

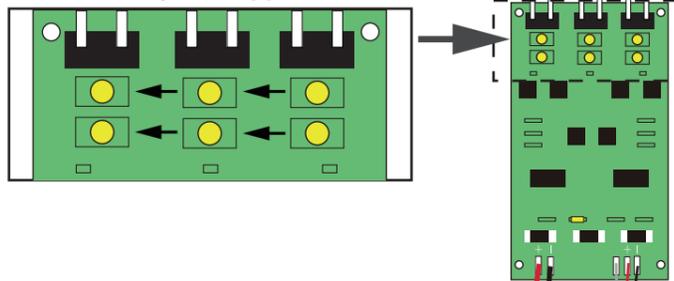
Electric retract system

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.



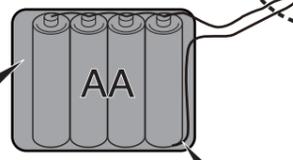
2. Turn on the radio control to check the lights on the circuit board, if the lights turn on green or turn on red orderly, 0.5 second after each from the right to the left and all the lights will turn off after 15 seconds, then the circuit will work normally. Otherwise the circuit will be a defective one if you make sure the setting on your radio control are correct, please don't use it but contact with your supplier in time.



3. Link the electric retract units to the circuit boards after the above two steps, check again the electric retracts to see if they can work normally or not.

In order to let the customers have more choices, we don't provide a uniform plugs.

For retracts

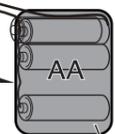


7.4V 30C

1

Receiver

4.8V



For receiver

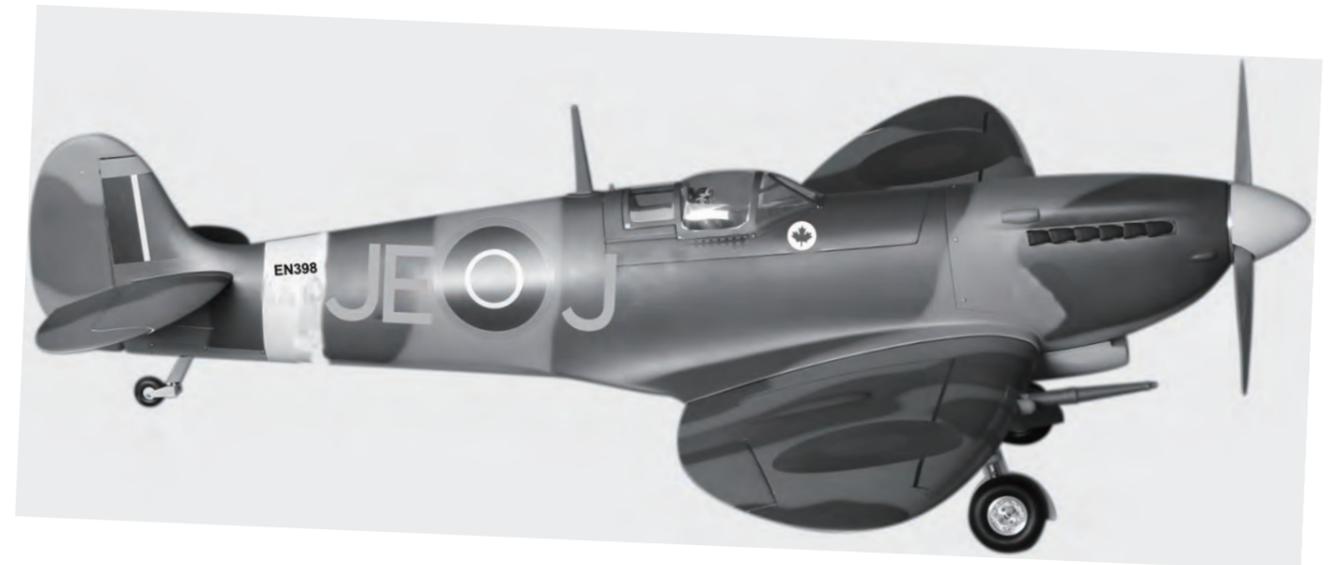
4. Assemble the electric retracts to the plane after several times smoothly running.



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



Speci cation:
 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

TopRCModel-USA.com

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.

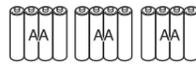
REQUIRED FOR OPERATION (Purchase separately!)

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.

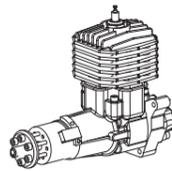


For handling the radio properly, refer to its instruction manual.

2 Engine and Muffler

Model Airplane Engine 35cc gas engine

Muffler



3 Propeller Spinner

4.25 in scale spinner

Purchase a propeller that will match your engine.

Engine 19"x10"



Motor 21"x12"



Motor: Outer rotor, 63-60 220KV

4 Sponge Sheet Gasoline tube Fuel Filter

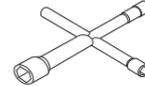


5 Required for engine starting: Gasoline

WARNING: Normal gasoline cannot be used with glow engines.



Fuel Pump Booster Cord 4 D-size Batteries Plug Wrench



6 Glue Instant Glue Epoxy Glue



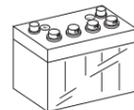
Epoxy Glue



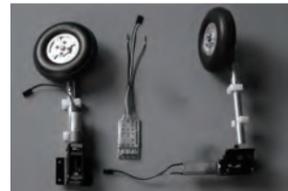
7 Other equipment for enhancing airplane operation & performance

Engine Starter

12V Battery (for starter)

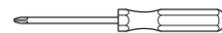


9 Optional electric retract set

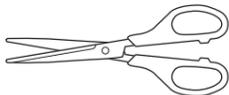
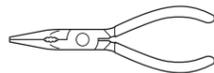


TOOLS REQUIRED (Purchase separately!)

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 recommend you use the thread lock for all the screws when you build your model.

AB Apply epoxy glue. **2mm** Drill holes with the specified diameter (2mm). **✂** Cut off excess. **☞** Pay close attention here! **LR** Assemble left and right sides the same way. **CA** Apply instant glue (CA glue, super glue). **☞** Cut off shade portion. **↺** Ensure smooth non-binding movement while assembling. **X** Must be purchased separately!



Accessories packing list

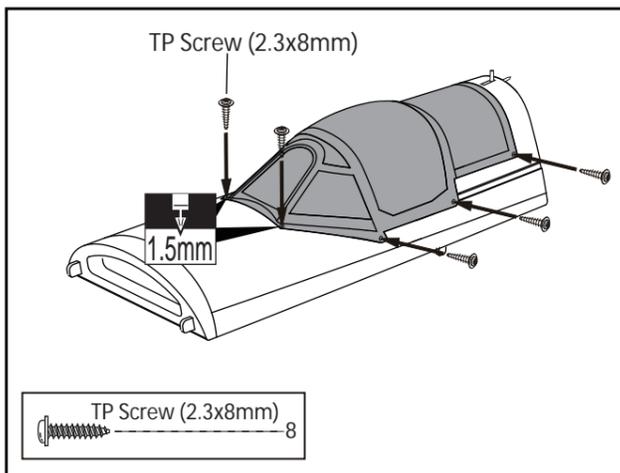
	TP Screw (2.3x8mm)	12
	TP Screw (2.3x12mm)	24
	TP Screw (3x20mm)	8
	Screw (2.6x12mm)	5
	Screw (3x16mm)	16
	Screw (2x10mm)	16
	Screw (3x5mm)	16
	Screw (3x10mm)	5
	Screw (3x20mm)	3
	Screw (4x15mm)	1
	Washer(3x10mm)	2
	Locknut (2mm)	16
	Washer(2x5mm)	16
	Washer(3x6mm)	21
	Copper joiner	6
	Aluminum tube	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 ber tube(10x285mm)	2
	Tailgear	1
	Alucevis	1
	Tail wheel (45mm)	1
	Fuel tank (550cc)	1

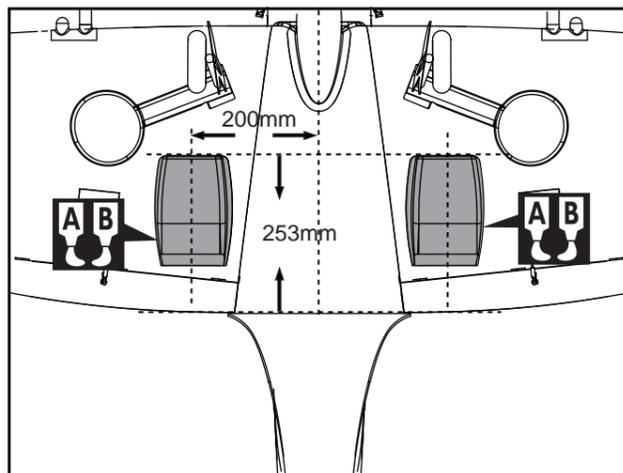
Purchased separately

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

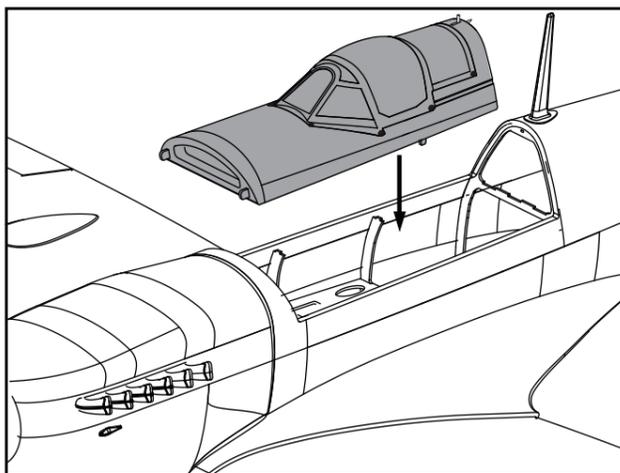
60 Assemble the canopy to the cockpit with screws.



