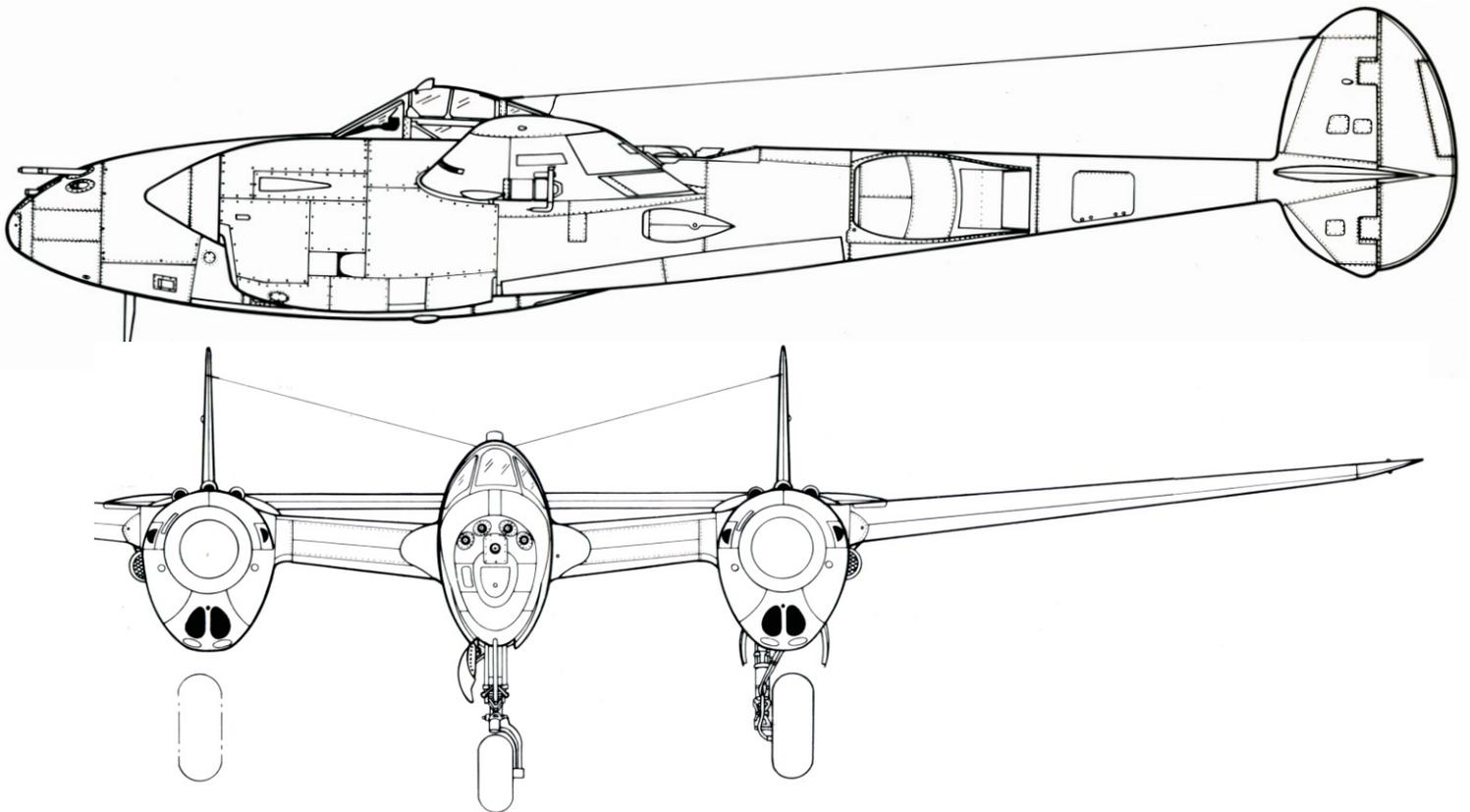




P-38 LIGHTNING

Radio control model

INSTRUCTION MANUAL

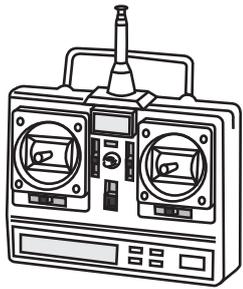


Wingspan approx.	83 in.
Fuselage length approx.	57.5 in.
Glow Engine	7.45cc 2T / 11.5cc 4T (x2)
Electric Motor	870 Watt Brushless motor x2
Radio	6 Channel / 10 Servos

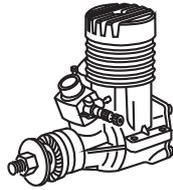


WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if you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

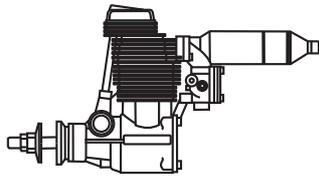
REQUIRED ITEMS



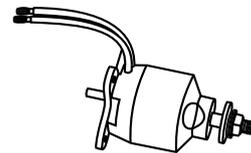
Minimum 6 channel radio for airplane / 8-10 servos.



.46 - .50 cu.in.(x2)
7.45cc (x2)

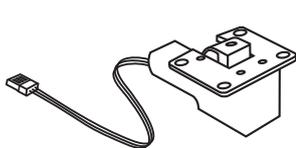


.60 - .70 cu.in (x2)
10cc - 11.5cc (x2)



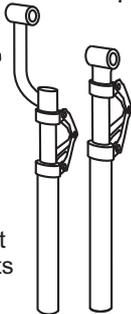
Electric Set up 1:
2X Dualsky XM5050EA-7 610Kv motors.
2X Dualsky XC8018BA 80A ESC, 100A burst
2X Dualsky XP45004EX 4S, 35C, 4500mAh Lipo
2X Prop: 14x9 x3-blade Master Airscrew
Approx Weight: 1600grams / 3.6lbs

Electric Setup 2:
2X Dualsky XM5060EA-6 470Kv motors.
2X Castle Creations Edge 100AMP ESC
2X Dualsky XP45005EX 5S, 35C, 4500mAh Lipo
2X Prop: 16x10 x3-blade Master Airscrew
Approx Weight: 2200grams / 4.8 lbs



Electric Retract:
VQ-ARE18S

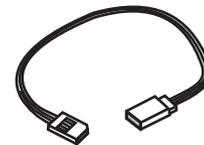
Nose gear Eretract&Strut
Main gear Eretract&Struts



Connector



Silicone tube



Extension cord

GLUE

Cyanoacrylate Glue



Silicon Glue



Epoxy (5min-Typ)

Hobby knife

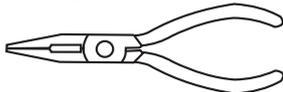


Phillip screw driver

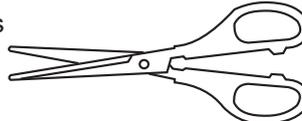
Hex Wrench



Needle nose Pliers



Scissors



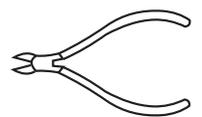
Awl



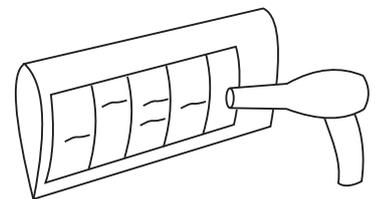
Sander



Wire Cutters



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



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

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

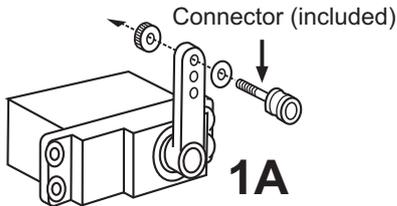
CONVERSION TABLE

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"	

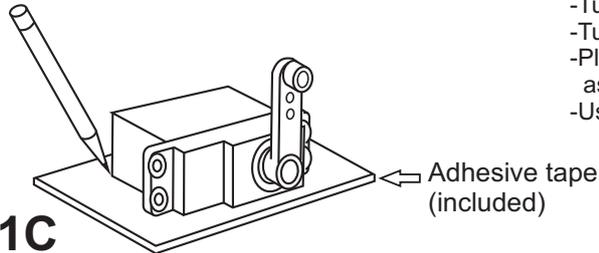
1-Wing

Connector

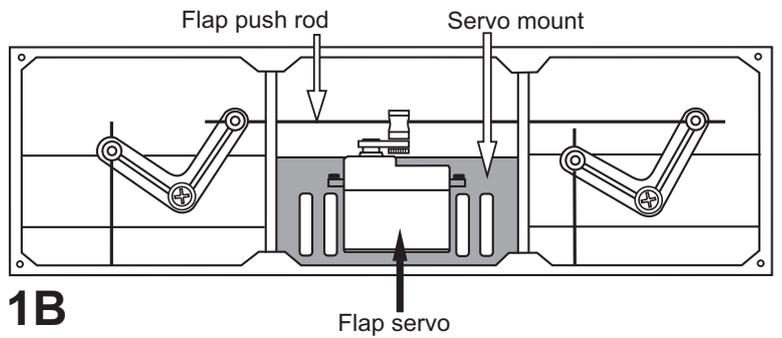
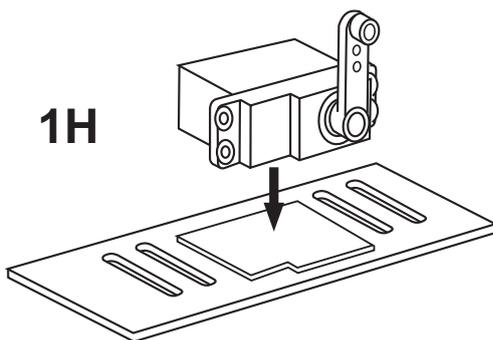
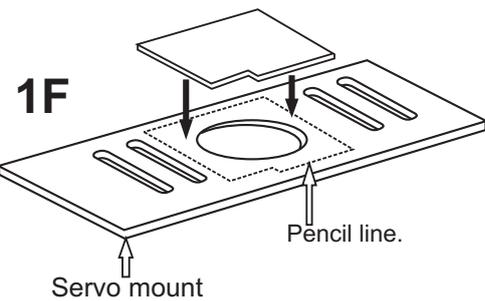
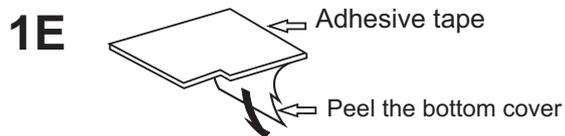
2



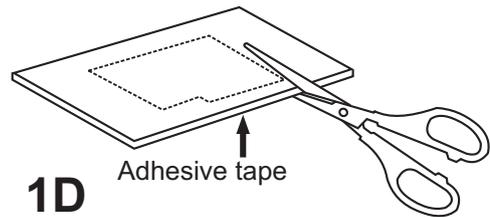
1A
Install the push rod connector onto the outer-most hole of the flap servo arm.



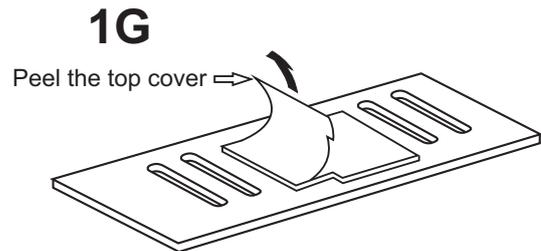
1C
Remove the servo out of the wing. Place the servo onto the adhesive tap as shown. With the pencil, trace around the servo, where it meets the adhesive tape.



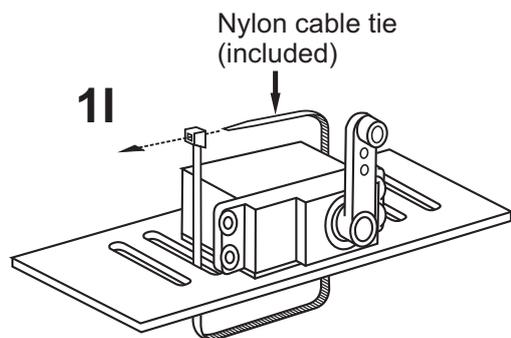
1B
-Turn the center wing over.
-Turn the four screws and move the hatch out of the wing.
-Place the flap servo onto the servo mount with the flap push rod installed as shown.
-Using the pencil, trace around the servo, where it meets the servo mount.



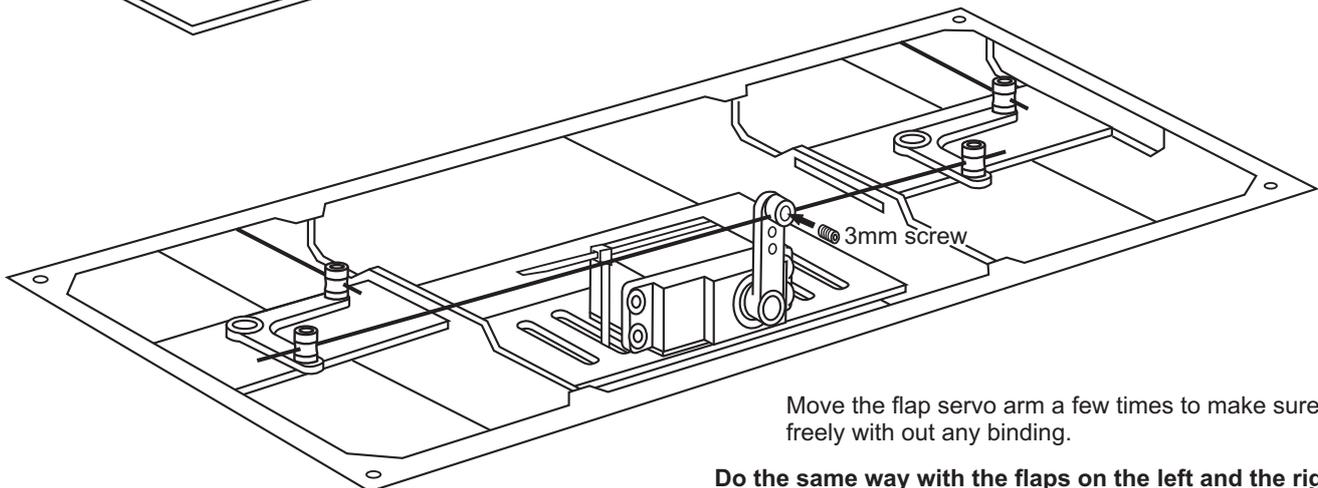
1D
With the scissors, cut along the pencil line



1G
Peel the top cover



1I



Move the flap servo arm a few times to make sure it move freely with out any binding.

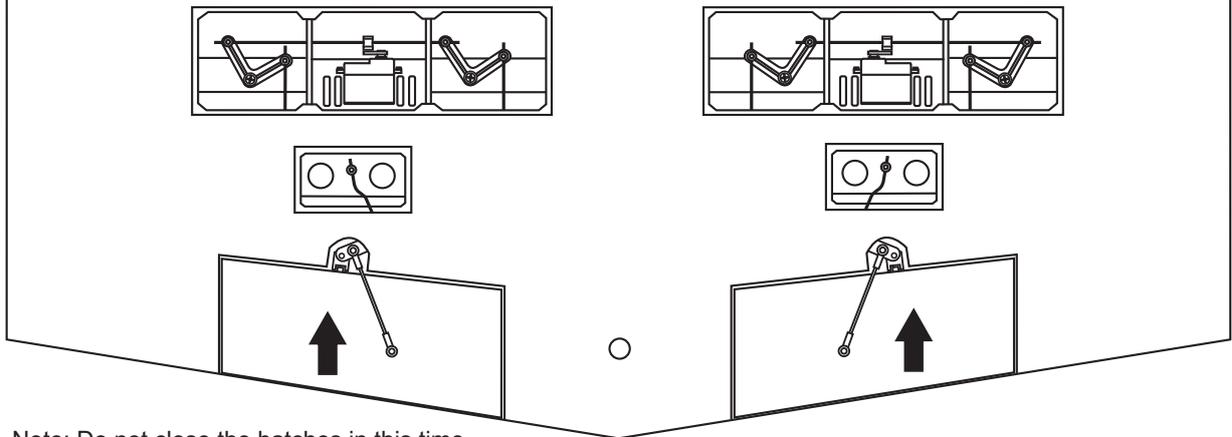
Do the same way with the flaps on the left and the right wing

2-Wing

CENTER WING

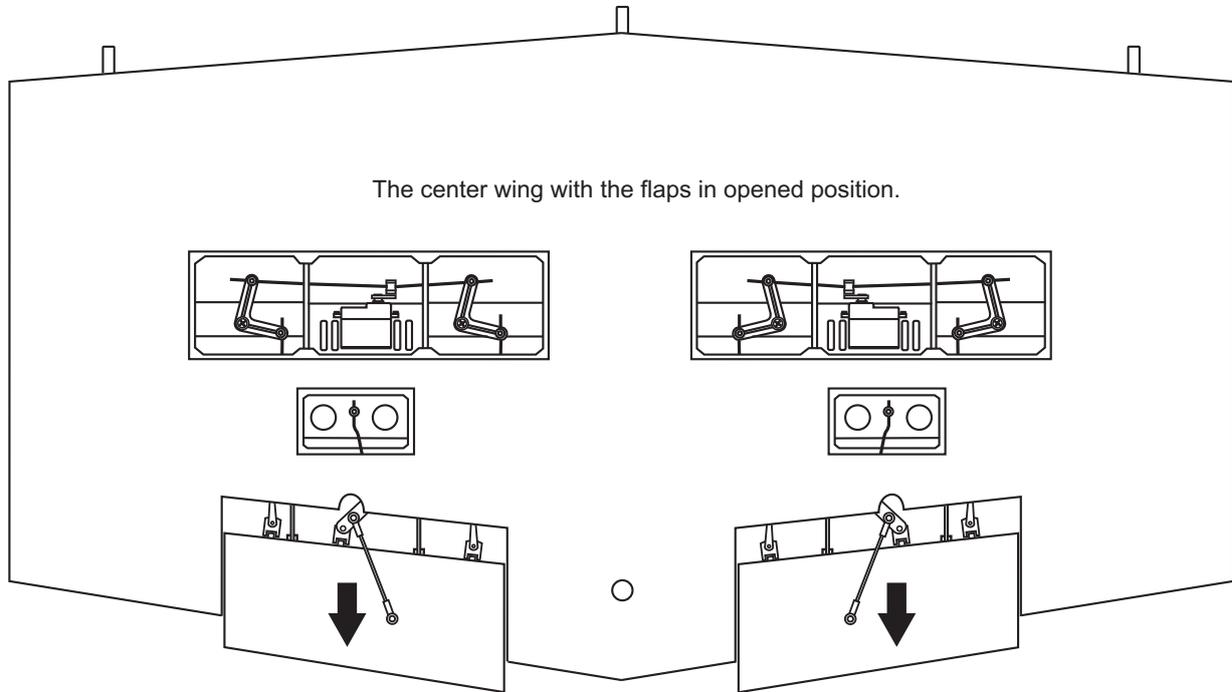
Bottom-view

The center wing with the flaps in closed position.

