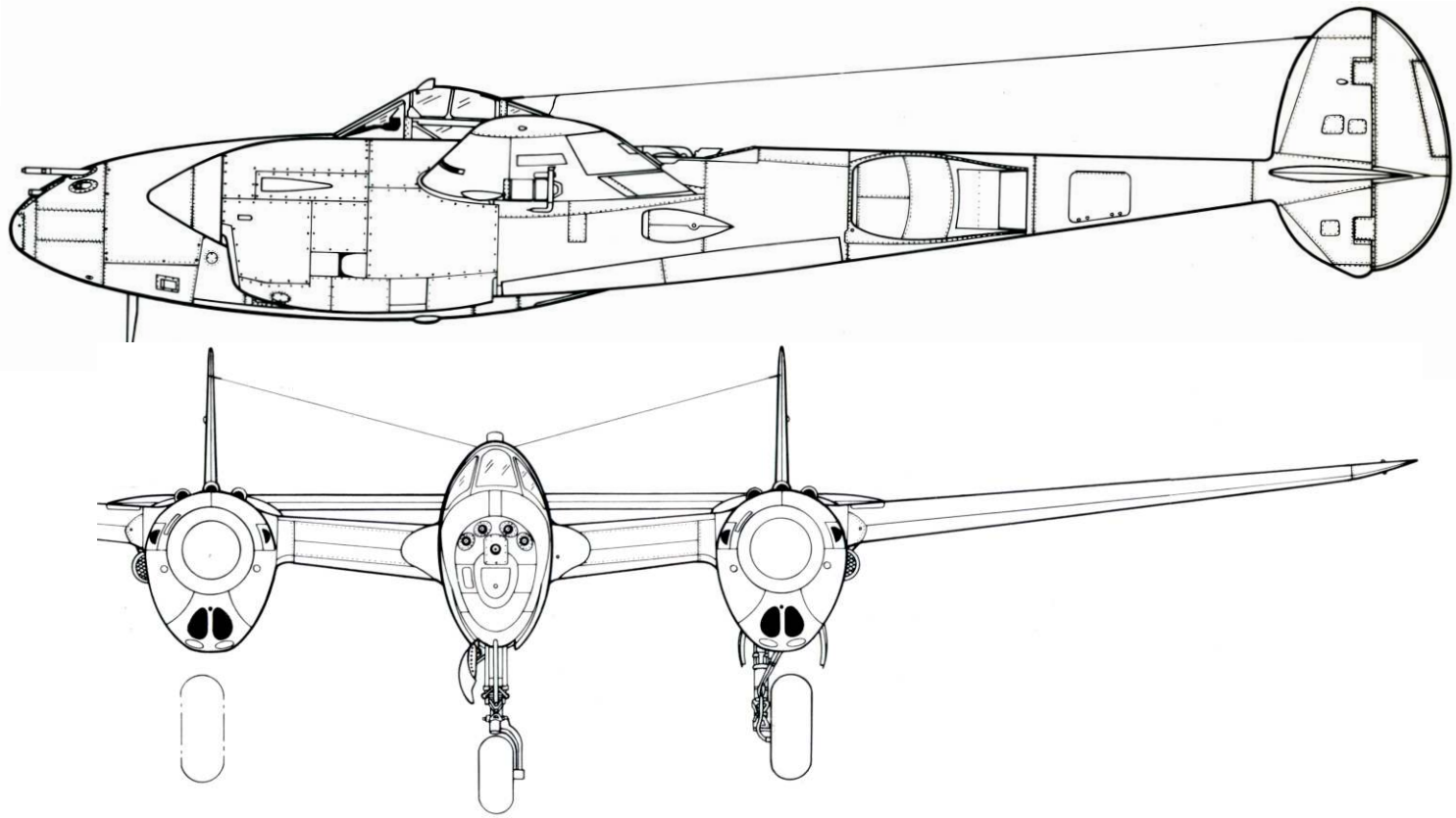
P-38 LIGHTNING

Radio control model

INSTRUCTION MANUAL

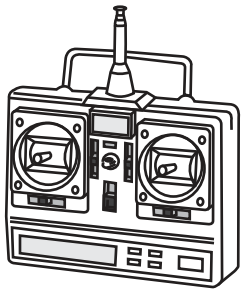


Wingspan approx.	83 in.
Fuselage length approx.	57.5 in.
Glow Engine	7.45cc 2T /11.5cc 4T (x2)
Electric Motor	870 Watt Brushless motor x2
Radio	6 Channel / 10 Servos

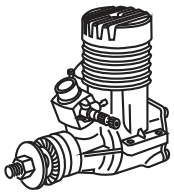
LEGEND MODEL

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**.**

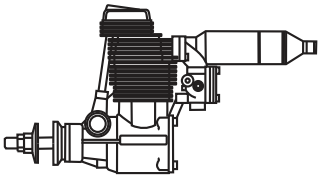
REQUIRED ITEMS



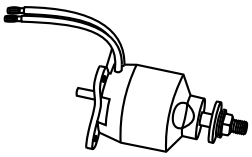
Minimum 6 channel radio
for airplane / 8-10 servos.



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

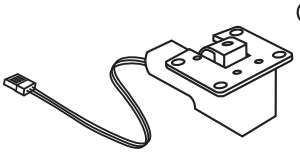


.60 - .70 cu.in (x2)
10cc - 11.5cc (x2)

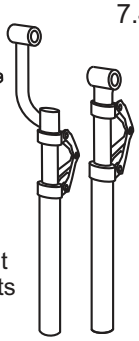


Electric Set up 1:
2X Dualsky XM5050EA-7 610Kv motors.
2X Dualsky XC8018BA 80A ESC, 100A burst
2X Dualsky XP45004EX 4S, 35C, 4500mAh Lipo
2X Prop: 14x9 x3-blade Master Airscrew
Approx Weight: 1600grams / 3.6lbs

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



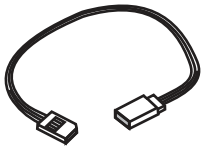
Electric Retract:
VQ-ARE18S



Nose gear Eretract&Strut
Main gear Eretract&Struts

Connector

Silicone tube



Extension cord

GLUE

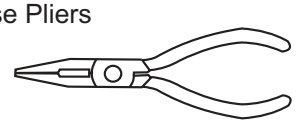
Cyanoacrylate Glue

Silicon Glue

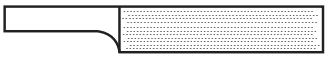
Epoxy (5min-Typ)

Hobby knife

Needle nose Pliers

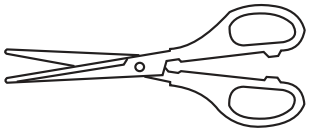


Sander



Phillip screw driver

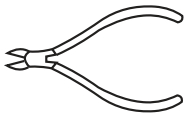
Scissors



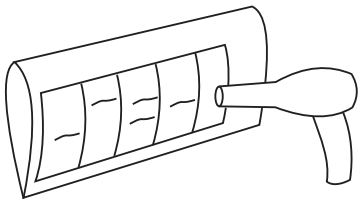
Hex Wrench

Awl

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

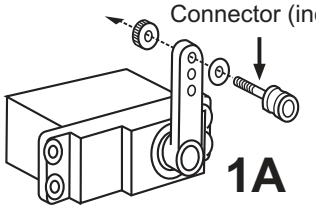
Read through the manual before you begin, so you will have an overall idea of what to do.

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”	

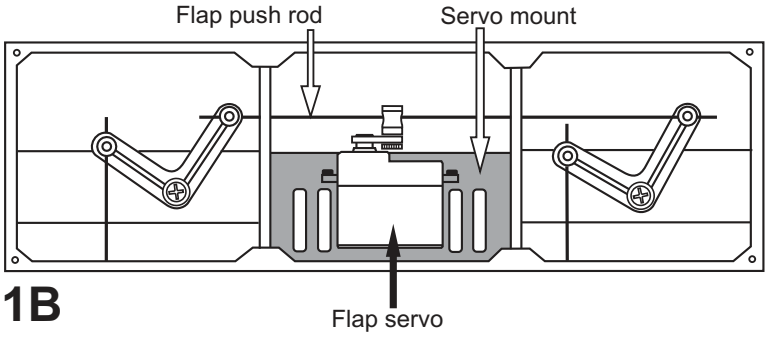
1-Wing

Connector
.....2



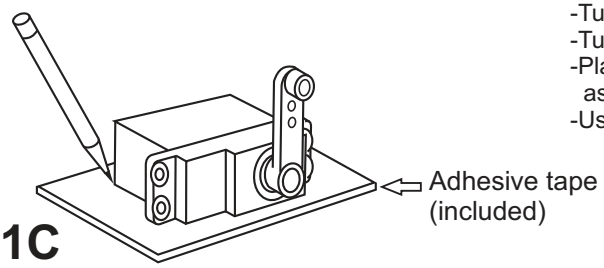
1A

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



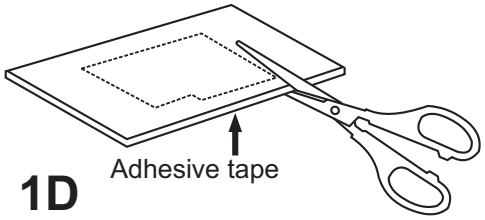
1B

-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 <u>with the flap push rod installed</u> as shown.
-Using the pencil, trace around the servo, where it meets the servo mount.



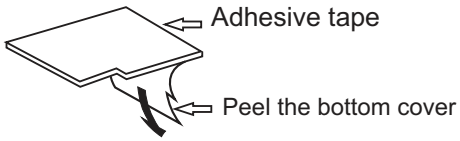
1C

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.

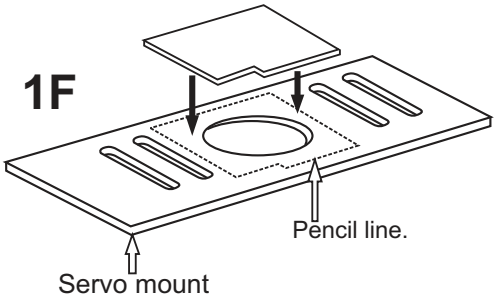


1D

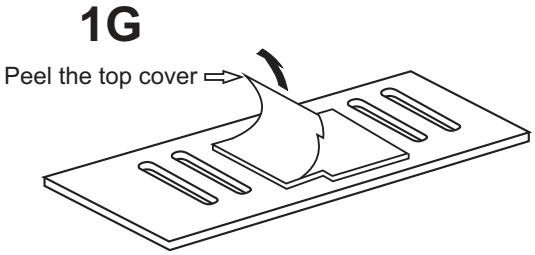
With the scissors, cut along the pencil line



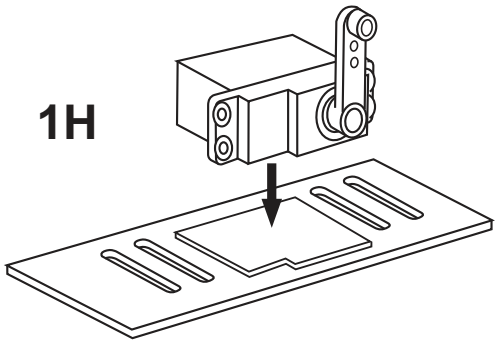
1E



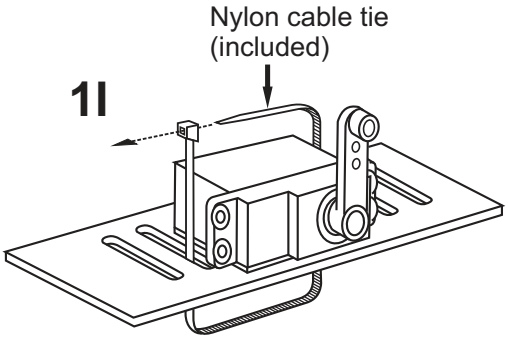
1F



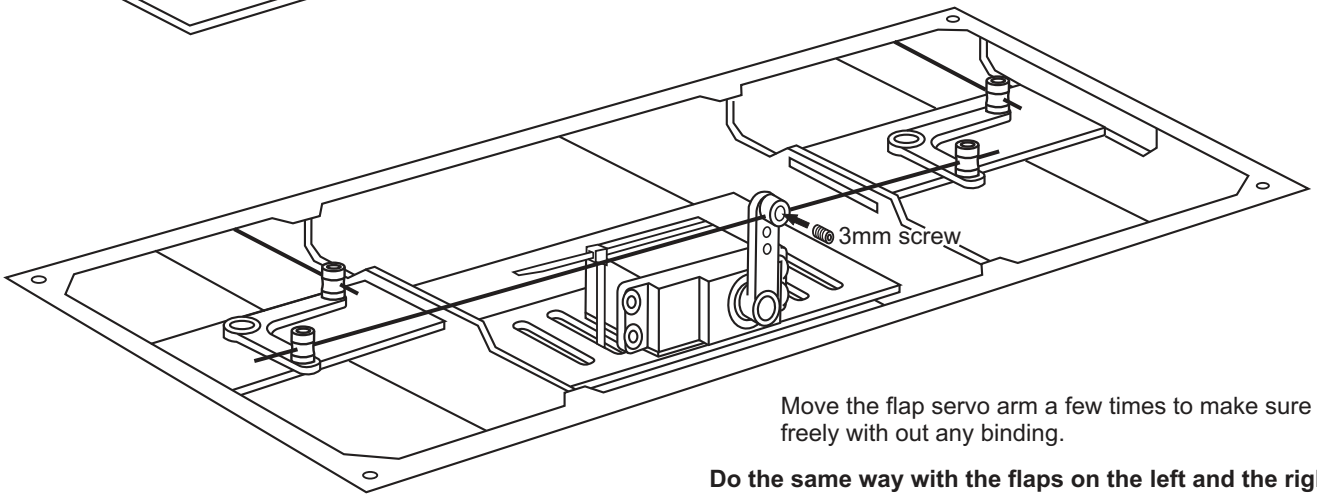
1G



1H



1I



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

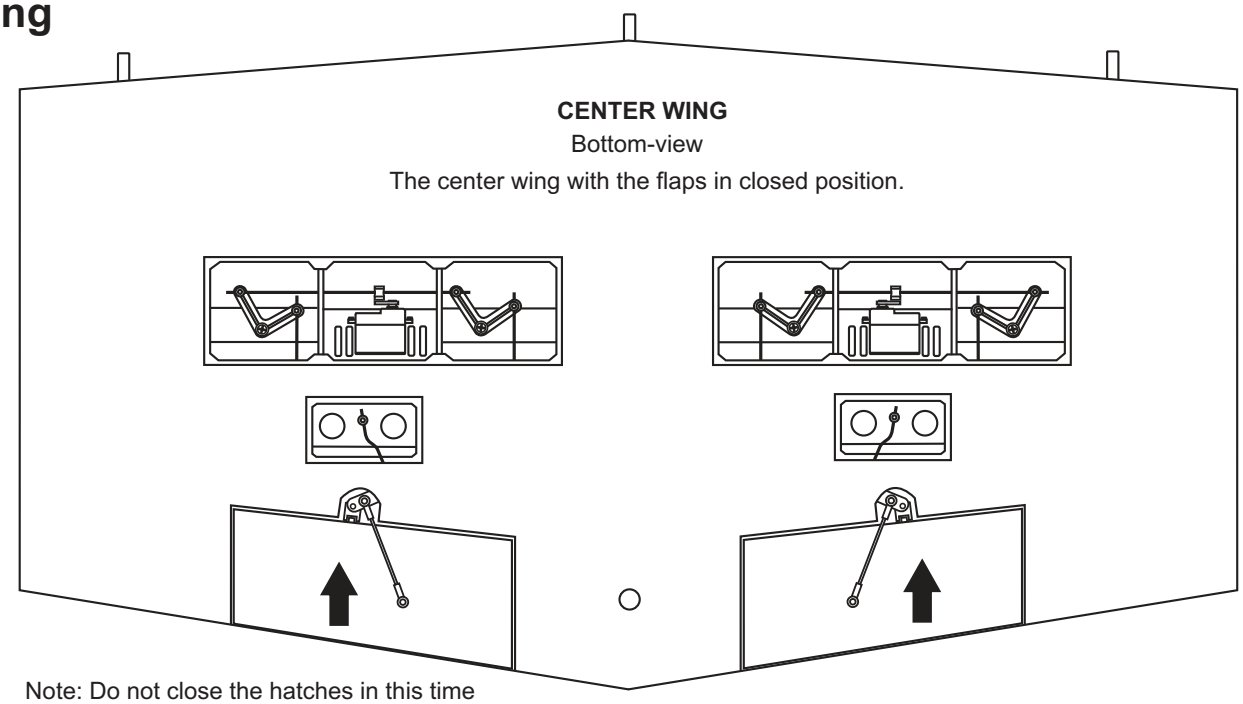
Do the same way with the flaps on the left and the right wing

