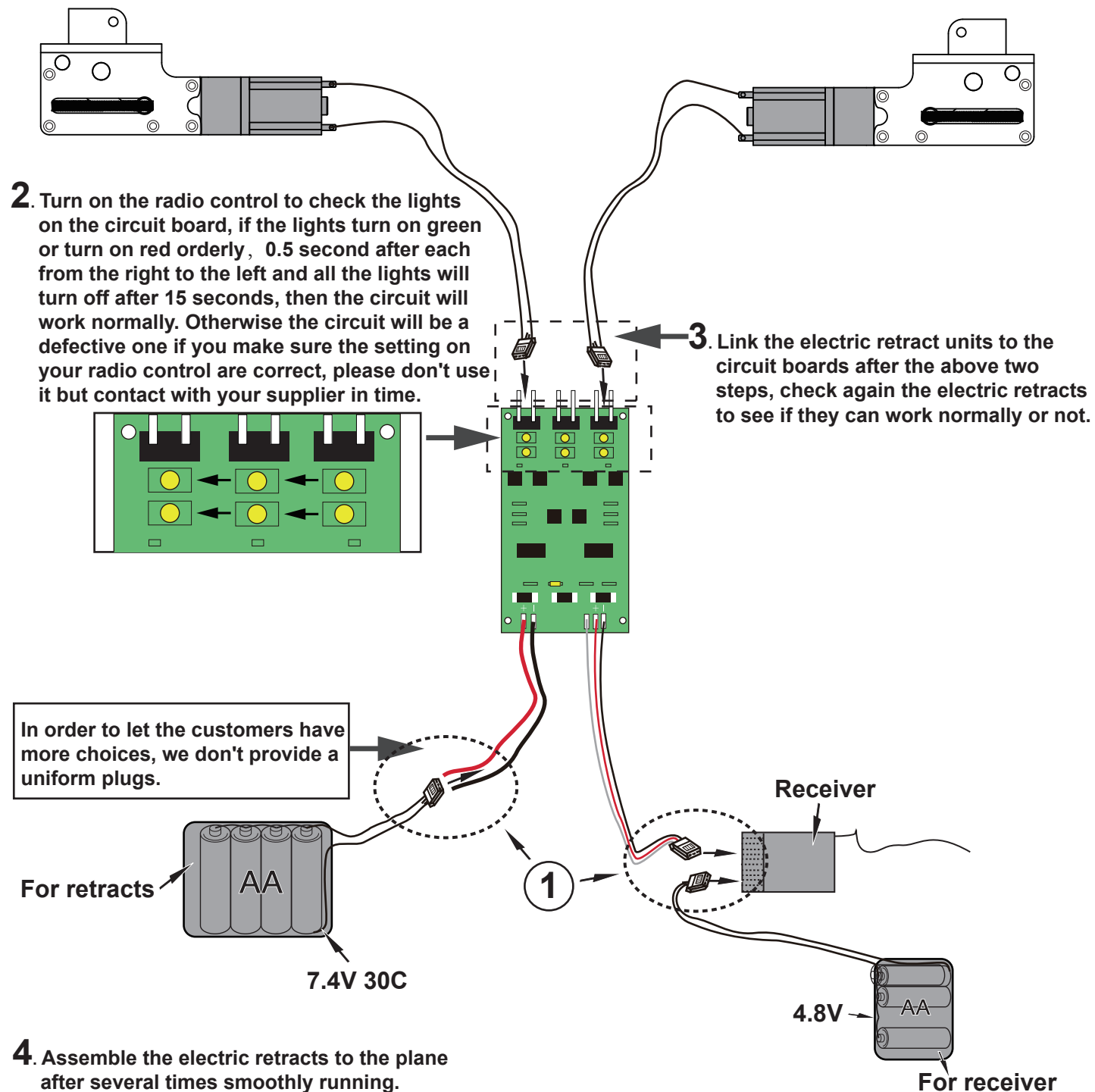


Electric retract system

Thank you very much for purchasing our TRCM optional electric retract set, all our products were passed strict QC before they shipped out to the customers. In order to avoid probably trouble happen, we still would like you to follow the steps below before you assemble our electric retracts to your plane.

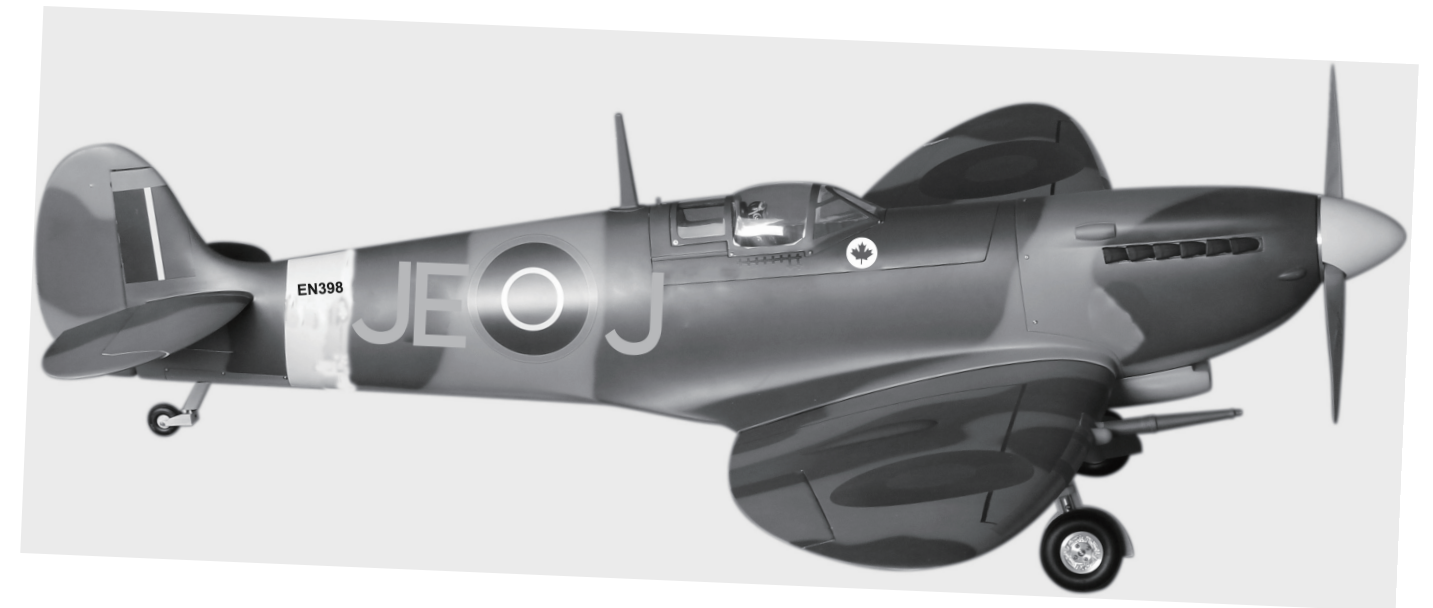
1. Connecting the circuit board to the battery and receiver.



Warning! Please don't ceaselessly turn and off the switch in 2 seconds, if you do this way, the circuit board will be heated.

Before start ,please carefully read the explanations!

Spitfire Mk.IX ARF



Specification:

Wing Span: 2058mm/81in

Length: 1715mm/67.5in

Flying Weight: ~7.6kg

Wing area: 74.95 dm²

Engine: 35cc-40cc

R/C System: 2.4Ghz 6ch

Servo: GP *7 ; EP * 6

Battery: LI-PO 5S*2 5000mAh 30C

ESC: 120A High voltage Brushless ESC

INSTRUCTION MANUAL



SAFETY PRECAUTIONS

This R/C airplane is not a toy!

(The people under 18 years old is forbidden from flying this model)

First-time builders should seek advice from people having building experience. If misused or abused, it can cause serious bodily injury and damage to property.

Fly only in open areas and preferably at a dedicated R/C flying site. We suggest having a qualified instructor carefully inspect your airplane before its first flight. Please carefully read and follow all instructions included with this airplane, your radio control system and any other components purchased separately.

REQUIRED FOR OPERATION (Purchase separately!)



CAUTION: For details concerning the equipment listed below (size, maker, etc.), check with your hobby shop.

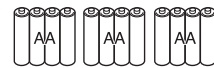
- 1 A minimum 6 channel radio for airplanes (with 8 servos), and dry batteries.



CAUTION: Only use a minimum 6 channel radio for airplanes! (No other radio may be used!)

6 channel radio for airplane is highly recommended for this model.

12 AA-size Batteries



A minimum 6 channel transmitter for airplanes.



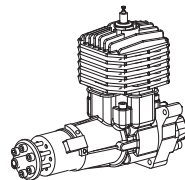
For handling the radio properly, refer to its instruction manual.

2

Engine and Muffler

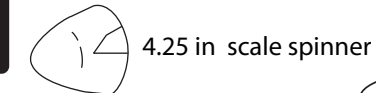
Model Airplane Engine 35cc gas engine

Muffler



3

Propeller Spinner

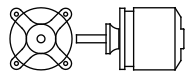


Purchase a propeller that will match your engine.

Engine 19"X10



Motor 21"X12



Motor: Outer rotor, 63-60 220KV

TOOLS REQUIRED (Purchase separately!)

Sharp Hobby Knife



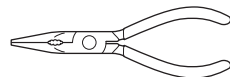
Phillips Screw Driver (l, m, s)



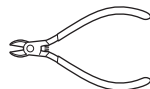
Awl



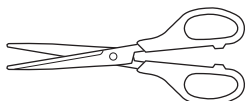
Needle Nose Pliers



Wire Cutters



Scissors



BEFORE YOU BEGIN

- 1 Read through the manual before you begin, so you will have an overall idea of what to do.
- 2 Check all parts. If you find any defective or missing parts, contact your local dealer.
- 3 Symbols used throughout this instruction manual, comprise:
- 4 We strongly recommen you use the thread lock for all the screws when you build your model.



Apply epoxy glue.



Drill holes with the specified diameter (2mm).



Cut off excess.



Pay close attention here!



Assemble left and right sides the same way.



Apply instant glue (CA glue, super glue).



Cut off shade portion.



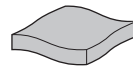
Ensure smooth non-binding movement while assembling.



Must be purchased separately!

4

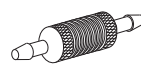
Sponge Sheet



Gasoline tube



Fuel Filter



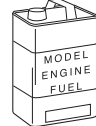
5

Required for engine starting:



WARNING: Normal gasoline cannot be used with glow engines.