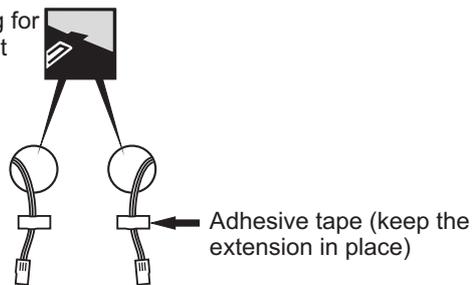


Note: Do not close the hatches in this time

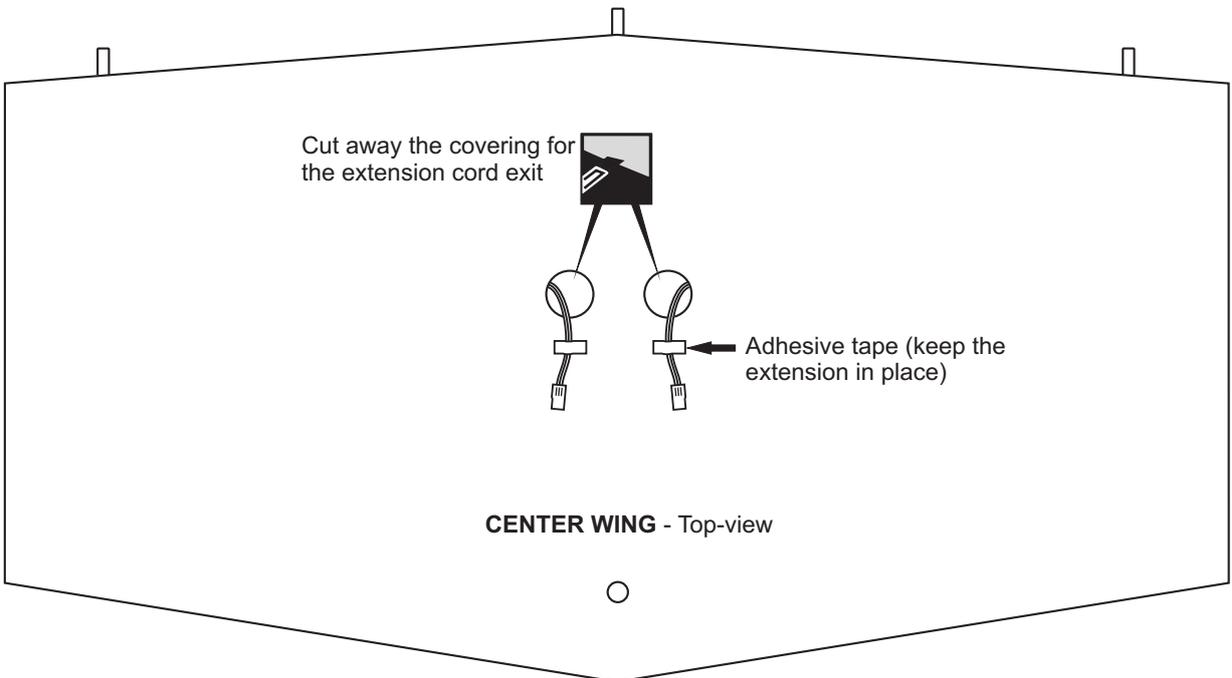
The center wing with the flaps in opened position.



Cut away the covering for the extension cord exit

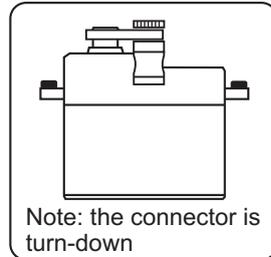
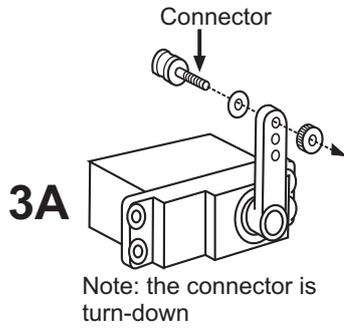


CENTER WING - Top-view

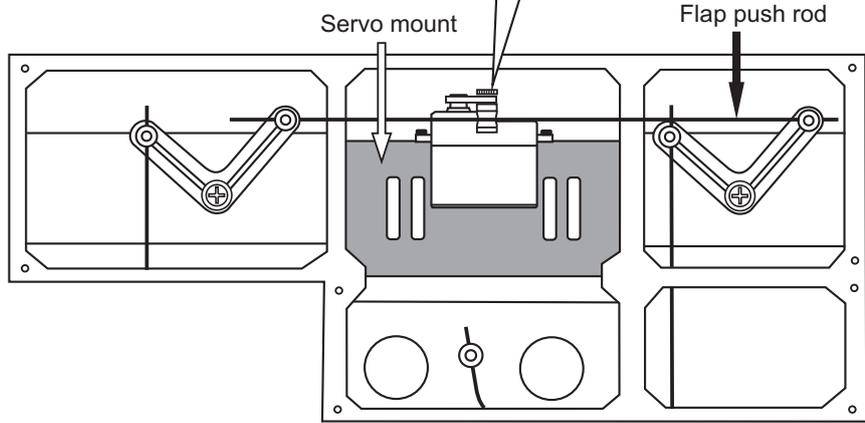


3-Wing

Connector
2
2
 2x30mm screw
4



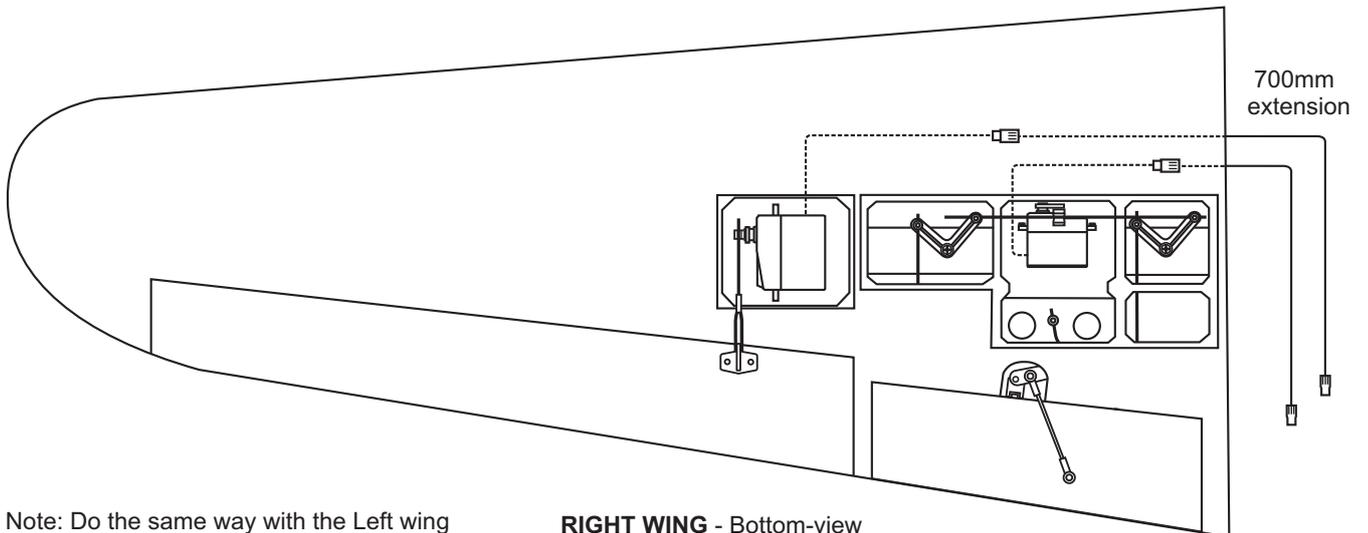
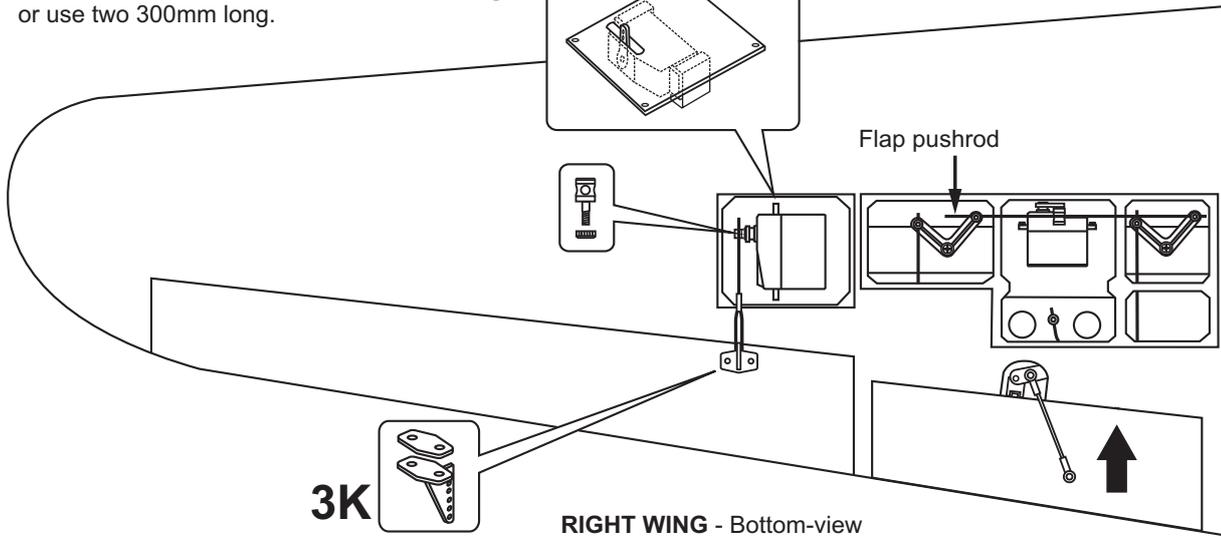
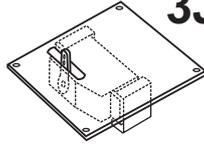
From Step **3B** to Step **3I**, follow the procedure as described in the **1-WING** section



To be connected the extension with the aileron servo cord before attach the hatch to the wing
 Note: the aileron extension must 700mm long or use two 300mm long.

Aileron servo hatch with servo installed (standard servo using)

3J



Note: Do the same way with the Left wing

4-Wing

Slide the aluminum tube into the left and right side of the center wing.

19x317mm aluminum tube

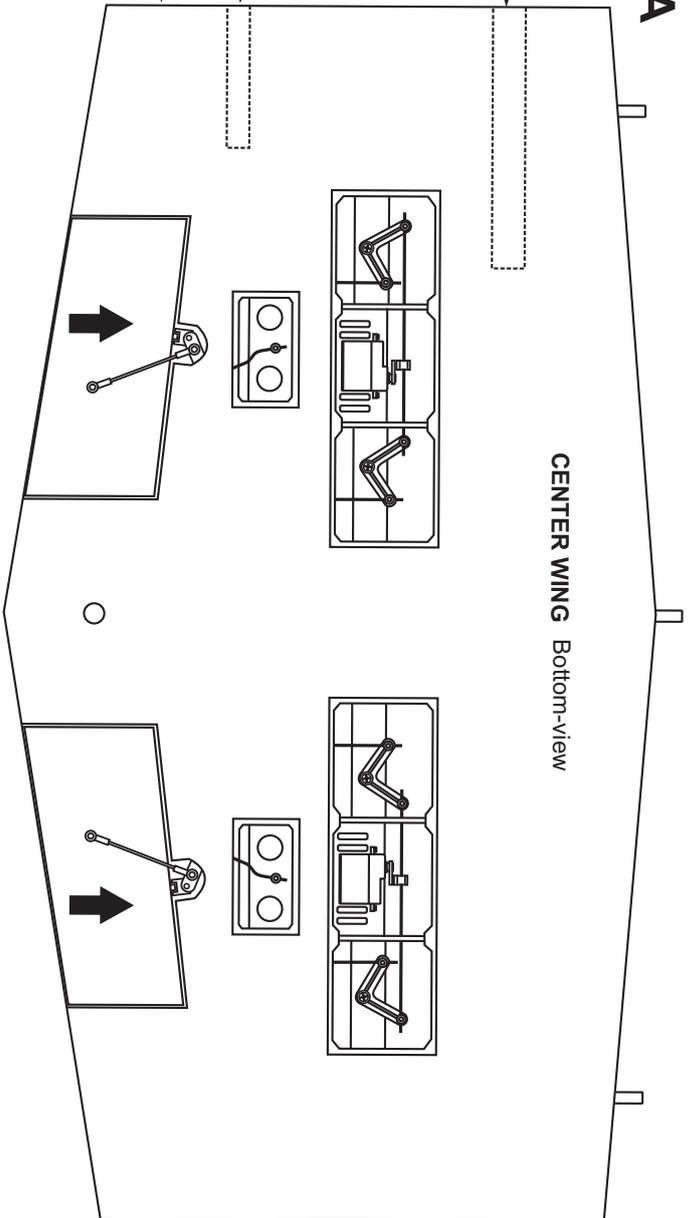
Do the same way with the other side of the center wing.