2-Wing

CENTER WING

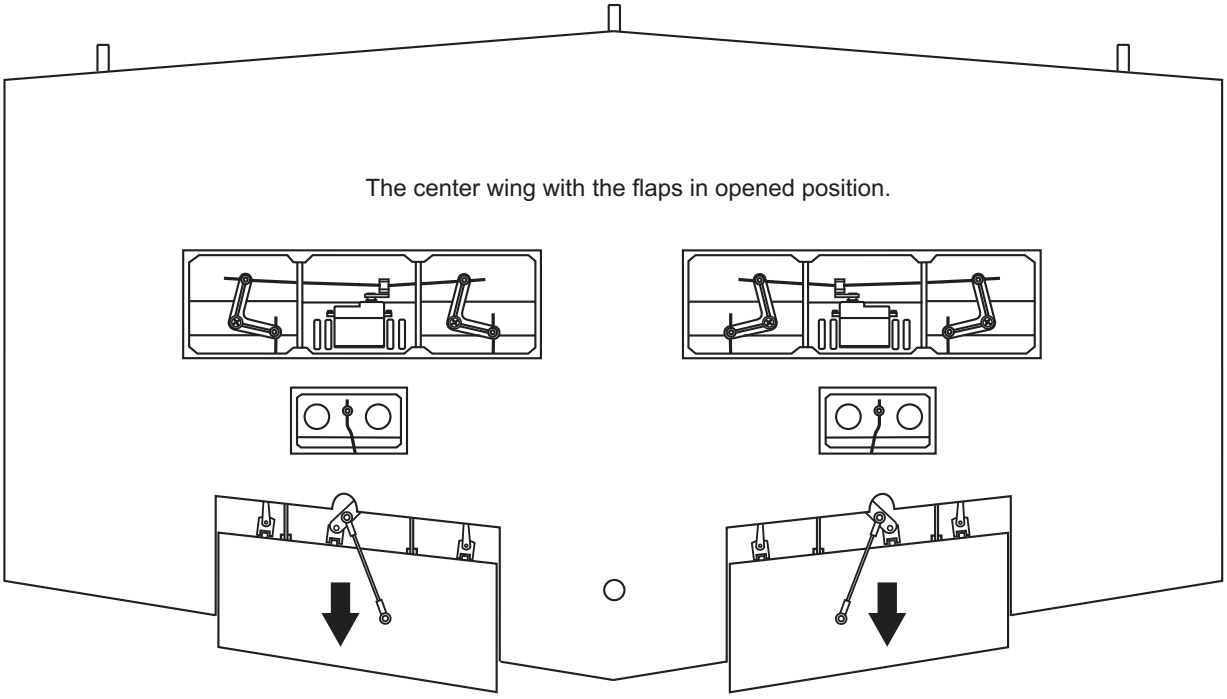
Bottom-view

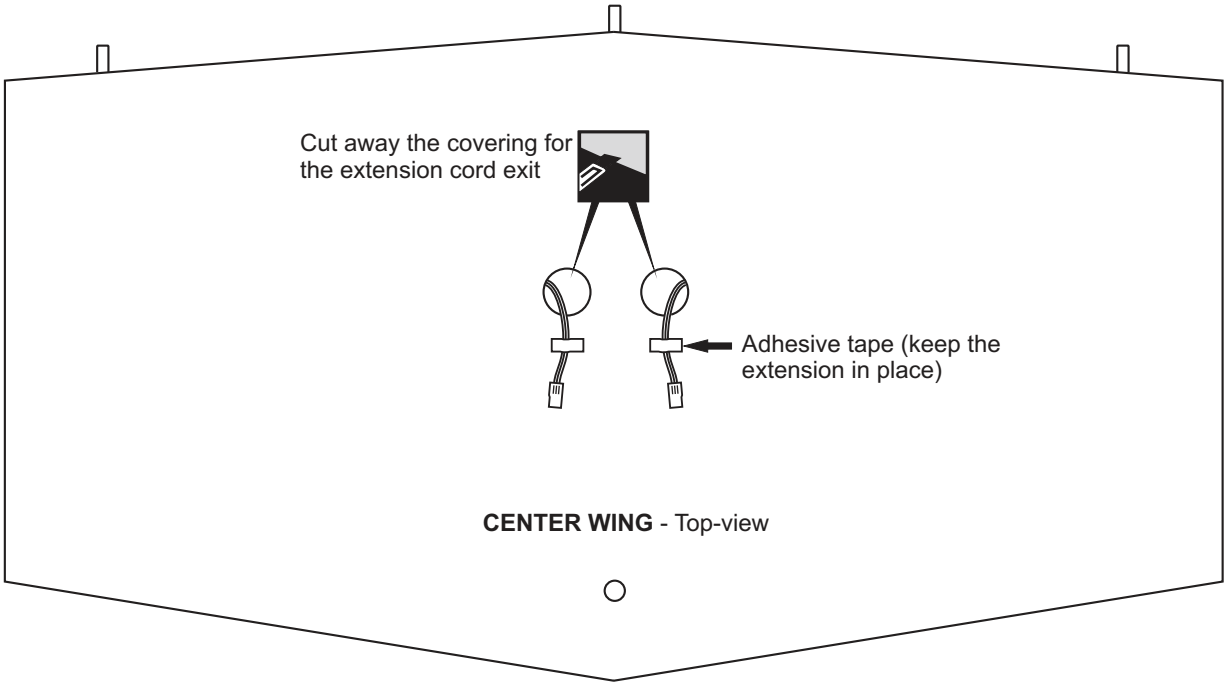
The center wing with the flaps in closed position.



Note: Do not close the hatches in this time

The center wing with the flaps in opened position.





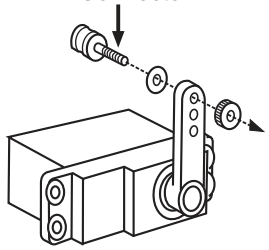
CENTER WING - Top-view

3-Wing

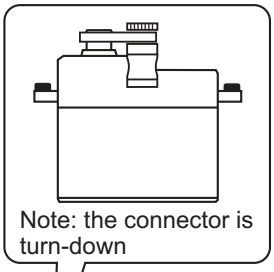
Connector
.....2
.....2
2x30mm screw
.....4

Connector

3A

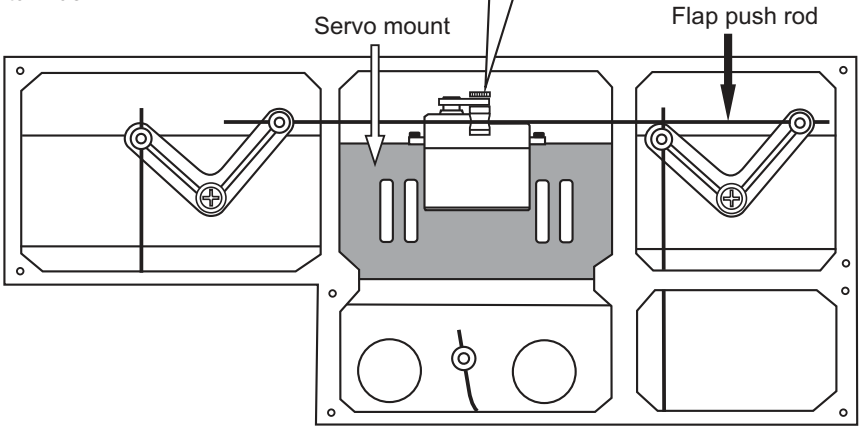


Note: the connector is turn-down



Note: the connector is turn-down

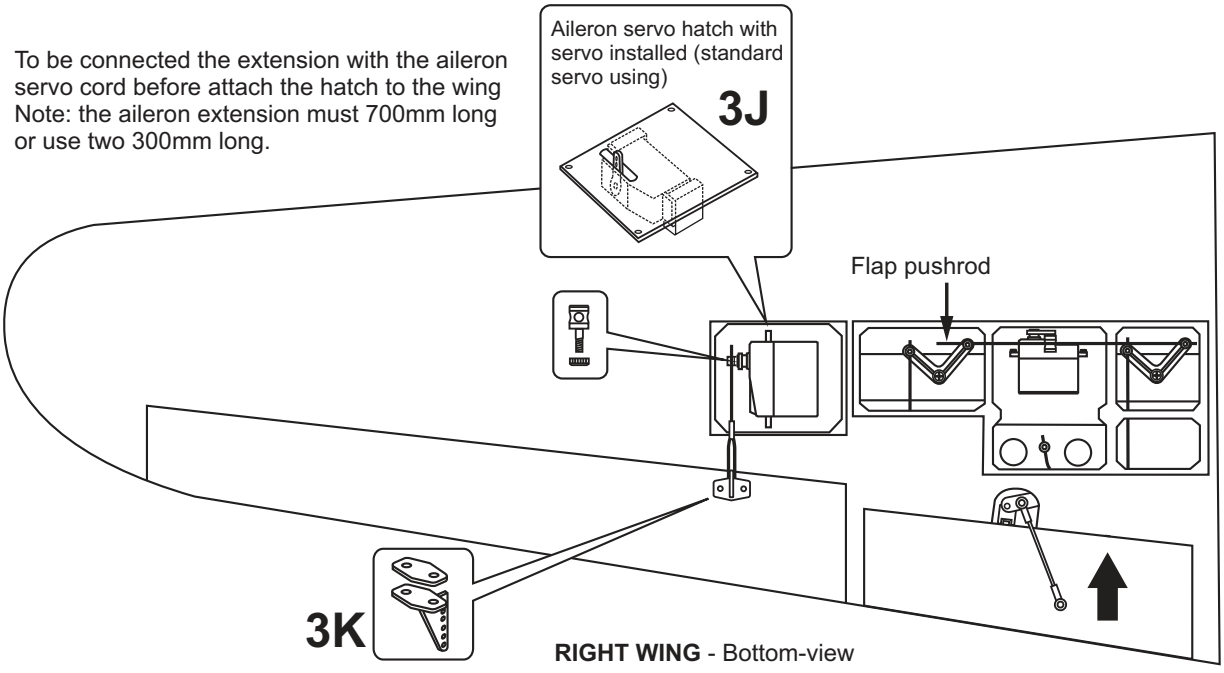
From Step **3B** to Step **3I**, follow the procedure as described in the **1-WING** section



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.

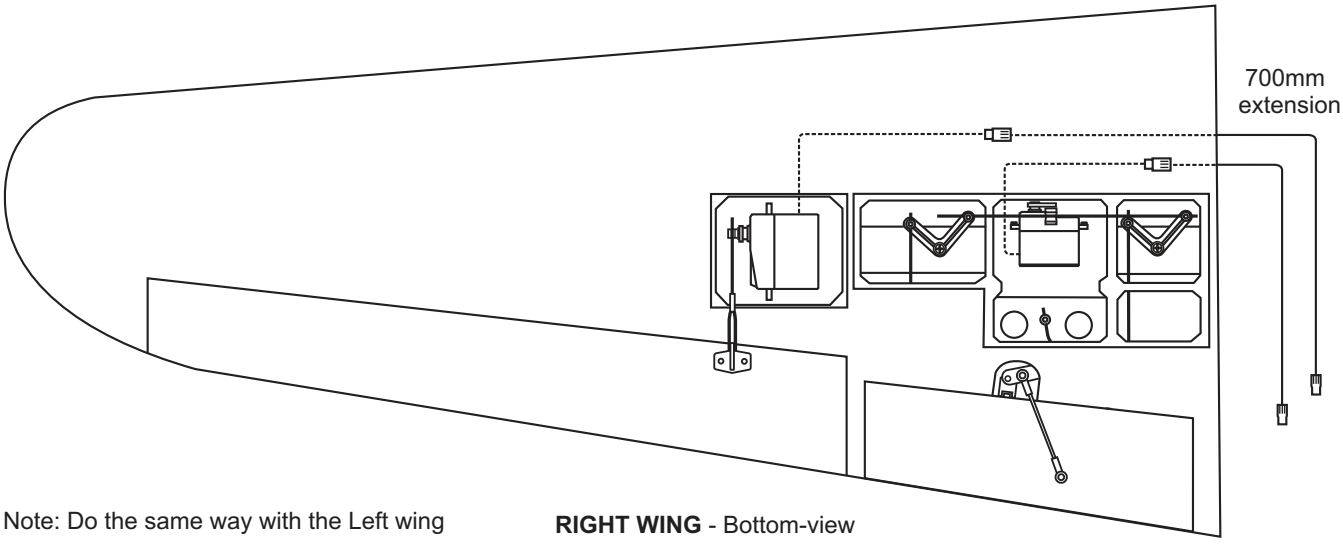
Aileron servo hatch with servo installed (standard servo using)

3J



3K

RIGHT WING - Bottom-view



Note: Do the same way with the Left wing

RIGHT WING - Bottom-view

4A

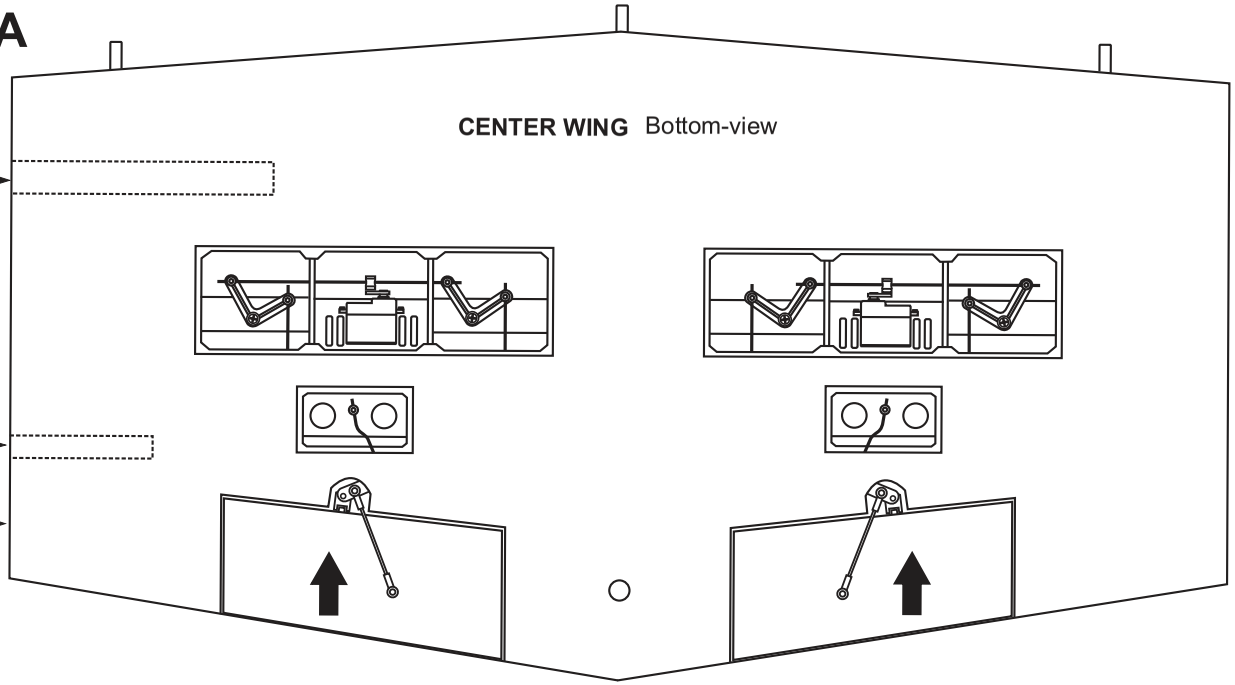
Slide the aluminum tube into the left and right side of the center wing.