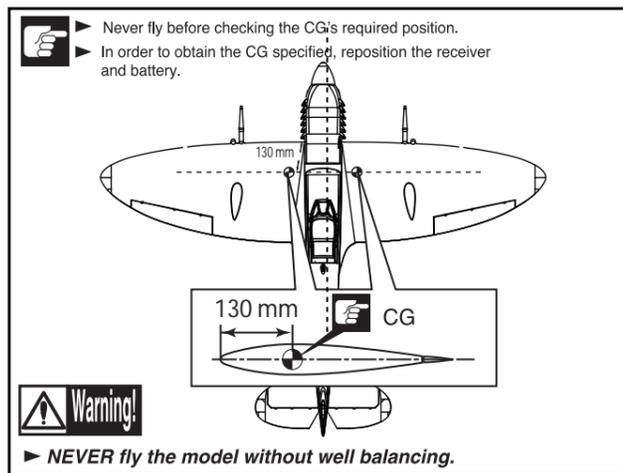
63 Epoxy the ber deconations to appropriate position on the bottom of the wing.



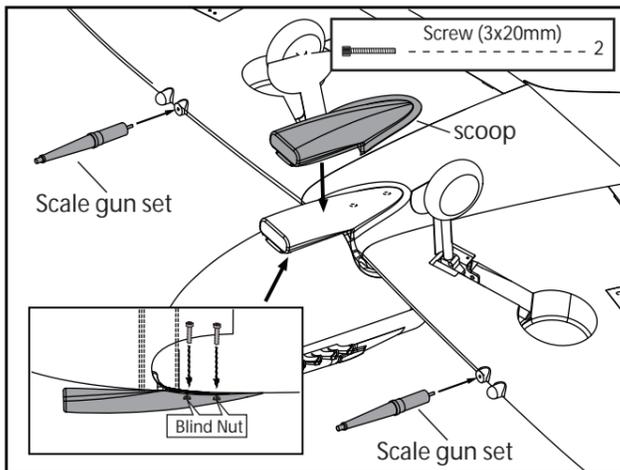
61 Assemble the cockpit to the fuselage.



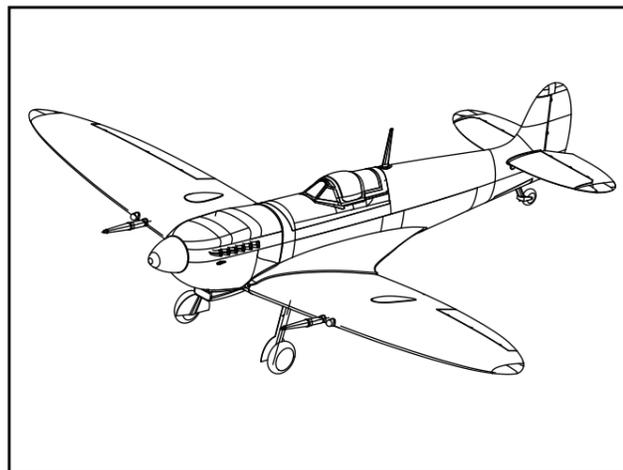
64 The centre of the Gravity.



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



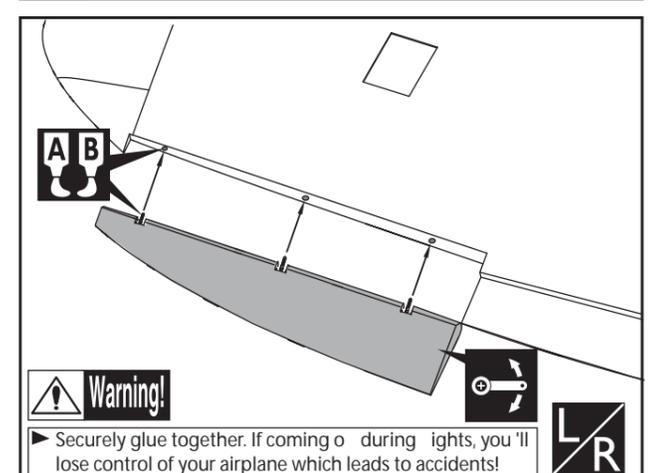
65 The skech map of the Spit re plane install completion.



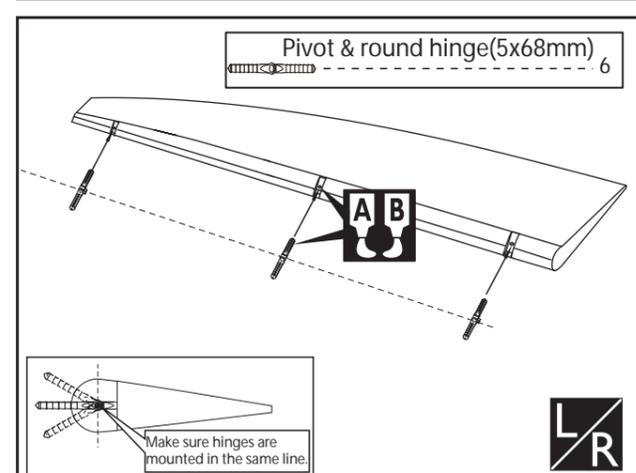
Accessory list for the coming installation steps.

	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)	4
	Washer(3x6mm)	8
	L bracket	4
	Screw (3x16mm)	8
	Servo tray(68.5x56.5x2mm)	2

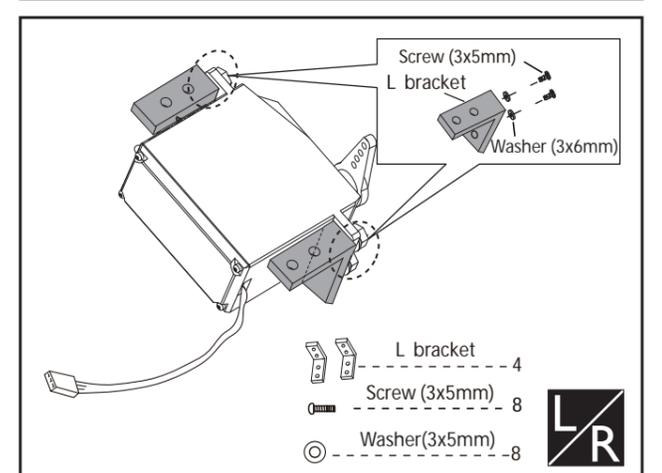
3 Assemble the aileron to main wing with instant type AB glue. Be careful to ensure the moving parts of the hinges are able to move freely.



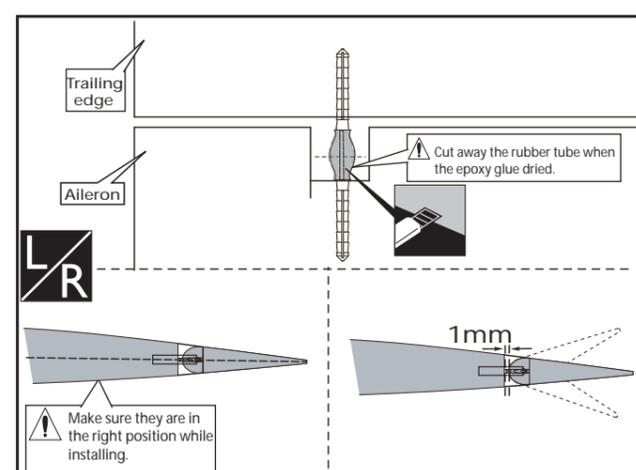
1 Apply instant AB glue to aileron and pin hinge.



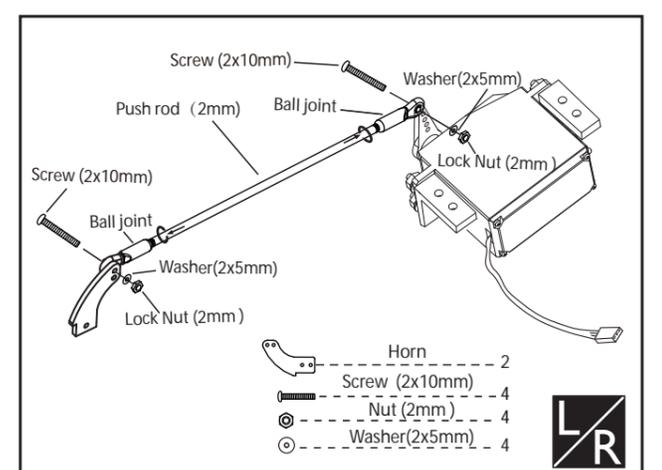
4 Install the L brackets to the servo of aileron as illustration below.



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



5 Install the nylon control horn and connect the linkage.



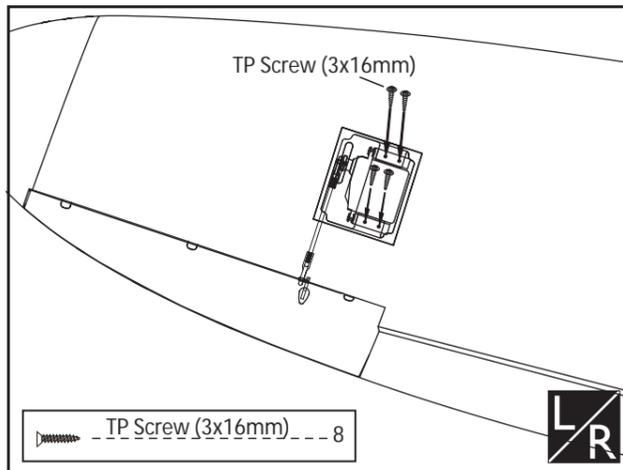
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning!** Do not overlook this symbol!