12x182mm aluminum tube

6x12mm wooden dowel

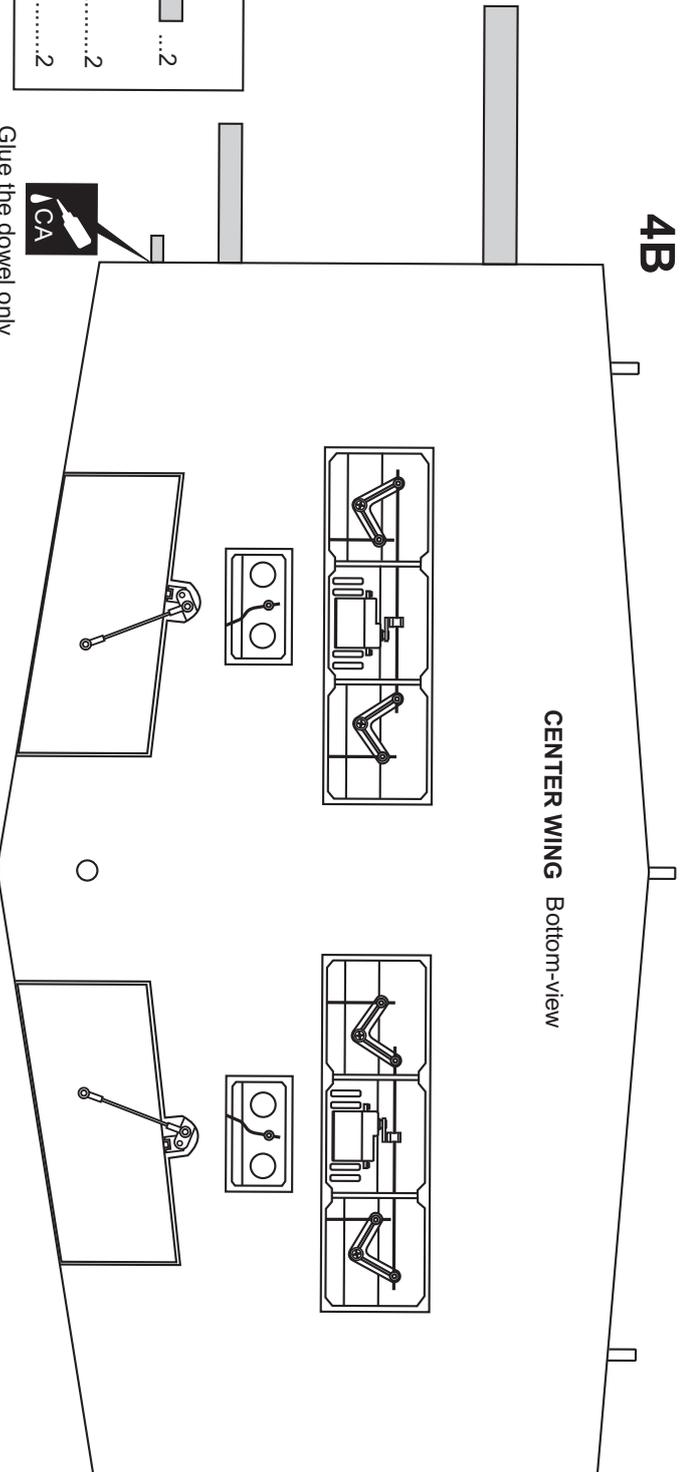
4A

CENTER WING Bottom-view



4B

CENTER WING Bottom-view

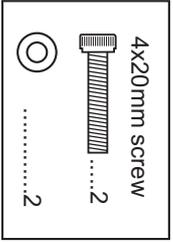


- 19x317mm aluminum tube 2
- 12x182mm aluminum tube 2
- 6x12mm wooden dowel 2

Glue the dowel only

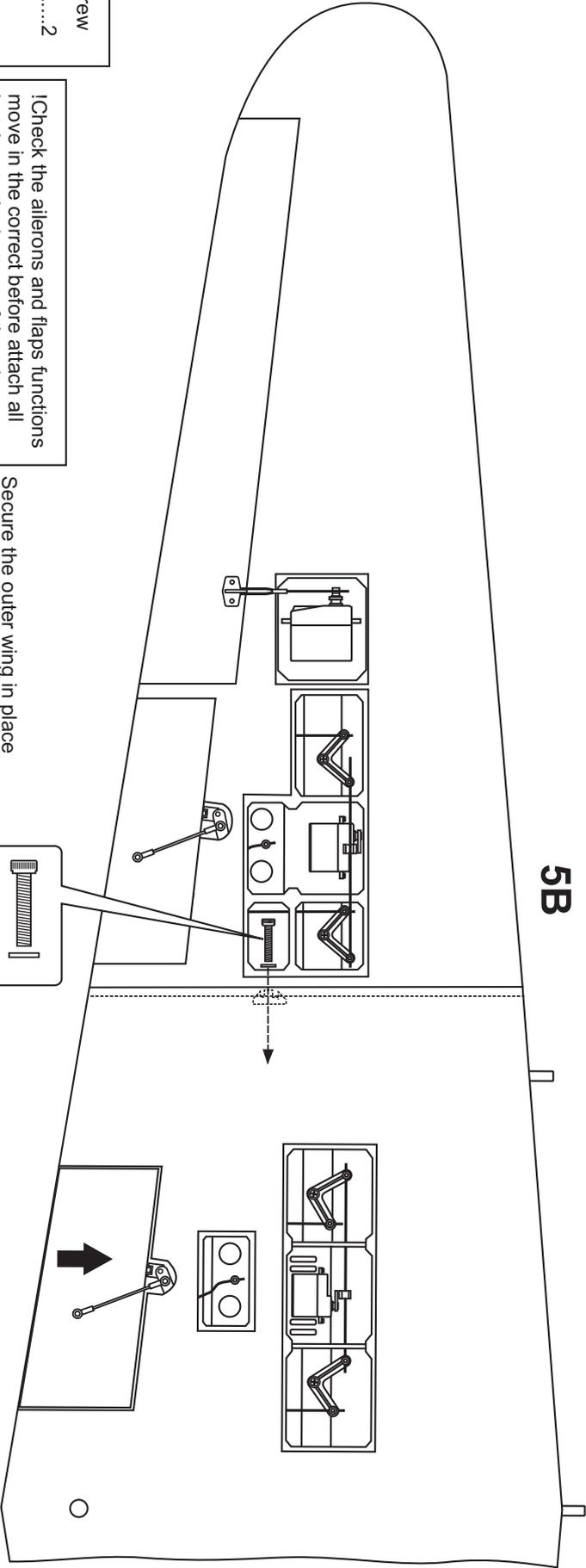
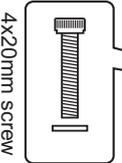


5-Wing

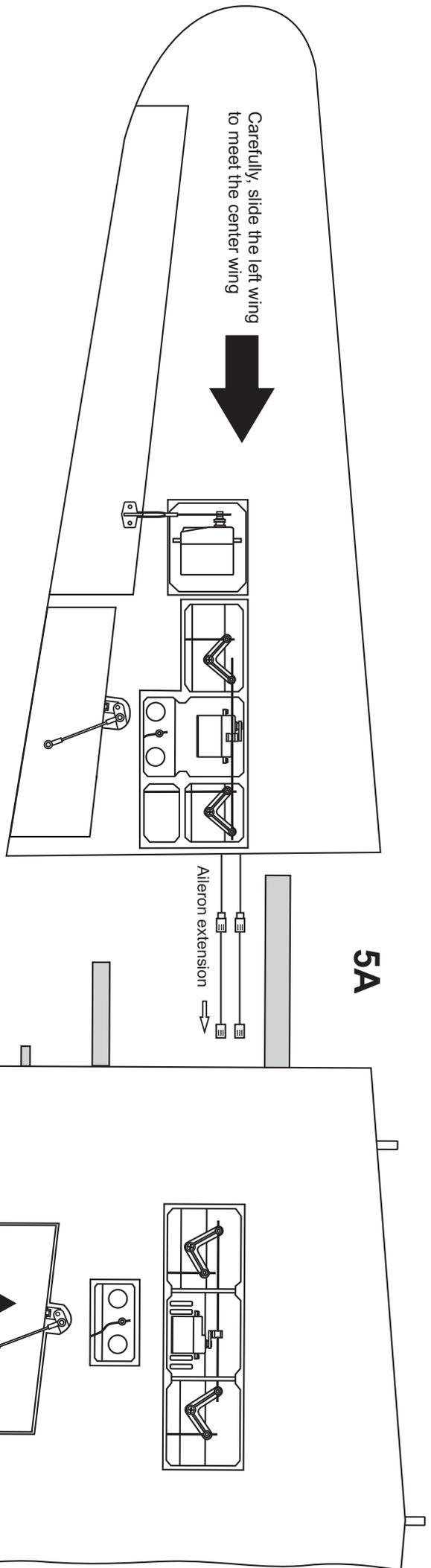


Check the ailerons and flaps functions move in the correct before attach all hatches to the bottom of the wing.

Secure the outer wing in place using 4x20mm screw

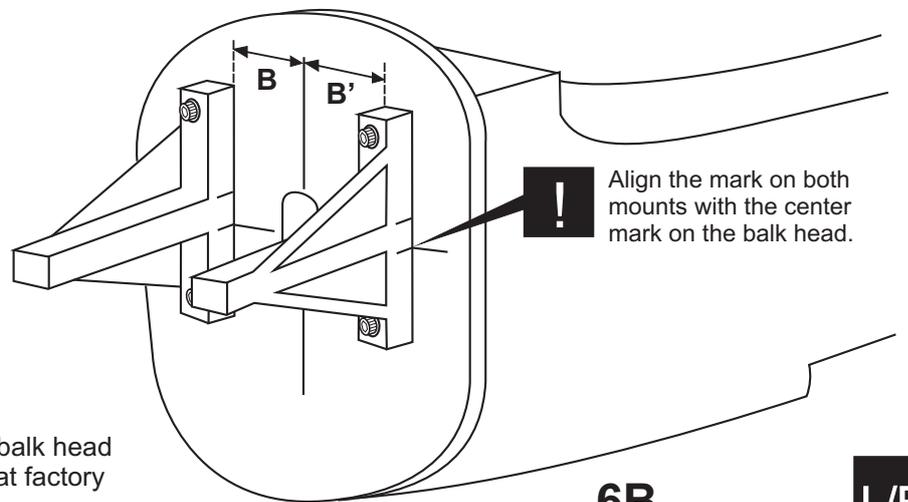
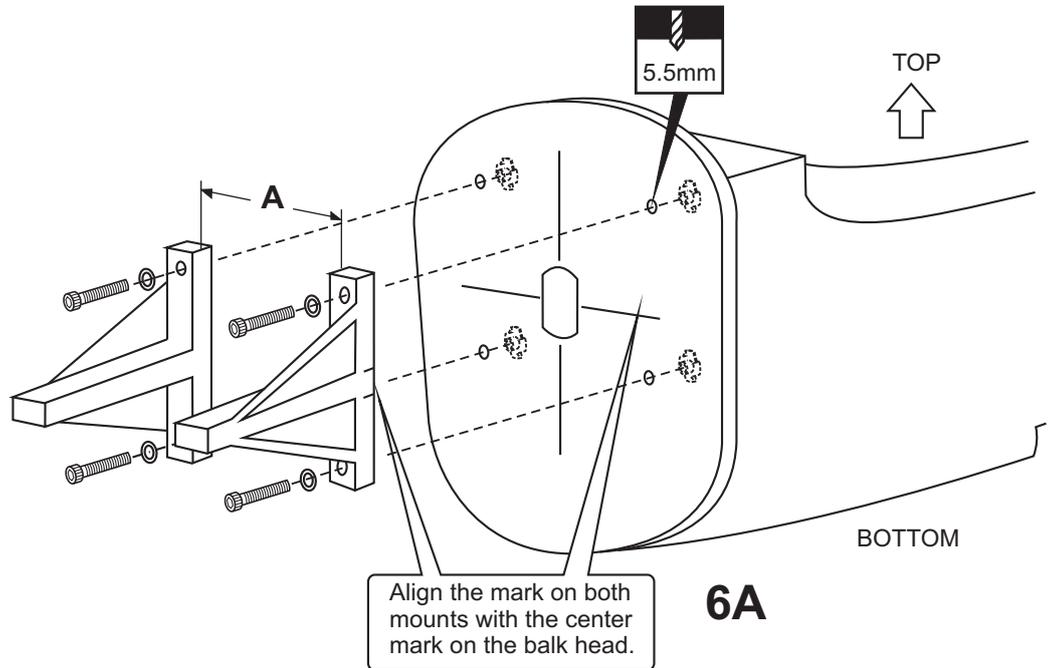
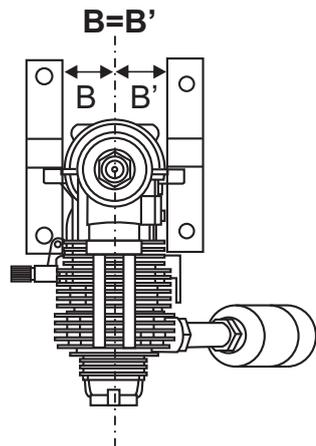
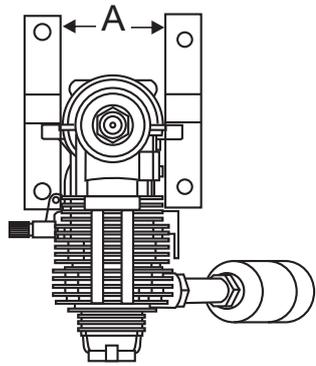


5B



5A

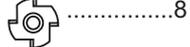
6-Engine mounts



4x30mm screw



Blind-nut

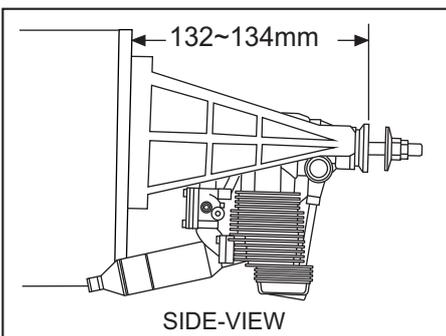


! Engine thrust on balk head is already adjust at factory

6A

L/R

7-Engine



Secure the engine to the engine mount using four 3x25mm screws

Insert the Z-bend into the hole on the throttle lever of engine.

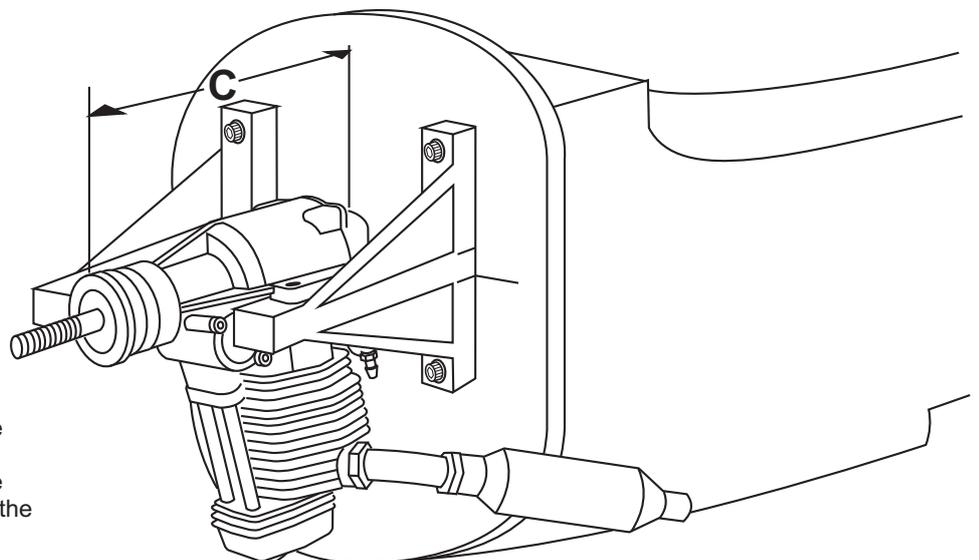
Note: It may be easier to temporarily remove the control arm from the carburetor to insert the Z-bend

3x25...(8)

Washer...(8)

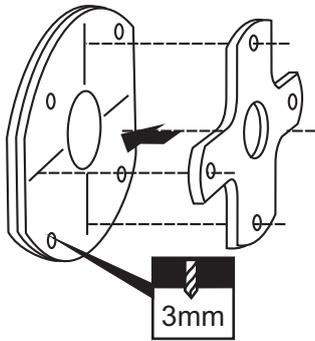
Nut 3mm...(8)

C= 132 ~ 134mm



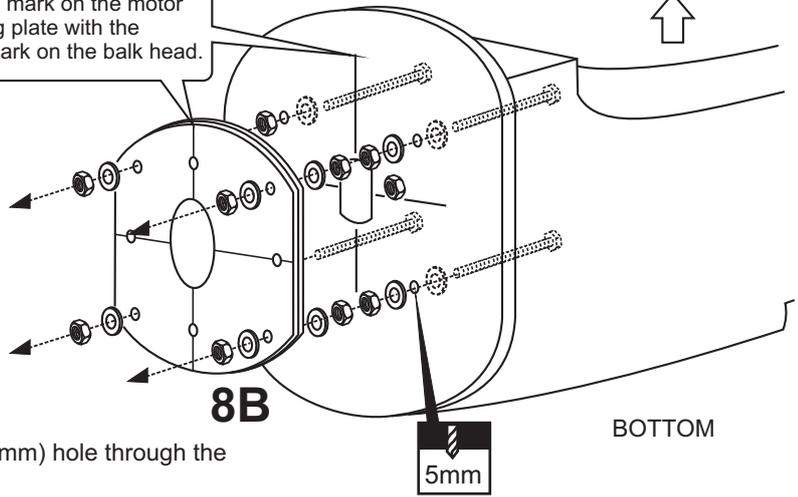
L/R

8-Electric Motor



8A

Align the mark on the motor mounting plate with the center mark on the balk head.



8B

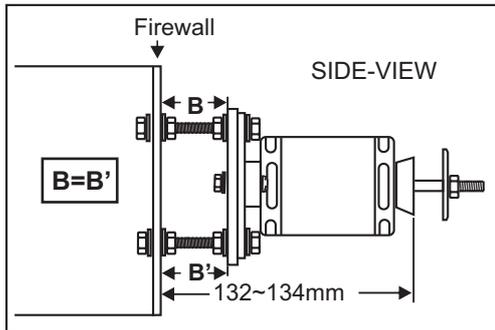
TOP
↑

BOTTOM

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

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

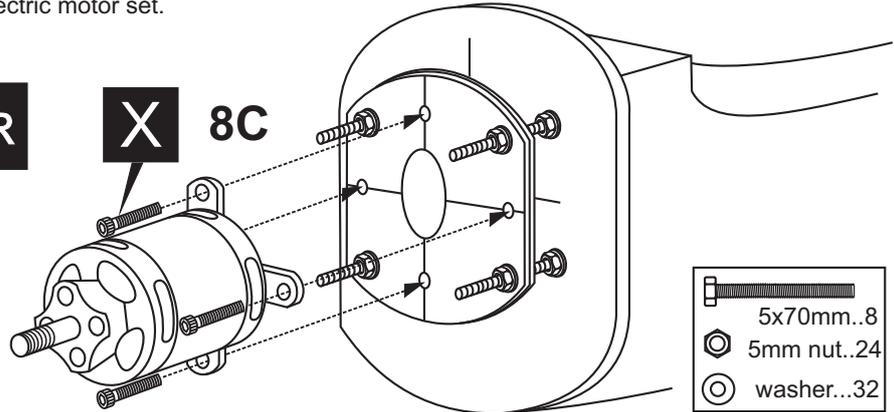
Note: The aluminum motor mounting included with electric motor set.