19x317mm aluminum tube

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

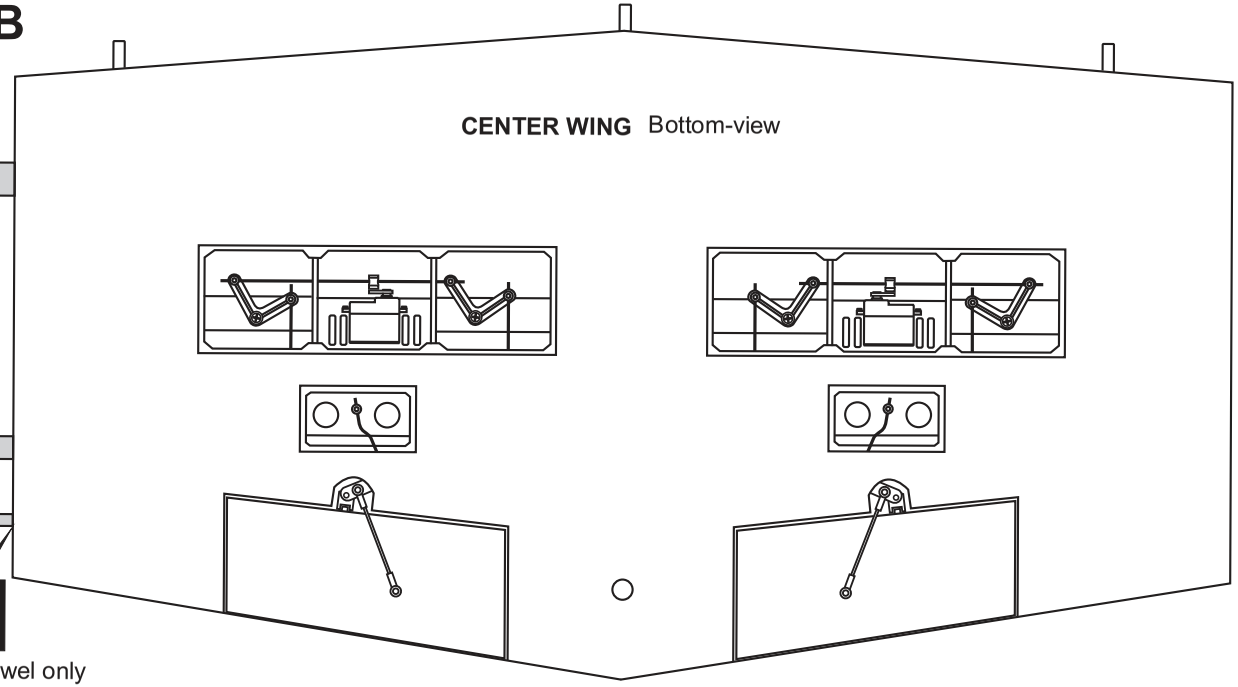
12x182mm aluminum tube

6x12mm wooden dowel



4B

Glue the dowel only



19x317mm aluminum tube ...2

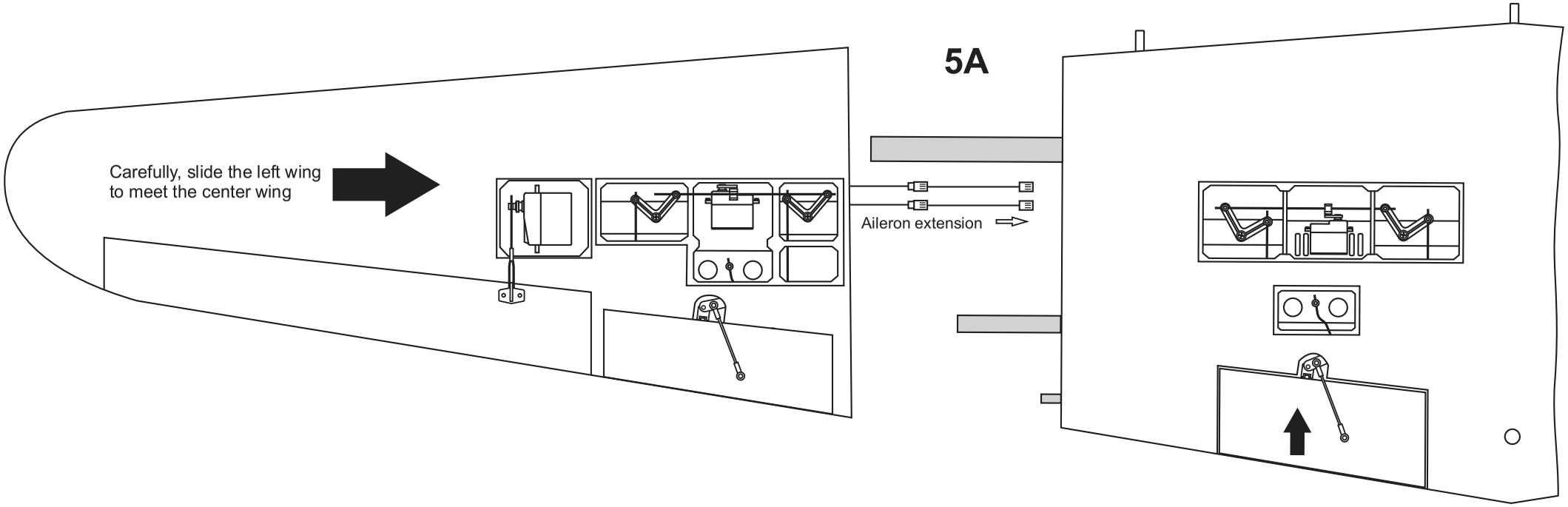
12x182mm aluminum tube 2

6x12mm wooden dowel 2

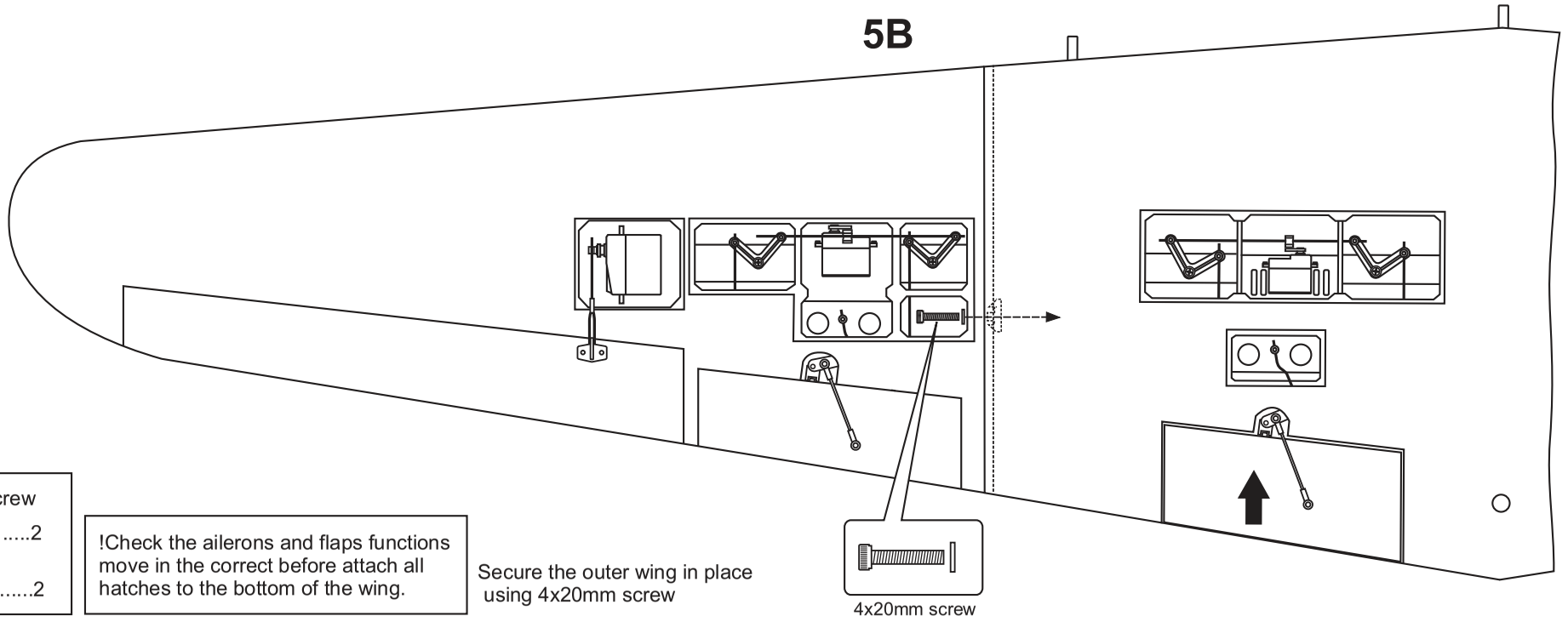
4-Wing

5-Wing

5A



5B



4x20mm screw 2

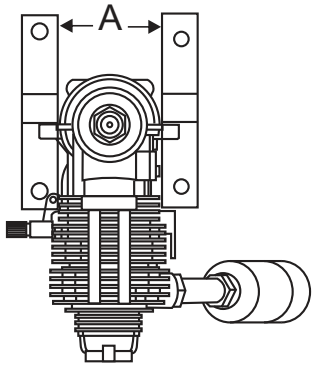
.....2

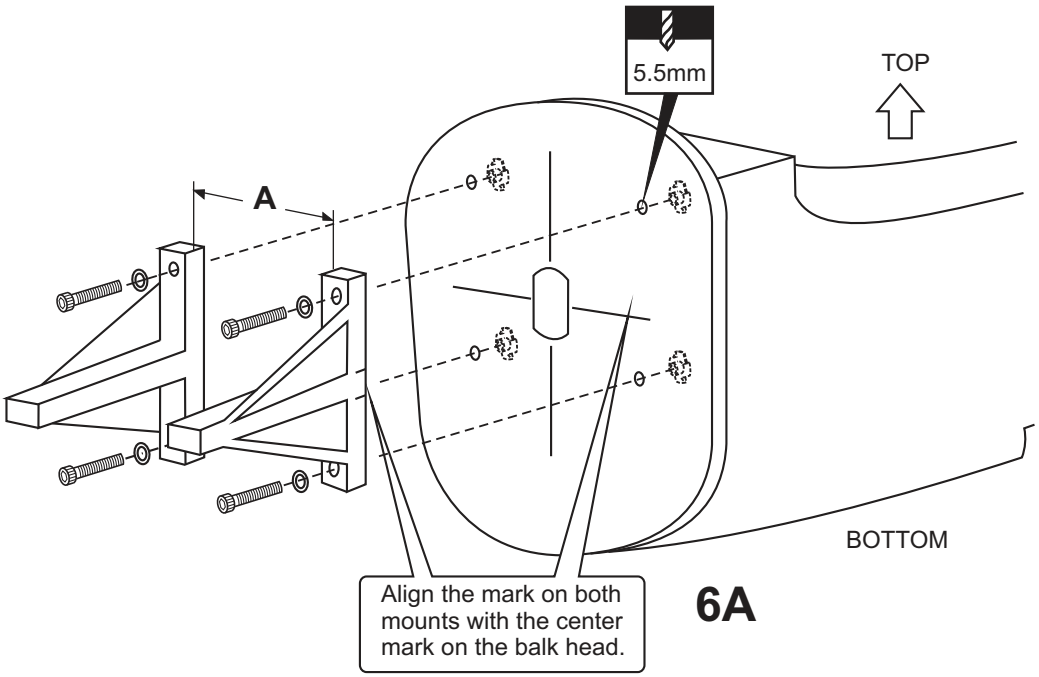
!Check the ailerons and flaps functions move in the correct before attach all hatches to the bottom of the wing.

Secure the outer wing in place using 4x20mm screw

4x20mm screw

6-Engine mounts

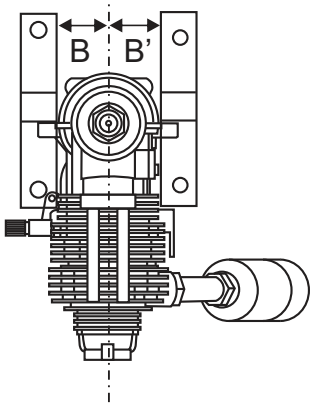


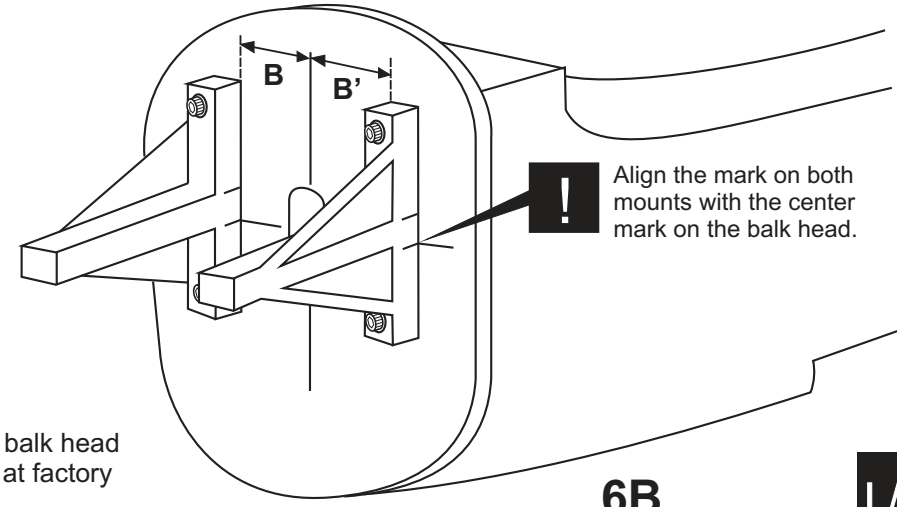


Align the mark on both mounts with the center mark on the balk head.

6A

B=B'





Align the mark on both mounts with the center mark on the balk head.

6B

4x30mm screw ..8

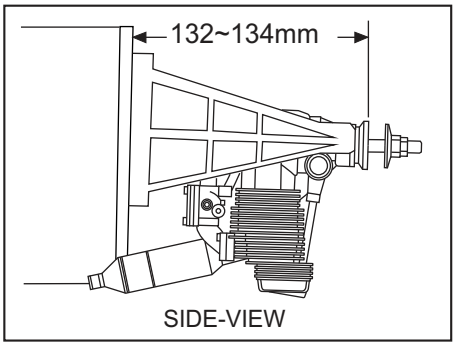
..8

Blind-nut ..8

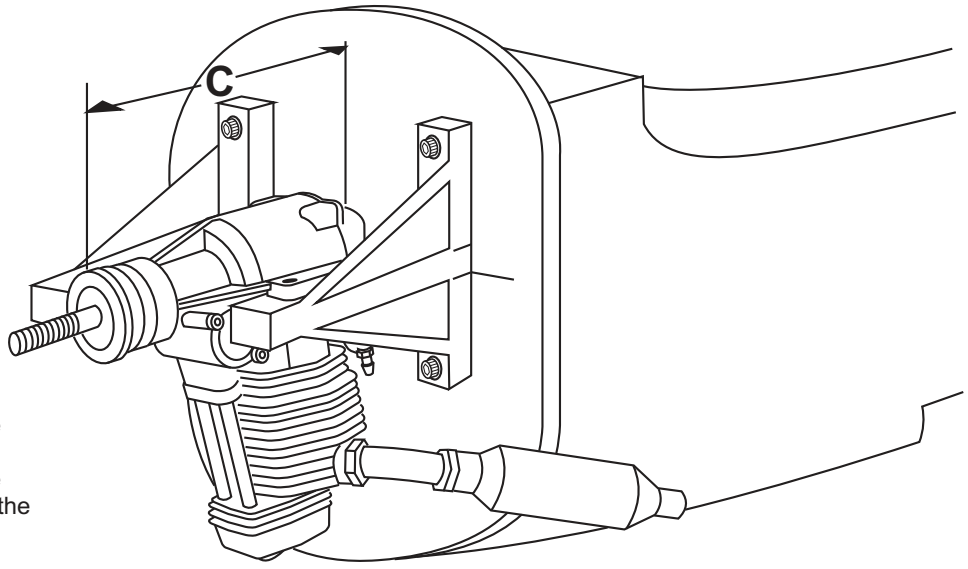
! Engine thrust on balk head is already adjust at factory

L/R

7-Engine



C= 132 ~ 134mm



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

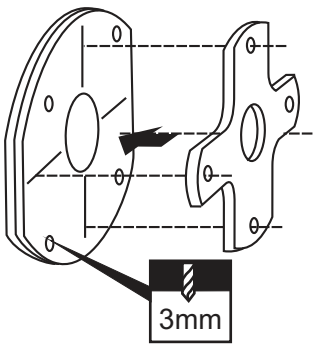
3x25...(8)

Washer....(8)

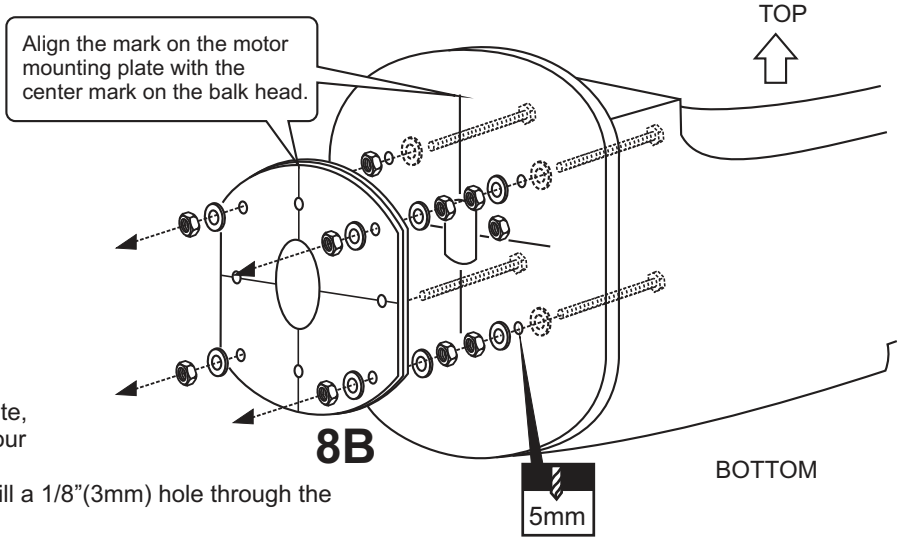
Nut 3mm..(8)

L/R

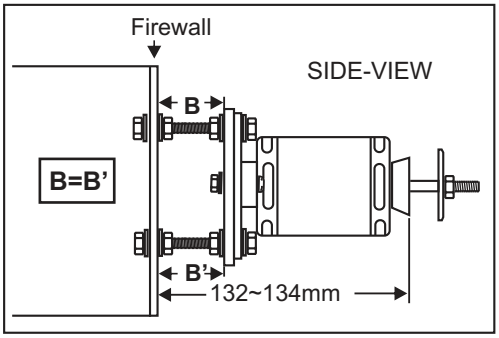
8-Electric Motor



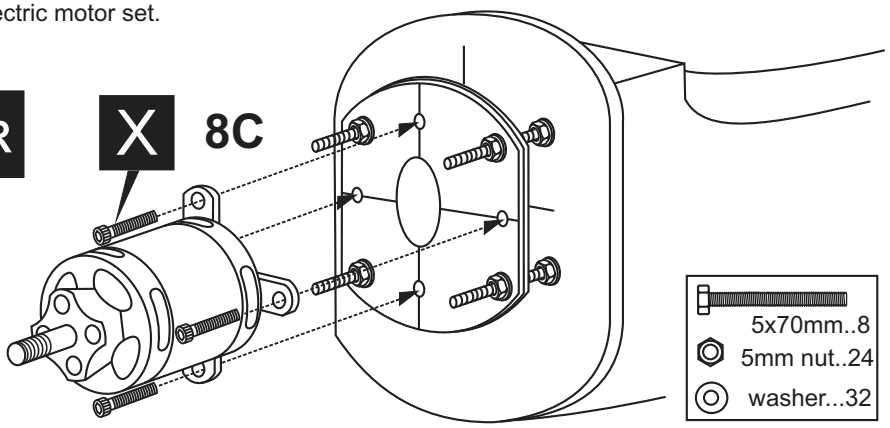
8A



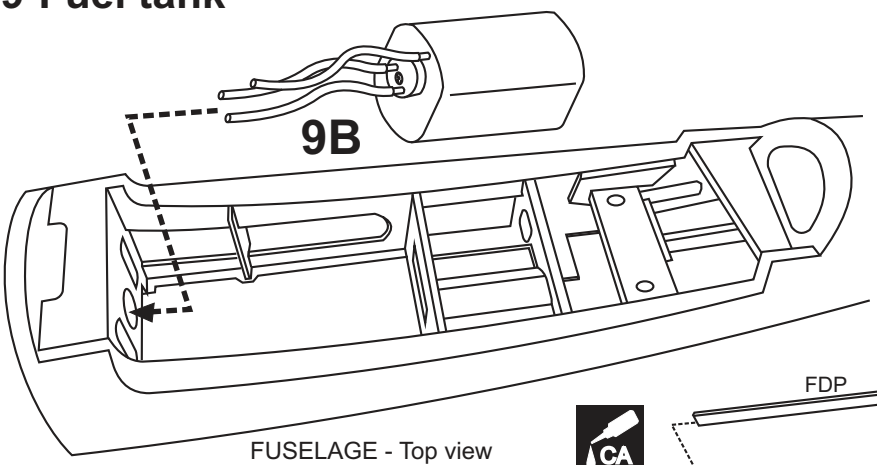
Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled.
Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked .
Note: The aluminum motor mounting included with electric motor set.