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

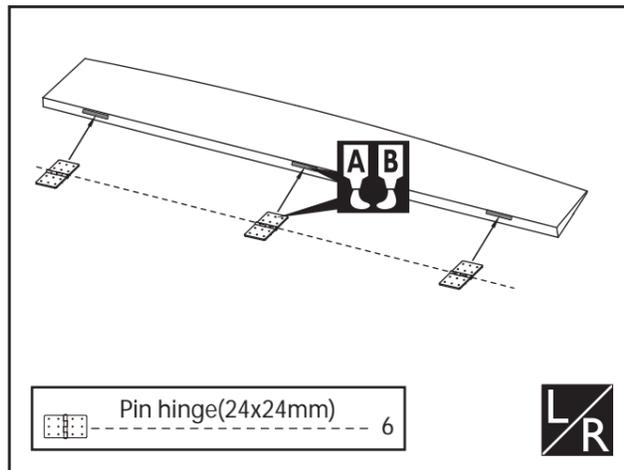
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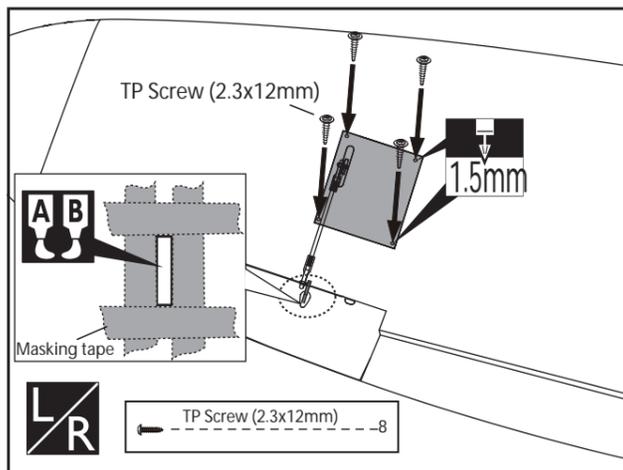
6 Secure the servo. Install the nylon control horn and connect the linkage.



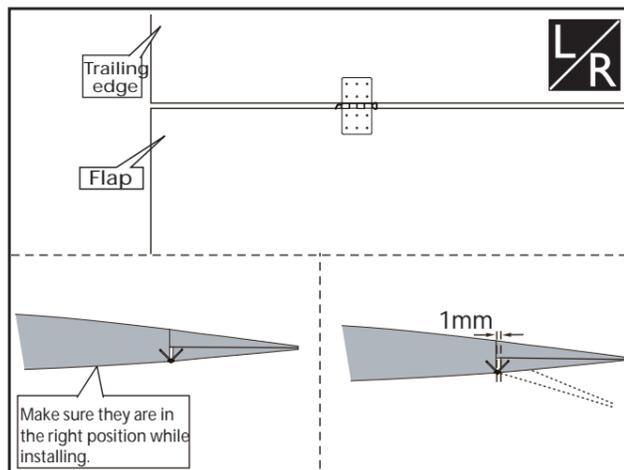
8 Epoxy the pin hinges to the slots in the cap.



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



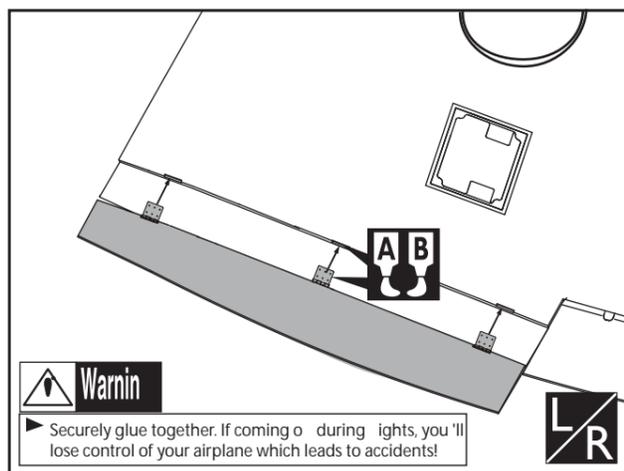
9 Keep some space about 1mm width between trailing edge and flap.



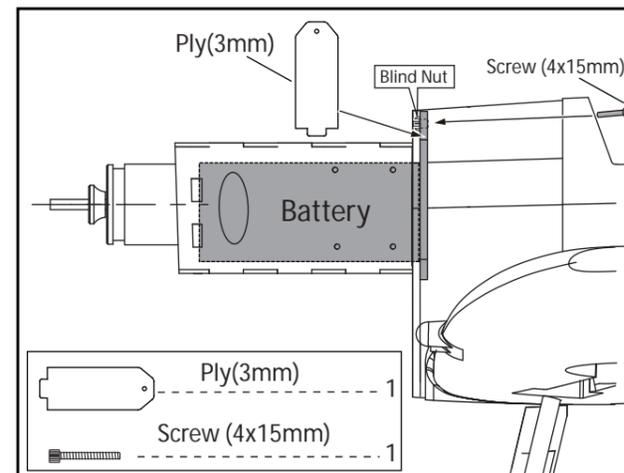
Accessory list for the coming installation steps.

	Horn	2
	Pin hinge(24x24mm)	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

10 Epoxy the caps to the wings as illustration.



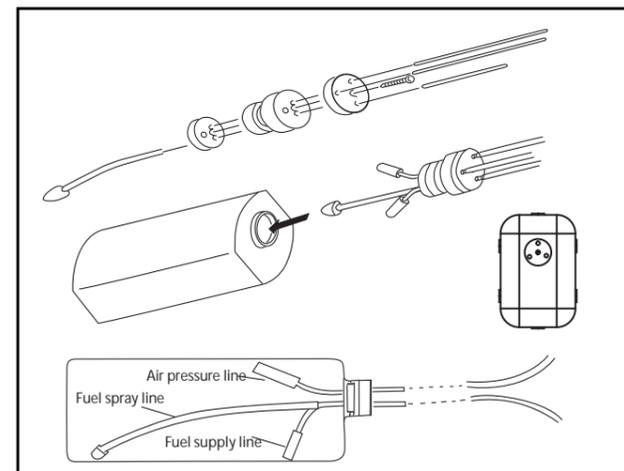
55 Fix the ply sheet as illustration with screw from the fuselage to stop the battery from moving.



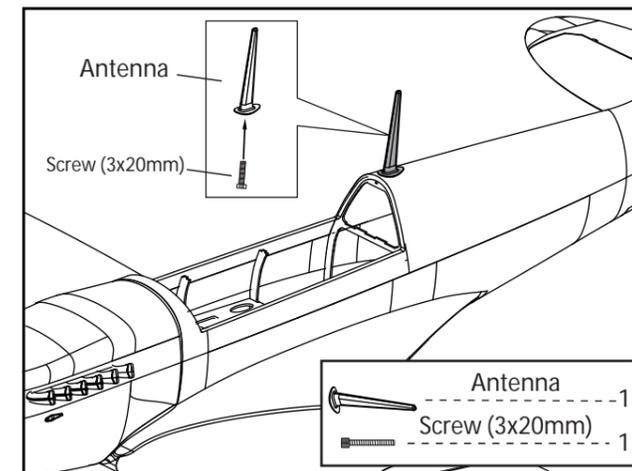
Accessory list for the coming installation steps.

	Canopy (Fiberglass)	1
	Canopy (PVC)	1
	Fiber decorations	2
	scoop	1
	Antenna	1
	Scale gun set	2
	TP Screw (2.3x8mm)	8
	Screw (3x20mm)	3

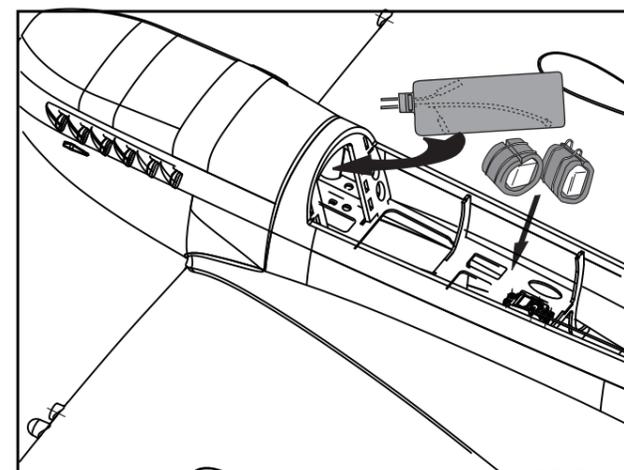
56 Assembly of the fuel tank (please notice that the plug of the tank and the tube should be special for gasoline).



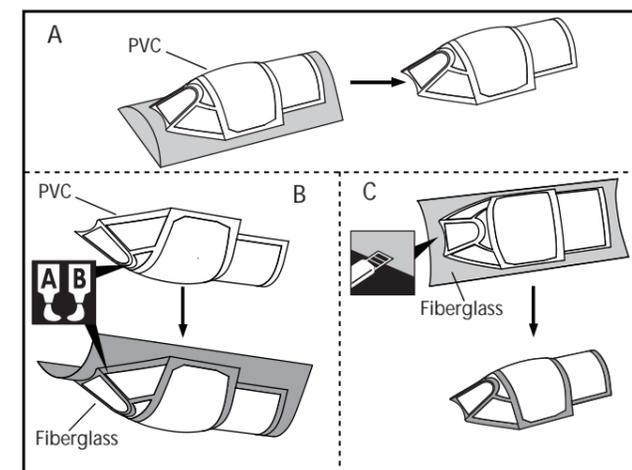
58 Assemble the antenna to the fuselage with screw.