L/R

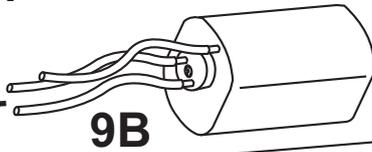
X

8C

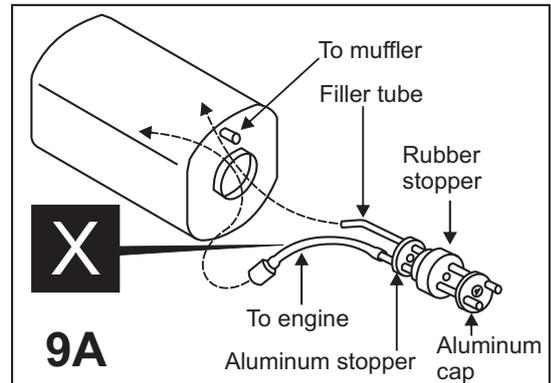


- 5x70mm..8
- 5mm nut..24
- washer...32

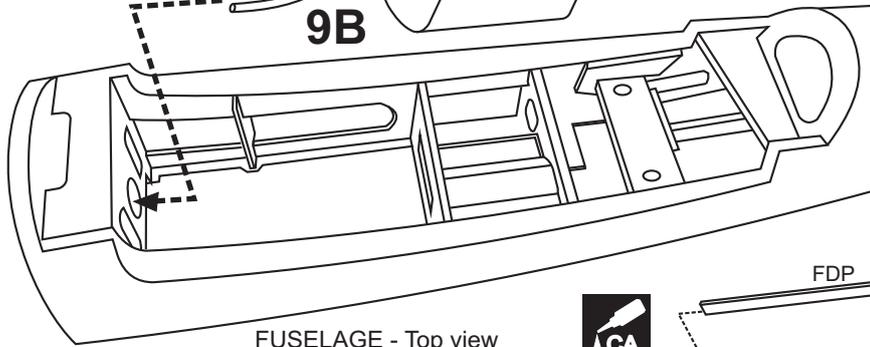
9-Fuel tank



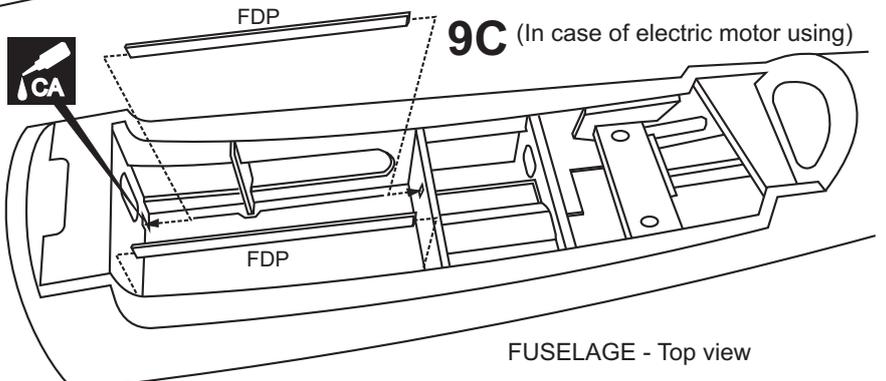
9B



9A



FUSELAGE - Top view



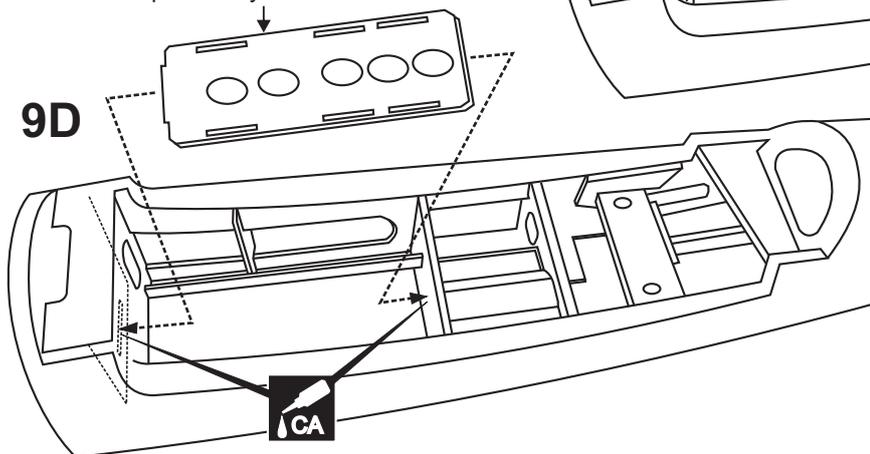
9C (In case of electric motor using)

FUSELAGE - Top view

Installing the Lipo Battery Stand

Lipo Battery stand

9D

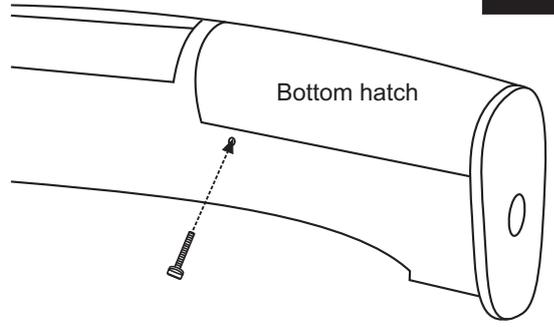
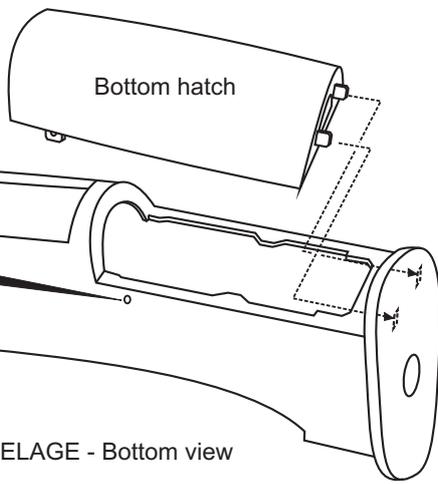


L/R

10-Hatch

L/R

Cut away only the covering



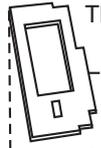
30x4mm nylon bolt4

FUSELAGE - Bottom view

Secure the Bottom hatch in place using the 30x4mm nylon bolt.

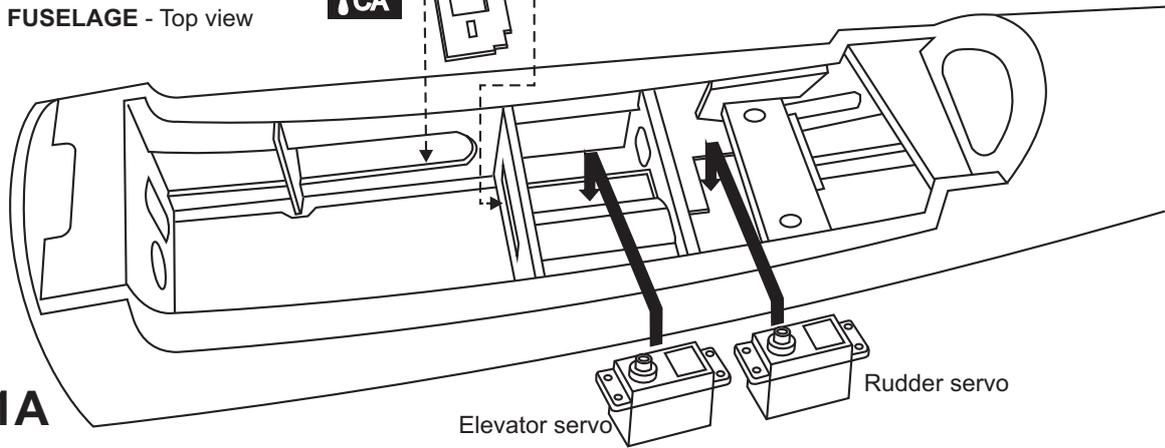
11-Servos

RIGHT FUSELAGE - Top view



Throttle servo tray Note: Turn the throttle servo tray for other engine if needed.

11A

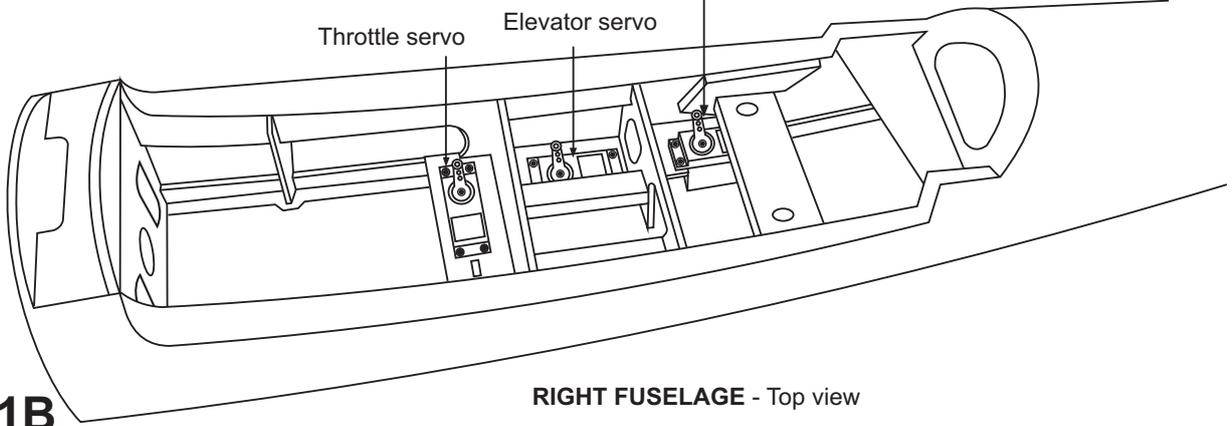


Elevator servo

Rudder servo

11B

RIGHT FUSELAGE - Top view



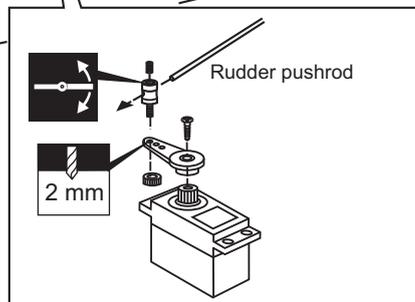
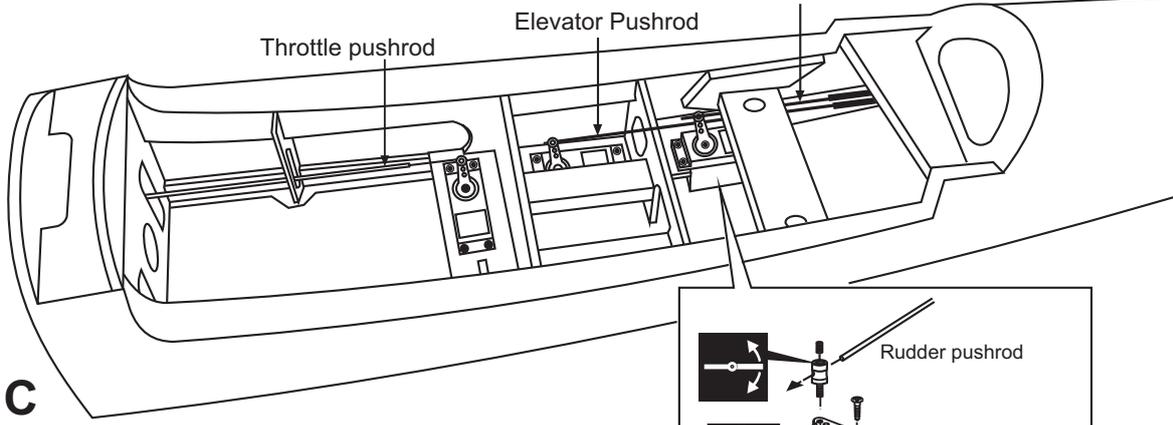
Throttle servo

Elevator servo

Rudder servo

11C

Throttle pushrod
Elevator Pushrod
Rudder Pushrod



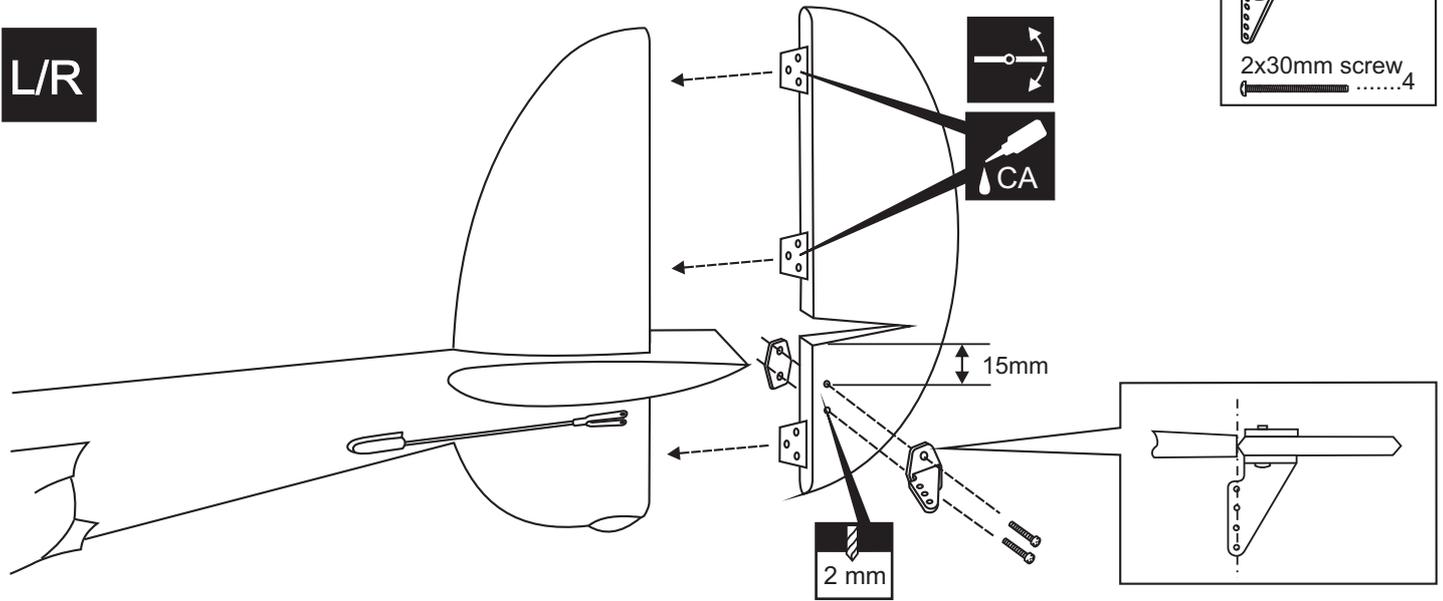
Connecting rod6



L/R

12-Rudder

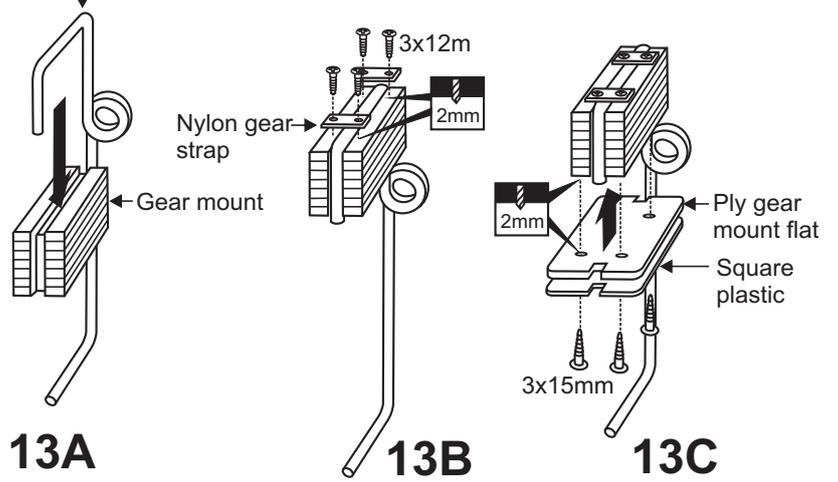
L/R



13-Fixed gear

- 3x12mm screw8
- 3x15mm screw8
- 3x20mm screw16
- Nylon gear strap4
- Gear mount x 2
- Square plastic x 2
- Ply gear mount plate x 2
- 4.7mm collar4