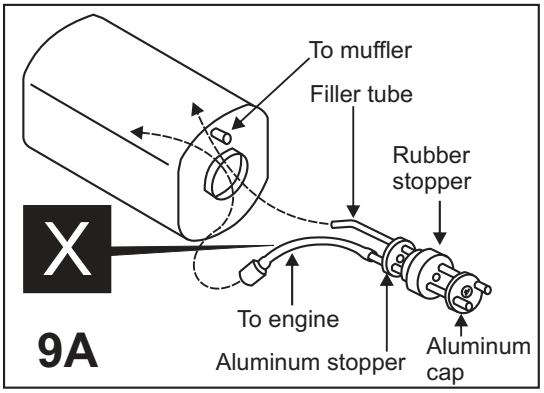
L/R



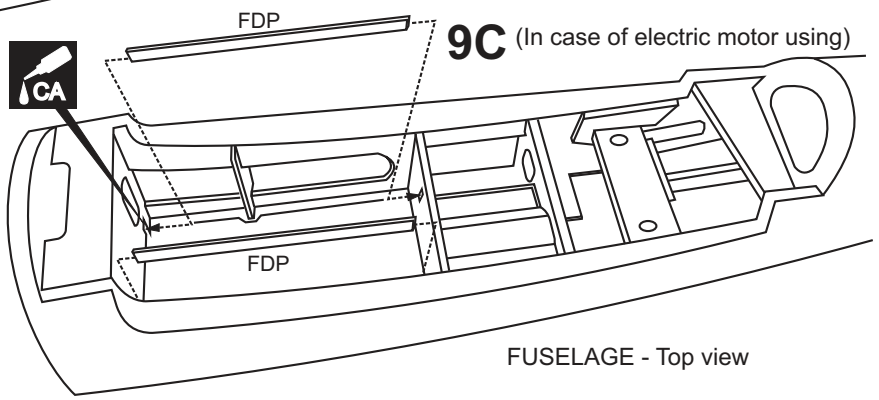
9-Fuel tank



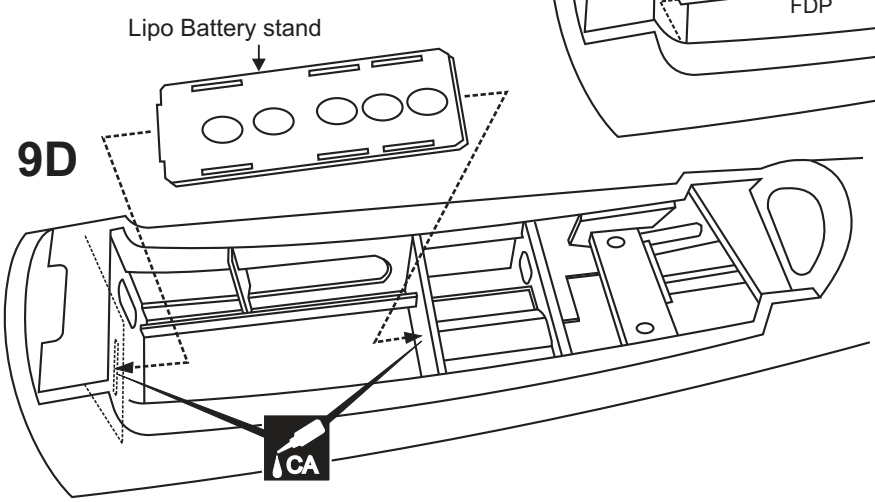
FUSELAGE - Top view



Installing the Lipo Battery Stand



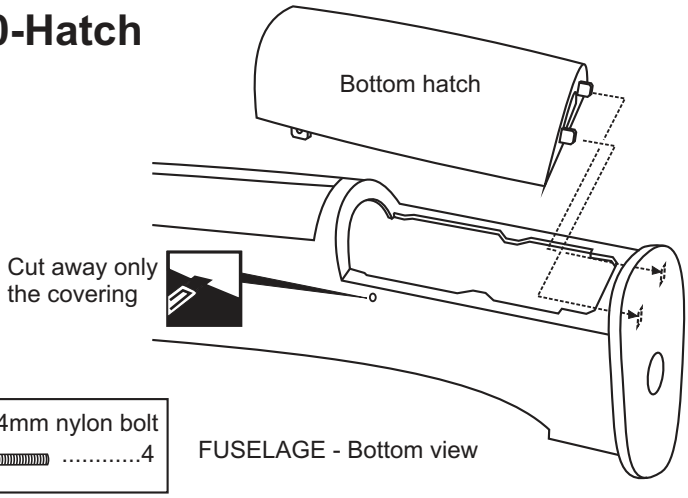
FUSELAGE - Top view



L/R

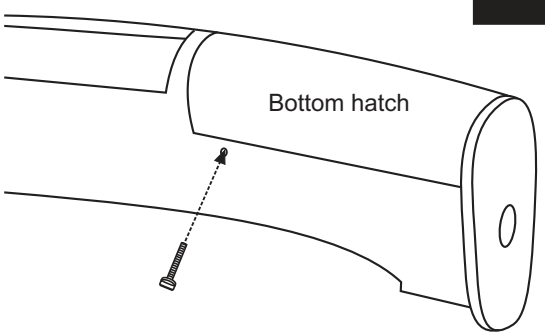
10-Hatch

L/R



30x4mm nylon bolt 4

FUSELAGE - Bottom view



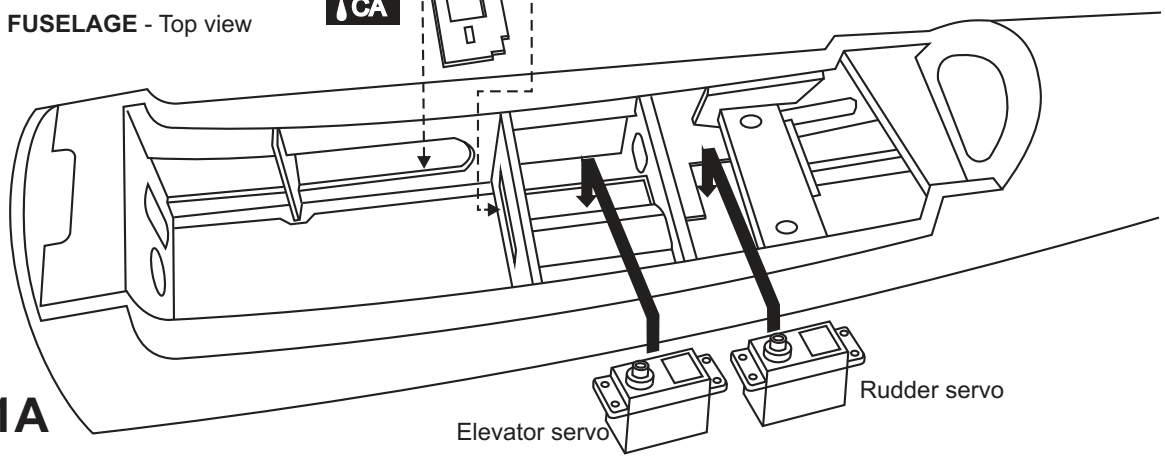
Secure the Bottom hatch in place using the 30x4mm nylon bolt.