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.



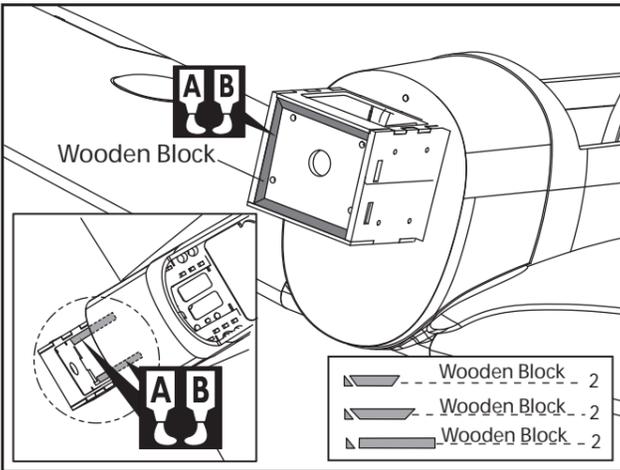
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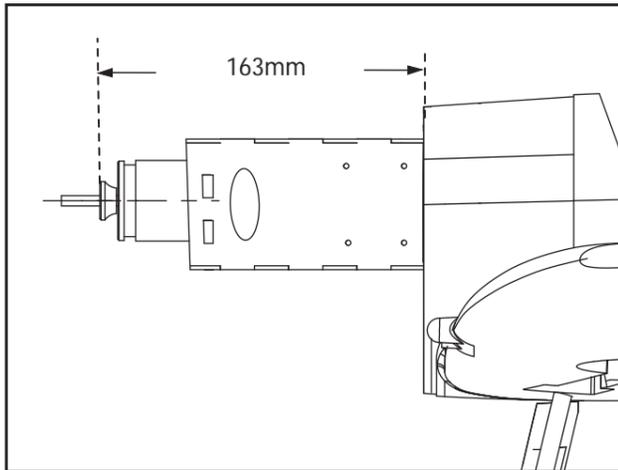
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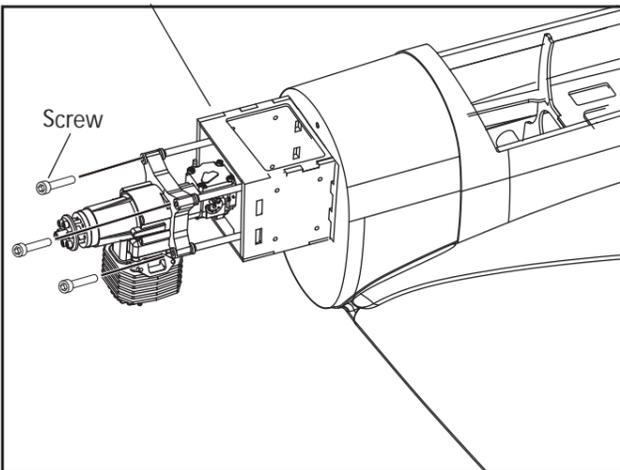
49 Reinforce the engine mount by epoxy the wooden blocks to the engine mounts from inner and outer of the engine mount as illustration.



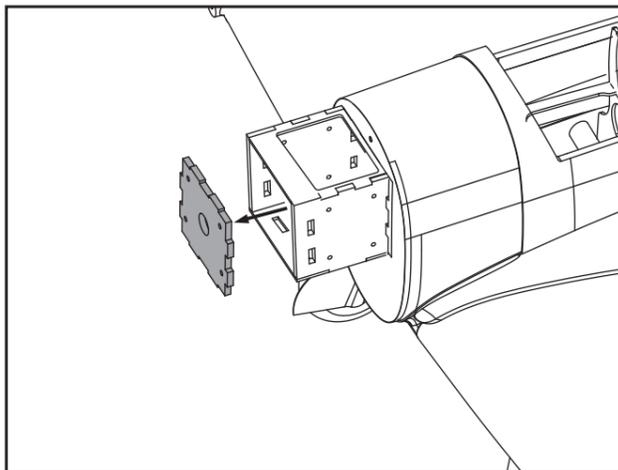
52 Customer can also use electric motor as optional, the assemble process is from step 52 to step 55. The side view when motor install completion.



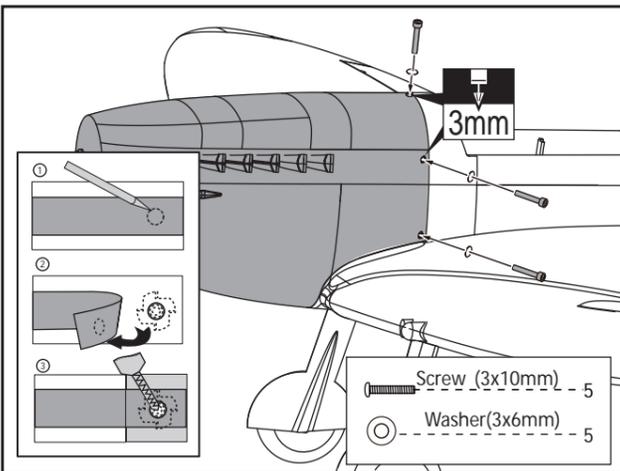
50 Install the engine to the engine mount with screws.



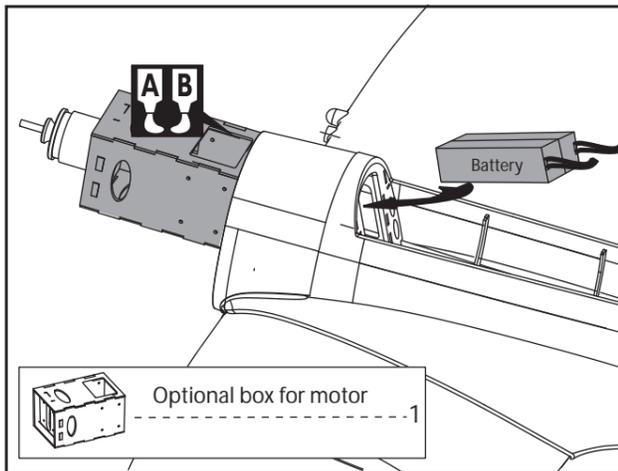
53 Remove the rewall o from the engine mount as illustration.



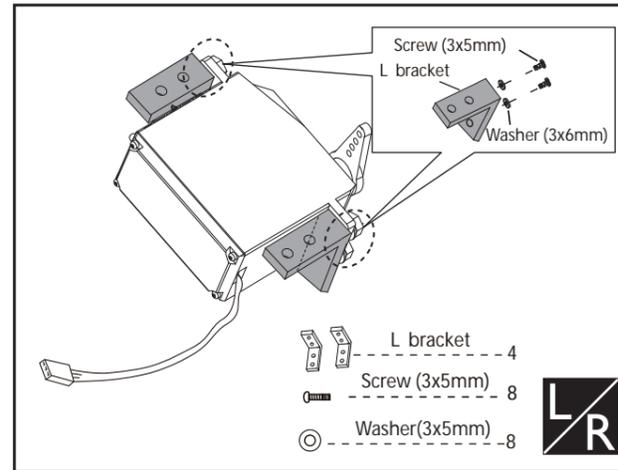
51 Using scotch tape, one side of it xed, cover the blind nut hole and mark where the blind nut holes are.put the cowl to it is place on the fuselage, base on the marks on the scotch tape drill holes to the cowlng.



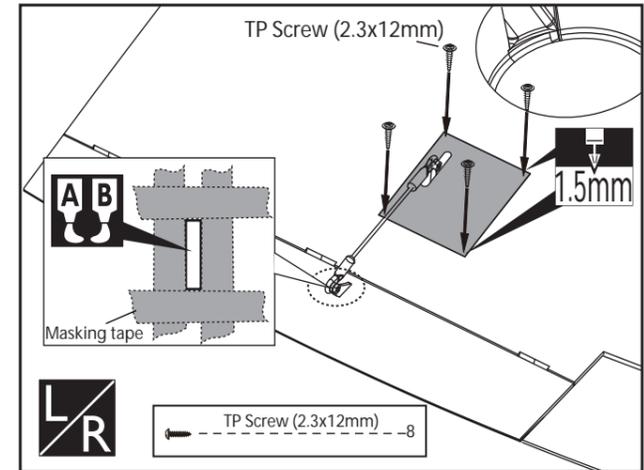
54 Epoxy the optional box to the engine mount and put the battery to the box from the hatch on the fuselage.



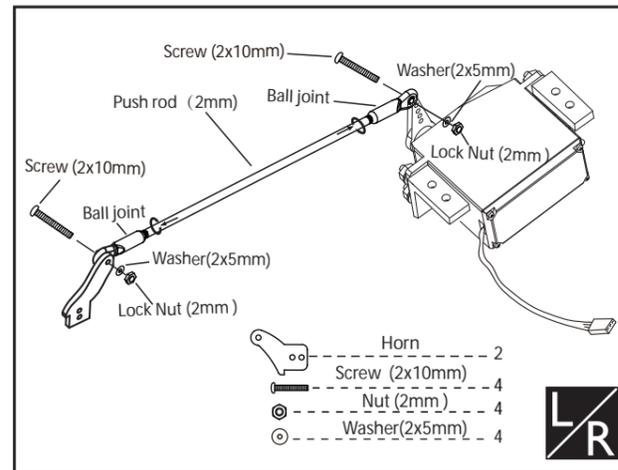
11 Install the L brackets to the servo of ap as illustration below.