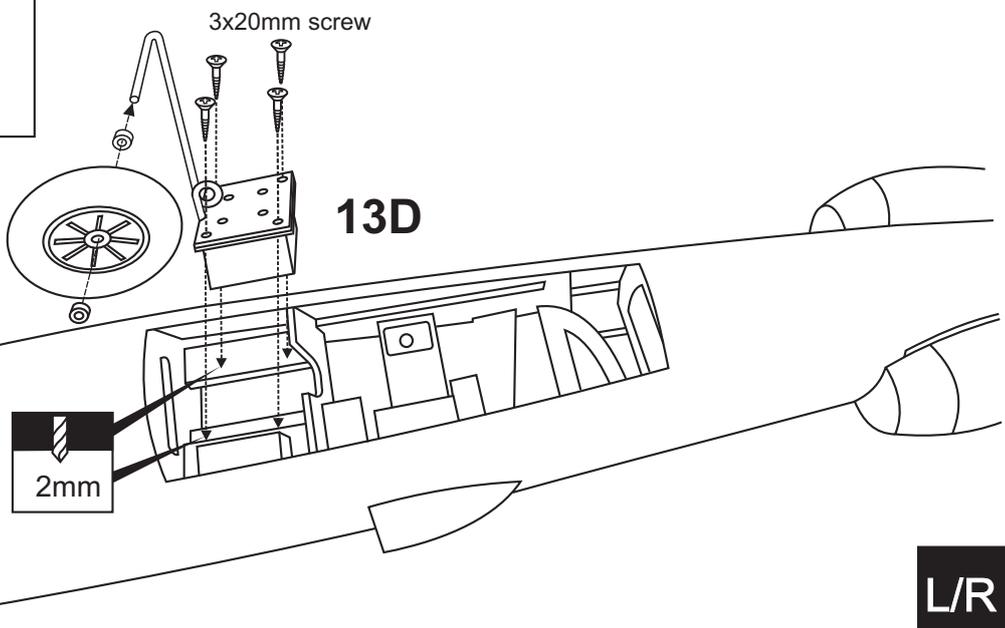
Main landing gear



13A

13B

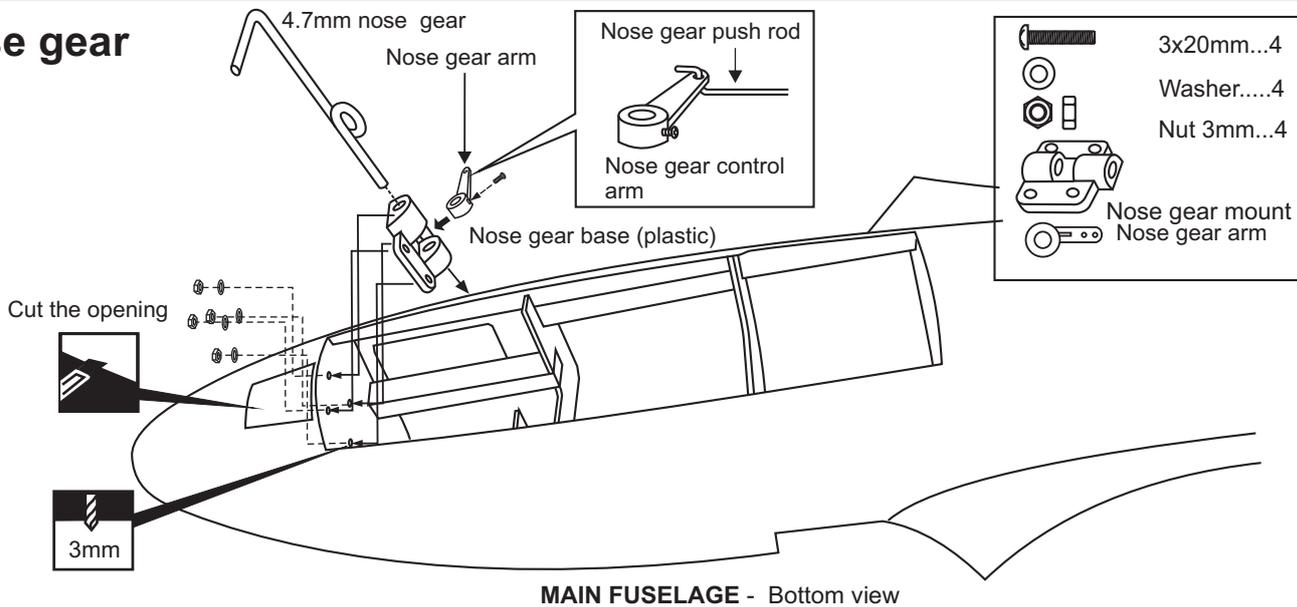
13C



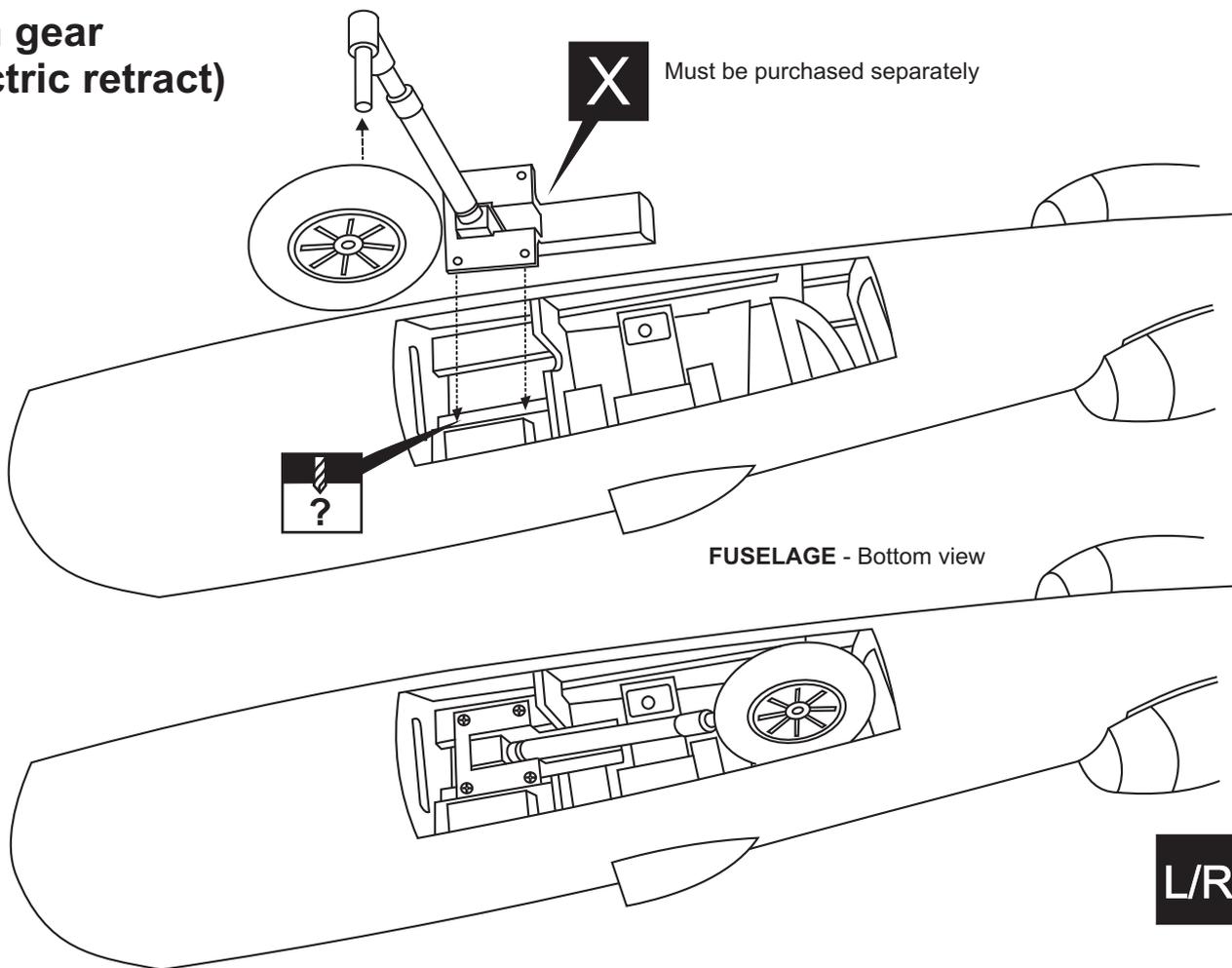
13D

L/R

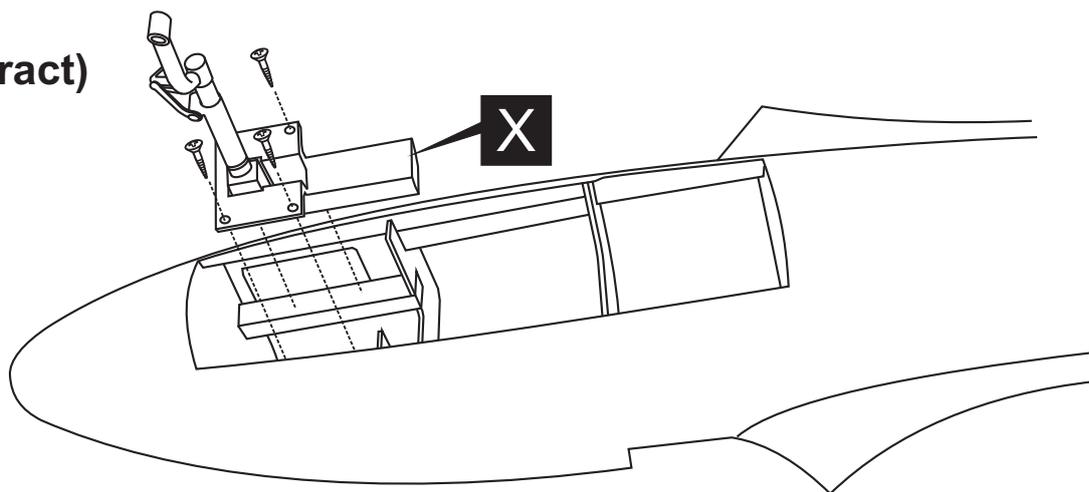
14-Nose gear



15-Main gear (Electric retract)

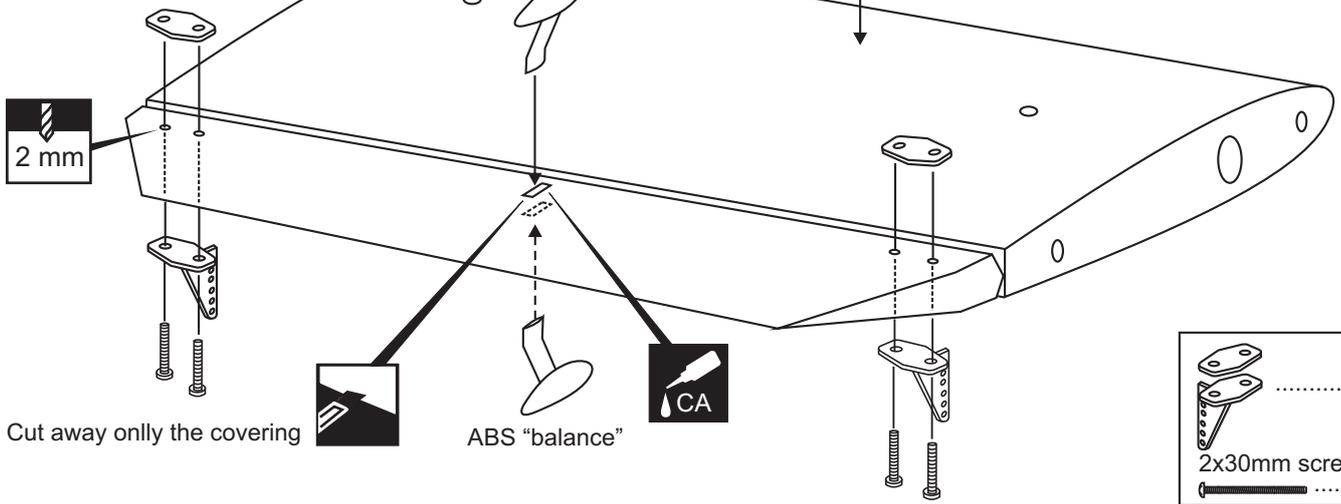


16-Nose gear (Electric retract)



17-Horizontal Stabilizer

ABS "balance" HORIZONTAL STABILIZER
Top-view

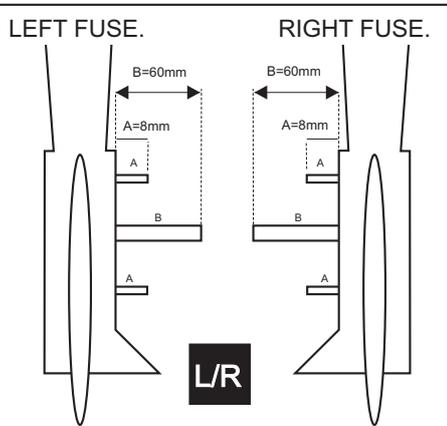


Cut away only the covering

ABS "balance"

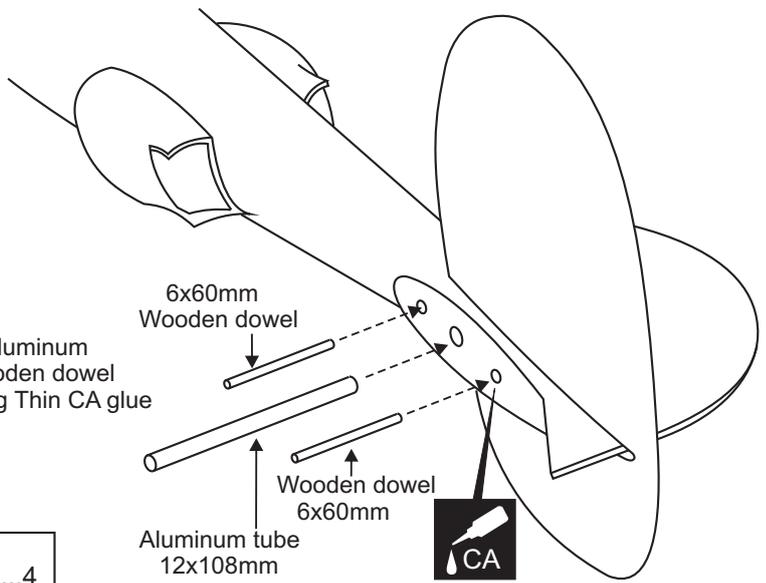
-2
- 2x30mm screw4

18-Horizontal Stabilizer



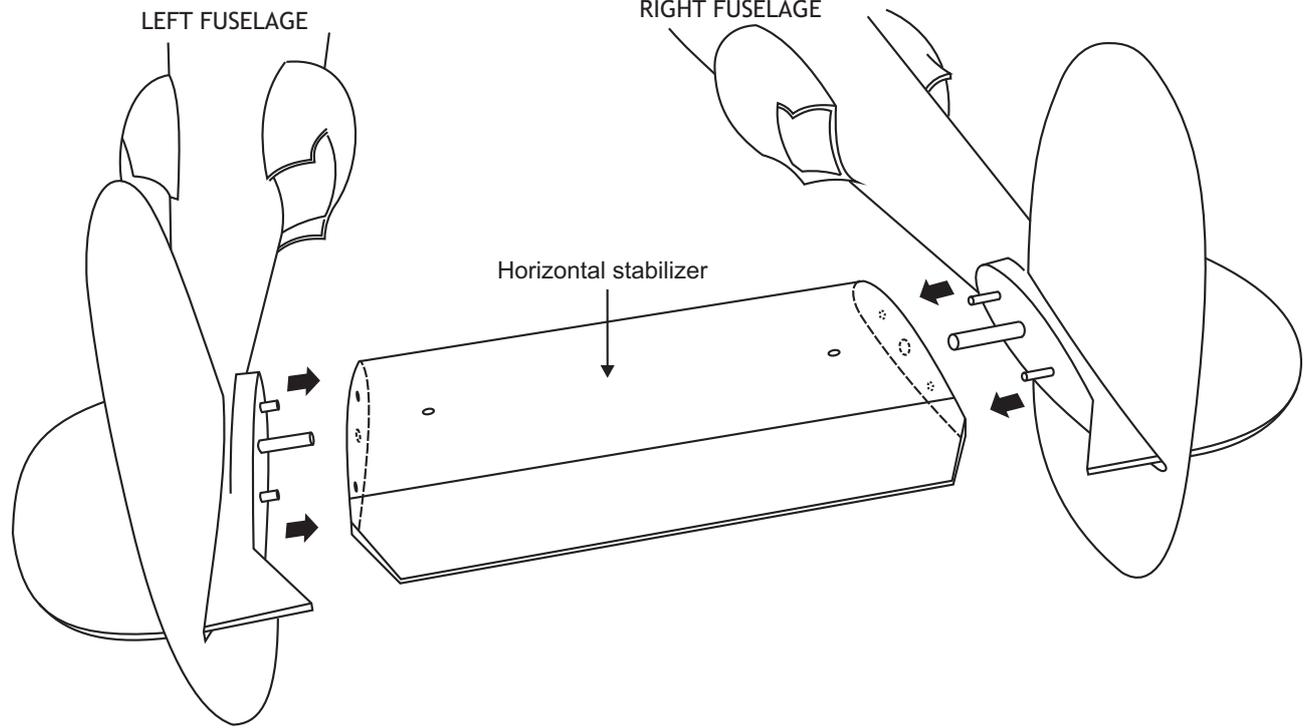
- 12x108mm aluminum tube2
- 6x60mm wooden dowel4