Gasoline



Fuel Pump



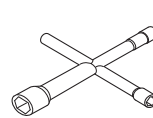
Booster Cord



4 D-size Batteries



Plug Wrench



6

Glue

Instant Glue



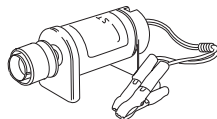
Epoxy Glue



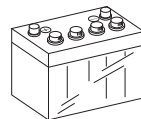
7

Other equipment for enhancing airplane operation & performance

Engine Starter

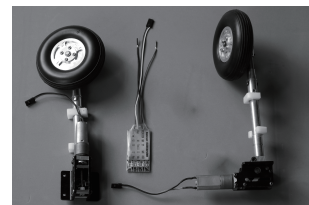


12V Battery (for starter)



9

Optional electric retract set



Accessories packing list

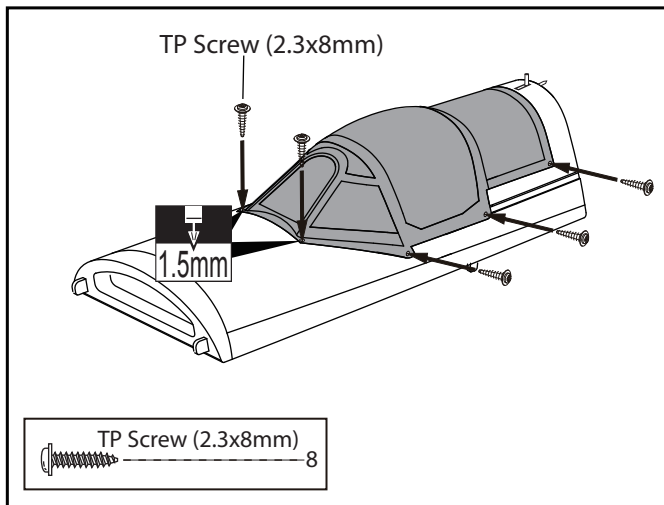
	TP Screw (2.3x8mm)	12
	TP Screw (2.3x12mm)	24
	TP Screw (3x20mm)	8
	Screw (2.6x12mm)	5
	Screw (3x16mm)	16
	Screw (2x10mm)	16
	Screw (3x5mm)	16
	Screw (3x10mm)	5
	Screw (3x20mm)	3
	Screw (4x15mm)	1
	Washer(3x10mm)	2
	Locknut (2mm)	16
	Washer(2x5mm)	16
	Washer(3x6mm)	21
	Copper joiner	6
	Aluminum tube	6
	Linkage Stopper	2
	L bracket	8
	Push rod (2x115mm)	2
	Push rod (2x70mm)	2
	Plastic tube (2x650mm)	1
	Steel wire (0.5x3000mm)	4
	Horn(2mm)	2
	Horn(2mm)	6
	Clevis	16
	pivot & round hinge(5x68mm)	15
	Pin hinge(24x24mm)	6
	Screw (6x50mm)	2
	EVA(10mm)	1
	Push rod	1
	Optional box for motor	1
	Ply sheet (3mm)	1
	Wooden Block	2
	Wooden Block	2
	Wooden Block	2

	Gear door	1
	Servo tray(2mm)	4
	Canopy Fiberglass	1
	Canopy PVC	1
	Fiber deconations	2
	scoop	1
	Antenna	1
	Scale gun set	2
	Main wing joiner(20x420mm)	4
	carbon fiber tube(10x285mm)	2
	Tail gear	1
	Aludevis	1
	Tail wheel (45mm)	1
	Fuel tank (550cc)	1

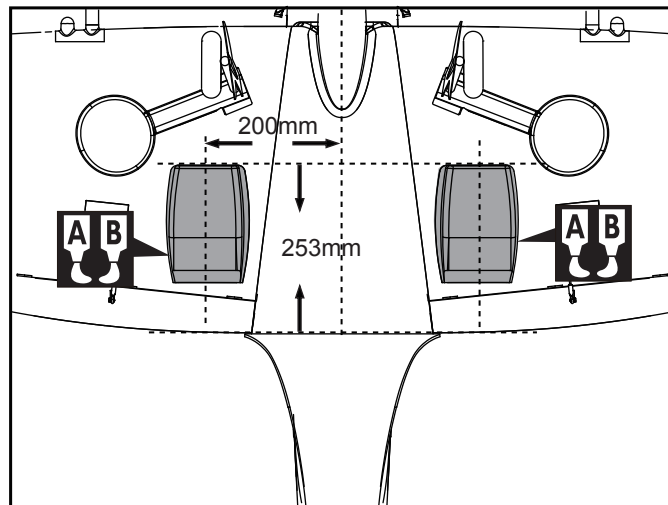
Purchased separately

	Main wheels (100mm)	2
	Oleo struts	1
	Circlip	2
	Wooden Block	4
	Retracts strut	2
	circuit board	1

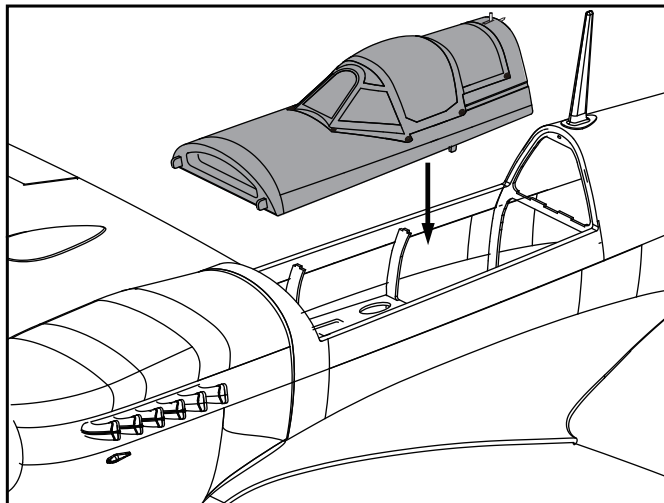
60 Assemble the canopy to the cockpit with screws.



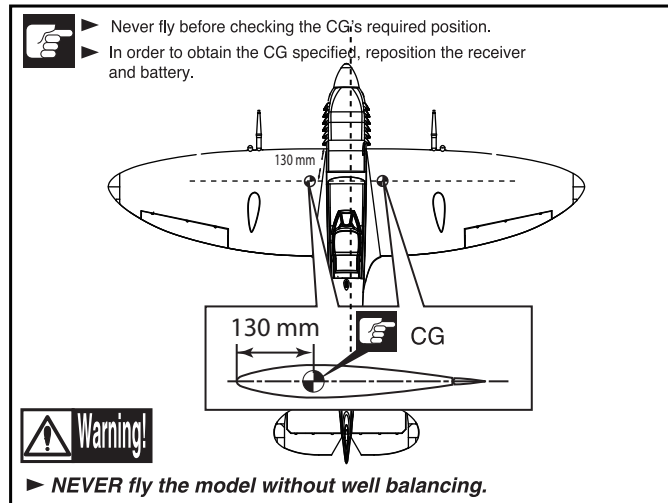
63 Epoxy the fiber deconations to appropriate position on the bottom of the wing.



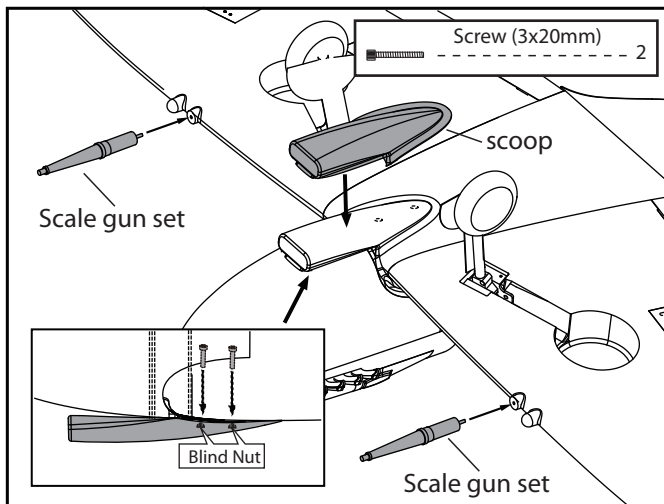
61 Assemble the cockpit to the fuselage.



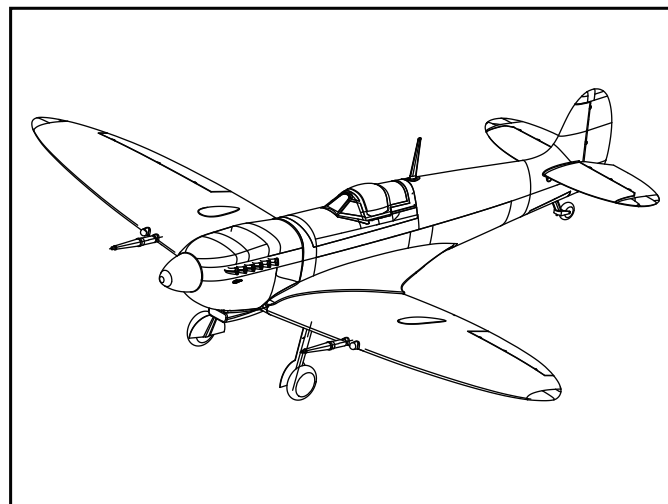
64 The centre of the Gravity.



62 Assemble the scale gun set to the wing and the fiber scoop to the fuselage.



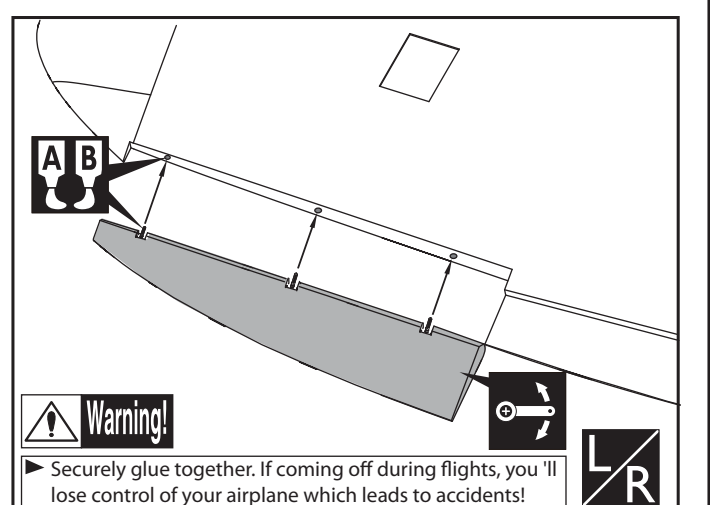
65 The skech map of the Spitfire plane install completion.



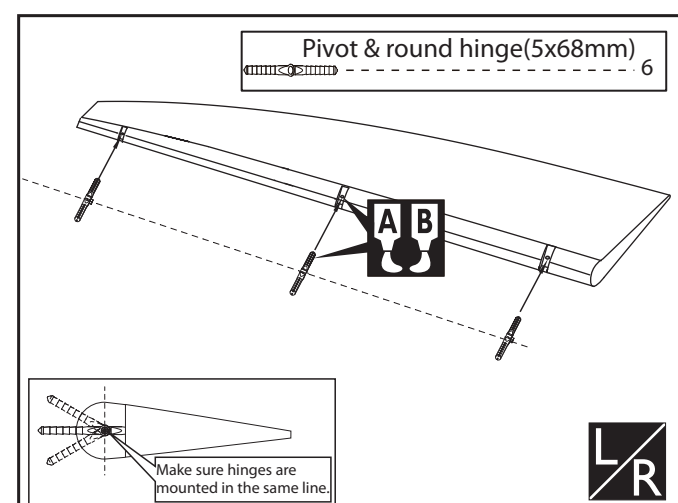
Accessory list for the coming installation steps.

Horn	2
Pivot & round hinge(5x68mm)	6
Clevis (2mm)	4
Push rod (2mm)	2
Screw (2x10mm)	4
Locknut (2mm)	4
Washer(2x5mm)	4
Screw (3x5mm)	8
Washer(3x6mm)	8
L bracket	4
Screw (3x16mm)	8
Servo tray(68.5x56.5x2mm)	2

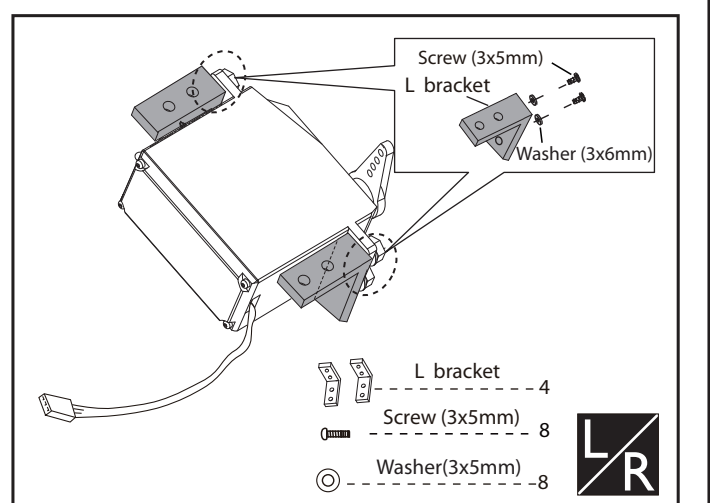
3 Assemble the aileron to main wing with instant type AB glue. Be careful to ensure the moving parts of the hinges are able to move freely.