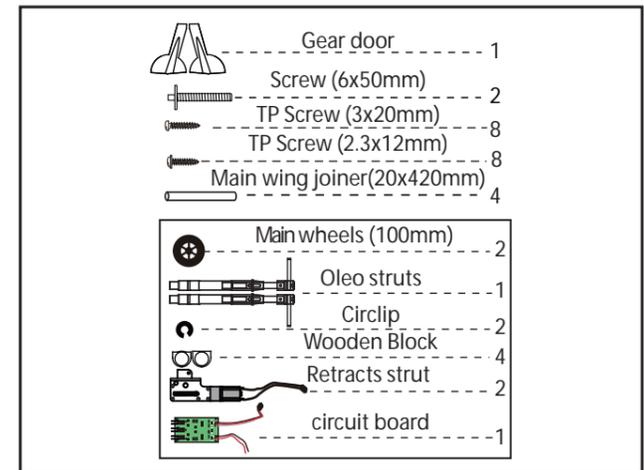
14 Assemble the servo tray to the wing with screws and epoxy the ber horn to the ap.



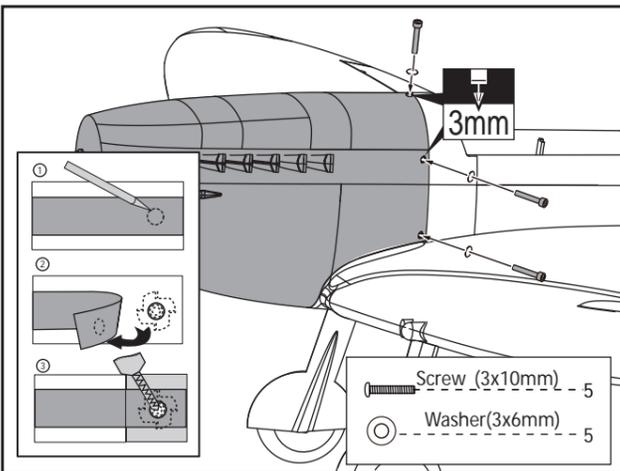
12 Install the nylon control horn and connect the linkage.



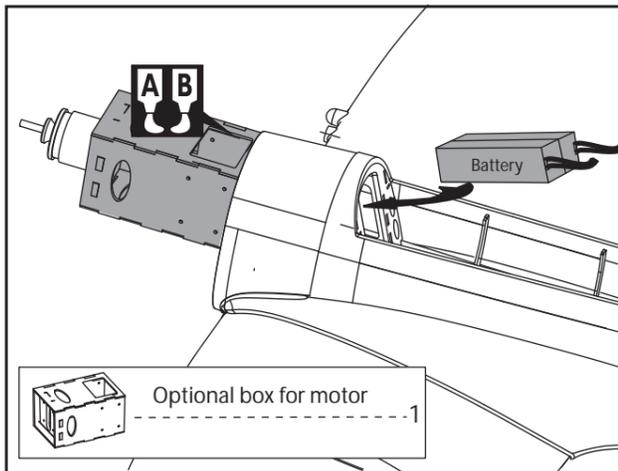
Warning! Accessory list for the coming installation steps.



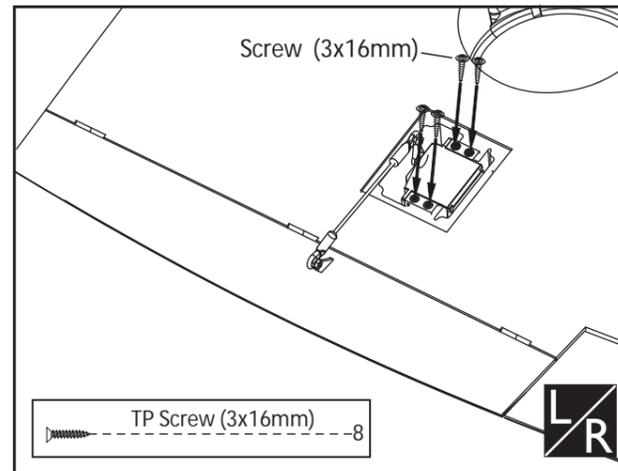
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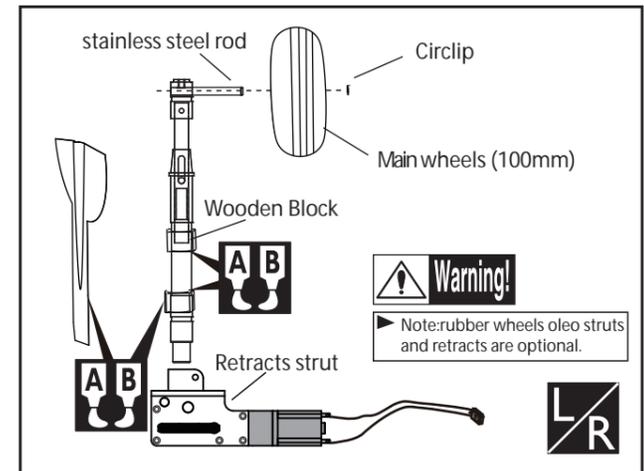
54 Epoxy the optional box to the engine mount and put the battery to the box from the hatch on the fuselage.



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



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



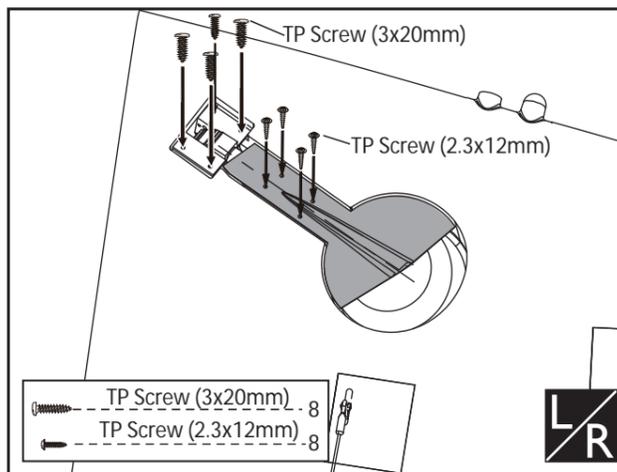
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning!** Do not overlook this symbol!

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

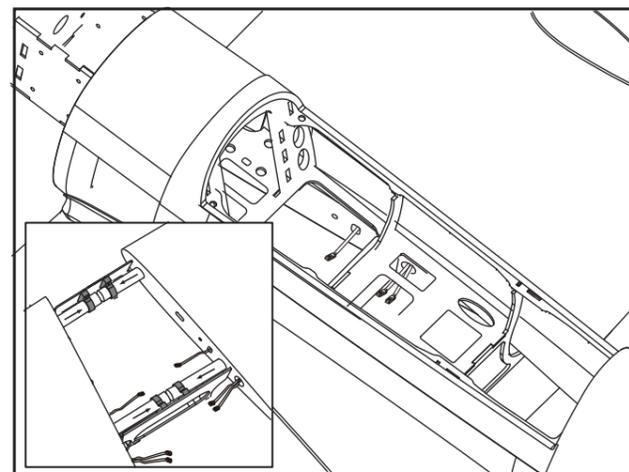
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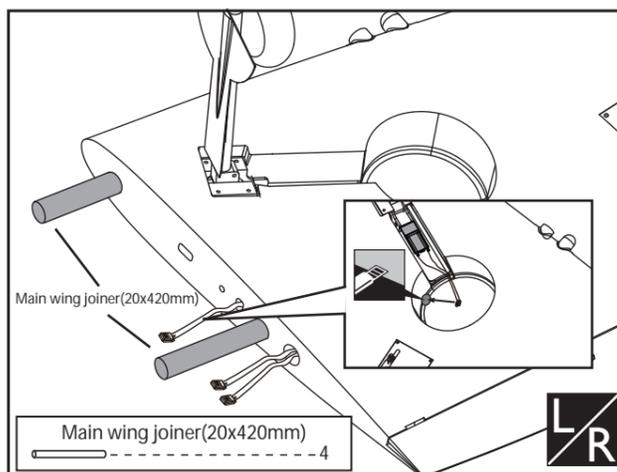
16 Assemble the retracts to the appropriate position in the gear house.



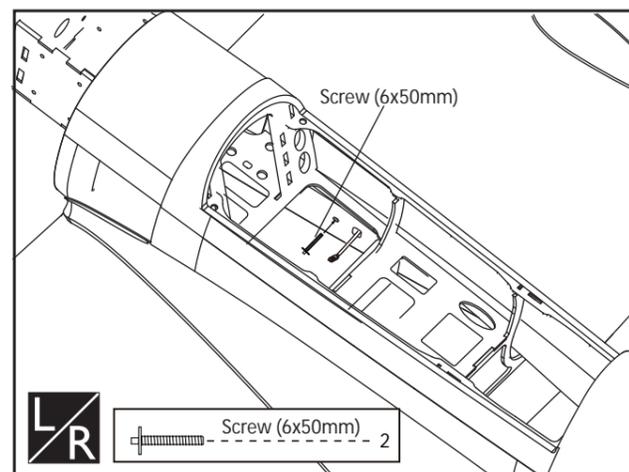
19 The sketch map of the wing fits well to the fuselage.