Secure the aluminum tube and wooden dowel in place using Thin CA glue

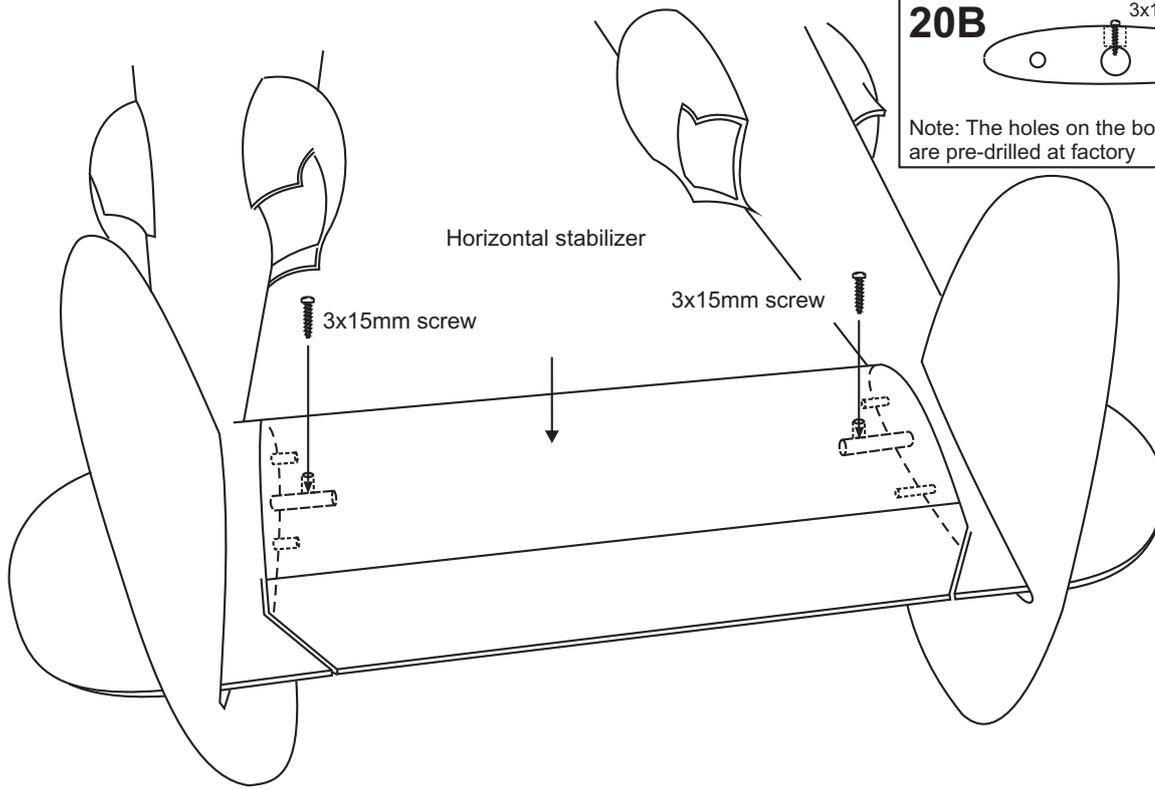
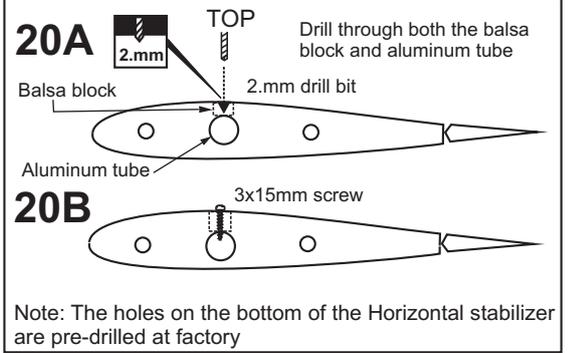


19-Horizontal Stabilizer

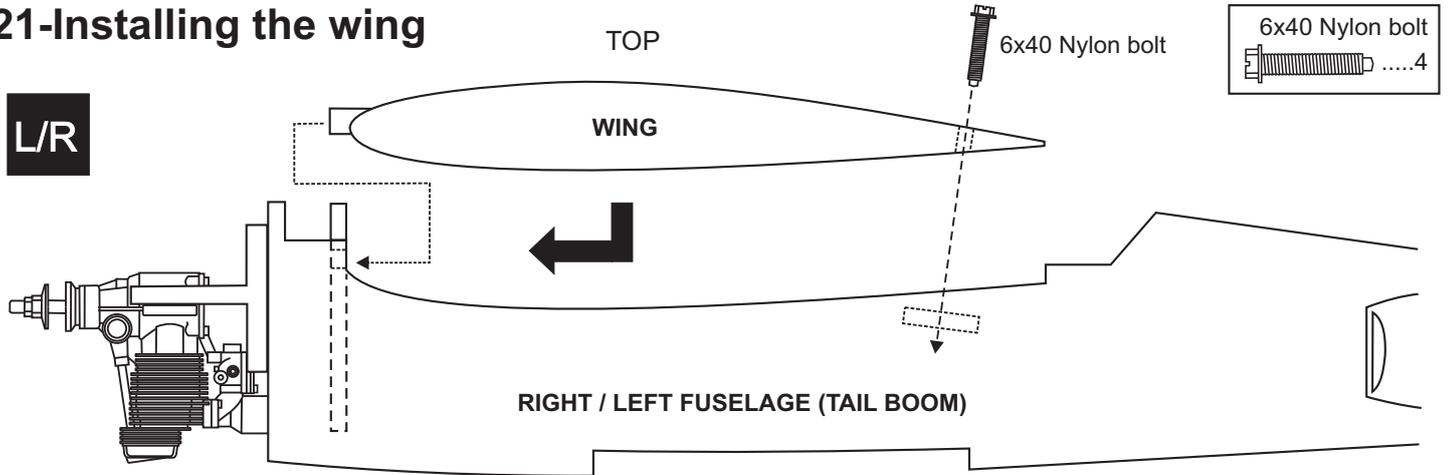
LEFT FUSELAGE RIGHT FUSELAGE



20-Horizontal Stabilizer

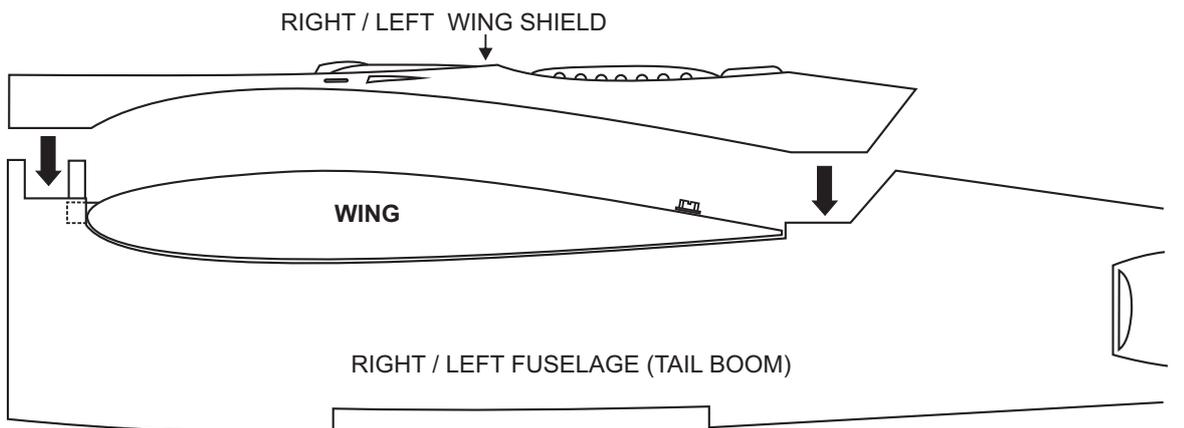


21-Installing the wing



22-Installing the wing shield

Trial fit the fuselage-top shield onto the wing. If necessary, sand the edge of the fuselage-top shield until this is achieved.

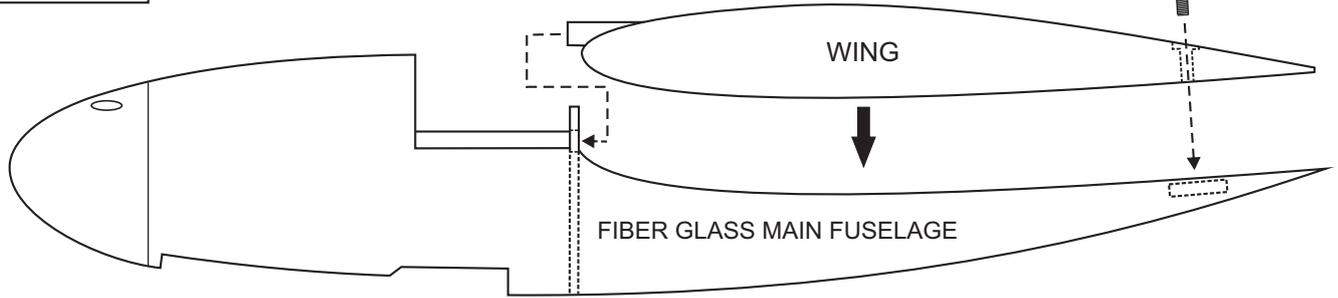
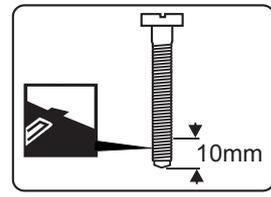


Secure the wing shield in place using 2.2x12mm screws

23-Installing the main fuselage

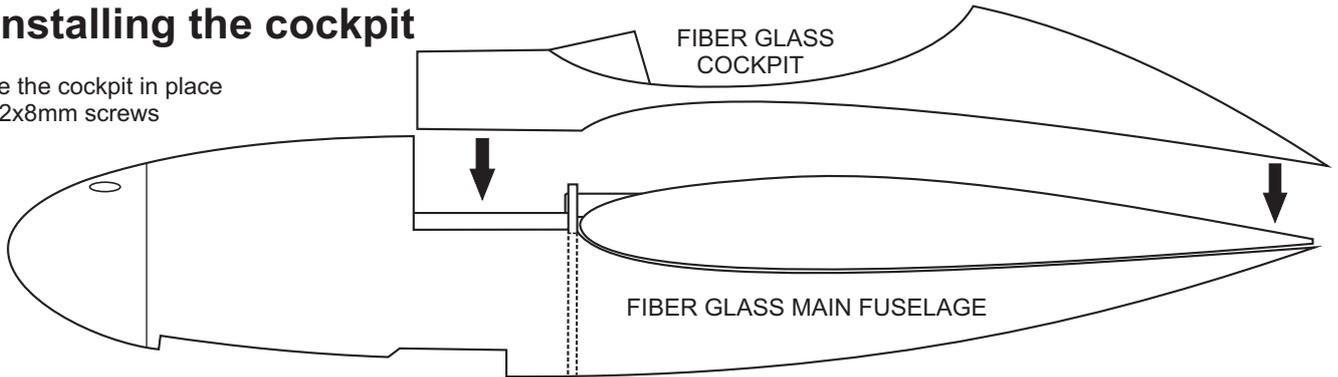
6x50mm plastic bolt

1



24-Installing the cockpit

Secure the cockpit in place using 2x8mm screws

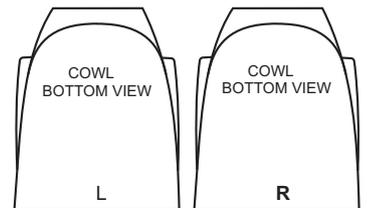
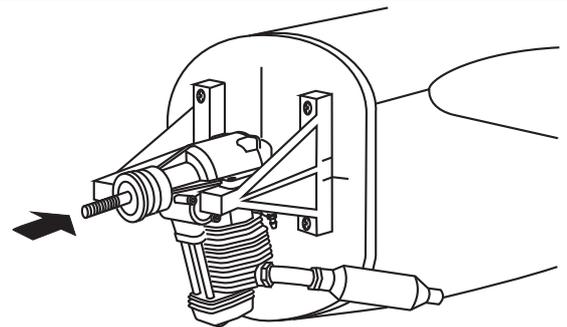
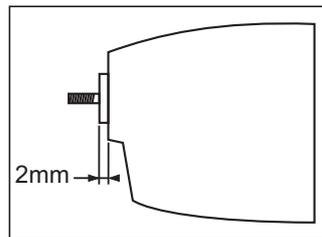
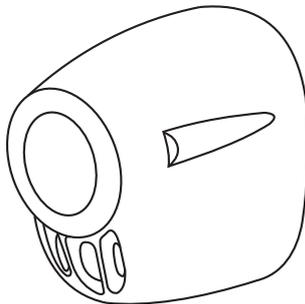
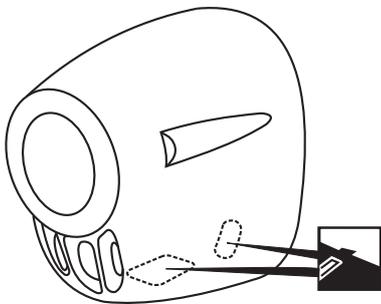


25-Cowling

2.5x12mm screw

8

Secure the cowl in place using 2.5x12mm screws

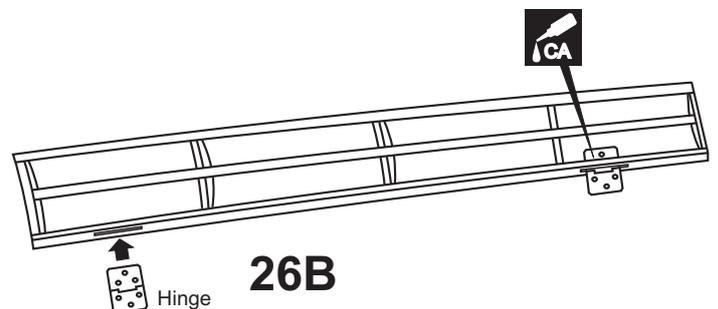
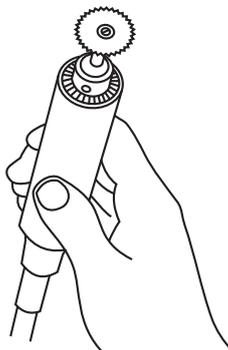


Note: The "L" Cowl for LEFT fuselage and "R" Cowl for RIGHT fuselage (looking from REAR to FRONT and TOP view).

26-Gear door



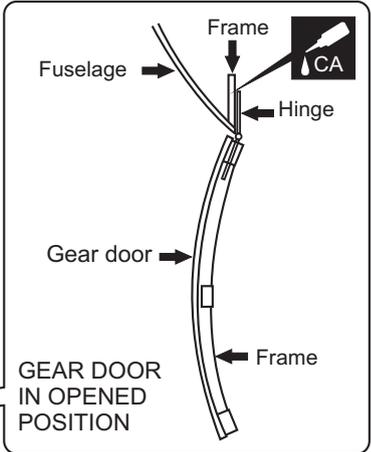
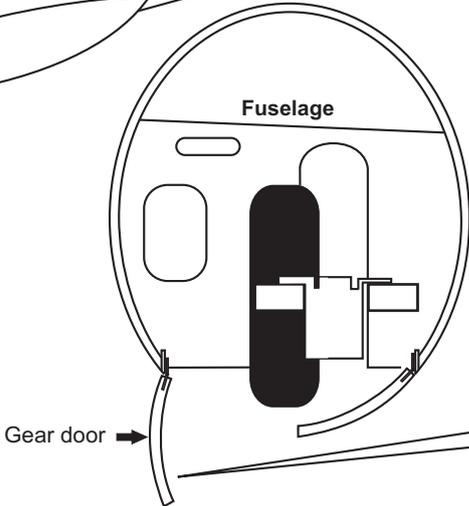
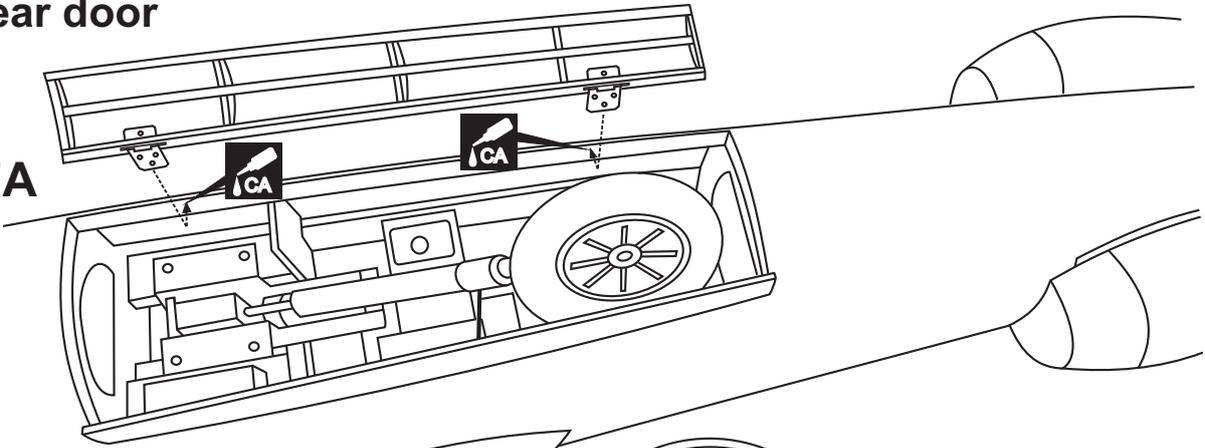
26A