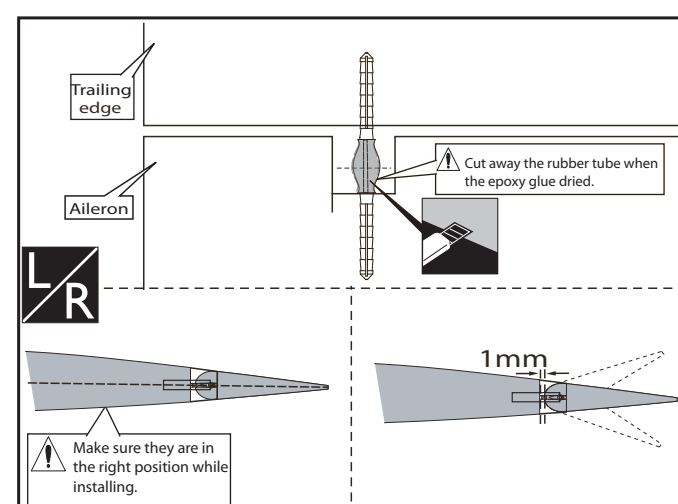
1 Apply instant AB glue to aileron and pin hinge.



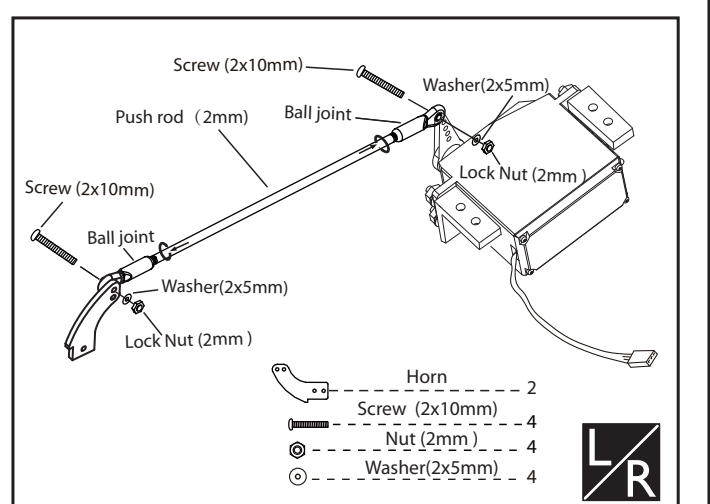
4 Install the L brackets to the servo of aileron as illustration below.



2 Keep some space about 1mm width between the trailing edge and the aileron.



5 Install the nylon control horn and connect the linkage.



Apply epoxy glue.

Assemble left and right sides the same way.

Pay close attention here!

Do not overlook this symbol!

Apply instant glue (CA glue, super glue).

Ensure smooth non-binding movement while assembling.

Cut off shaded portion.

Apply epoxy glue.

Assemble left and right sides the same way.

Pay close attention here!

Do not overlook this symbol!

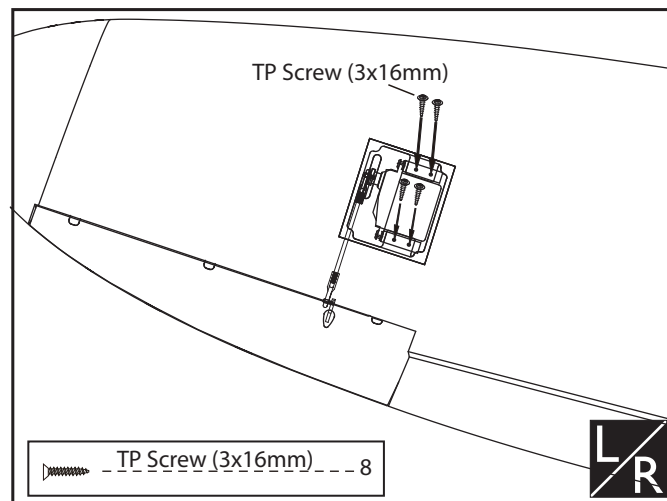
Apply instant glue (CA glue, super glue).

Ensure smooth non-binding movement while assembling.

Cut off shaded portion.

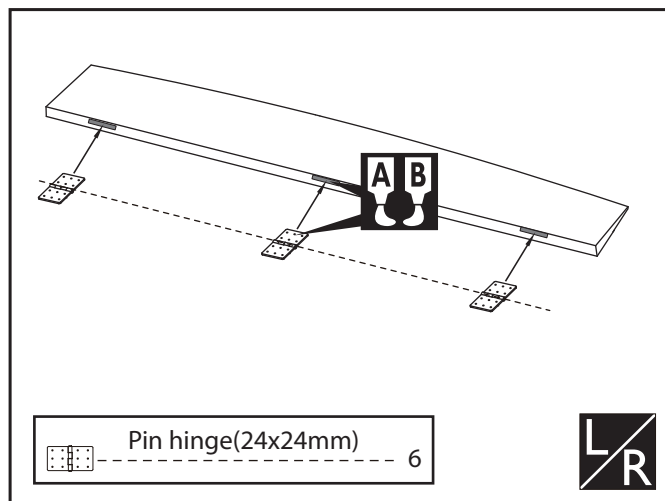
6

Secure the servo. Install the nylon control horn and connect the linkage.



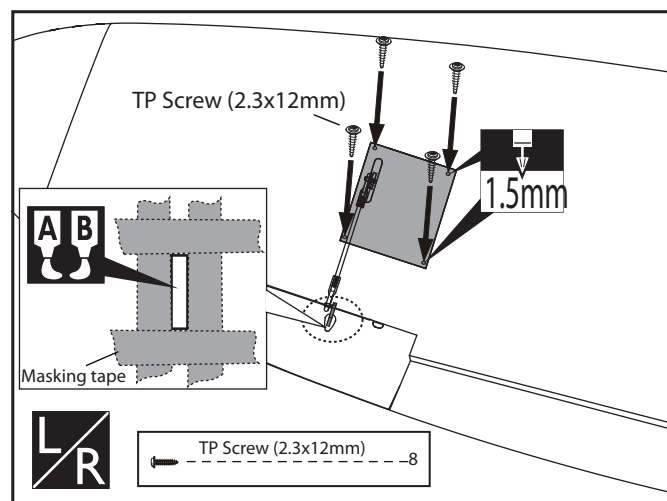
8

Epoxy the pin hinges to the slots in the flap.



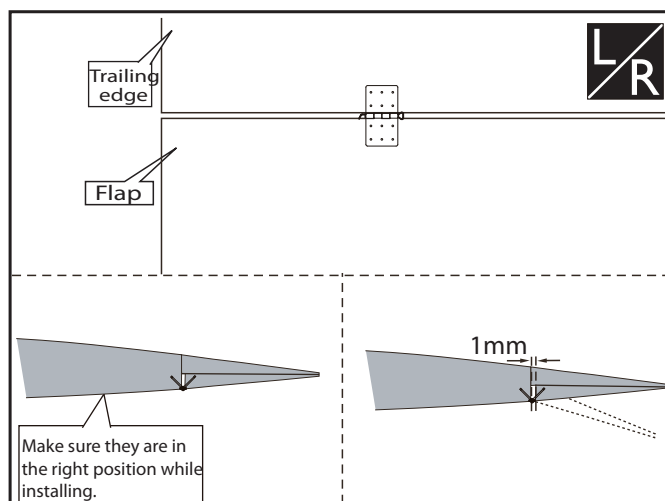
7

Assemble the servo tray to the wing with screws and epoxy the fiber horn to the aileron.

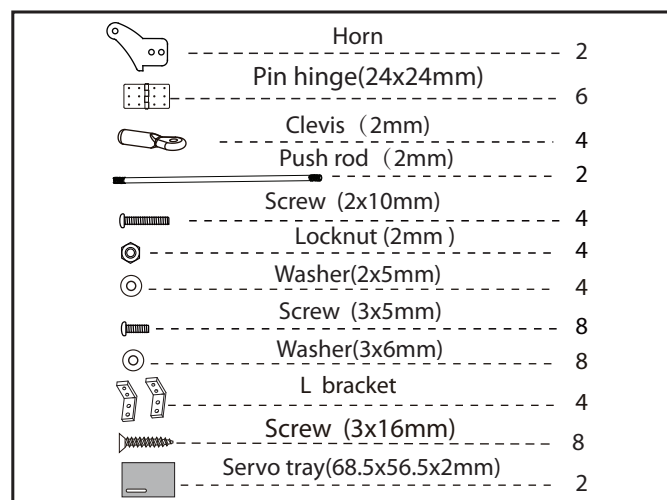


9

Keep some space about 1mm width between trailing edge and flap.

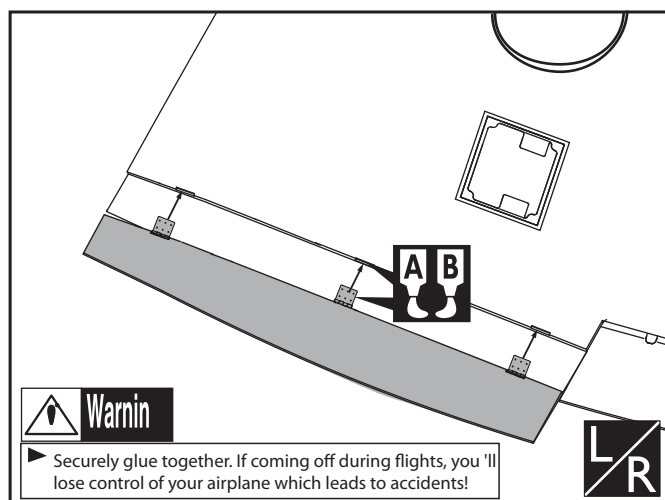


Accessory list for the coming installation steps.



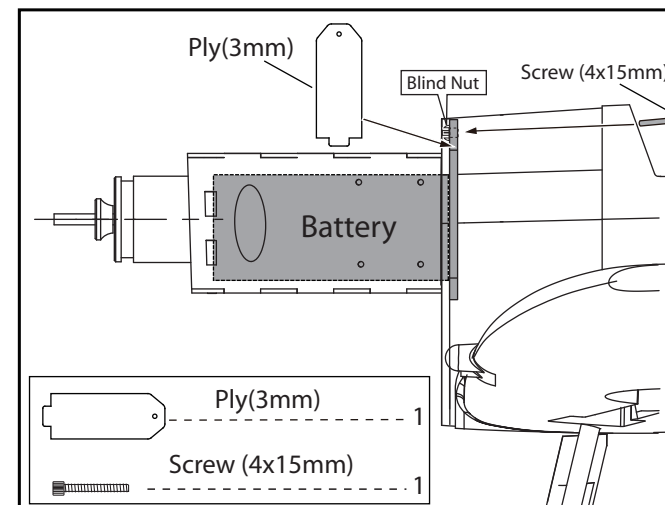
10

Epoxy the flaps to the wings as illustration.



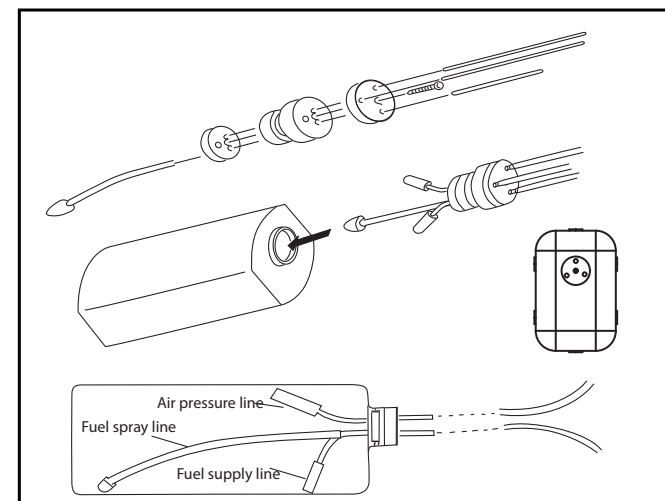
55

Fix the ply sheet as illustration with screw from the fuselage to stop the battery from moving.

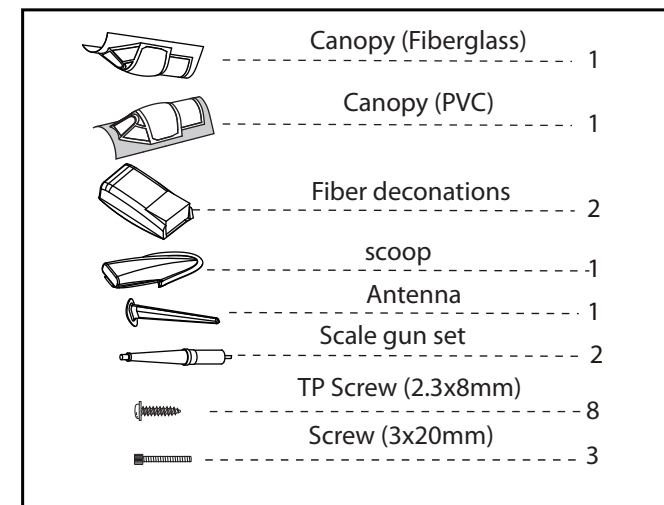


56

Assembly of the fuel tank (please notice that the plug of the tank and the tube should be special for gasoline).

