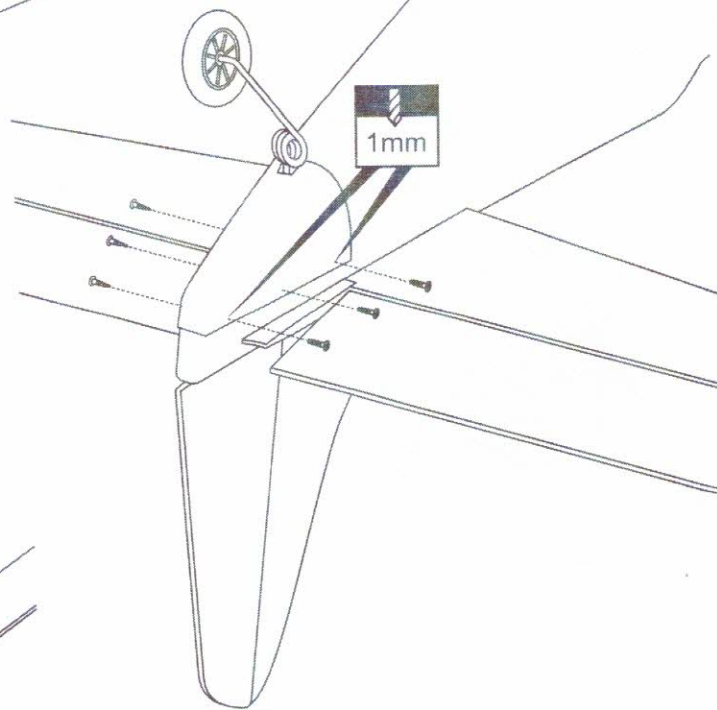




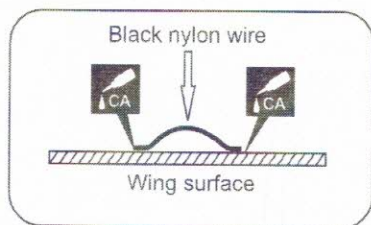
## 20-DECOR



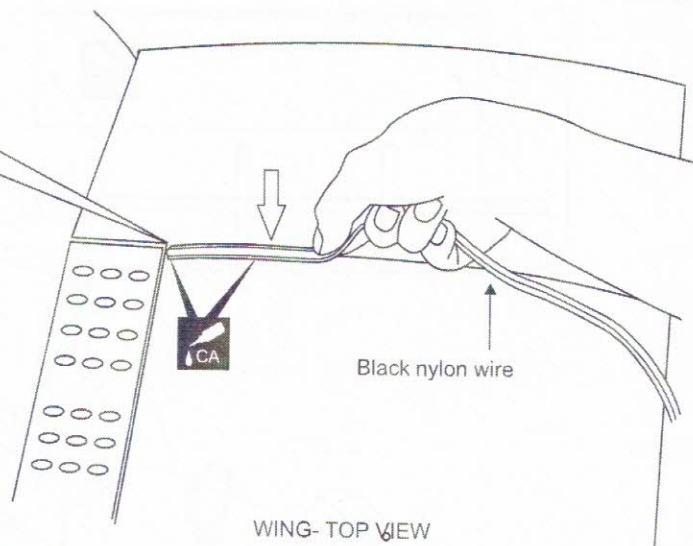
2x5mm screw  
 ....6



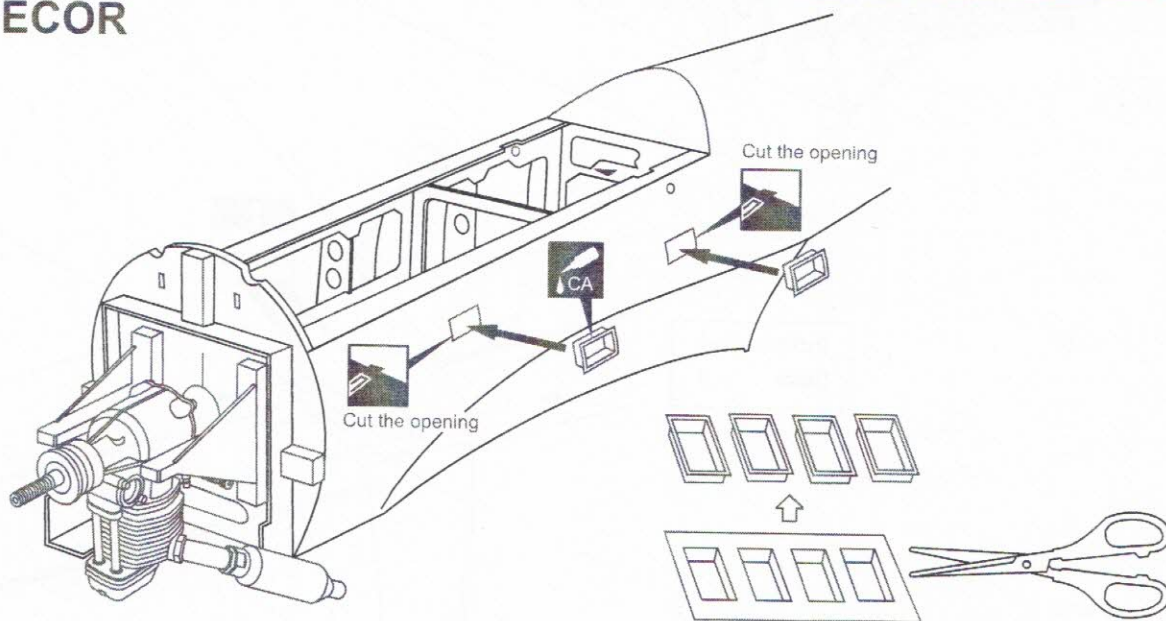