26B

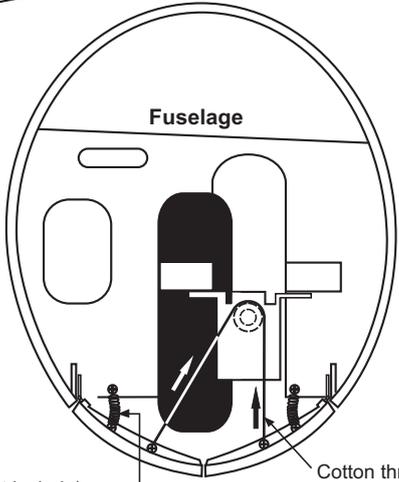
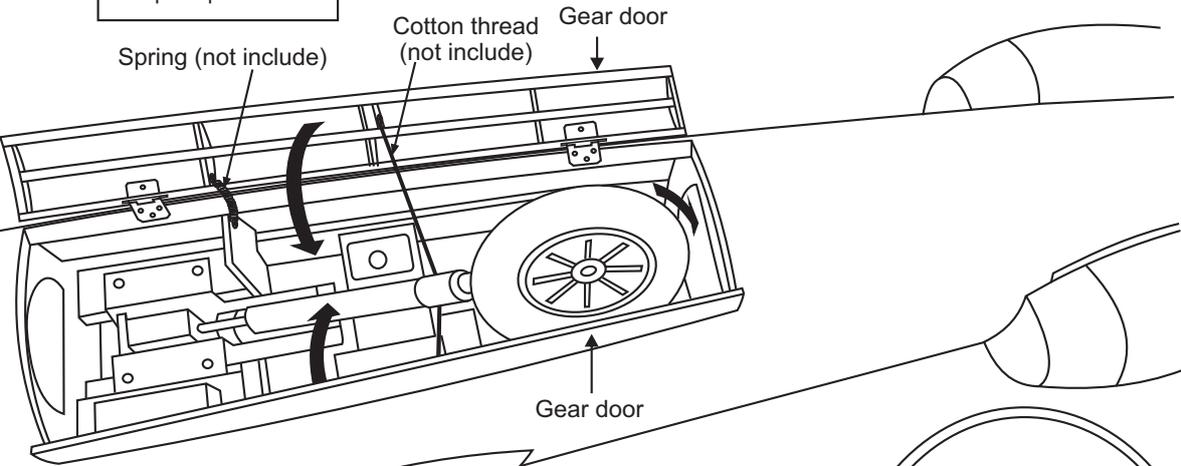
27-Gear door

27A



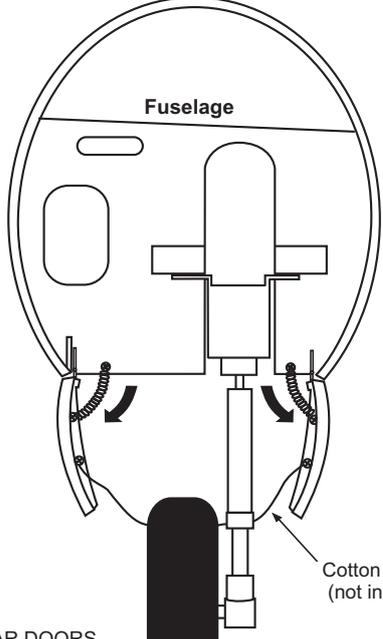
Note: you can find the same spring in old ball-point pen

27B



ALL GEAR DOORS IN CLOSED POSITION

(RETRACT LANDING GEAR IN RETRACTED POSITION)



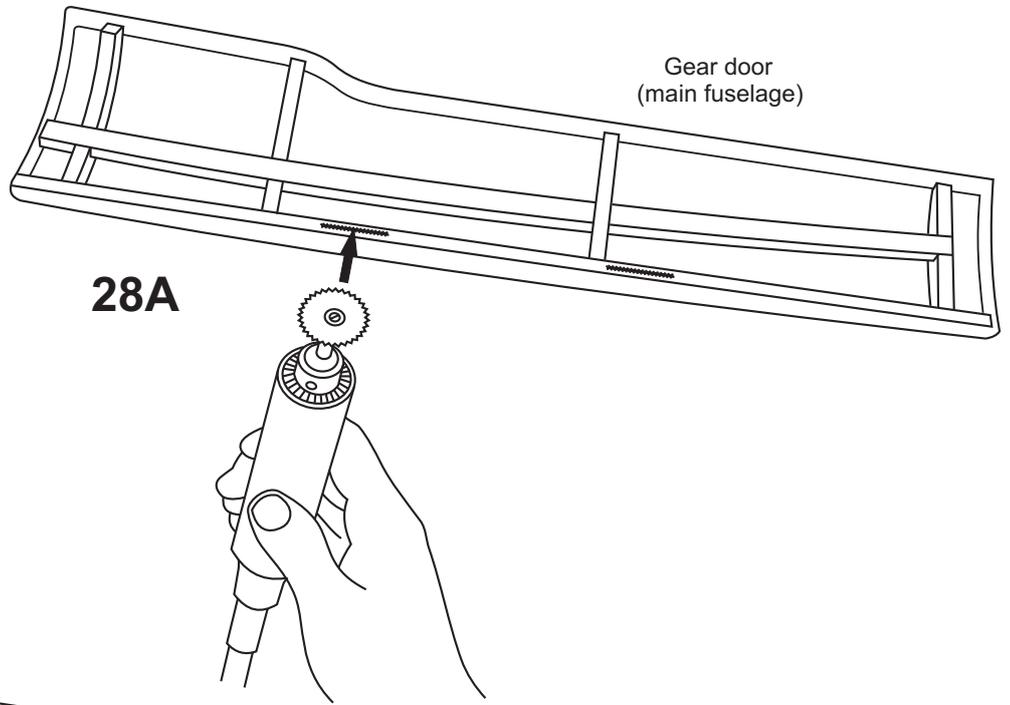
ALL GEAR DOORS IN OPENED POSITION

(RETRACT LANDING GEAR IN EXTENDED POSITION)

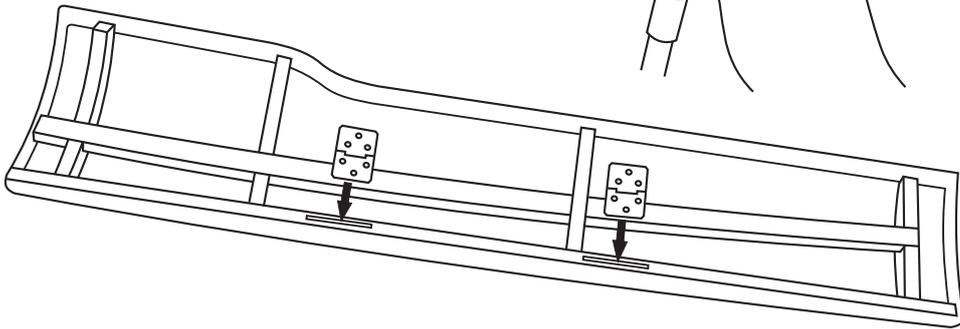
28-Gear door

Gear door
(main fuselage)

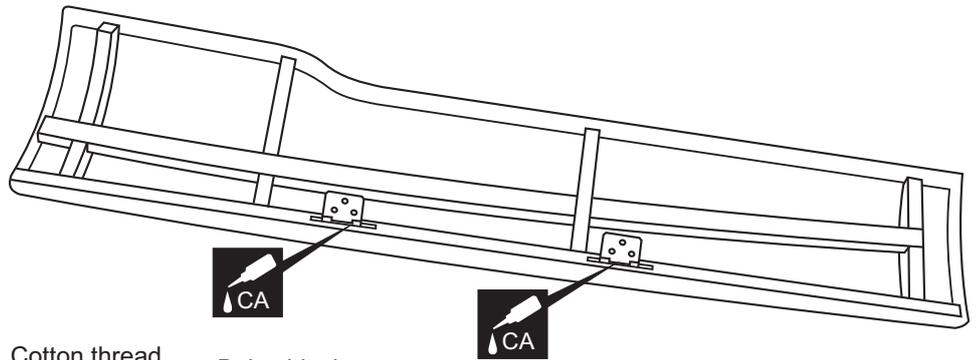
28A



28B



28C



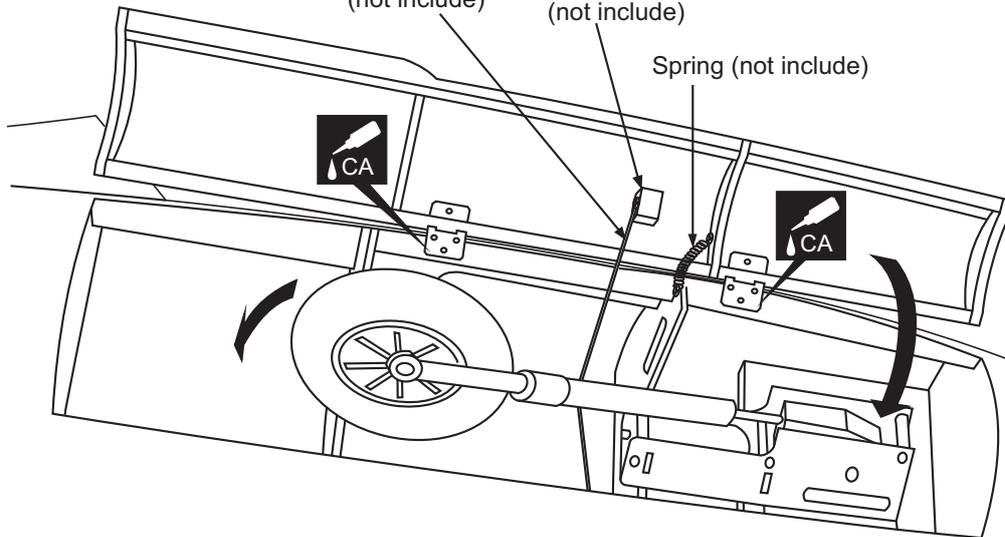
Cotton thread
(not include)

Balsa block
(not include)

Spring (not include)