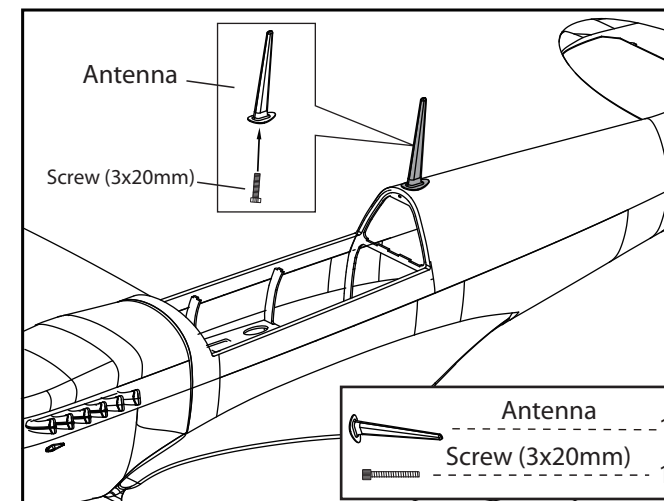


Accessory list for the coming installation steps.



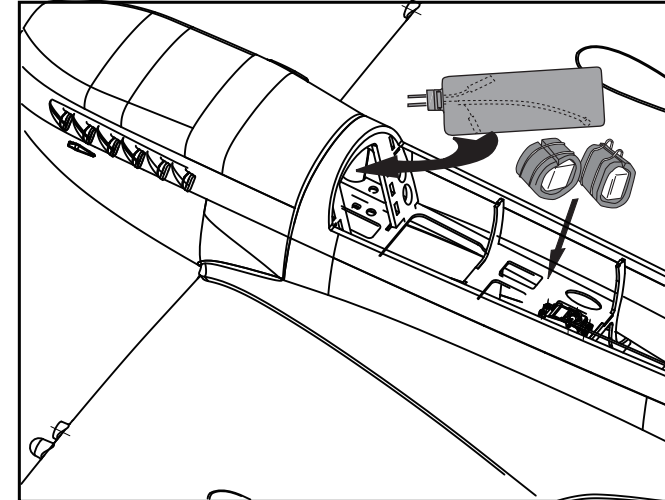
58

Assemble the antenna to the fuselage with screw.



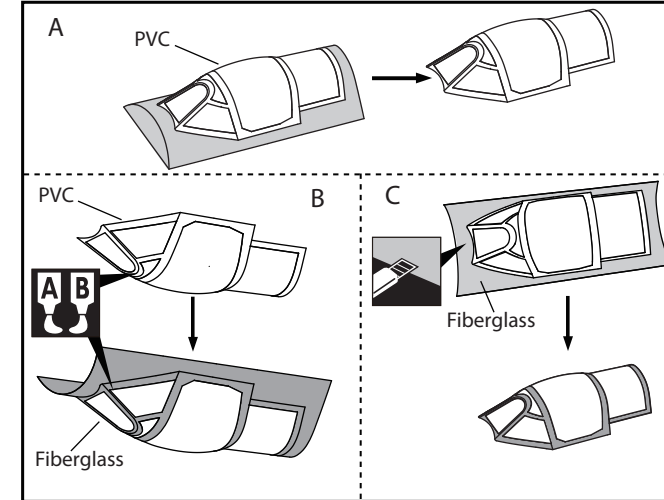
57

Mount the fuel tank, battery and receiver to the fuselage.



59

Cut off the surplus part from the PVC canopy, glue the fiberglass pic to the PVC canopy and trim off the surplus part.



Apply epoxy glue.



Apply instant glue (CA glue, super glue).



Assemble left and right sides the same way.



Ensure smooth non-binding movement while assembling.



Pay close attention here!



Cut off shaded portion.

Do not overlook this symbol!



Apply epoxy glue.



Apply instant glue (CA glue, super glue).



Assemble left and right sides the same way.



Ensure smooth non-binding movement while assembling.



Pay close attention here!

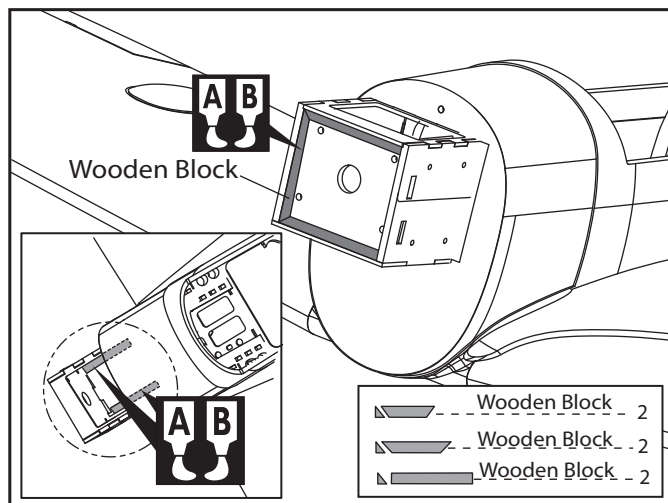


Cut off shaded portion.

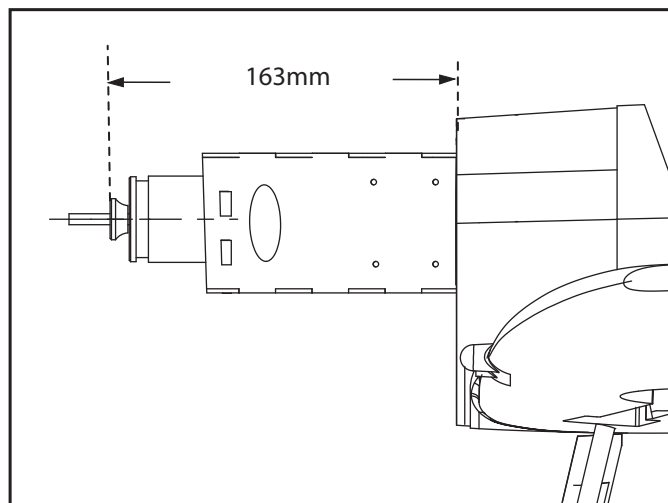
Do not overlook this symbol!



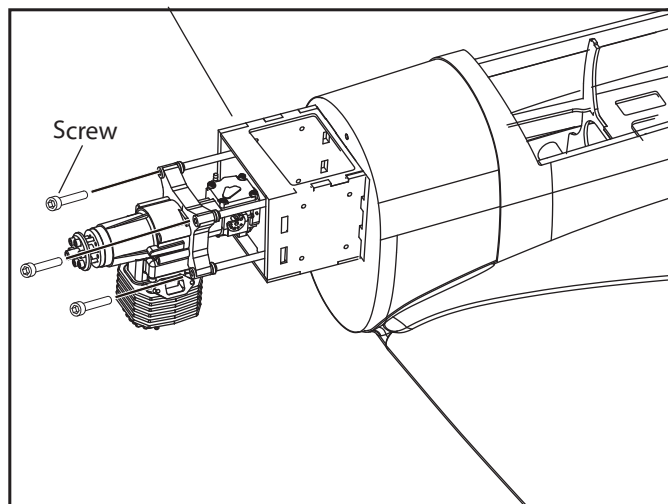
49 Reinforce the engine mount by epoxy the wooden blocks to the engine mounts from inner and outer of the engine mount as illustration.



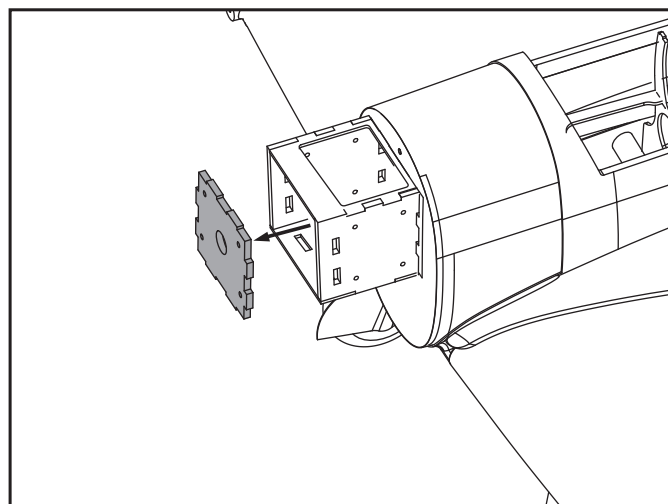
52 Customer can also use electric motor as optional, the assemble process is from step 52 to step 55. The side view when motor install completion.



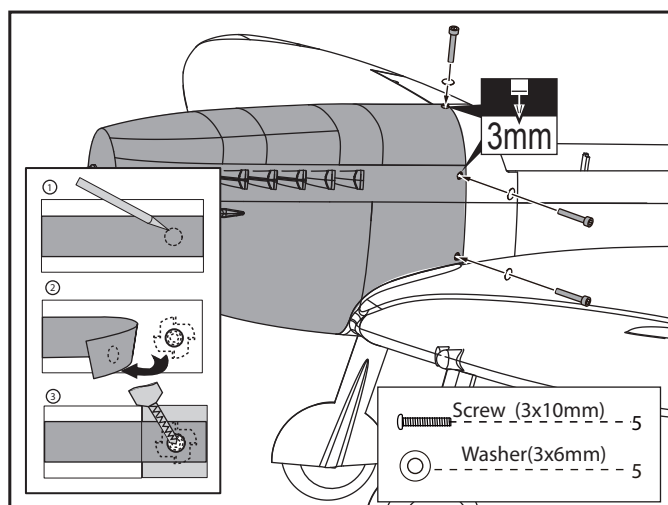
50 Install the engine to the engine mount with screws.



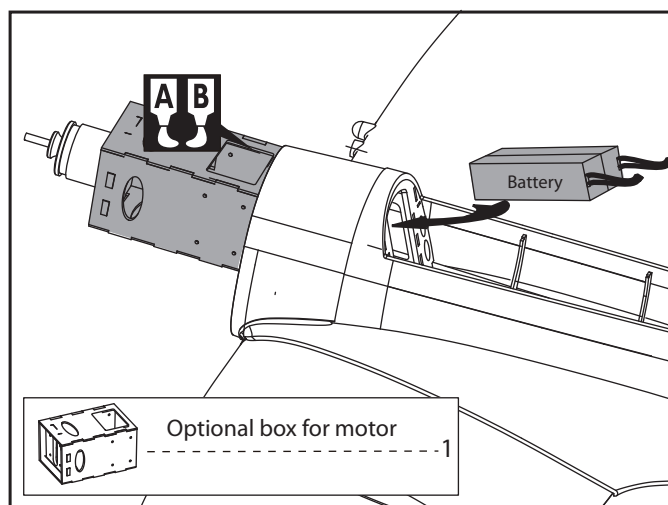
53 Remove the firewall off from the engine mount as illustration.



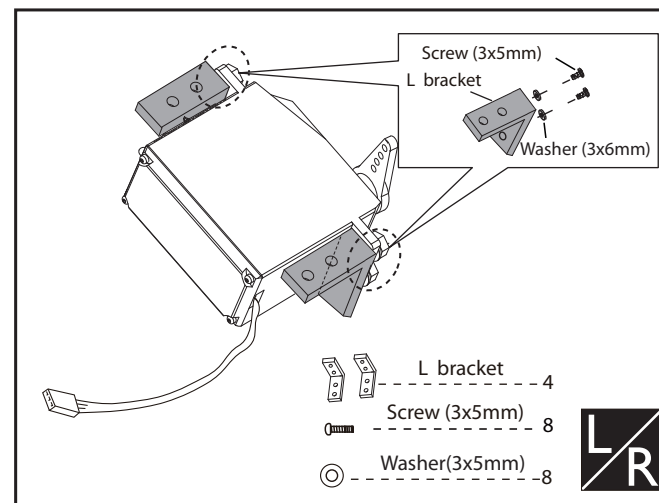
51 Using scotch tape, one side of it fixed, cover the blind nut hole and mark where the blind nut holes are, put the cowl to it is place on the fuselage, base on the marks on the scotch tape drill holes to the cowl.