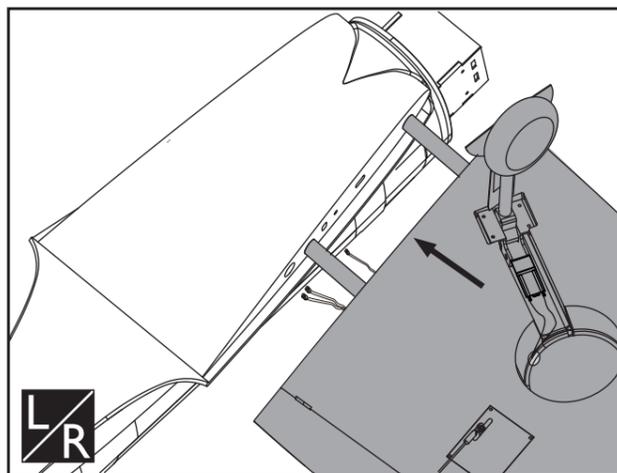
17 Drag the servo line and retracts lines from the wing.



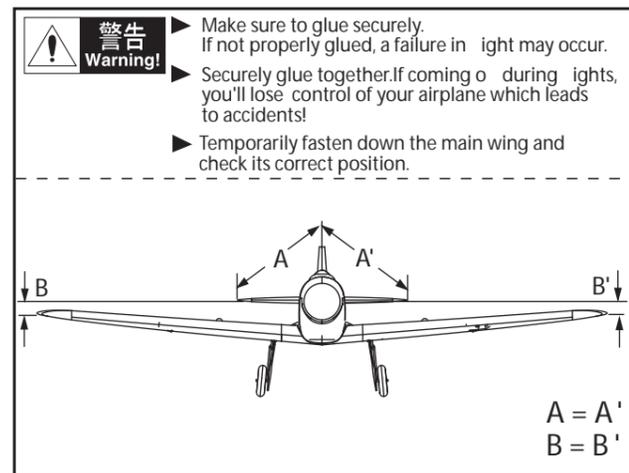
20 Factory already set blind nuts in the wings, the customers can fix the wing to the fuselage by tightening the nylon screws.



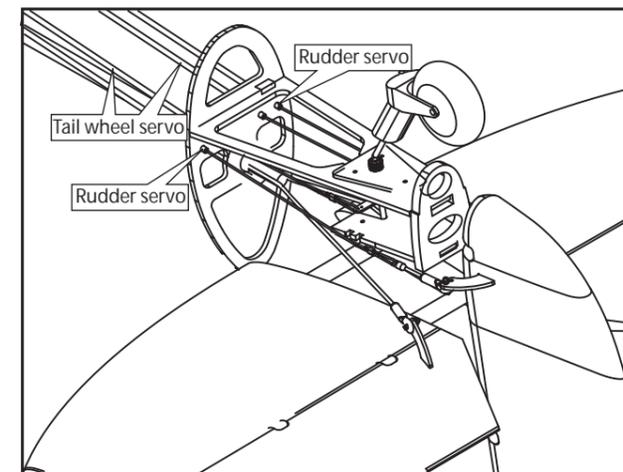
18 Connect the two wings through the main wing joiners.



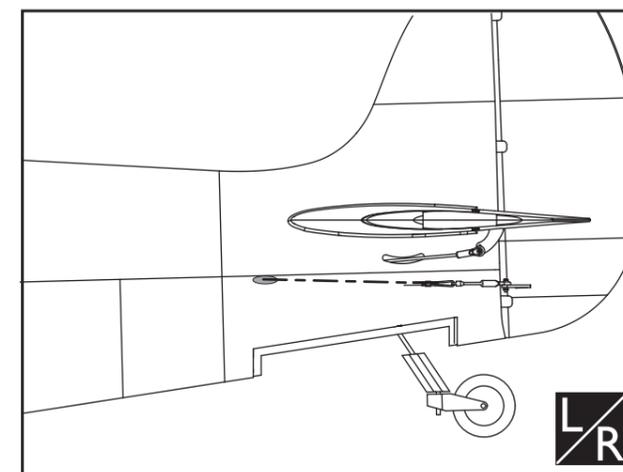
21 The sketch map should be when the stabilizer assembly completion.



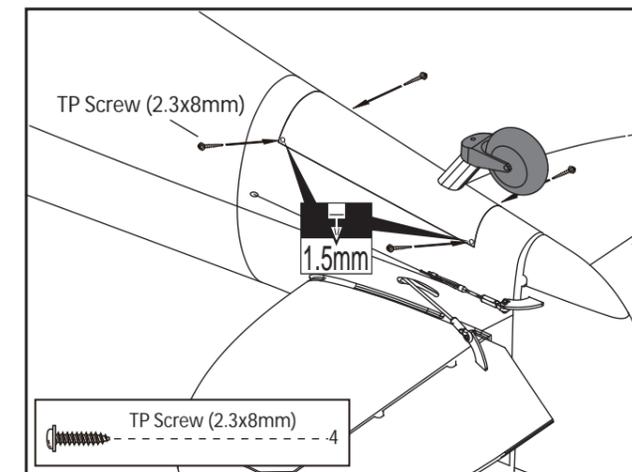
44 The sketch map of the steel wires working in the fuselage.



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



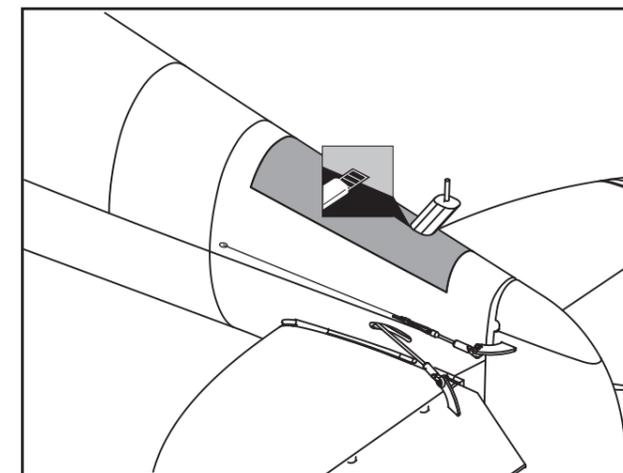
47 Assemble the tail gear cover with screws as below.



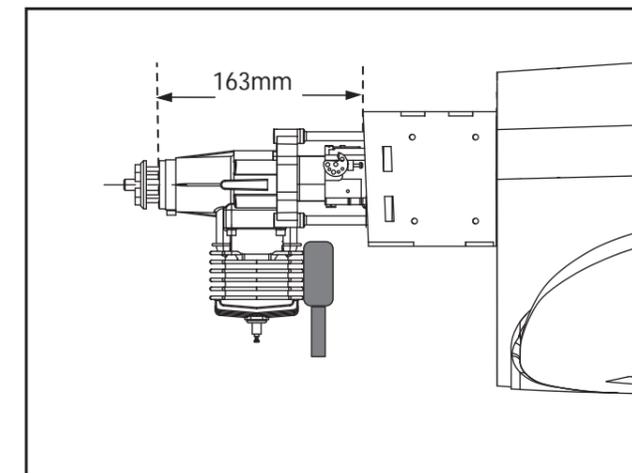
Warning! Accessory list for the coming installation steps.

	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

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



48 The side view when the engine installation completion.



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

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

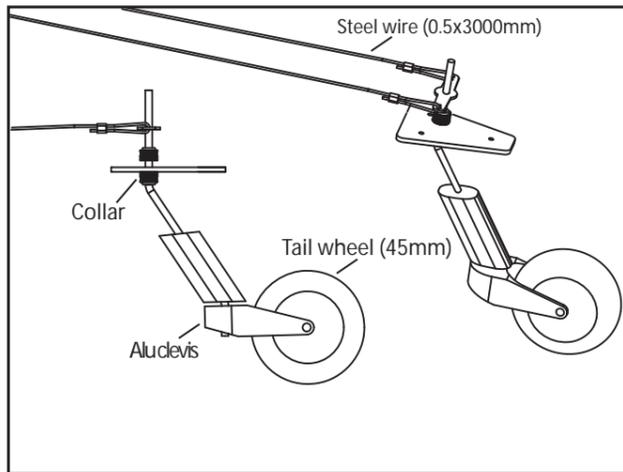
Do not overlook this symbol!
 Warning!

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

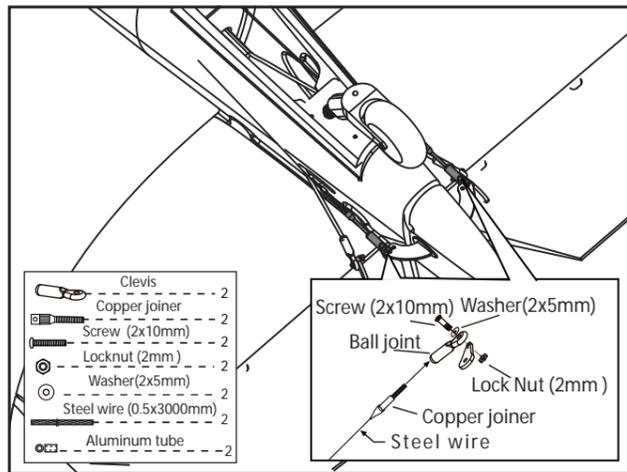
Apply instant glue (CA glue, super glue). Ensure smooth non-binding movement while assembling. Cut off shaded portion.

Do not overlook this symbol!
 Warning!