11-Servos

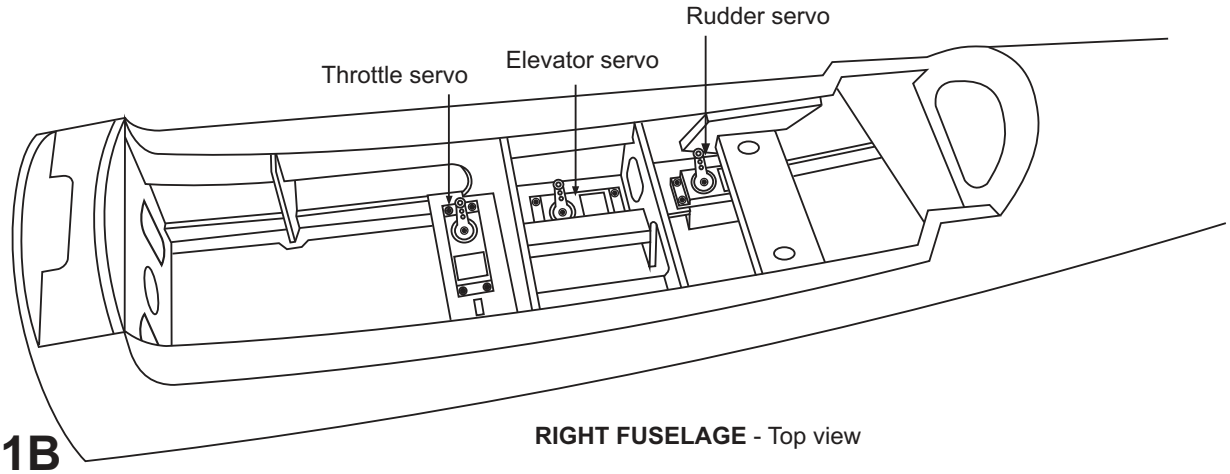
CA

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

RIGHT FUSELAGE - Top view

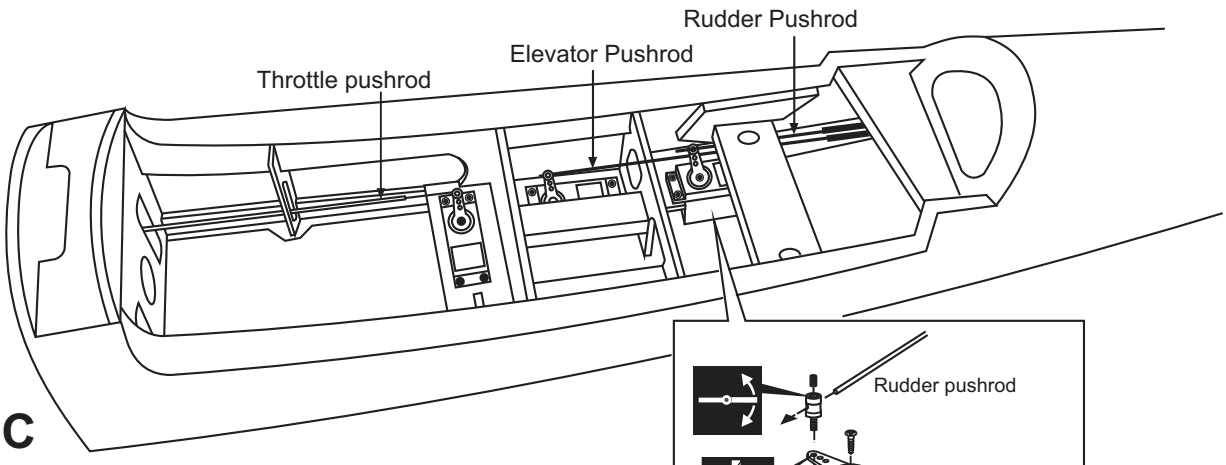


11A

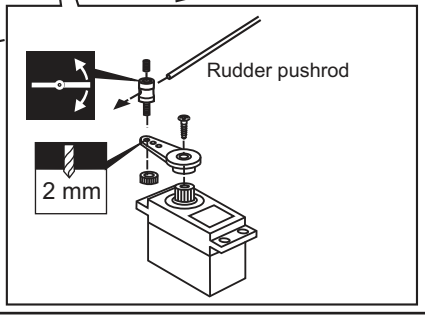


11B

RIGHT FUSELAGE - Top view



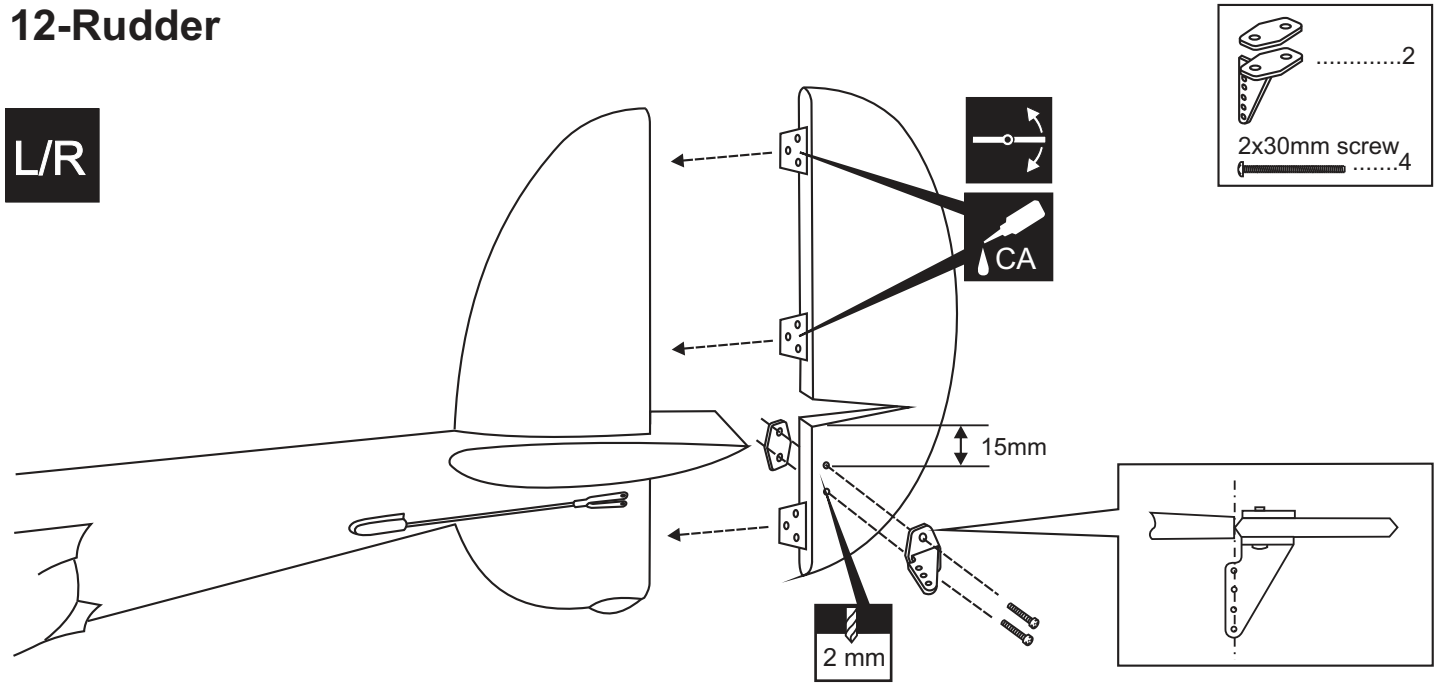
11C



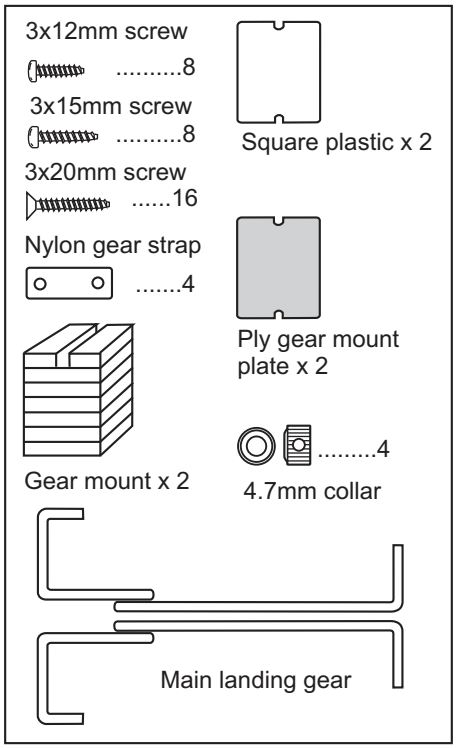
Connecting rod 6

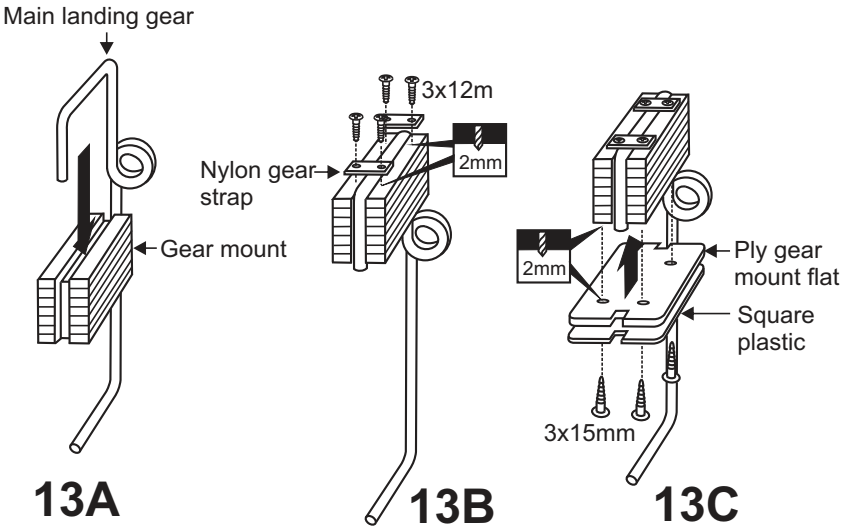
L/R

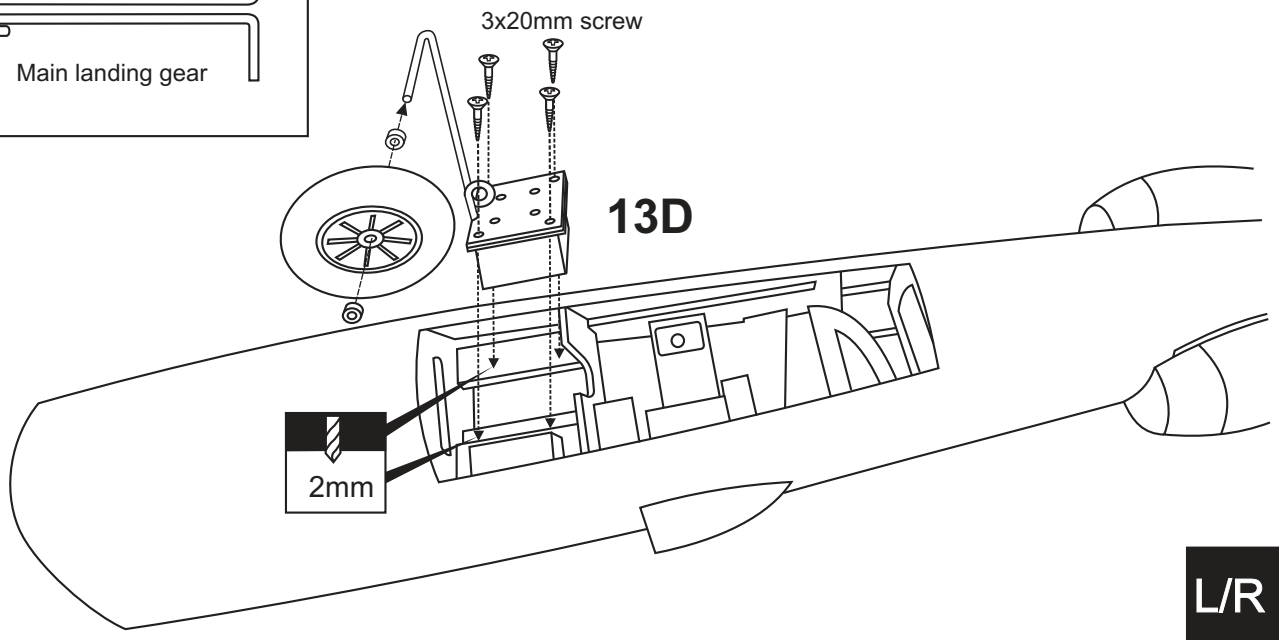
12-Rudder



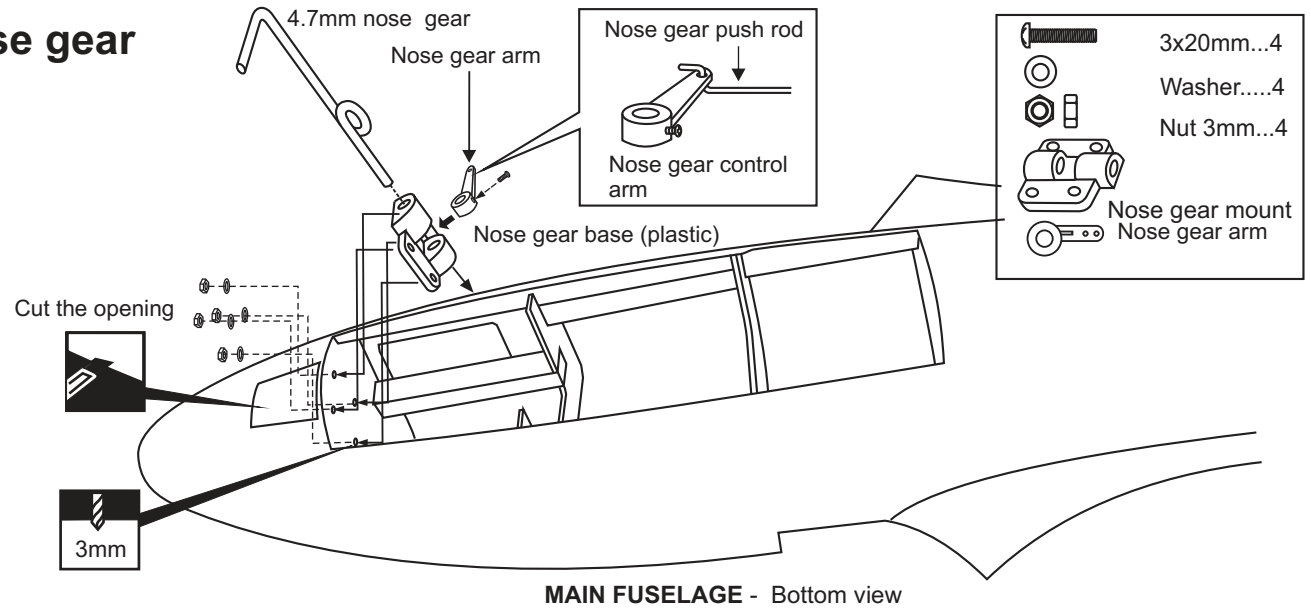
13-Fixed gear





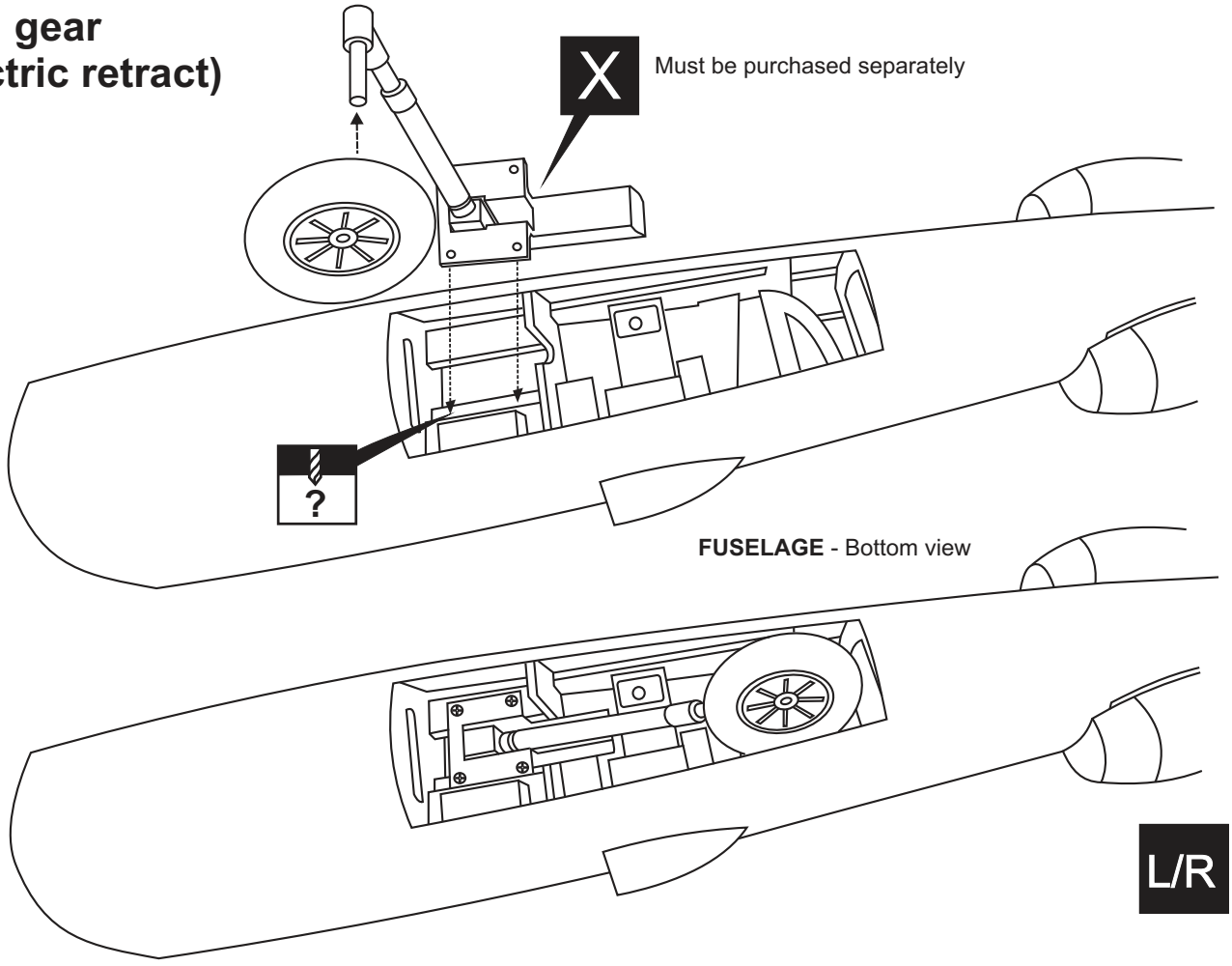


14-Nose gear



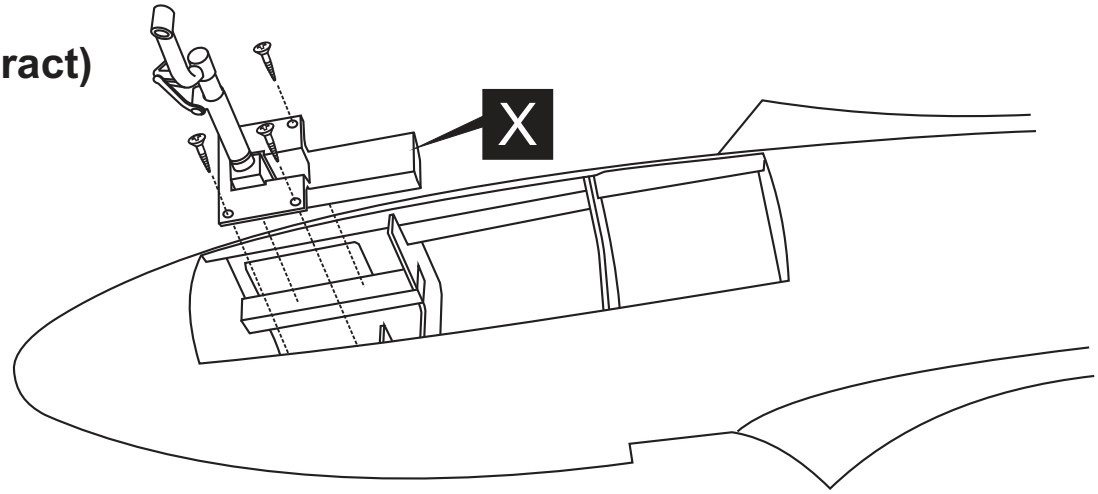
MAIN FUSELAGE - Bottom view

15-Main gear (Electric retract)

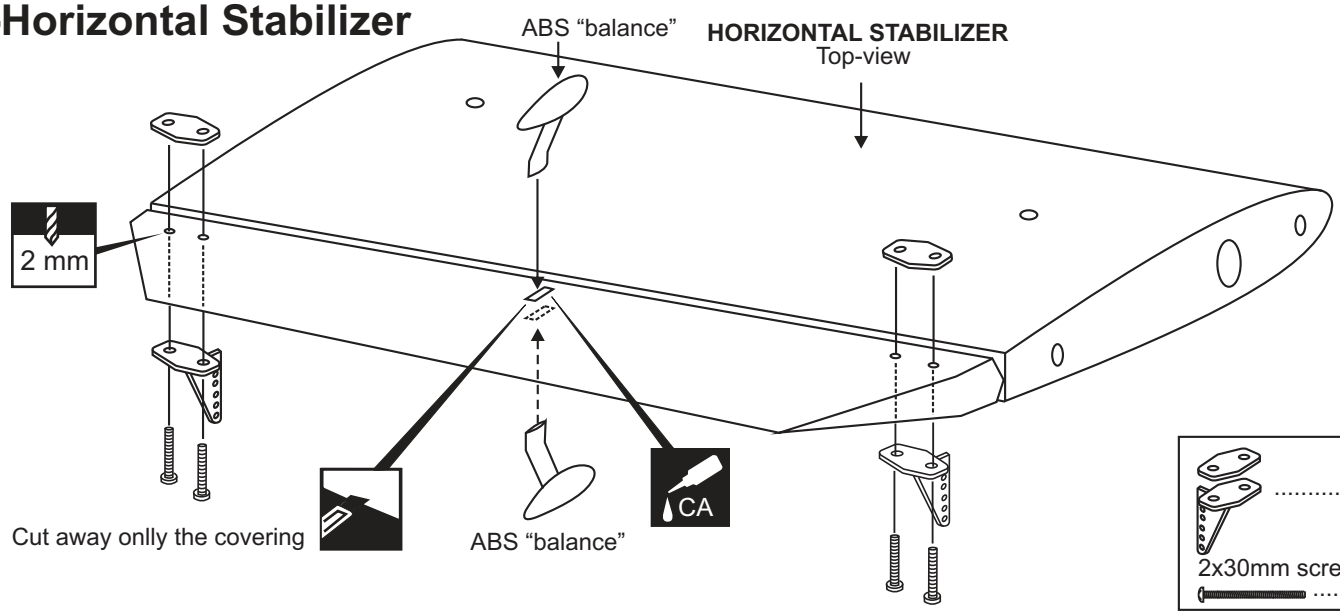


FUSELAGE - Bottom view

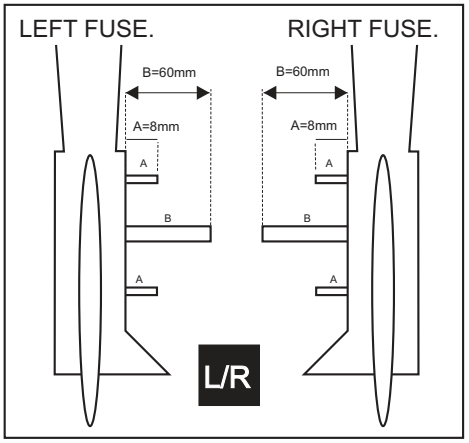
16-Nose gear (Electric retract)