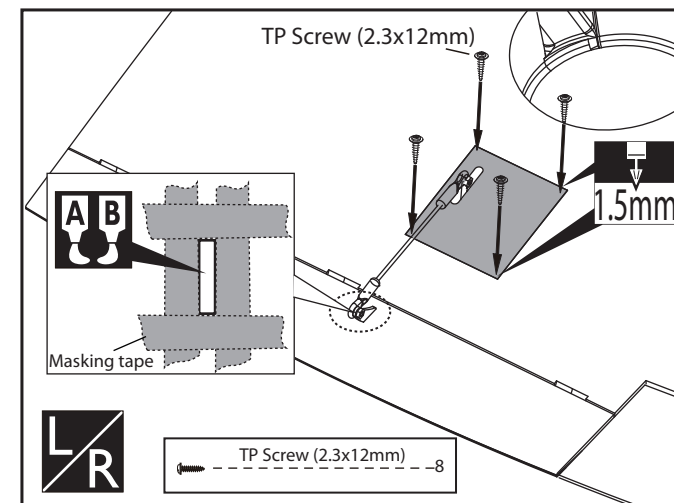
54 Epoxy the optional box to the engine mount and put the battery to the box from the hatch on the fuselage.



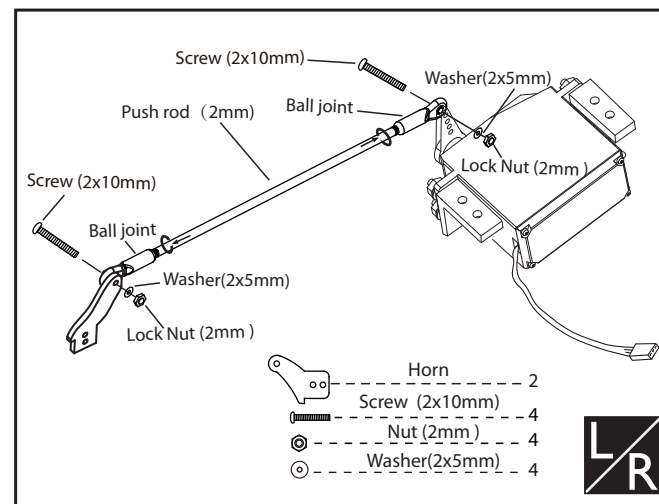
11 Install the L brackets to the servo of flap as illustration below.



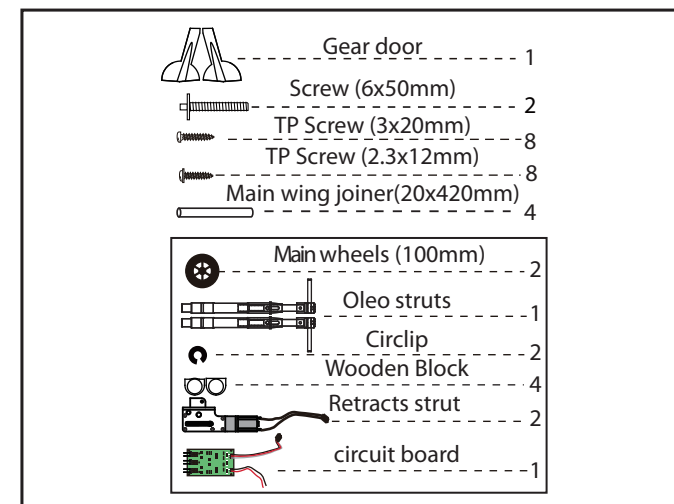
14 Assemble the servo tray to the wing with screws and epoxy the fiber horn to the flap.



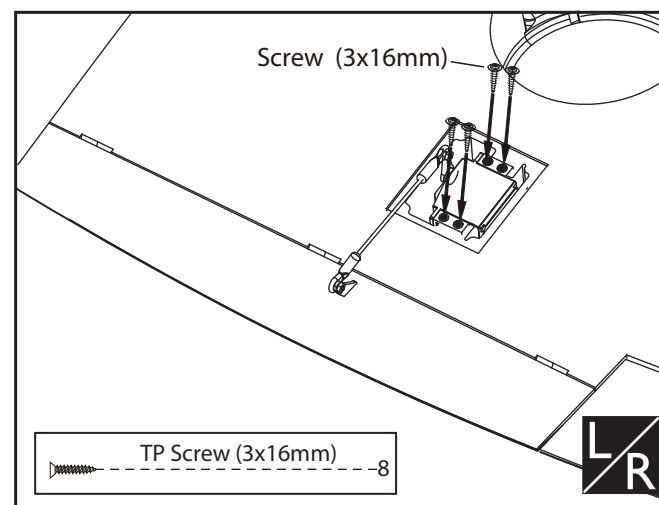
12 Install the nylon control horn and connect the linkage.



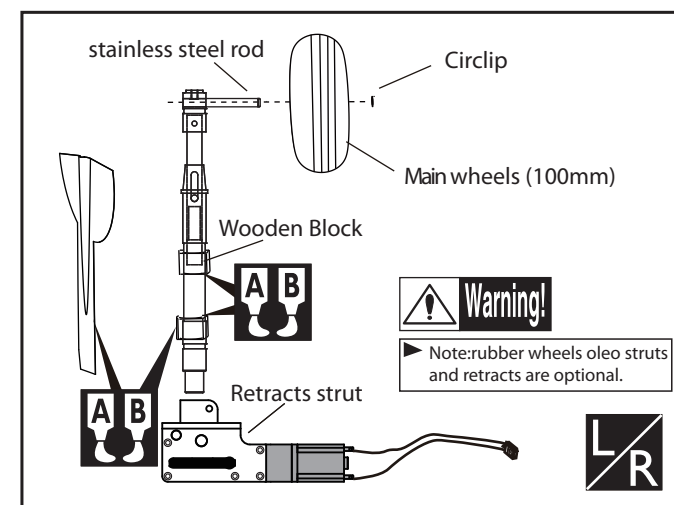
Accessory list for the coming installation steps.



13 Secure the servo. Install the nylon control horn and connect the linkage.



15 Mount the gear door and the wheel to the retract.



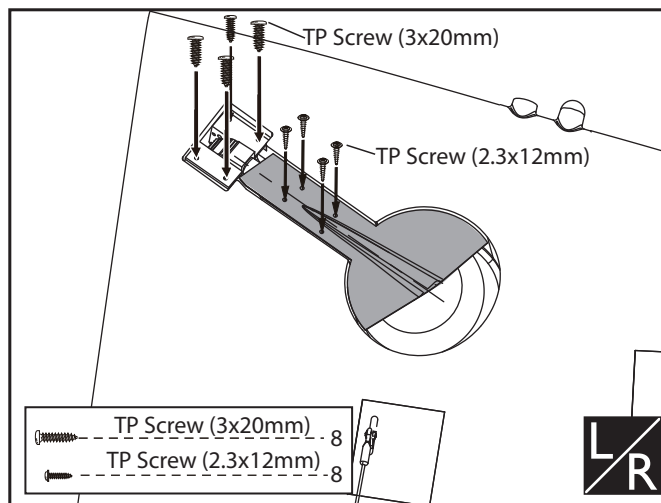
AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Hand** Ensure smooth non-binding movement while assembling. **Hand** Cut off shaded portion.

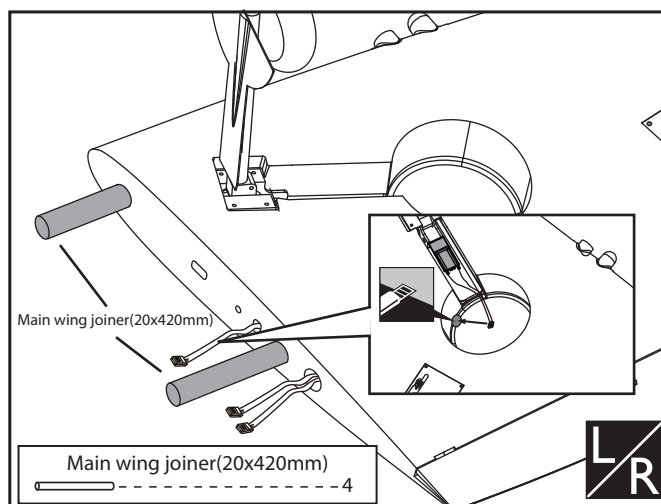
AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Hand** Ensure smooth non-binding movement while assembling. **Hand** Cut off shaded portion.

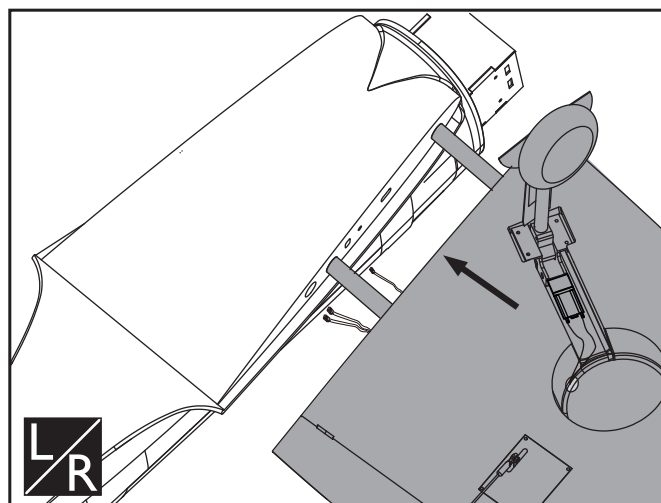
16 Assemble the retracts to the appropriate position in the gear house.



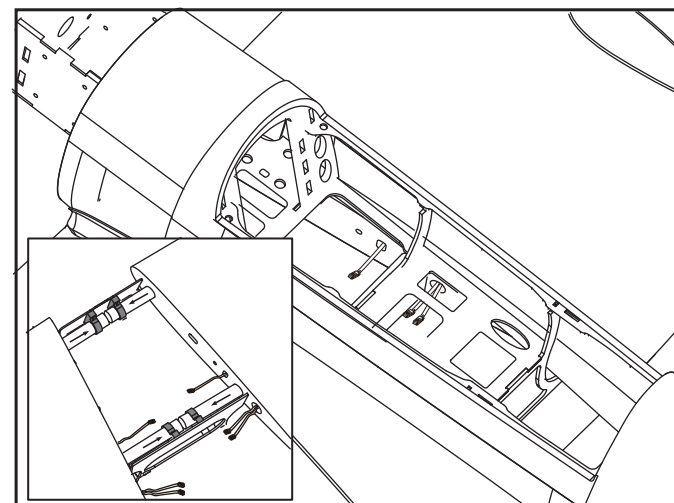
17 Drag the servo line and retracts lines from the wing.



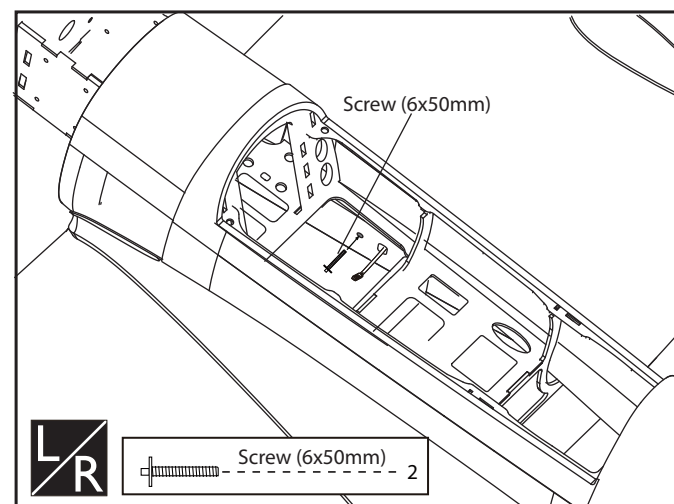
18 Connect the two wings through the main wing joiners.