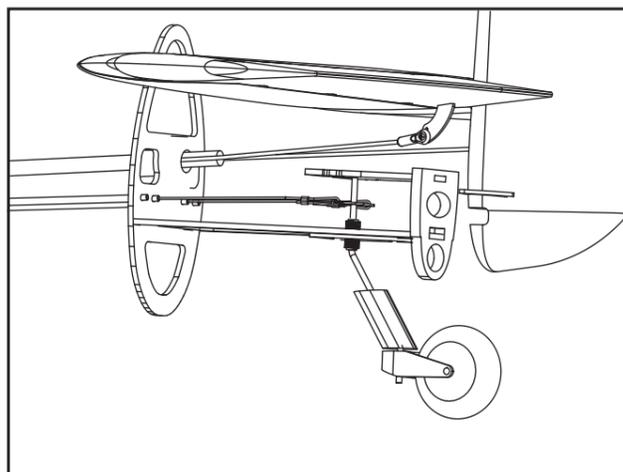
38 The sketch map when assemble the tail landing gear to the wheel steering mount.



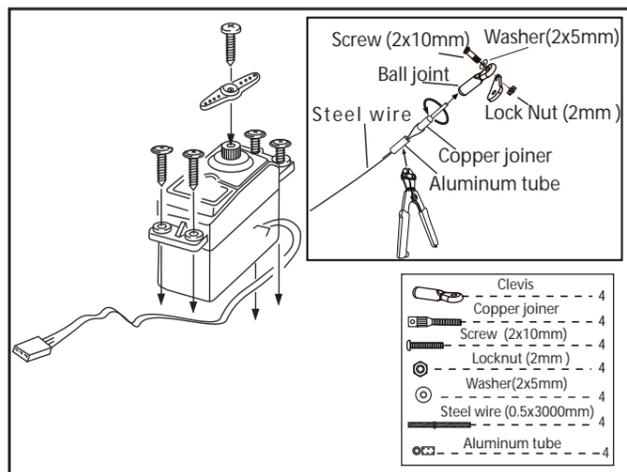
41 Assemble the steel wires well to the rudder horn and tail wheel.



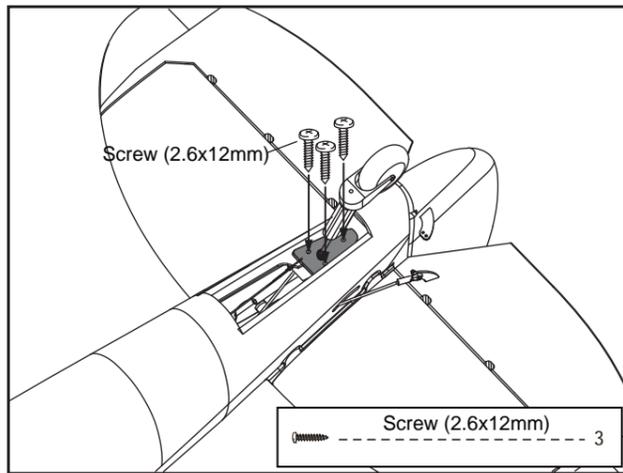
39 The sketch map of the tail wheel and steel wires working in the fuselage.



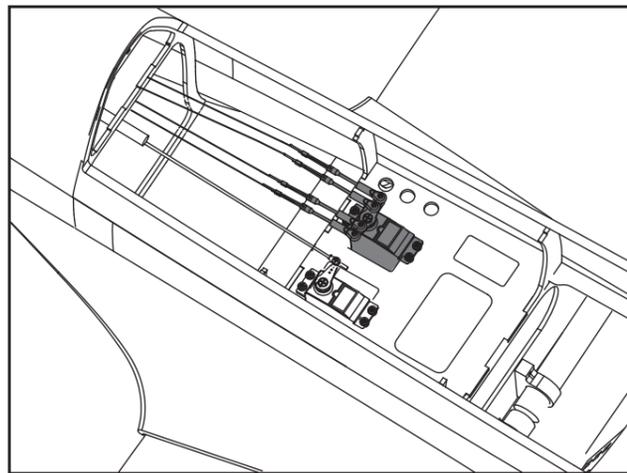
42 Install the servo.



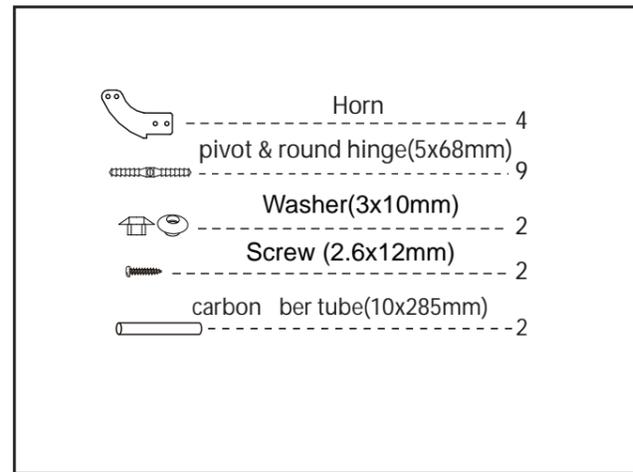
40 Fix the tail gear to the tail fuselage.



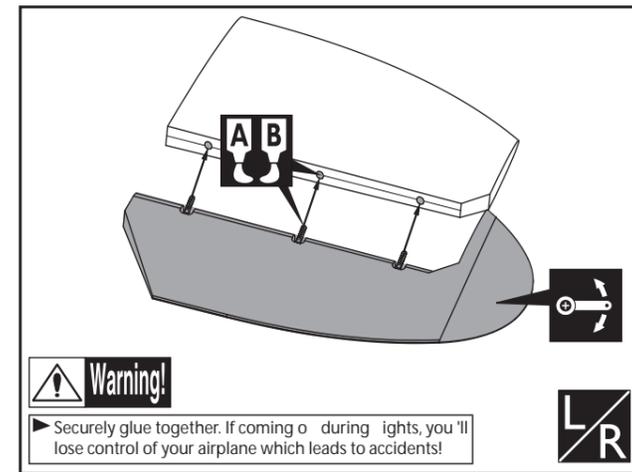
43 Connect the steel wires of the rudder horn and tail gear to the servo.



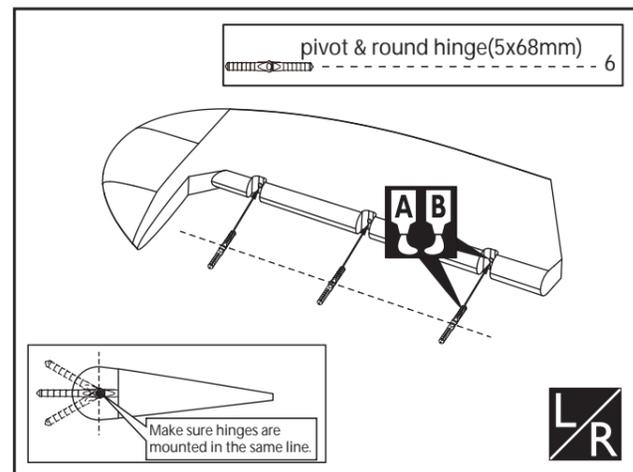
Warning! Accessory list for the coming installation steps.



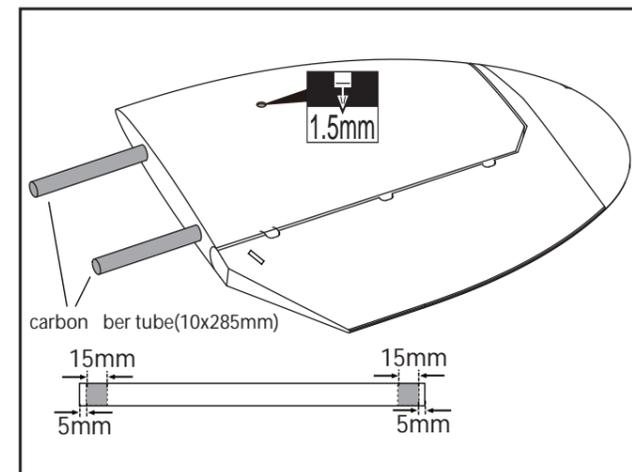
24 Epoxy the elevator to the stabilizer.



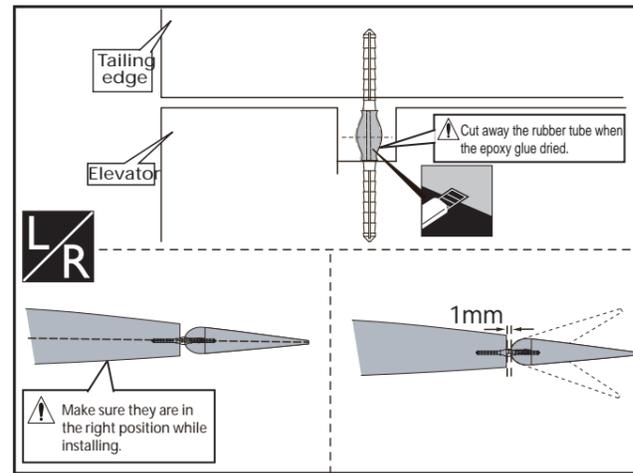
22 Apply instant type AB glue to elevator and hinges.