## 21-DECOR



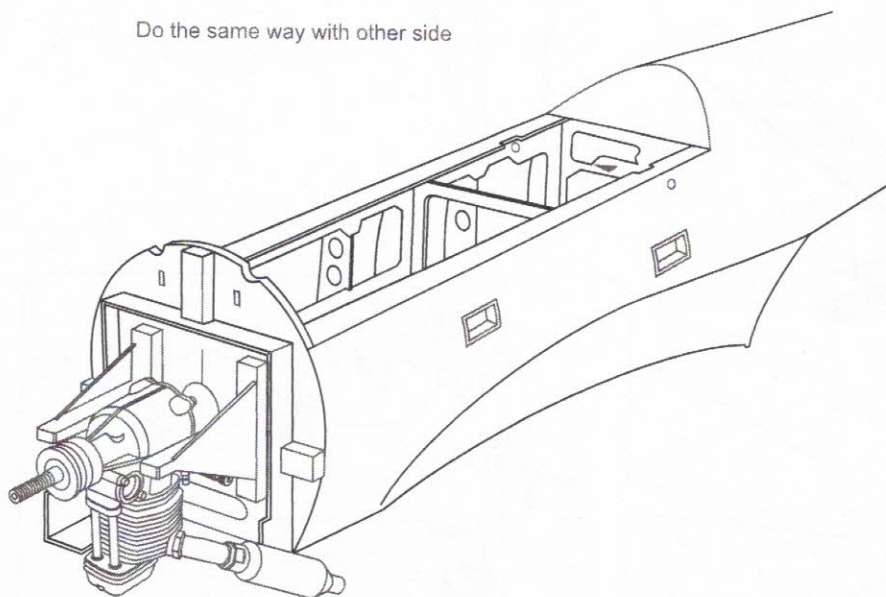
Do the same way with other side



## 22-DECOR

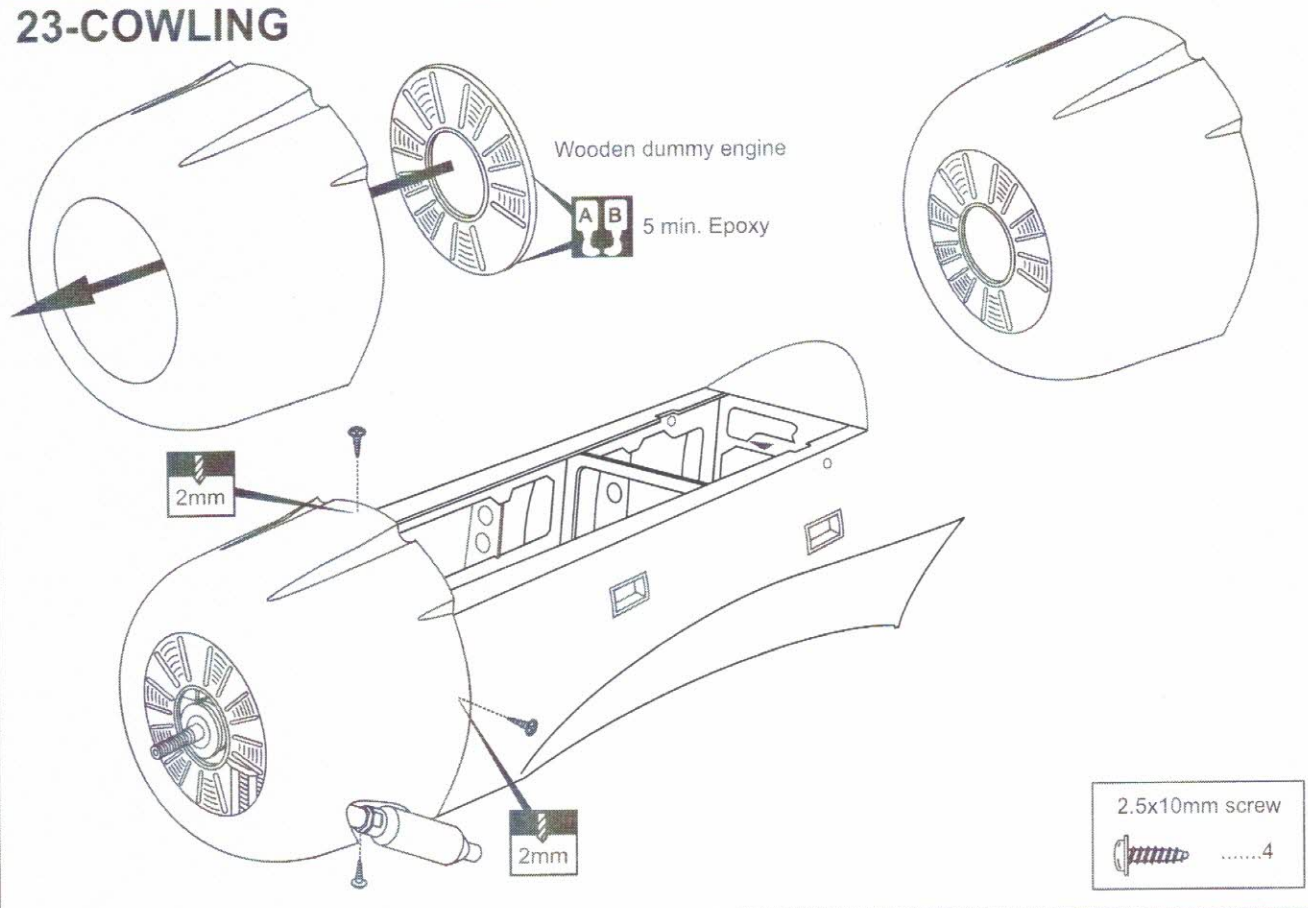


Do the same way with other side

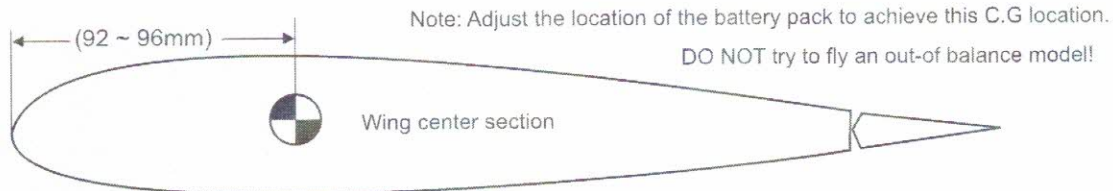




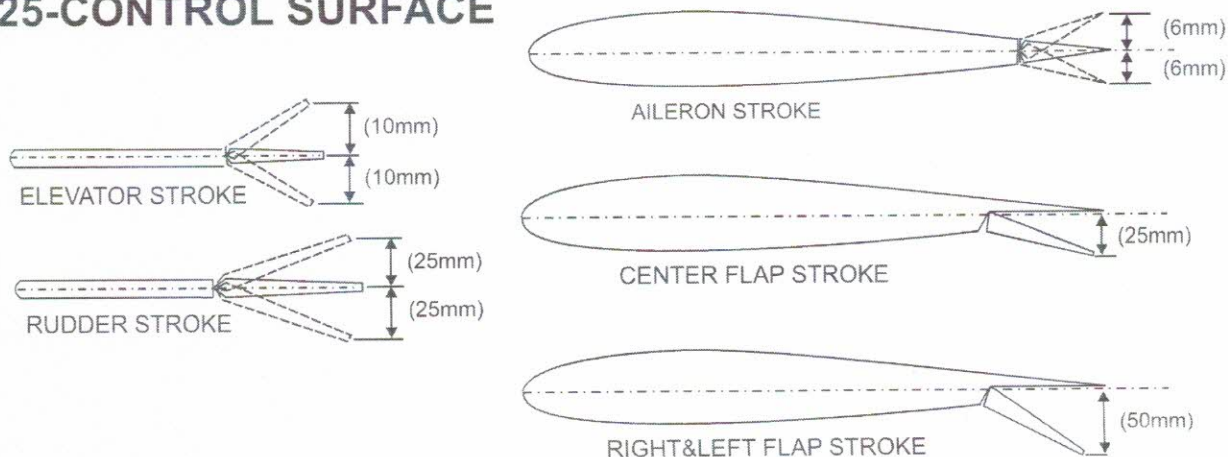
## 23-COWLING



## 24-BALANCE



## 25-CONTROL SURFACE



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

**IMPORTANT:** Please do not clean your model with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