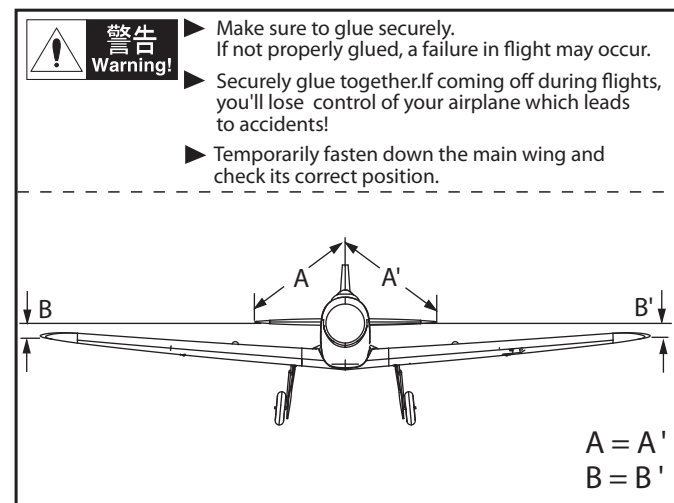
19 The sketch map of the wing fits well to the fuselage.



20 Factory already set blind nuts in the wings, the customers can fix the wing to the fuselage by tightening the nylon screws.



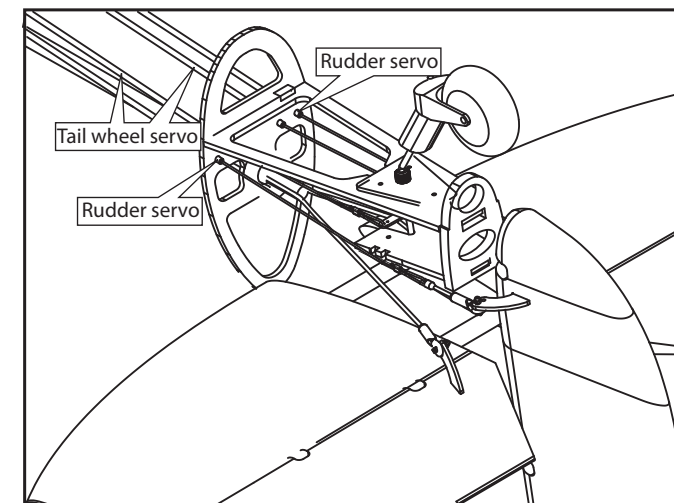
21 The sketch map should be when the stabilizer assembly completion.



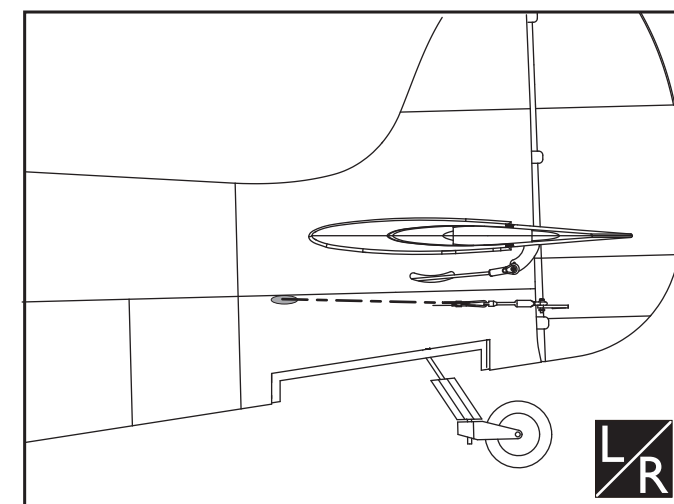
AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Wrench** Ensure smooth non-binding movement while assembling. **Scissors** Cut off shaded portion.

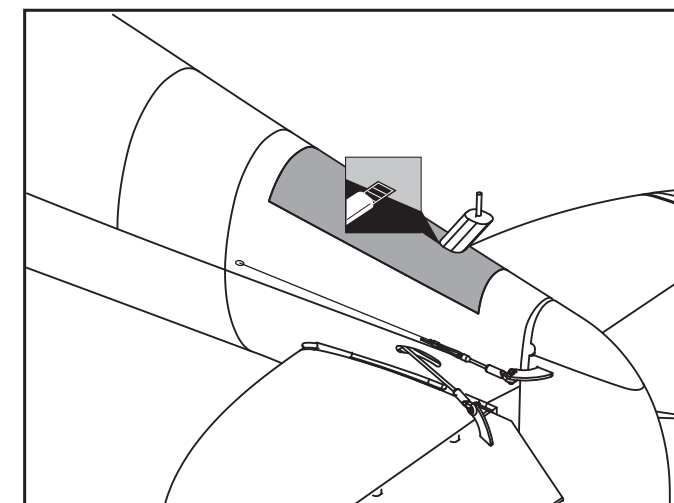
44 The sketch map of the steel wires working in the fuselage.



45 The sketch map of the steel wires connection out of the fuselage.



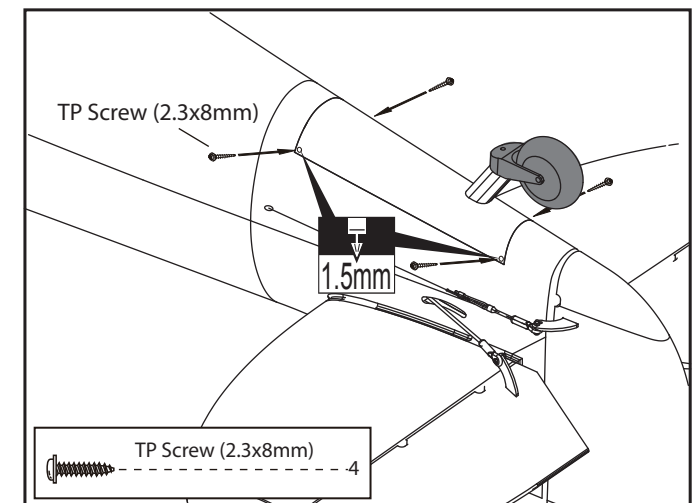
46 Take off the tail wheel and trim a slot on the tail cover for assembling the tail wheel.



AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Wrench** Ensure smooth non-binding movement while assembling. **Scissors** Cut off shaded portion.

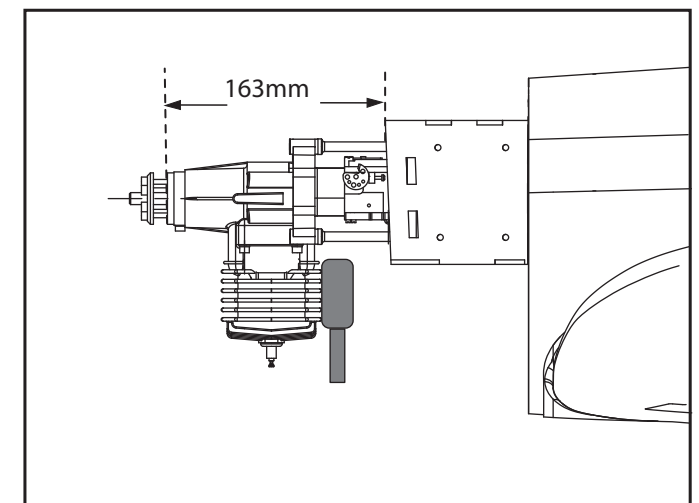
47 Assemble the tail gear cover with screws as below.



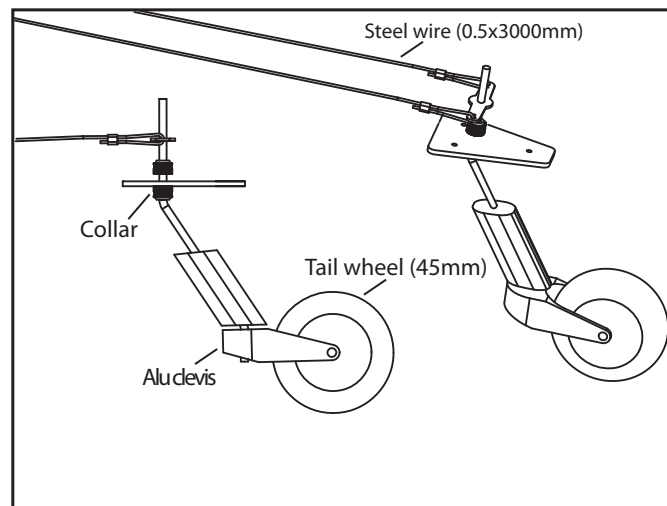
Accessory list for the coming installation steps.

	Linkage Stopper	2
	Plastic tube (2x650mm)	1
	Fuel tank (550cc)	1
	Ply sheet (3mm)	1
	Screw (4x15mm)	1
	Screw (3x10mm)	5
	Washer(3x6mm)	5
	Wooden Block	2
	Wooden Block	2
	Wooden Block	2

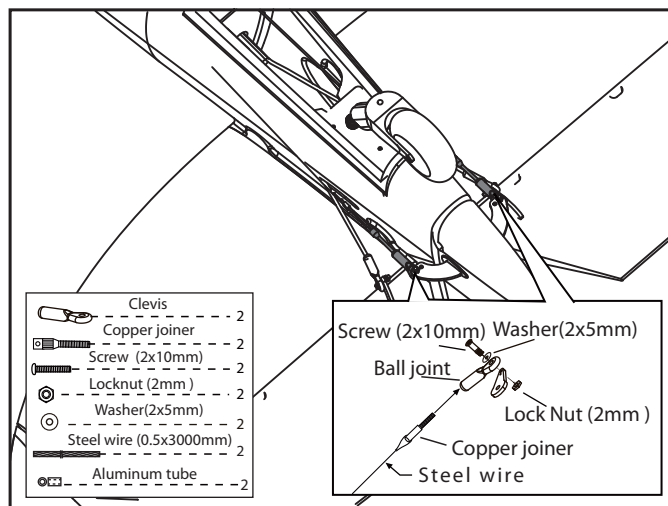
48 The side view when the engine install completion.



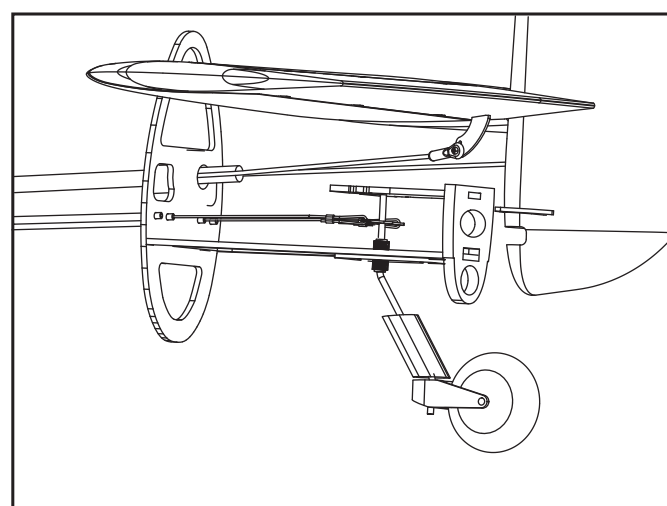
38 The sketch map when assemble the tail landing gear to the wheel steering mount.



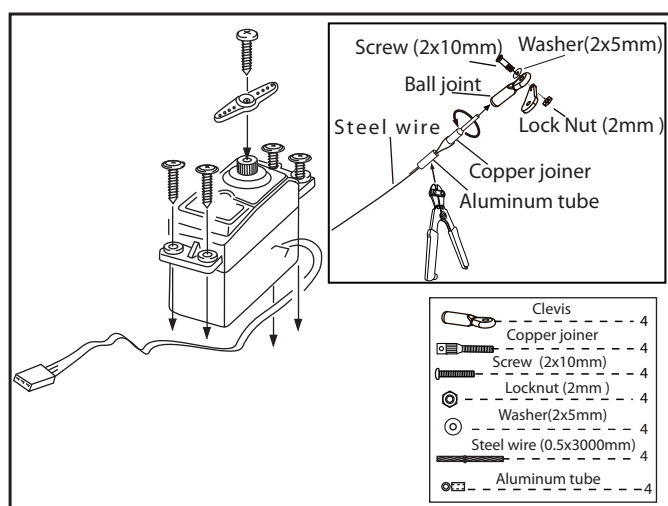
41 Assemble the steel wires well to the rudder horn and tail wheel.