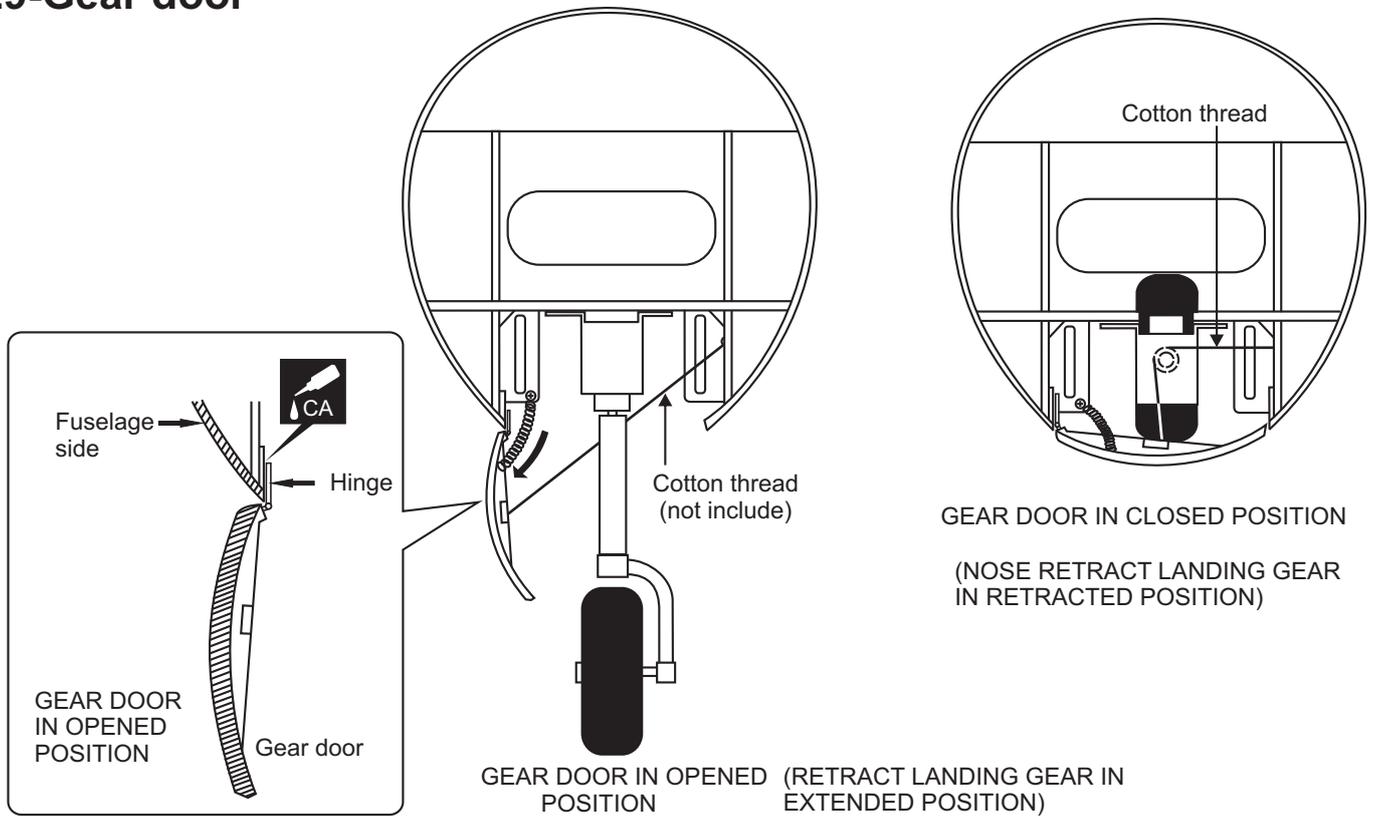
Gear door

28D

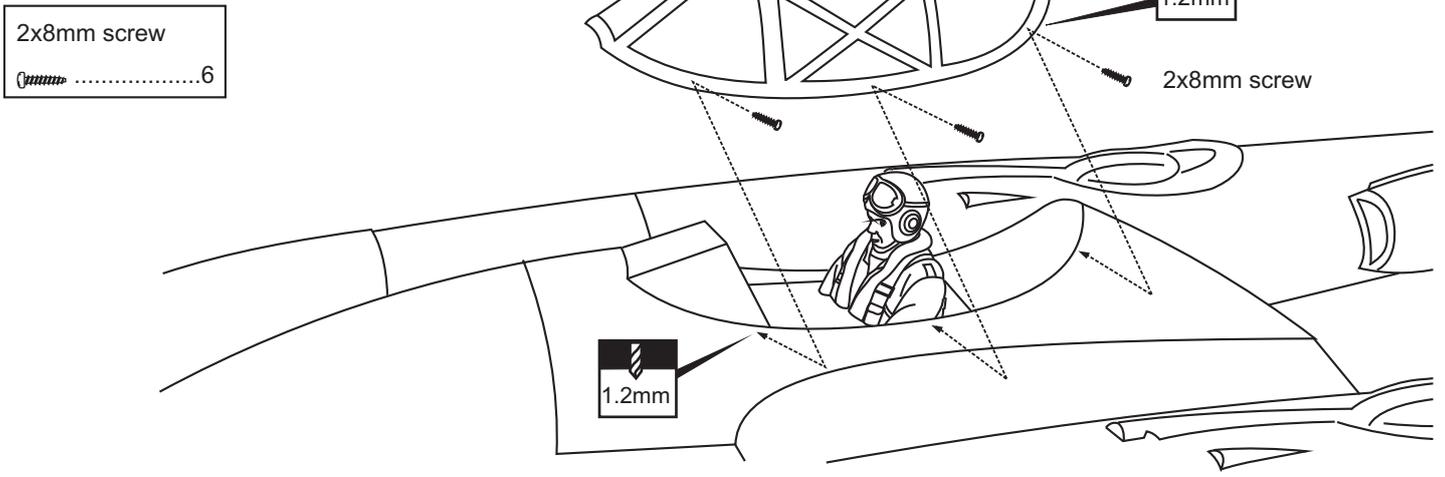


Bottom-view

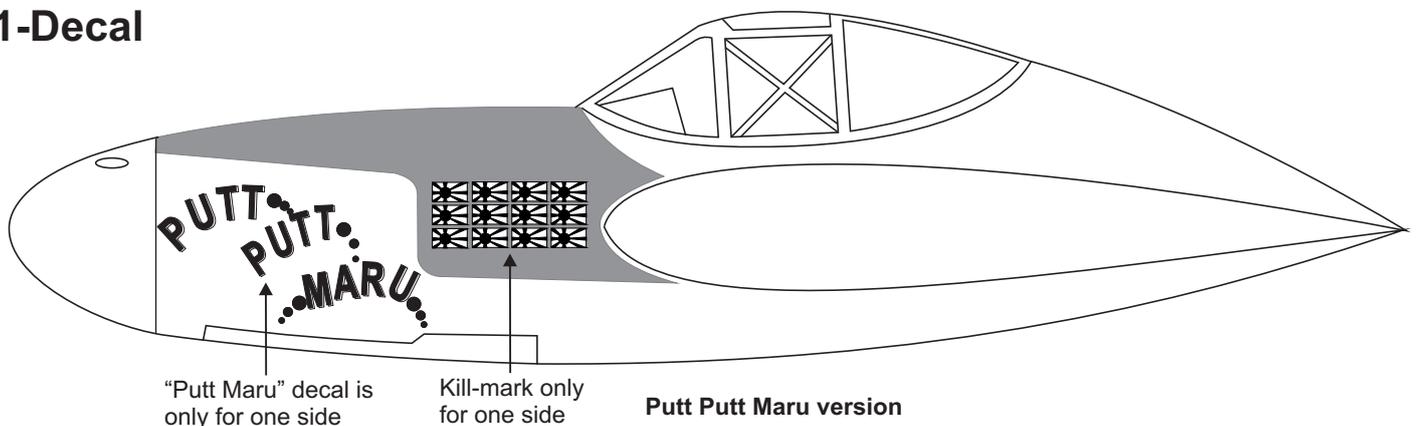
29-Gear door



30-Canopy



31-Decal

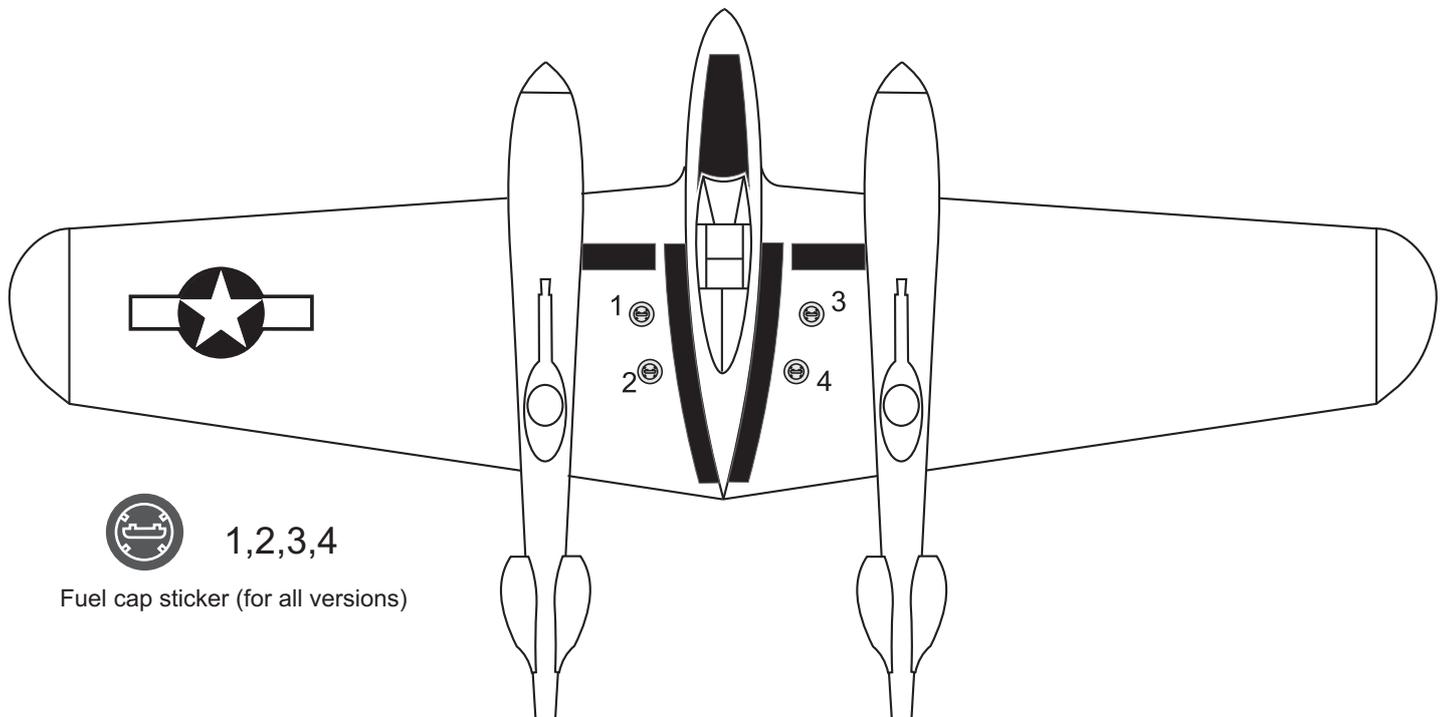
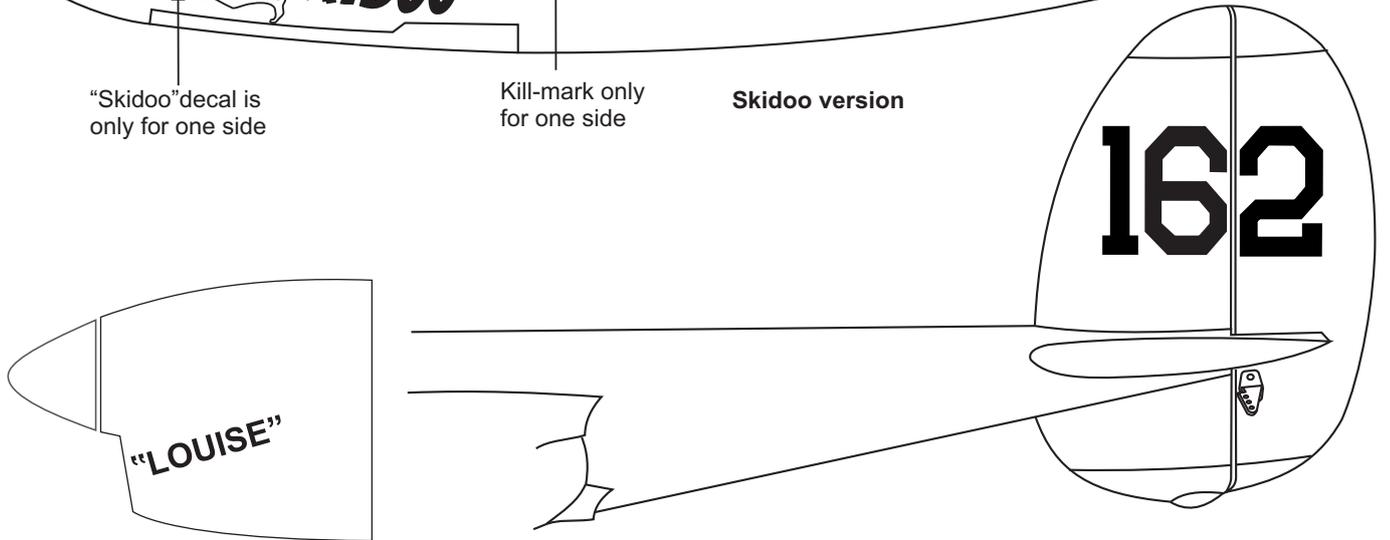
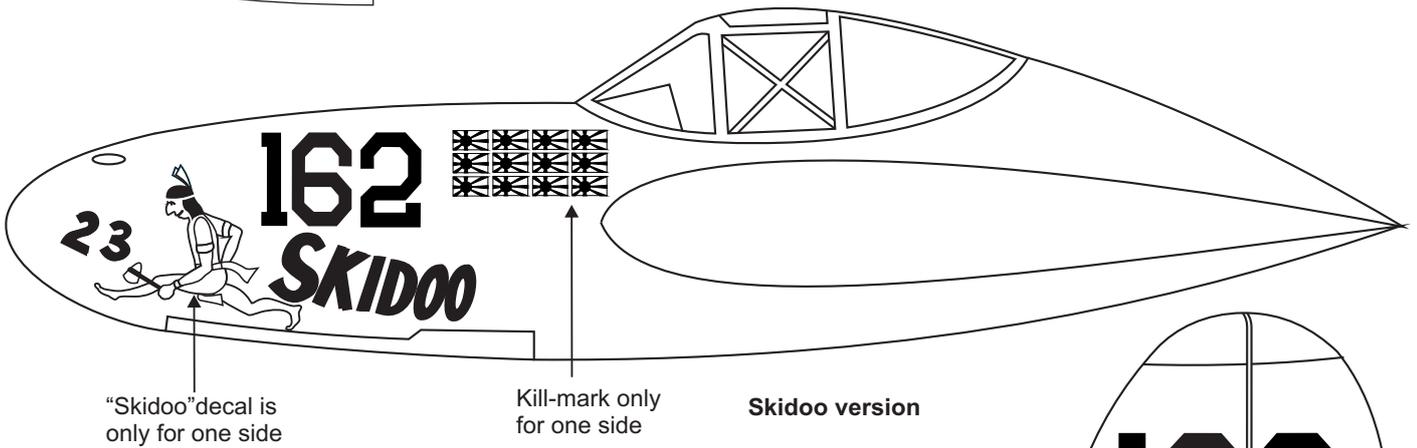
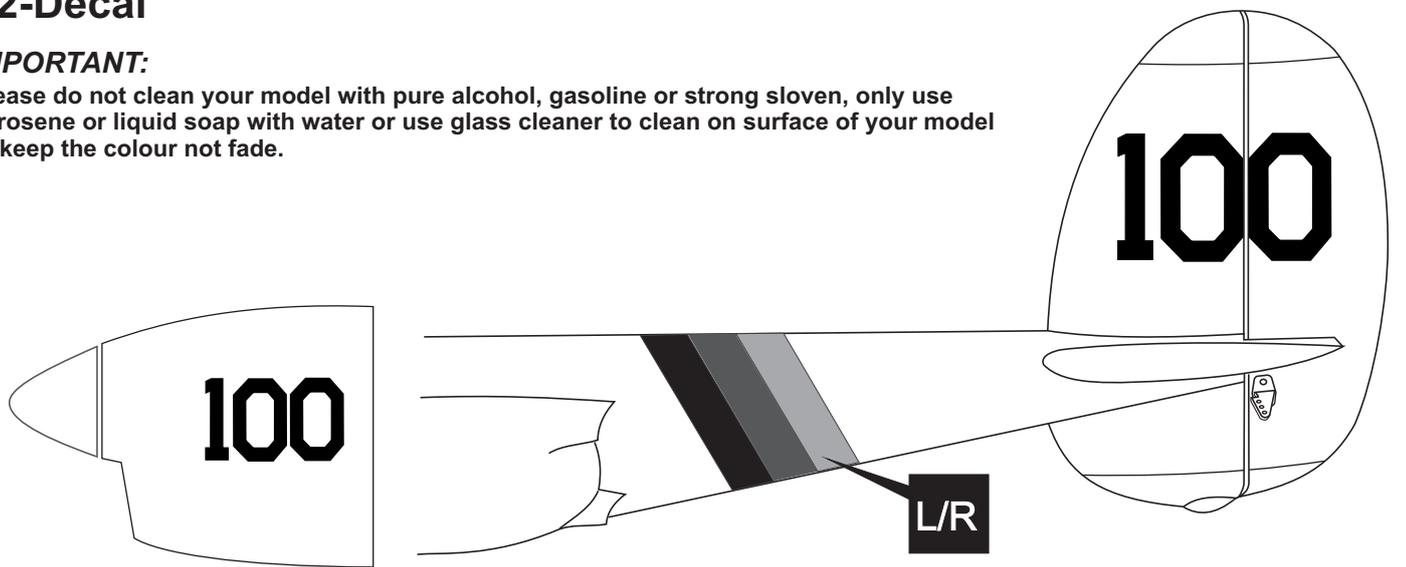


Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once. Peel off one corner of the backing and cut off with scissors. Arrange sticker on model and when satisfied adhere the corner without backing. Carefully peel back the rest of the backing while at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

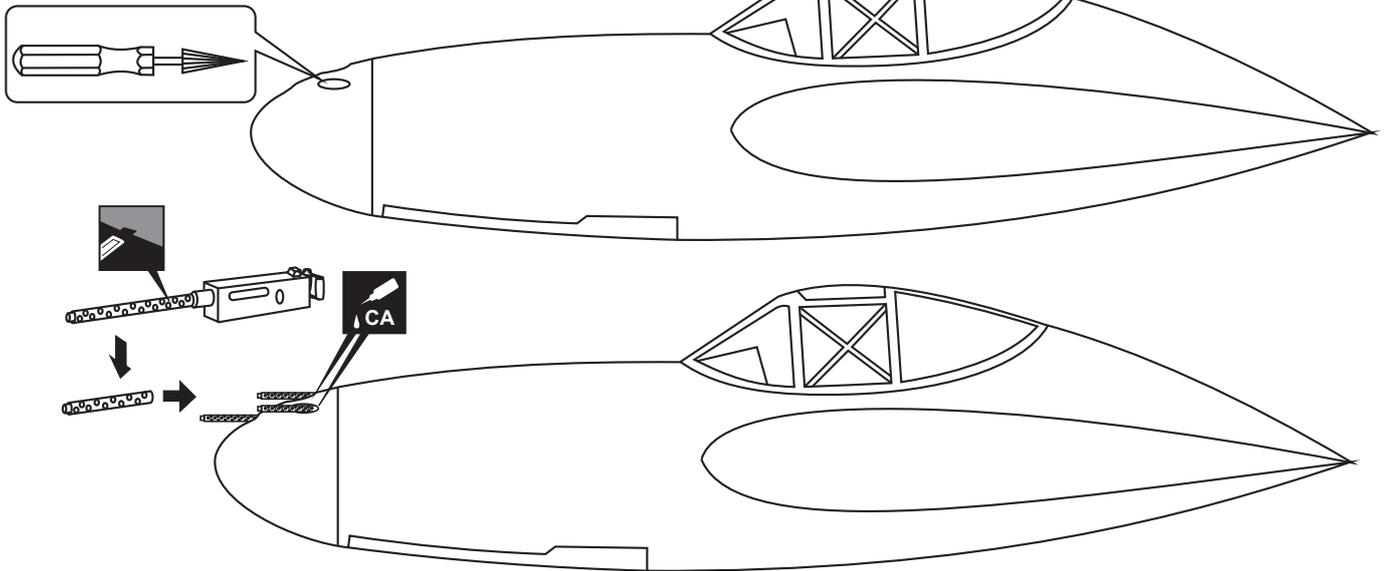
32-Decal

IMPORTANT:

Please do not clean your model with pure alcohol, gasoline or strong sloven, only use kerosene or liquid soap with water or use glass cleaner to clean on surface of your model to keep the colour not fade.

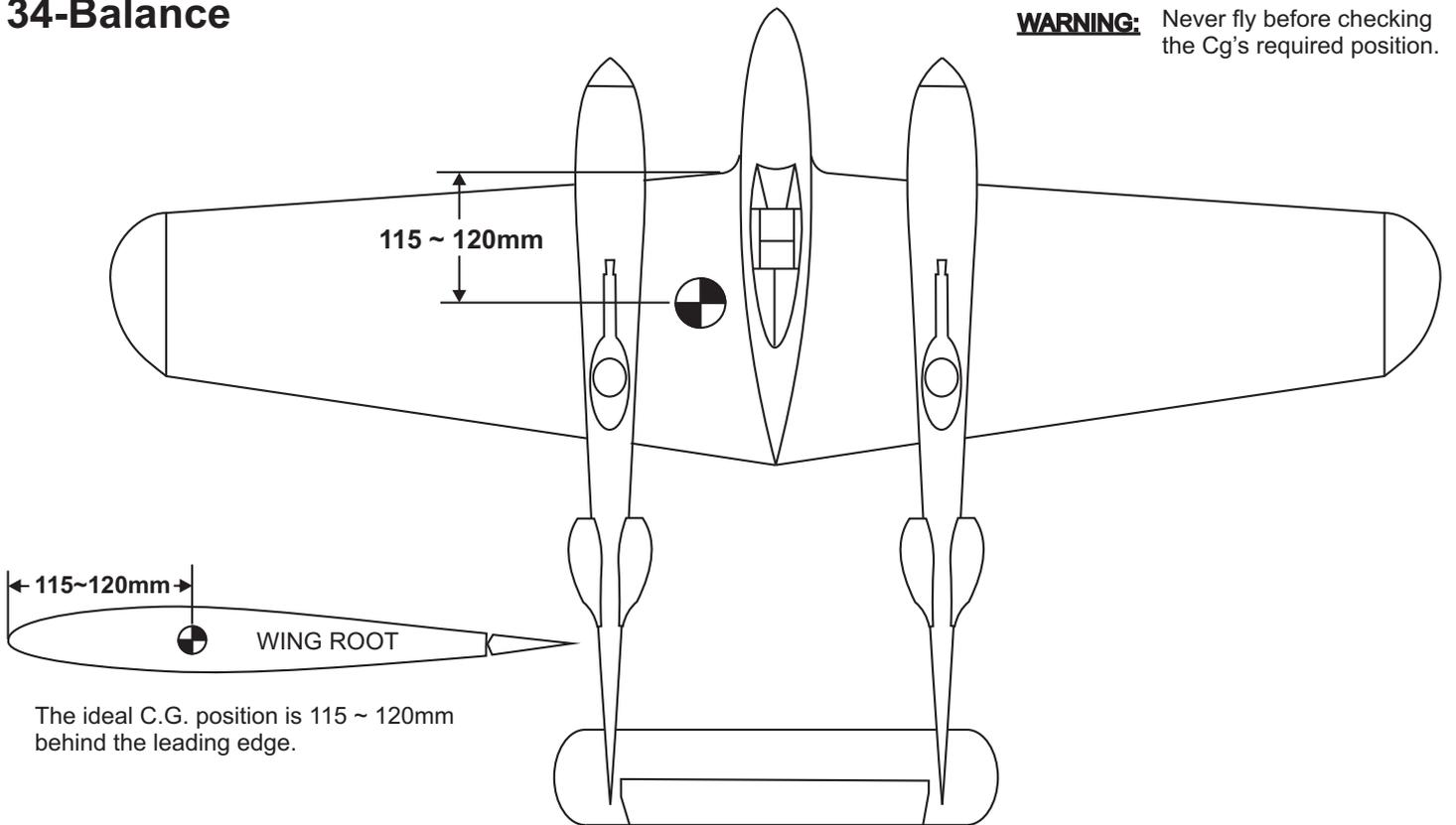


33-Installing the guns



34-Balance

WARNING: Never fly before checking the Cg's required position.



The ideal C.G. position is 115 ~ 120mm behind the leading edge.

35-Control ranges