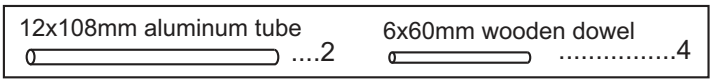


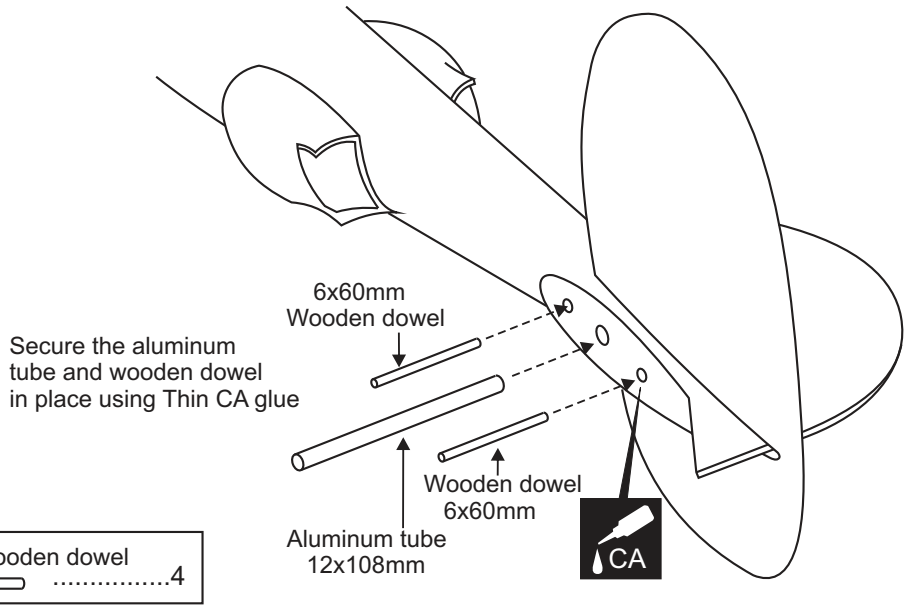
17-Horizontal Stabilizer



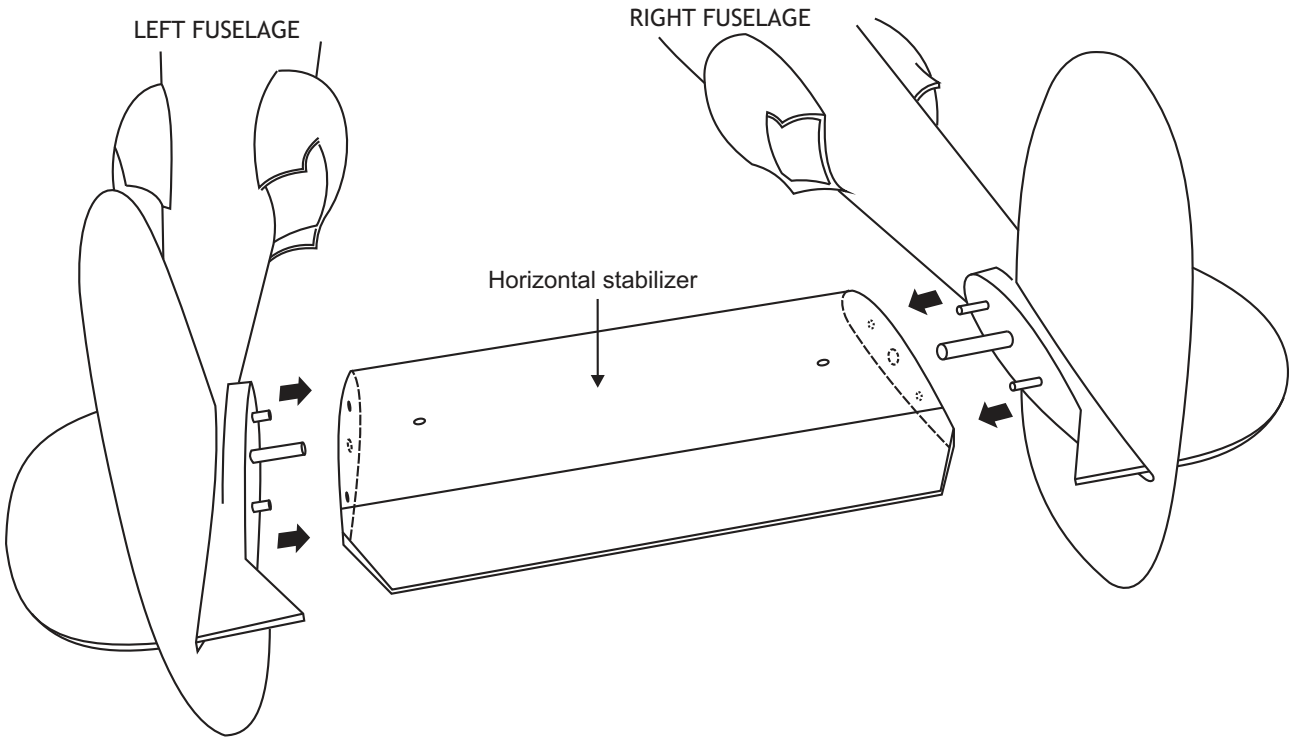
18-Horizontal Stabilizer



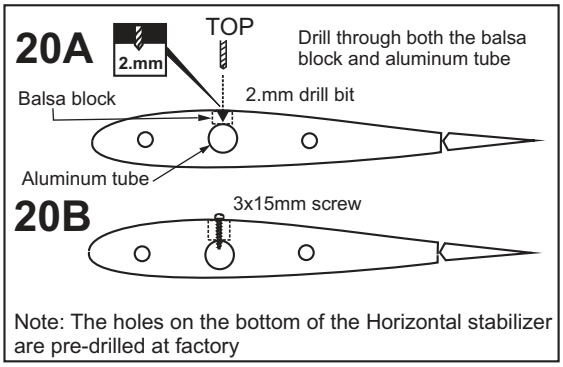


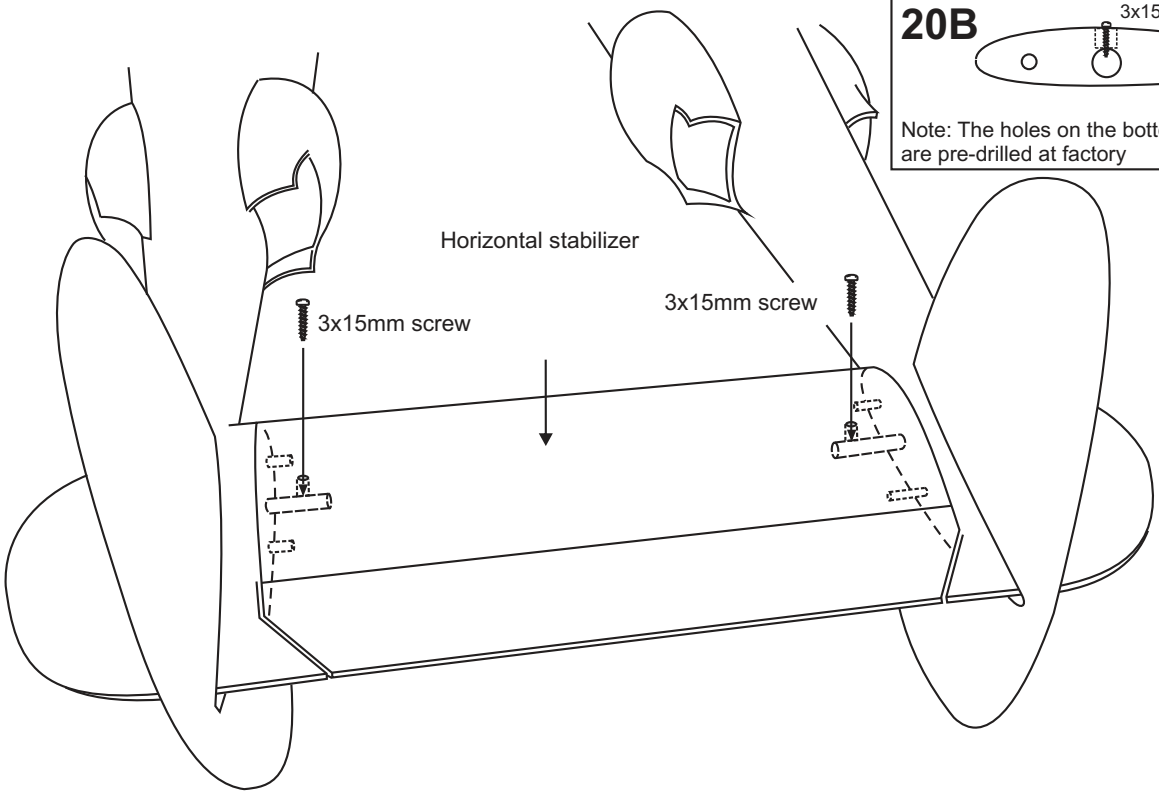


19-Horizontal Stabilizer

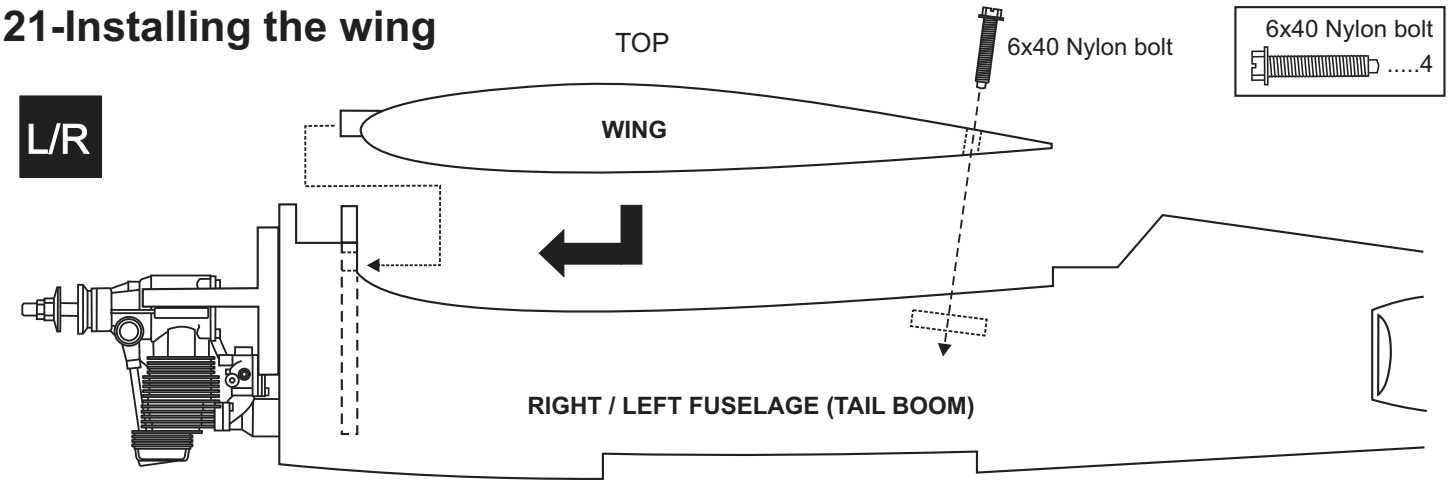


20-Horizontal Stabilizer

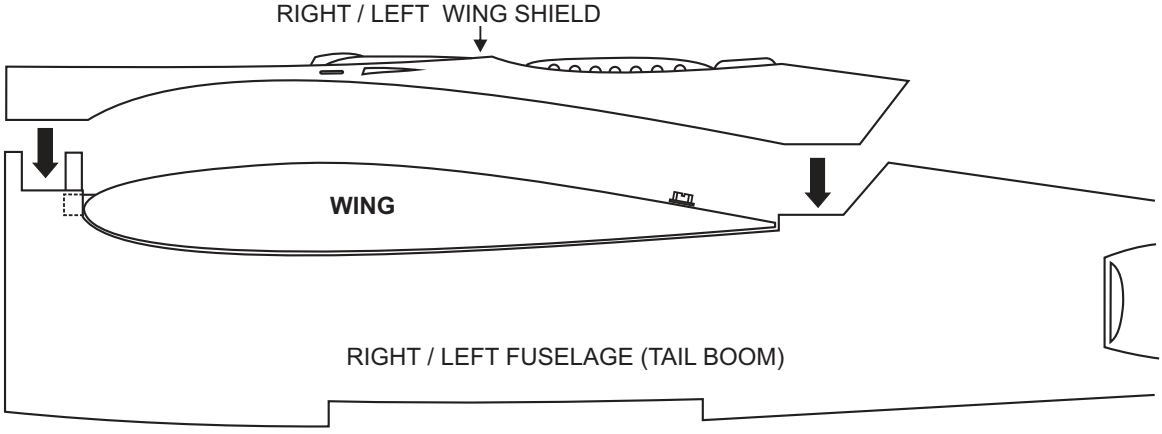




21-Installing the wing



22-Installing the wing shield



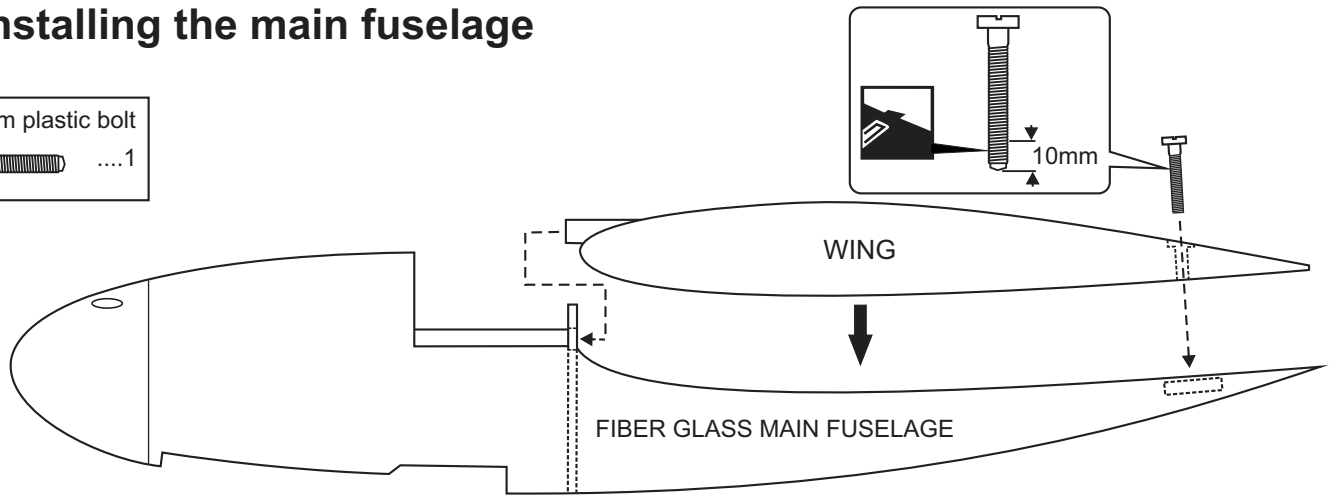
Trial fit the fuselage-top shield onto the wing, If necessary, sand the edge of the fuselage-top shield until this is achieved.

L/R

Secure the wing shield in place using 2.2x12mm screws

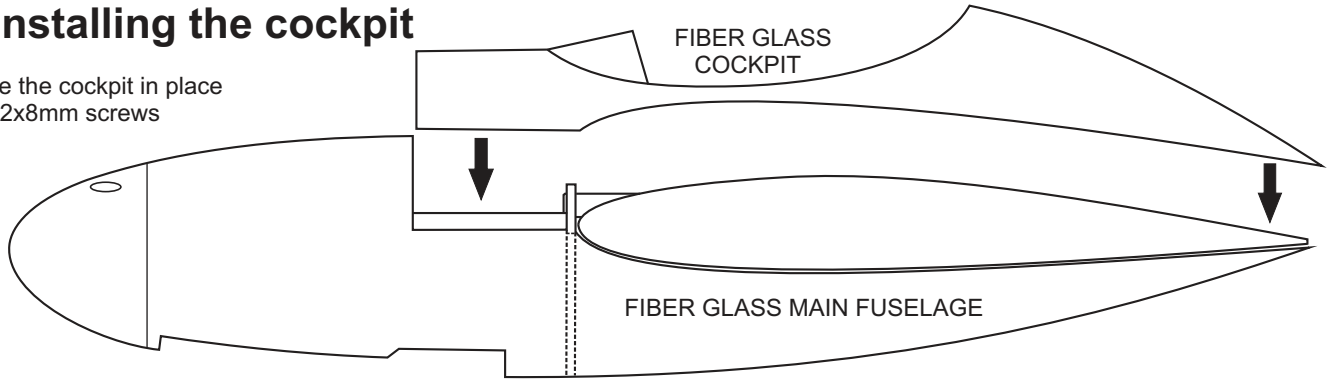
23-Installing the main fuselage

6x50mm plastic bolt 1



24-Installing the cockpit

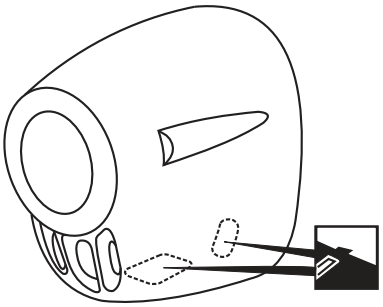
Secure the cockpit in place using 2x8mm screws

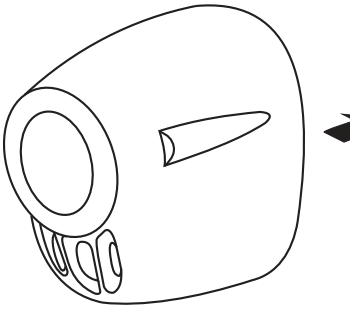


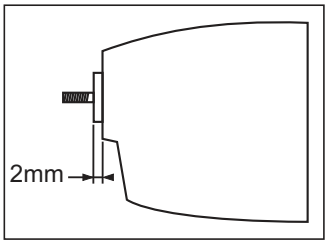
25-Cowling

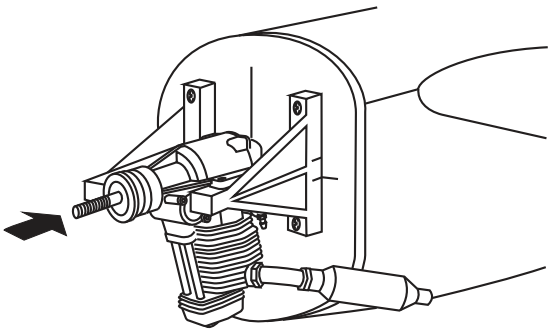
2.5x12mm screw 8

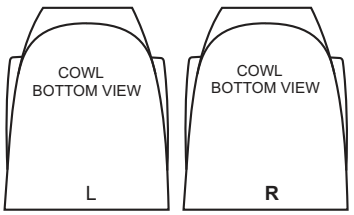
Secure the cowl in place using 2.5x12mm screws







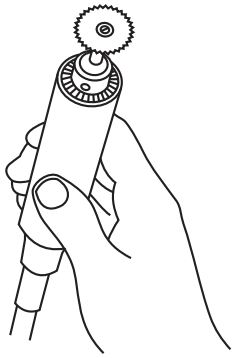


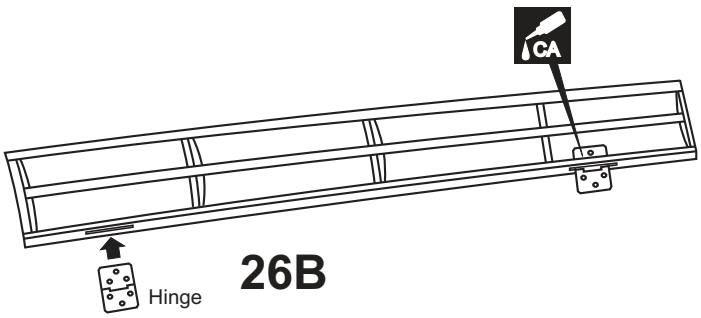


Note: The “L” Cowl for LEFT fuselage and “R” Cowl for RIGHT fuselage (looking from REAR to FRONT and TOP view).