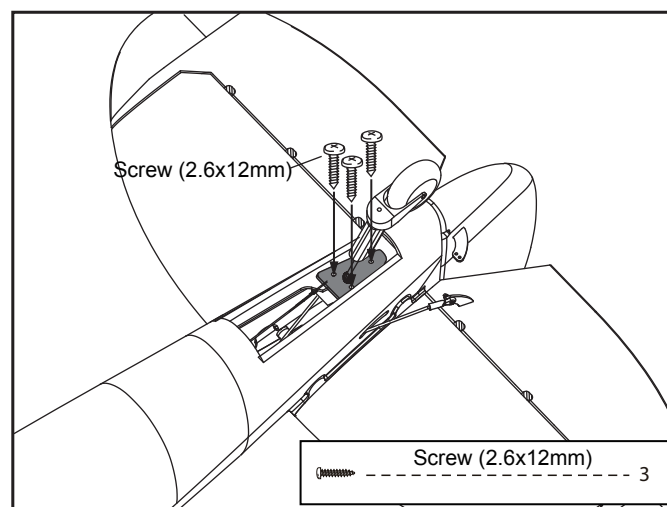
39 The sketch map of the tail wheel and steel wires working in the fuselage.



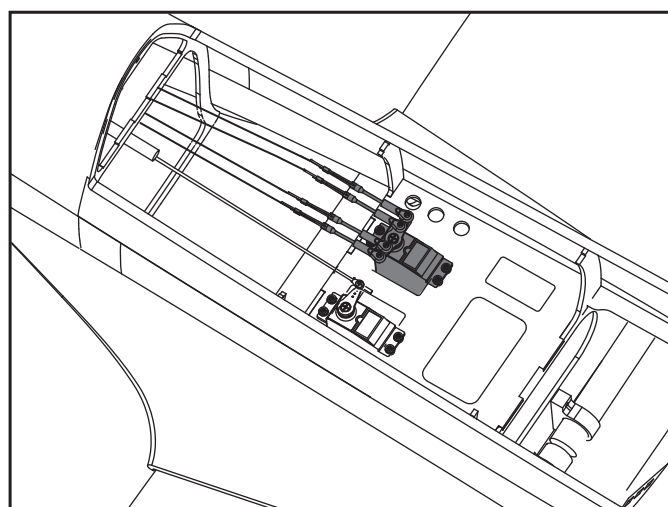
42 Install the servo.



40 Fix the tail gear to the tail fuselage.



43 Connect the steel wires of the rudder horn and tail gear to the servo.



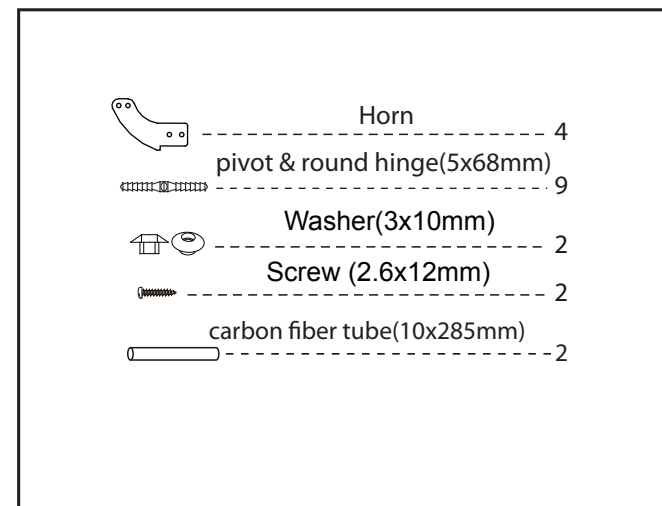
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!

Do not overlook this symbol!

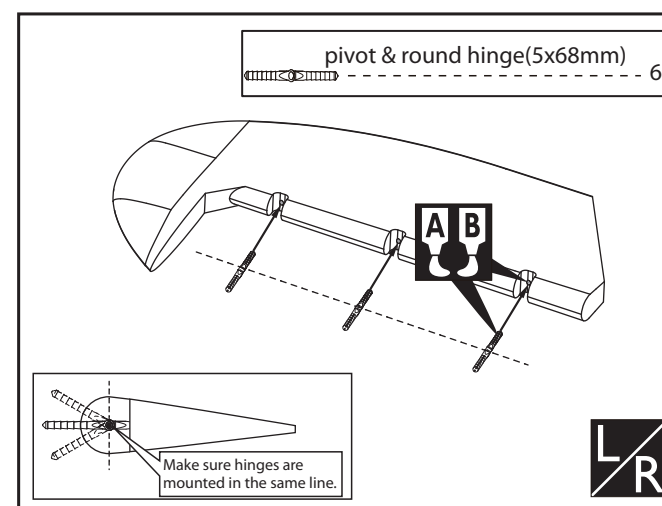
Apply instant glue (CA glue, super glue).
 Ensure smooth non-binding movement while assembling.
 Cut off shaded portion.

Do not overlook this symbol!

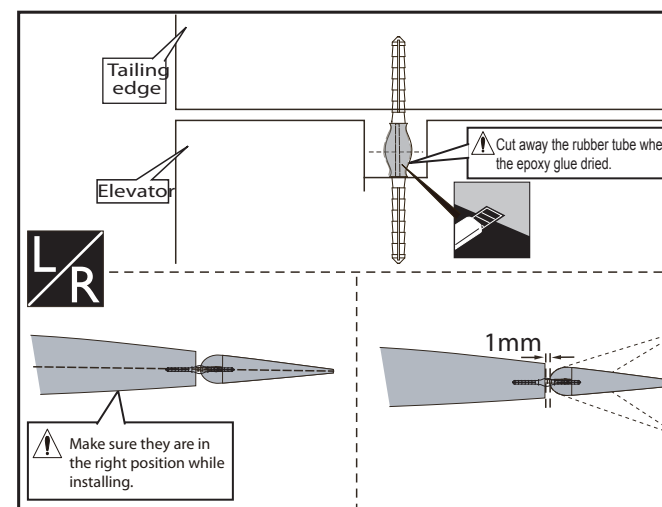
Accessory list for the coming installation steps.



22 Apply instant type AB glue to elevator and hinges.



23 Keep some space about 1mm width between elevator and tailing edge.



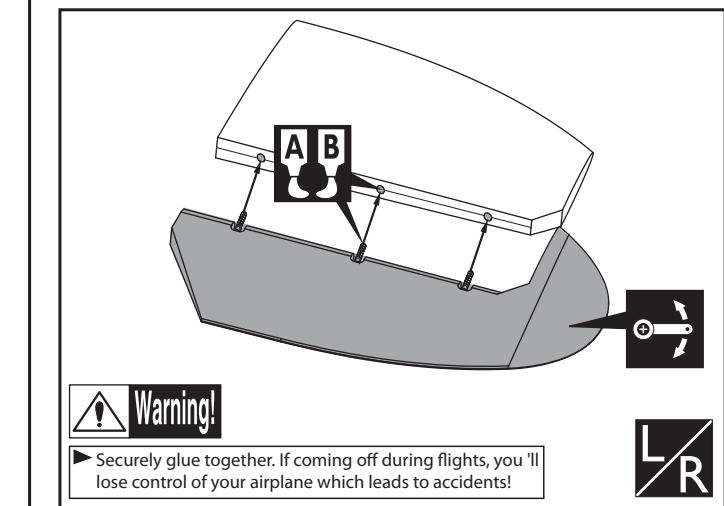
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!

Do not overlook this symbol!

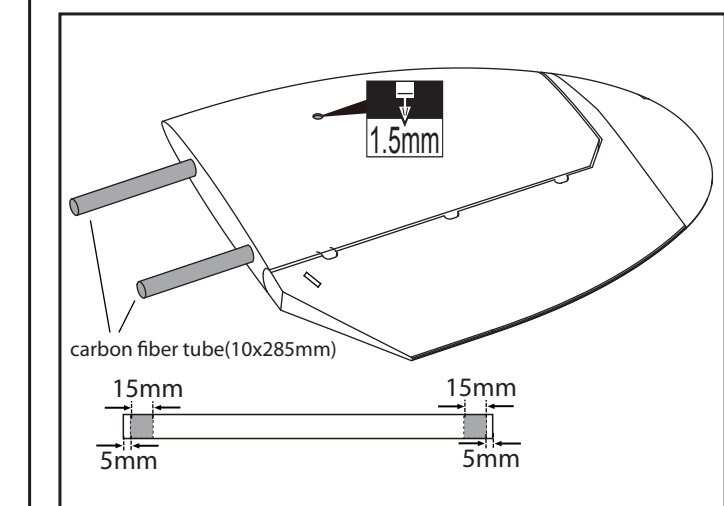
Apply instant glue (CA glue, super glue).
 Ensure smooth non-binding movement while assembling.
 Cut off shaded portion.

Do not overlook this symbol!

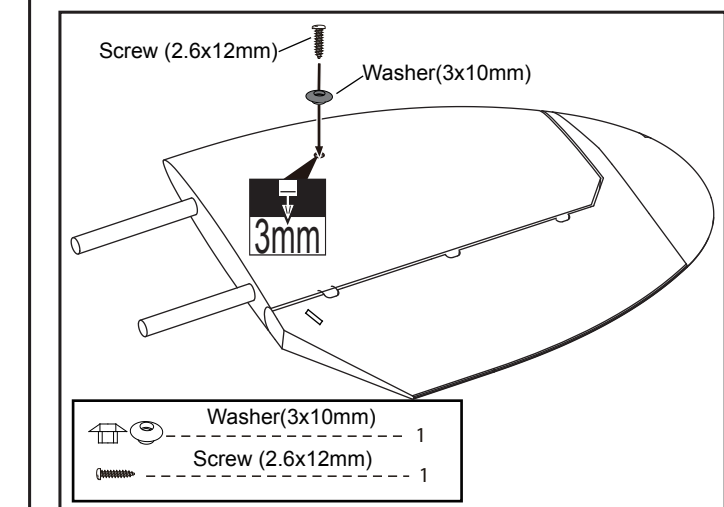
24 Epoxy the elevator to the stabilizer.



25 Glue the wooden block to each side of the stab tube as below, put the stab tube into one side the horizontal to the end and mark it out at the root of the horizontal, drill a hole in the stab tube and horizontal as illustration.



26 Fix the carbon fiber tube to one side of the stab with screws.



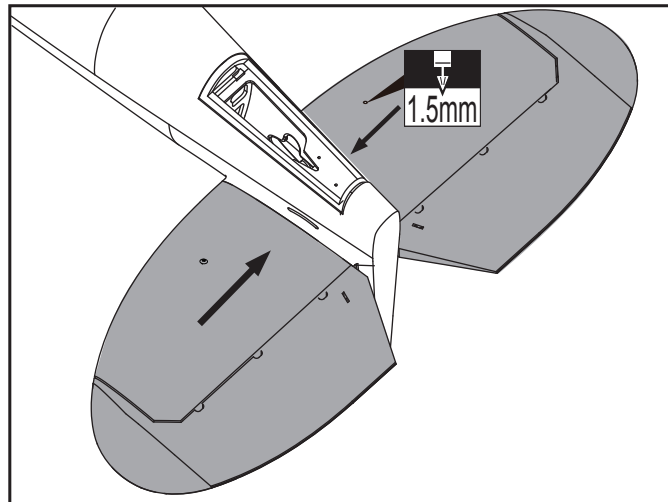
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!

Do not overlook this symbol!

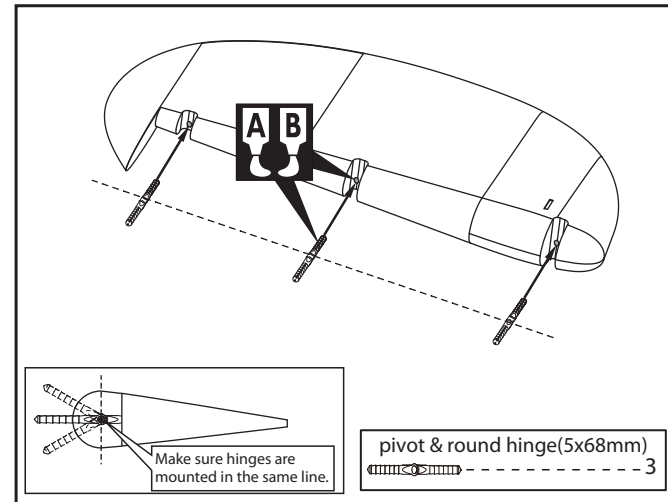
Apply instant glue (CA glue, super glue).
 Ensure smooth non-binding movement while assembling.
 Cut off shaded portion.