26-Gear door

26A

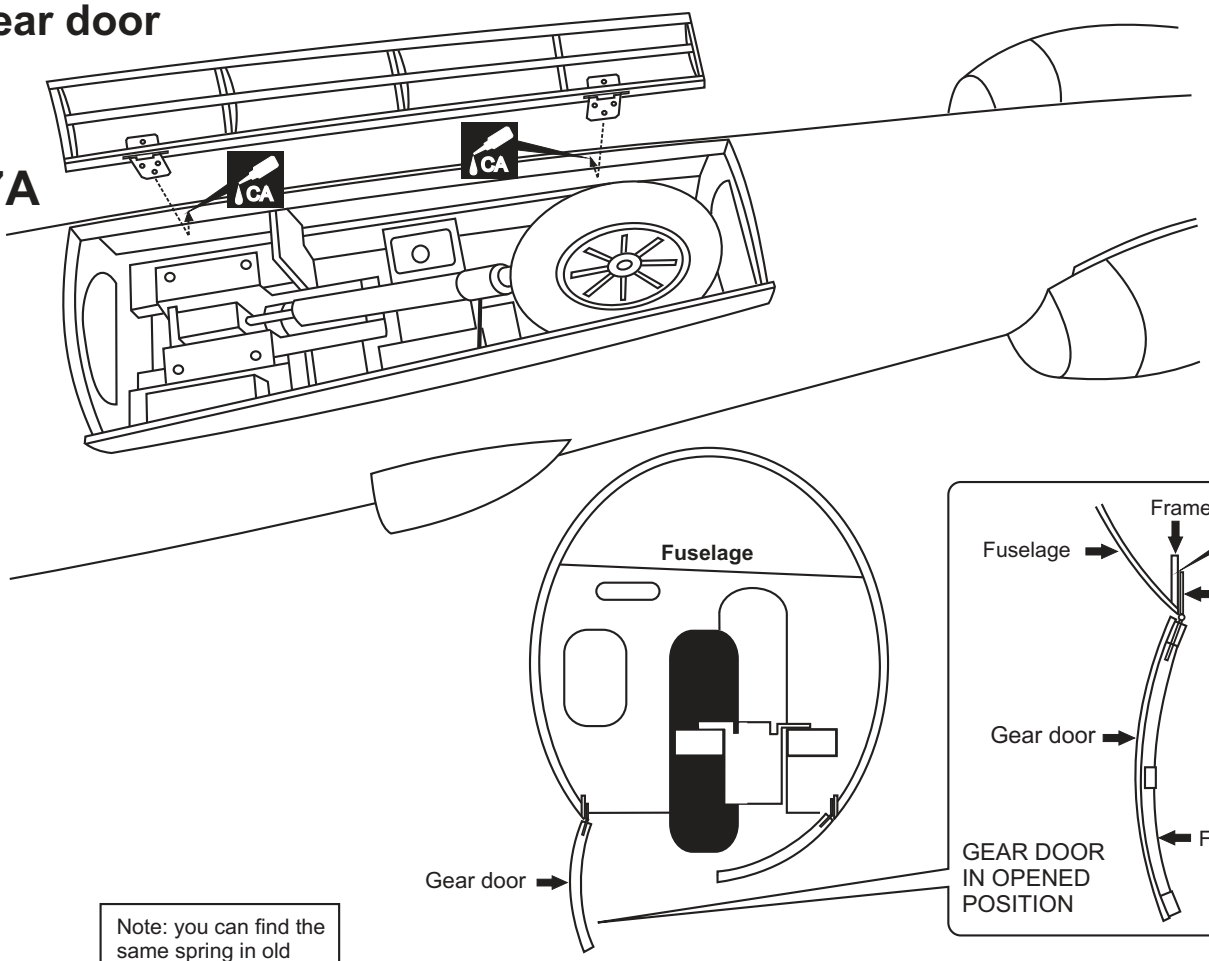


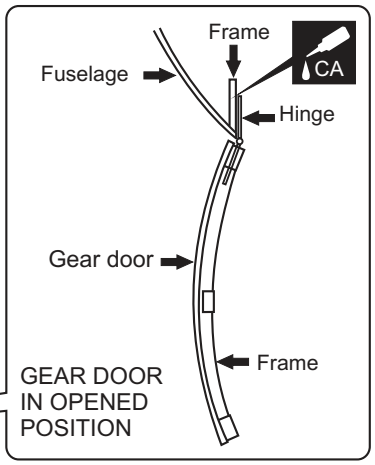


26B

27-Gear door

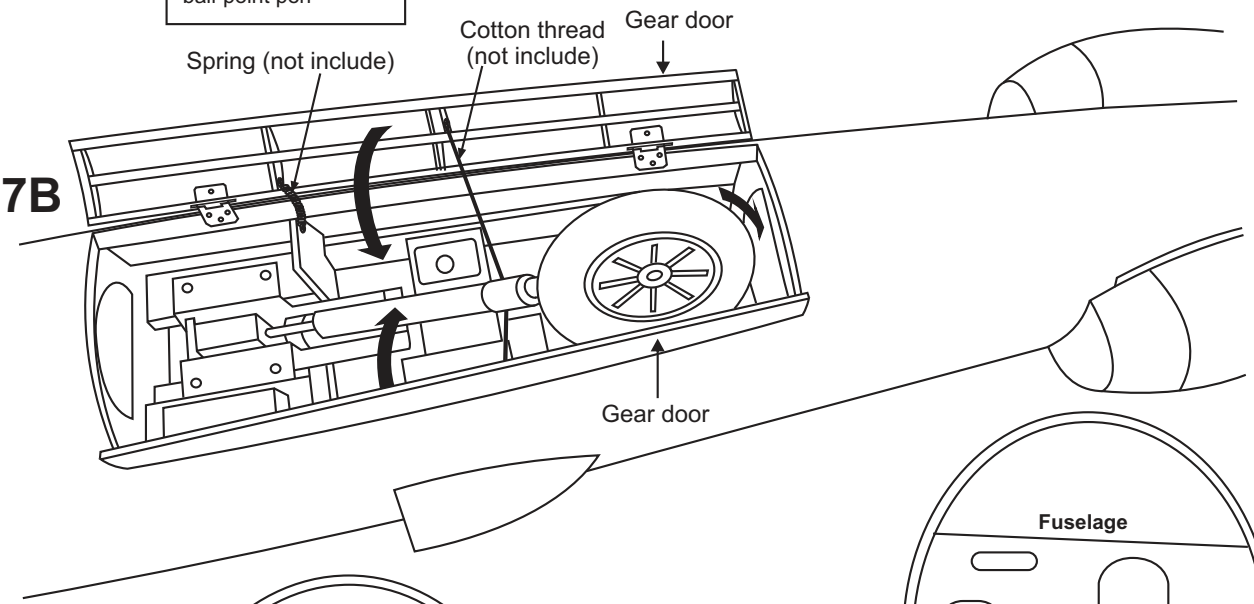
27A

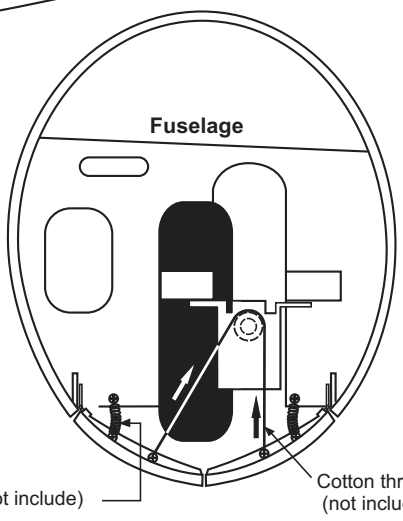




Note: you can find the same spring in old ball-point pen

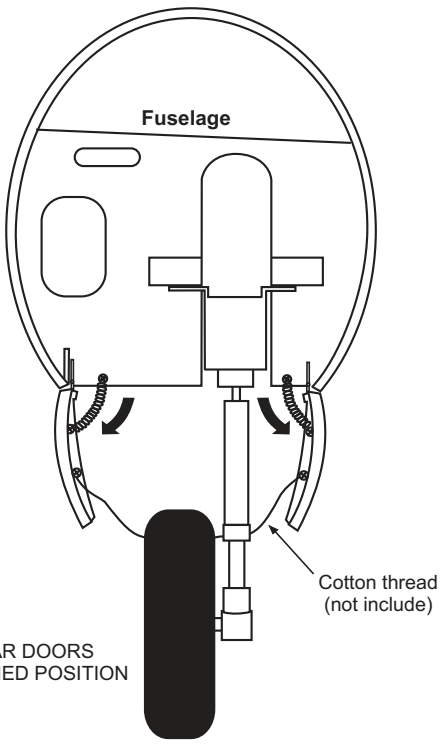
27B





ALL GEAR DOORS
IN CLOSED POSITION

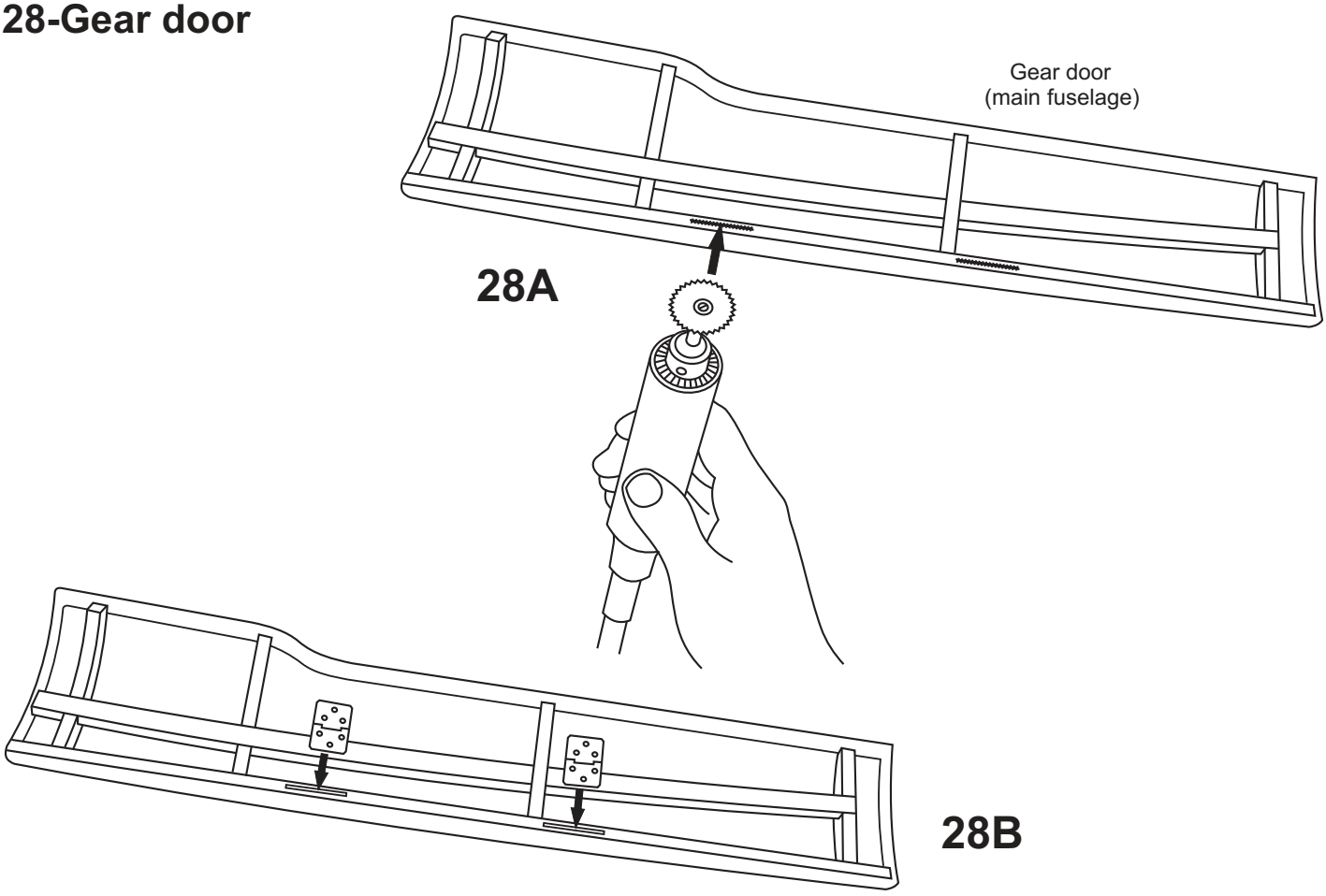
(RETRACT LANDING GEAR IN RETRACTED POSITION)

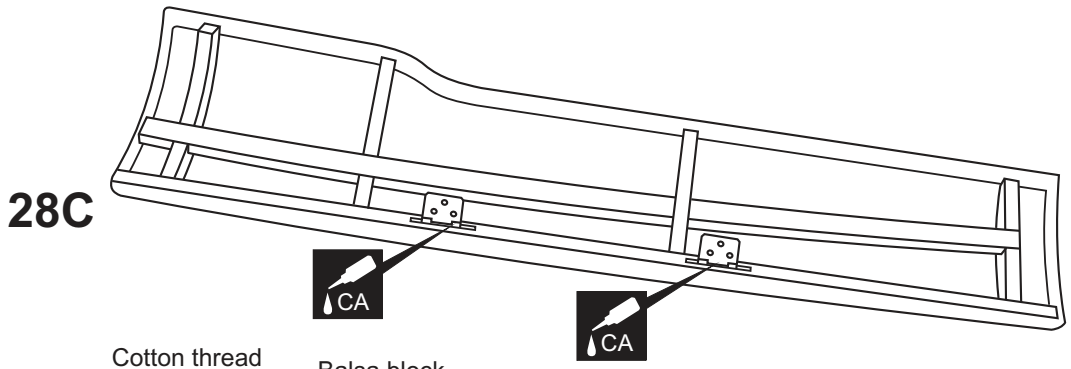


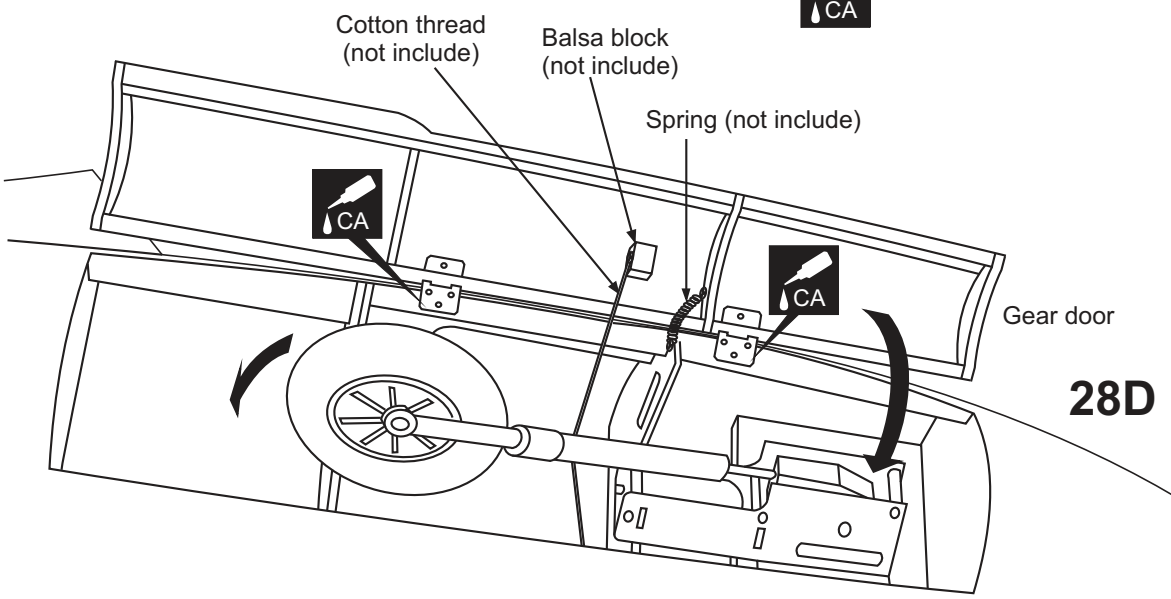
ALL GEAR DOORS
IN OPENED POSITION

(RETRACT LANDING GEAR IN EXTENDED POSITION)