Do not overlook this symbol!

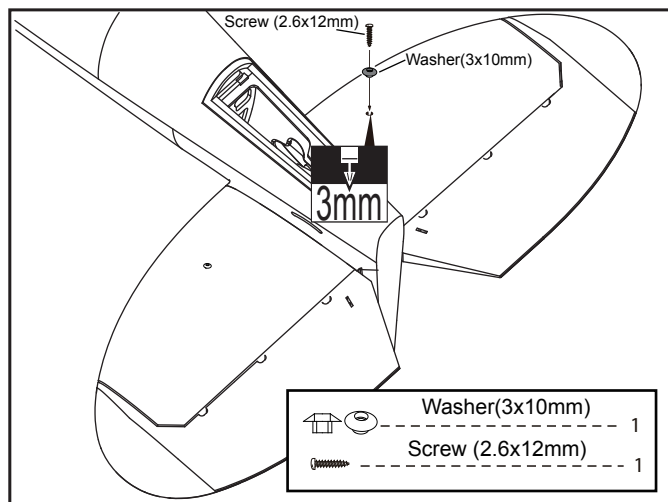
27 Assemble the stab to the fuselage drill a hole to the other section stab.



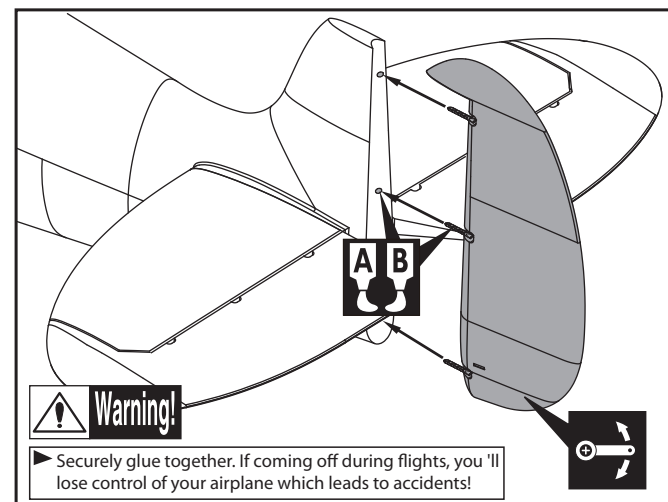
30 Epoxy the pivot & round hinges to the rudder.



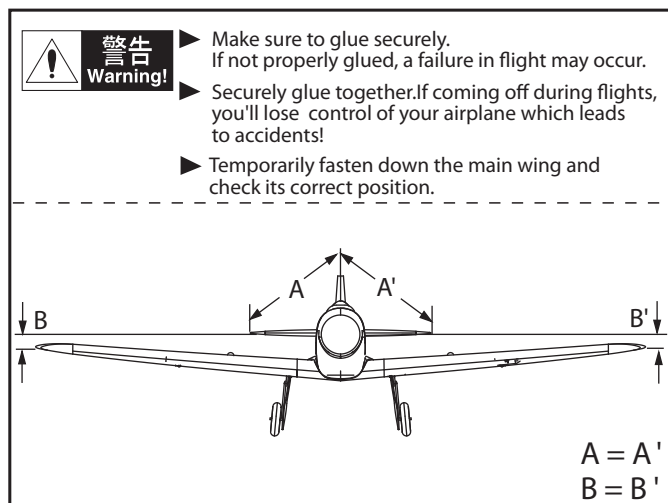
28 Fix the other side of the stab with screw.



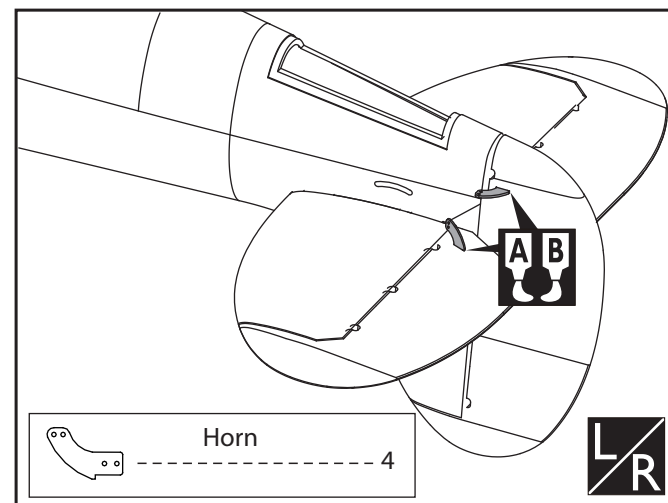
31 Epoxy the rudder to the vertical fin.



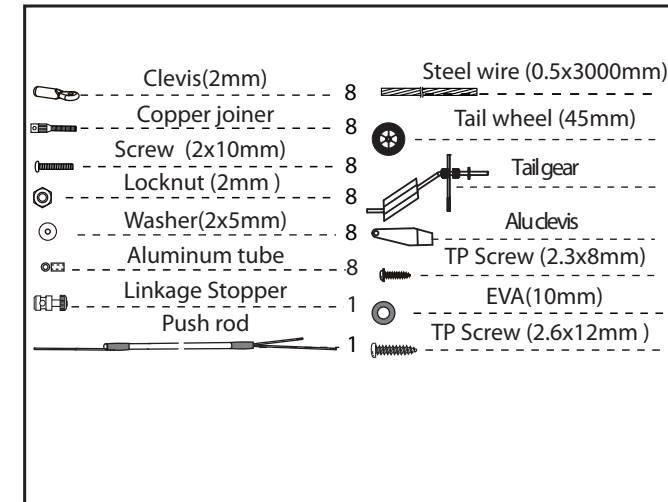
29 The sketch map should be when the stabilizer assembly completion.



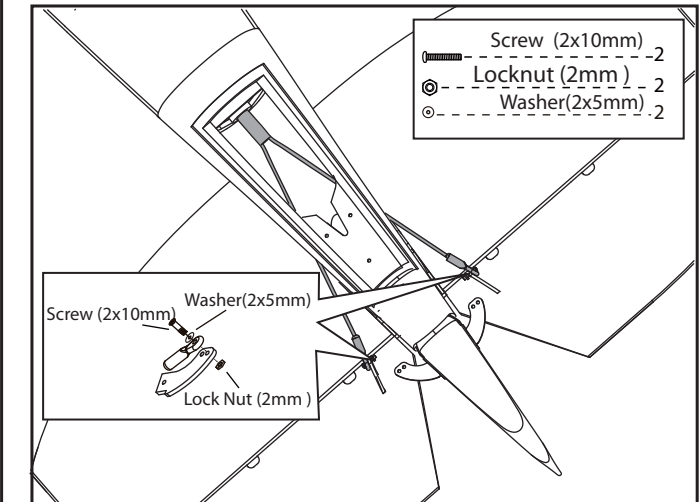
32 Epoxy the fiber horns to the slots in the rudder and elevator.



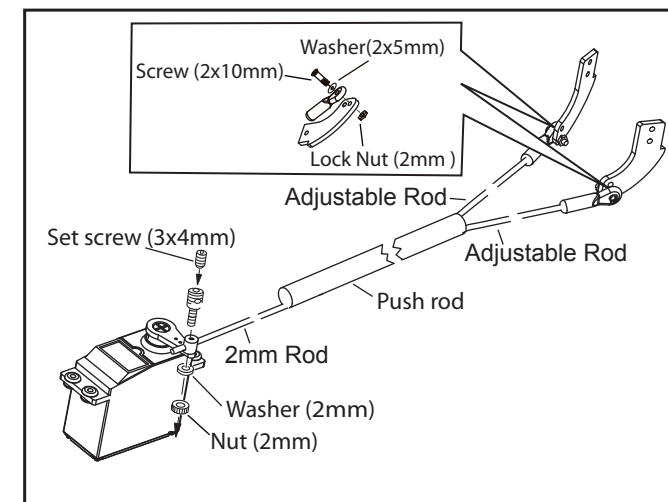
Accessory list for the coming installation steps.



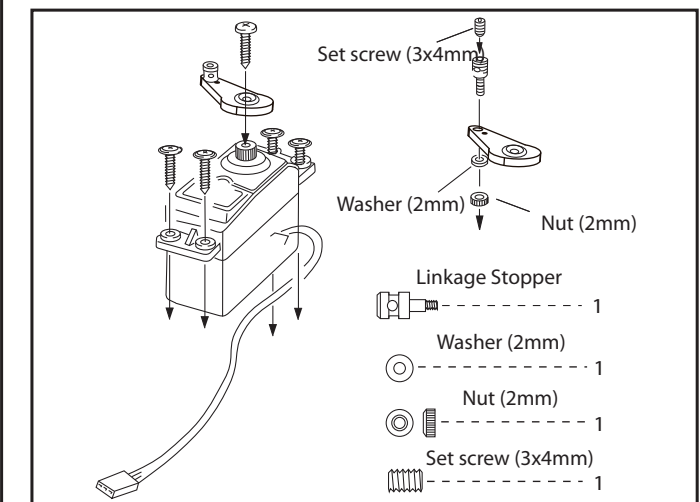
35 Assemble the push rod branches to the horns on the elevator.



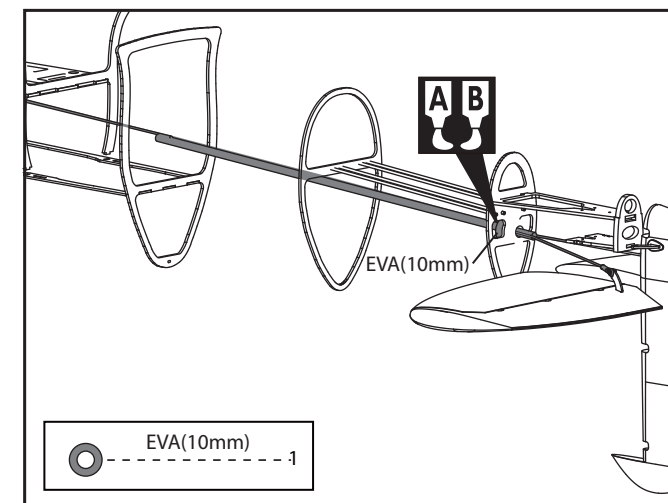
33 The sketch map of the push rod connect to the elevator servo.



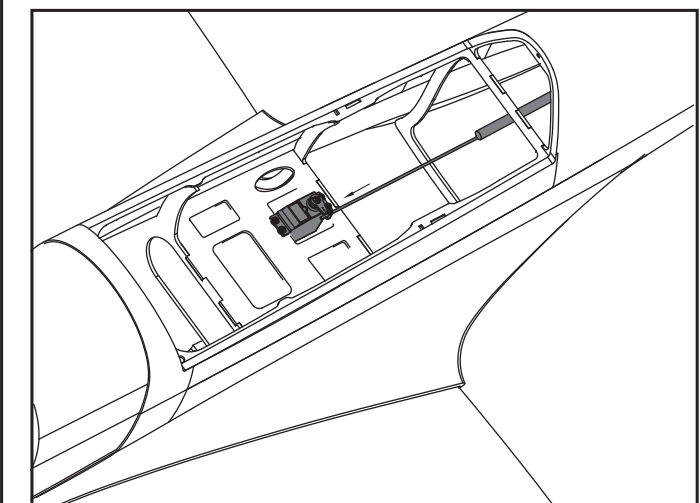
36 Assemble the servos.



34 The sketch map of the push rod working in the fuselage.



37 Assemble the another side of the push rod to the elevator servo in the fuselage as image.



AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Pay close attention here!** **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Ensure smooth non-binding movement while assembling.** **Cut off shaded portion.**

AB Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Pay close attention here!** **Warning!** Do not overlook this symbol!

CA Apply instant glue (CA glue, super glue). **Ensure smooth non-binding movement while assembling.** **Cut off shaded portion.**