28-Gear door

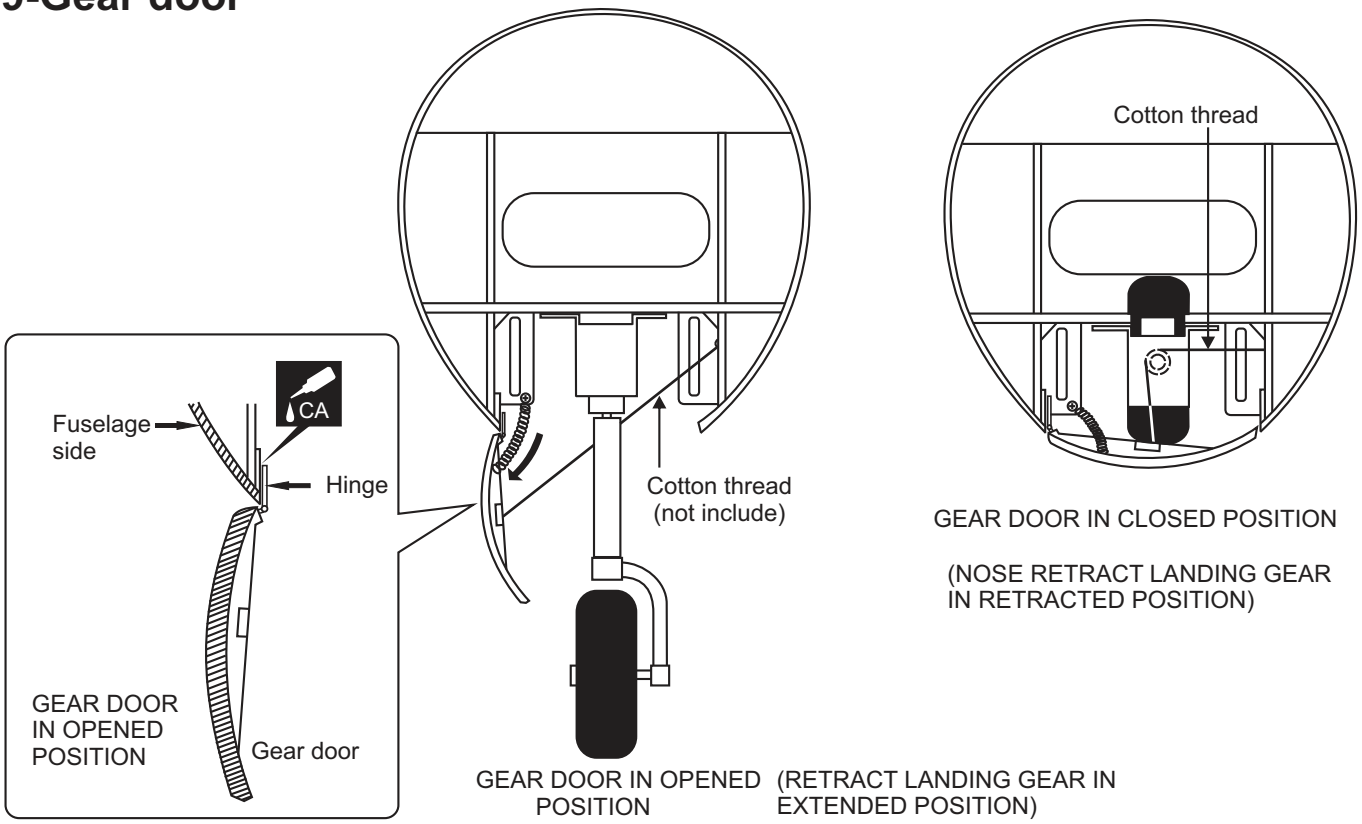




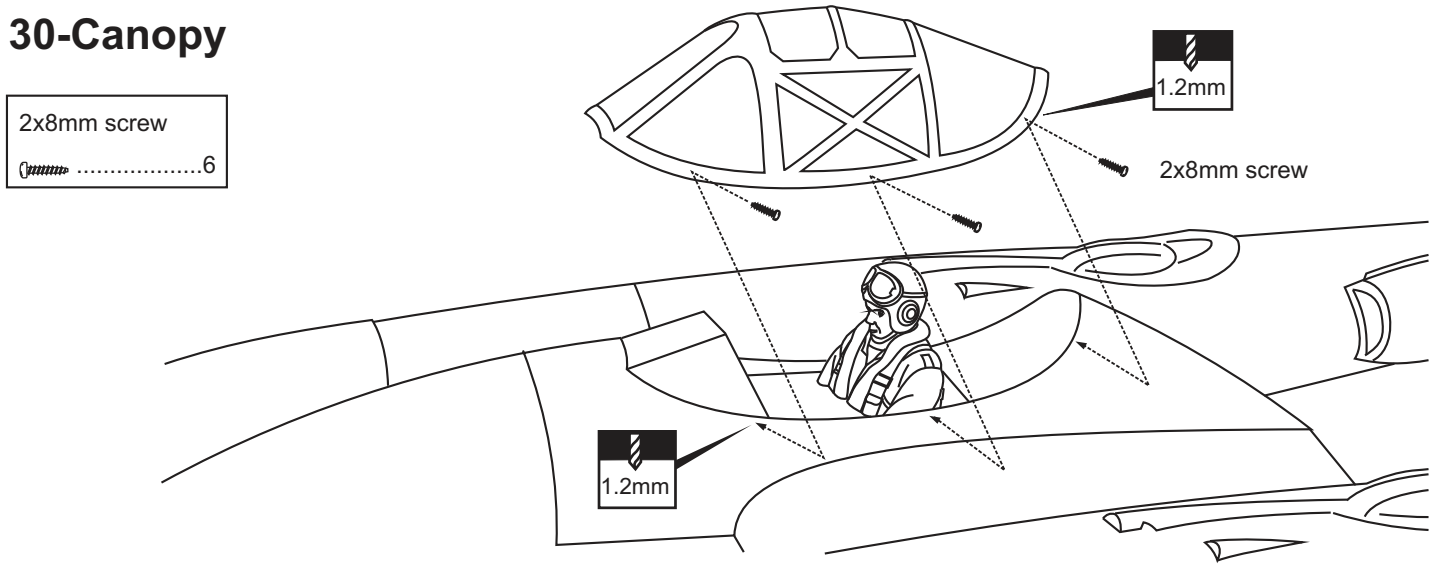


Bottom-view

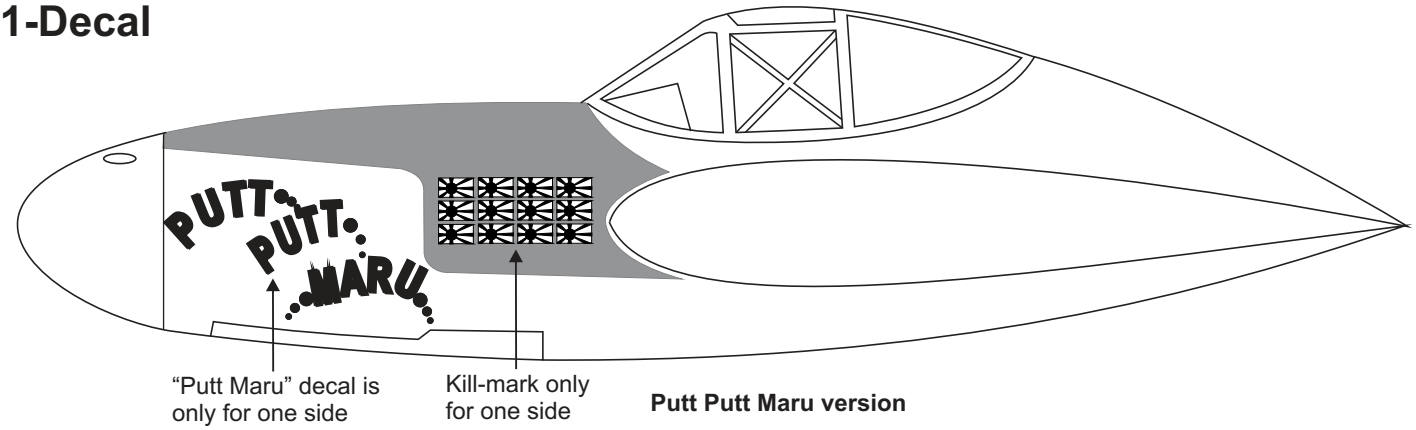
29-Gear door



30-Canopy



31-Decal



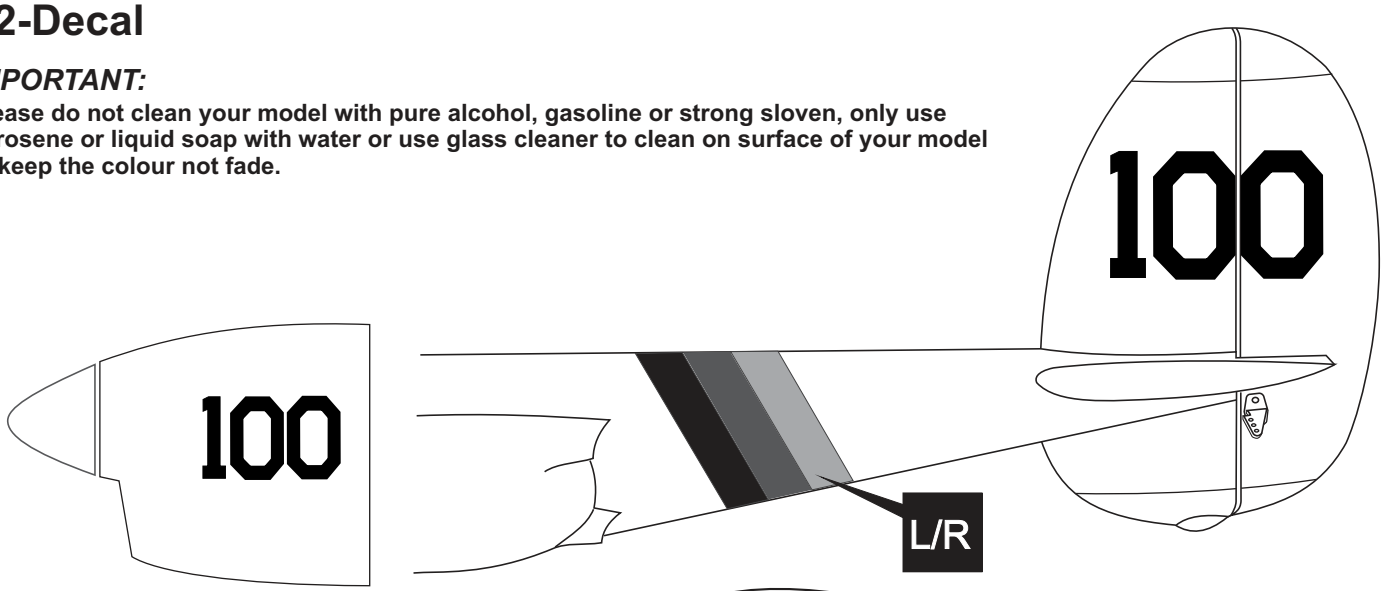
Putt Putt Maru version

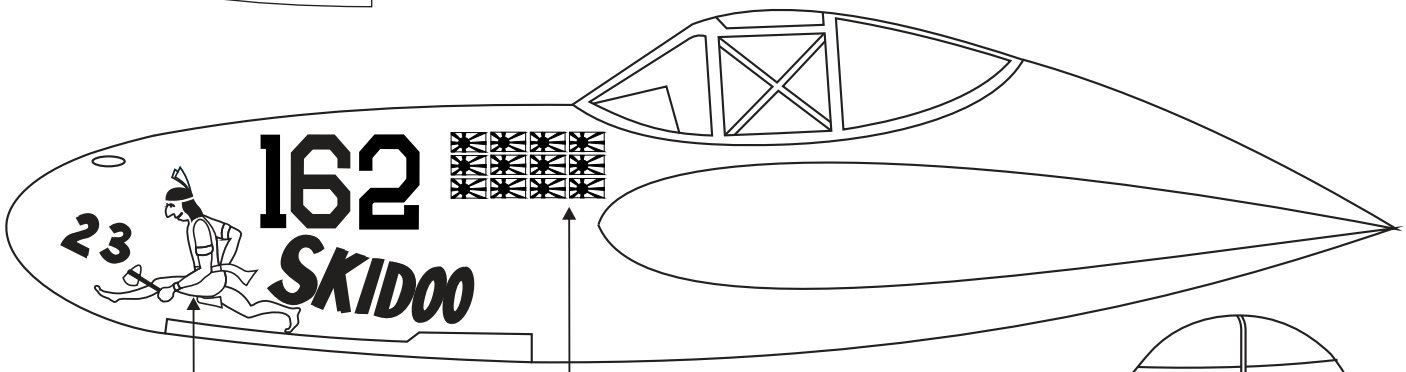
Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once.
Peel off one corner of the backing and cut off with scissors. Arrange sticker on model and when satisfied adhere the corner without backing.
Carefully peel back the rest of the backing while at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

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.

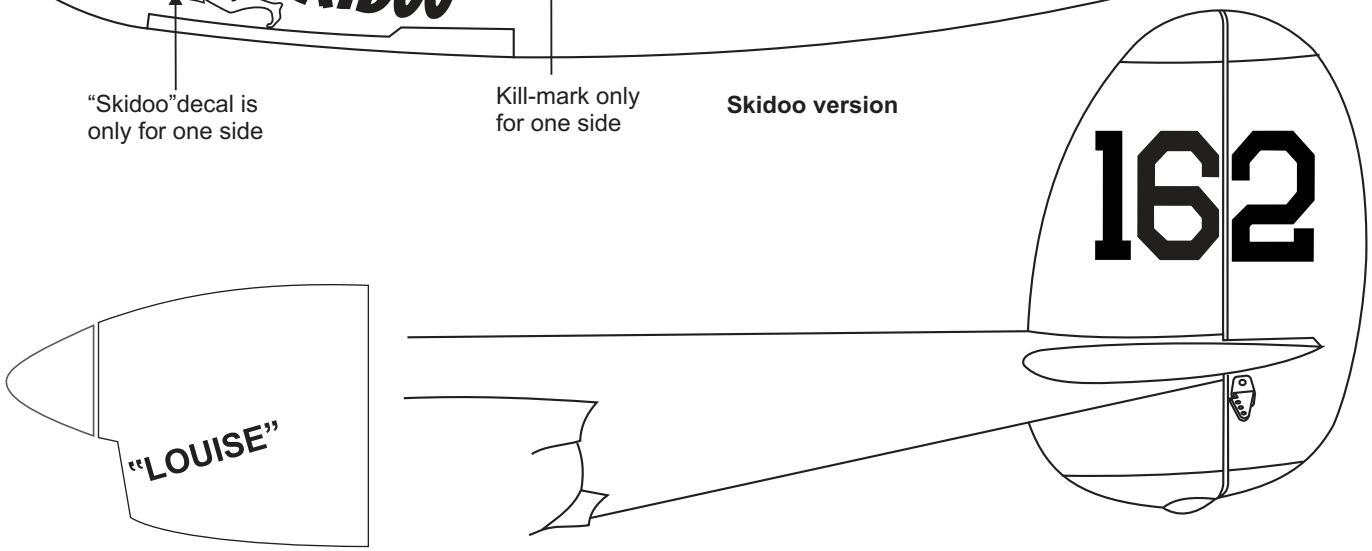


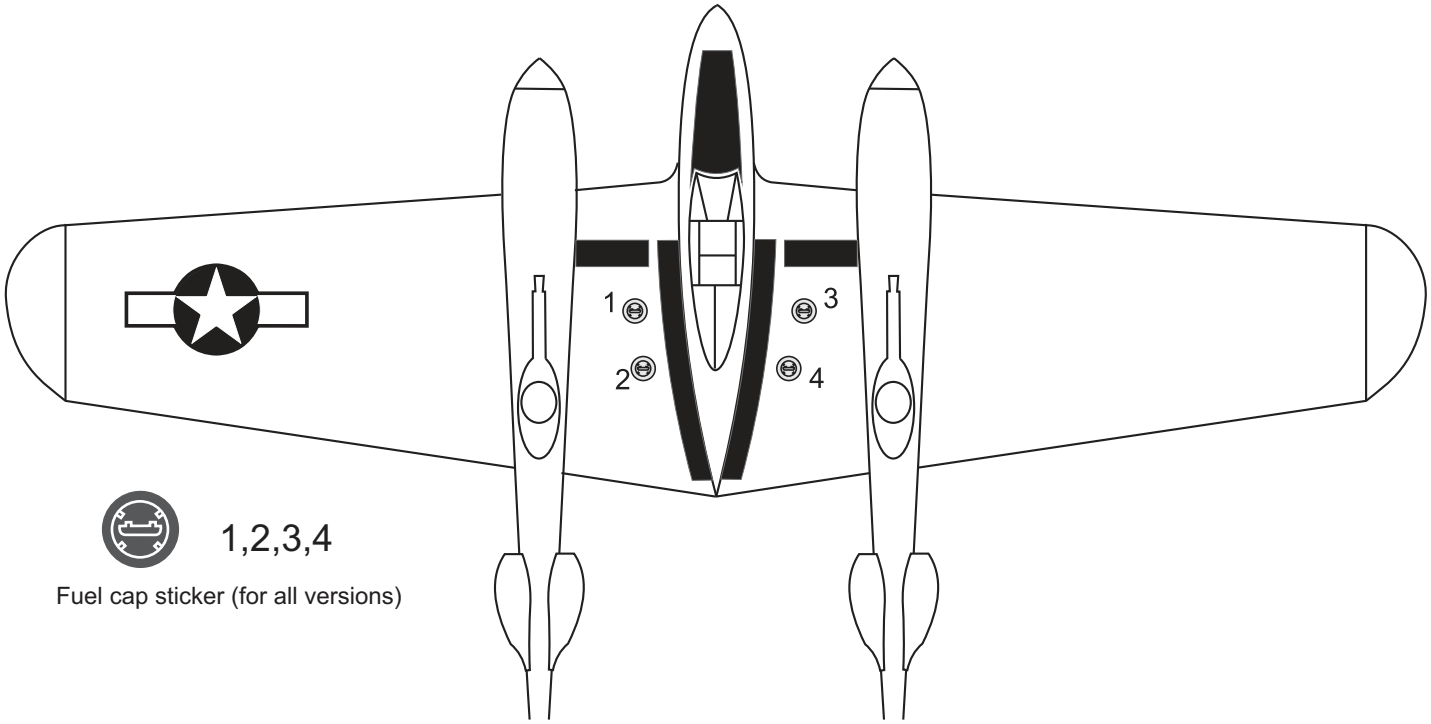


"Skidoo"decal is only for one side

Kill-mark only for one side

Skidoo version

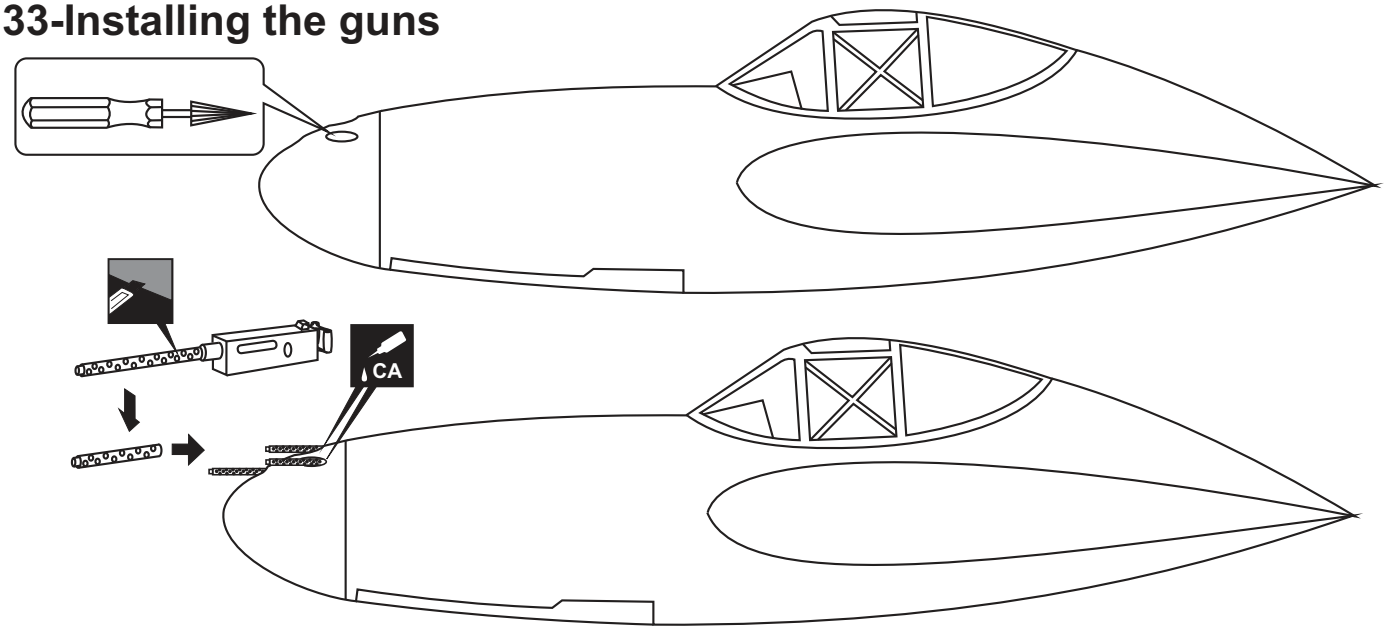




1,2,3,4

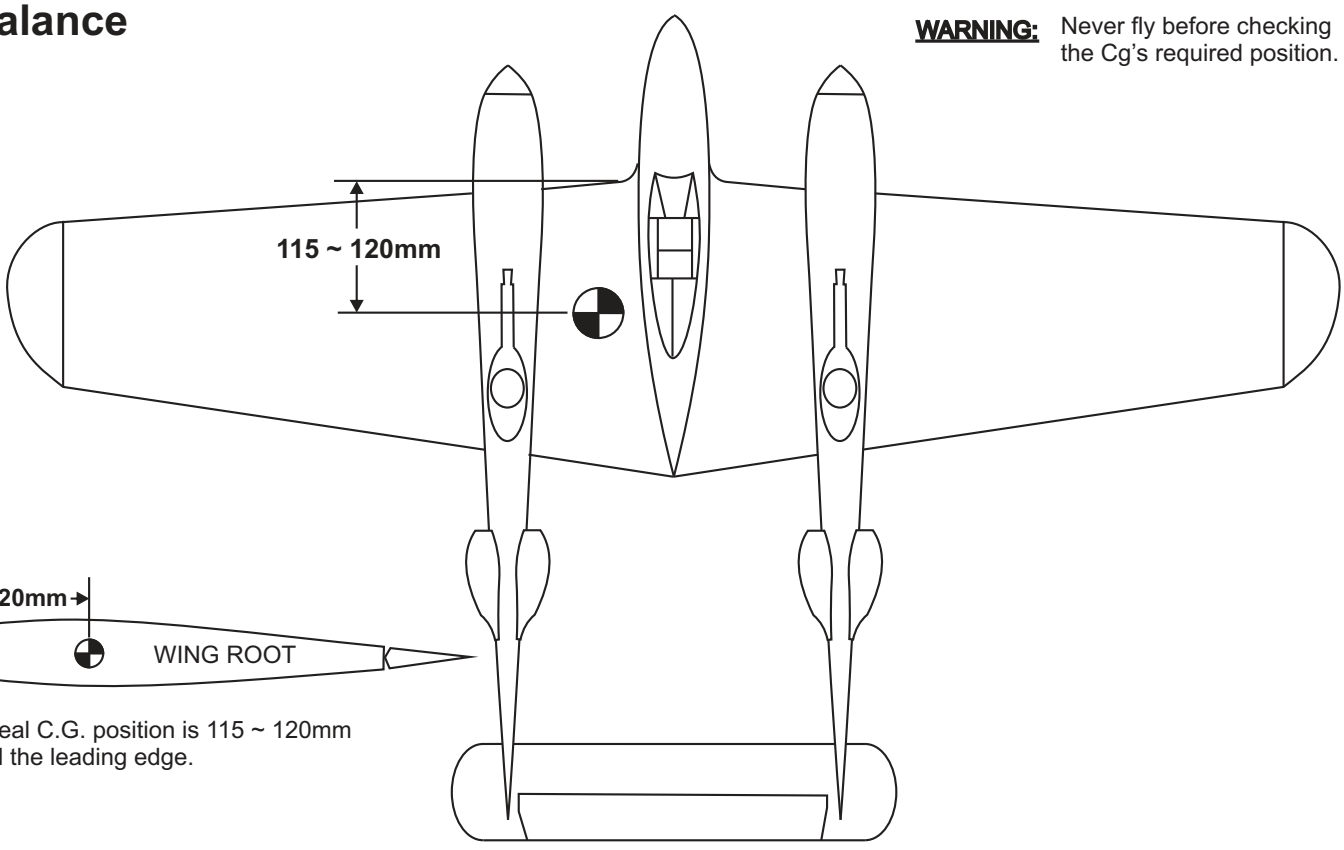
Fuel cap sticker (for all versions)

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