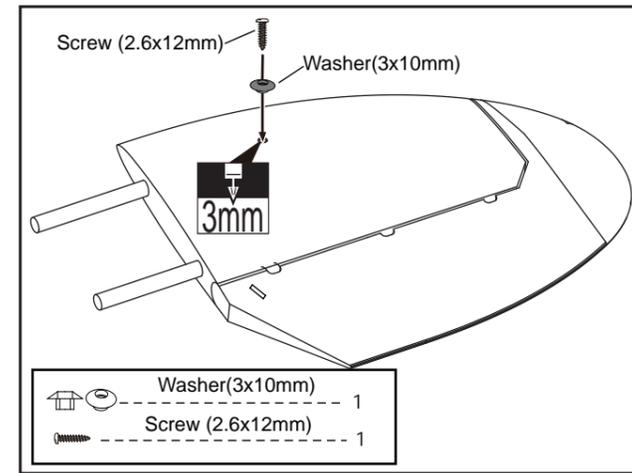
25 Glue the wooden block to each side of the stab tube as below, put the stab tube into one side the horizontal to the end and mark it out at the root of the horizontal, drill a hole in the stab tube and horizontal as illustration.



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



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



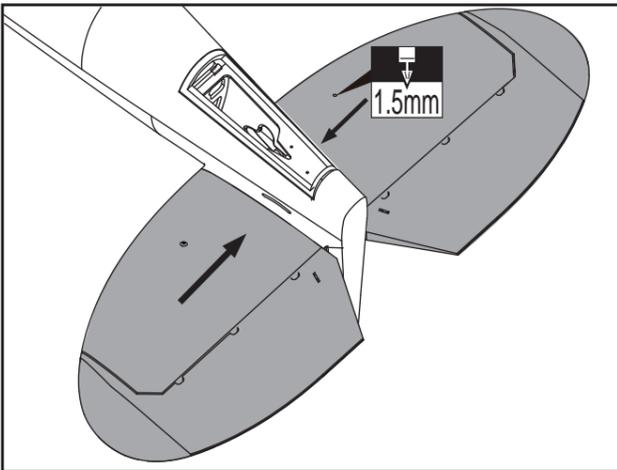
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

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

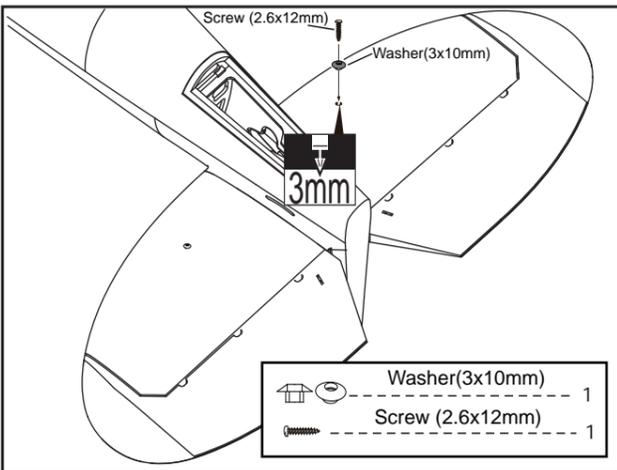
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

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

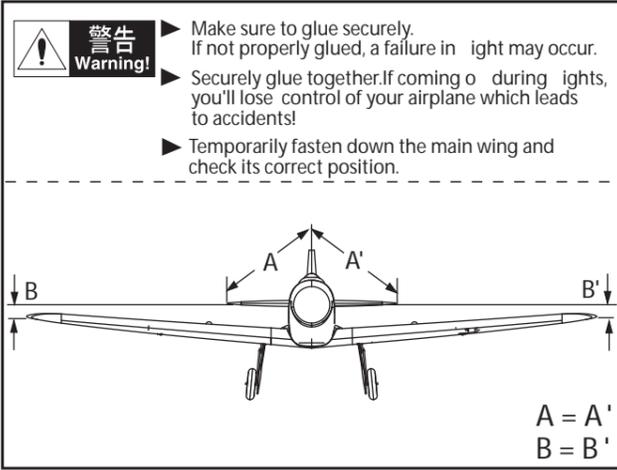
27 Assemble the stab to the fuselage drill a hole to the other section stab.



28 Fix the other side of the stab with screw.



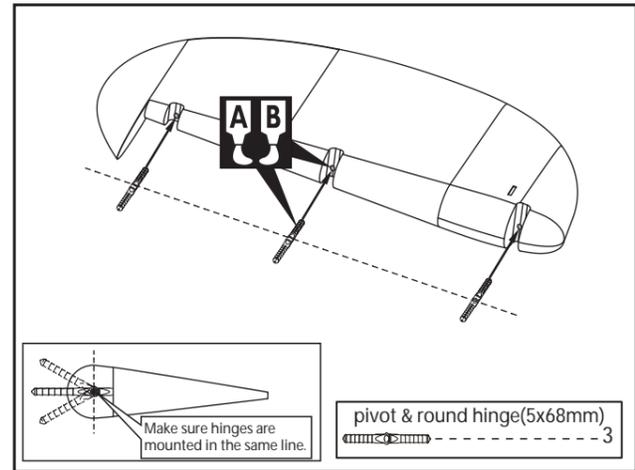
29 The sketch map should be when the stabilizer assembly completion.



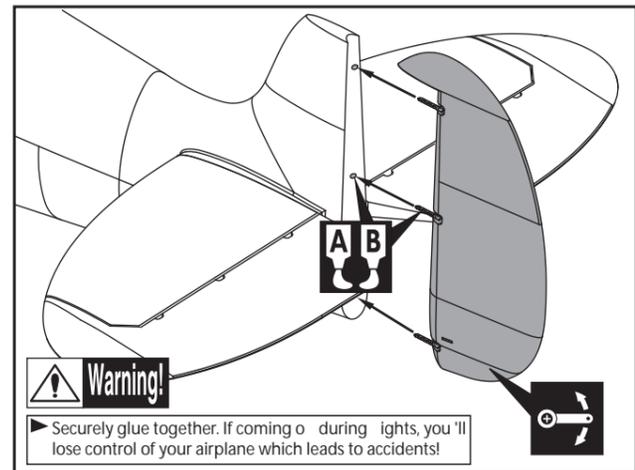
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

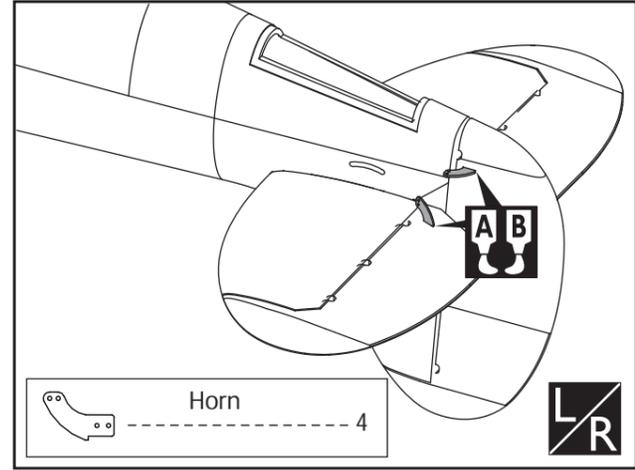
30 Epoxy the pivot & round hinges to the rudder.



31 Epoxy the rudder to the vertical fin.



32 Epoxy the horn to the slots in the rudder and elevator.



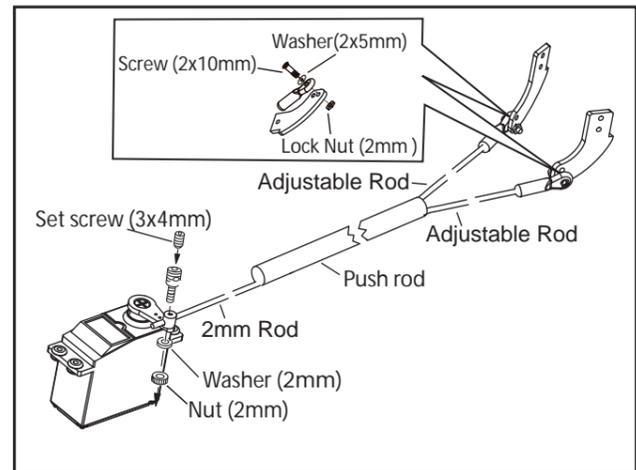
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

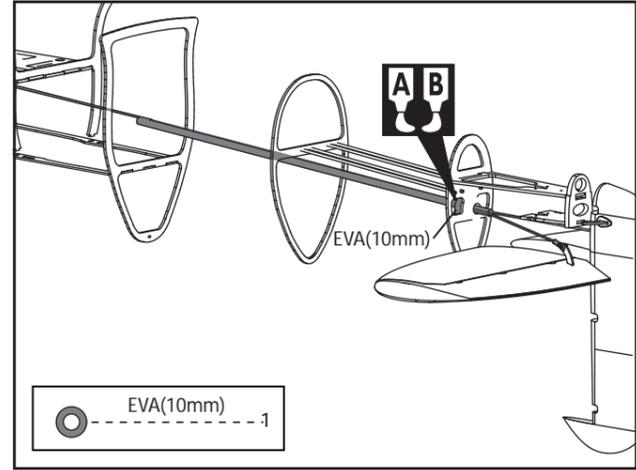
Accessory list for the coming installation steps.

Clevis(2mm)	8	Steel wire (0.5x3000mm)	4
Copper joiner	8	Tail wheel (45mm)	1
Screw (2x10mm)	8	Tailgear	1
Locknut (2mm)	8	Aluclevis	1
Washer(2x5mm)	8	TP Screw (2.3x8mm)	4
Aluminum tube	8	EVA(10mm)	1
Linkage Stopper	1	TP Screw (2.6x12mm)	3
Push rod	1		

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



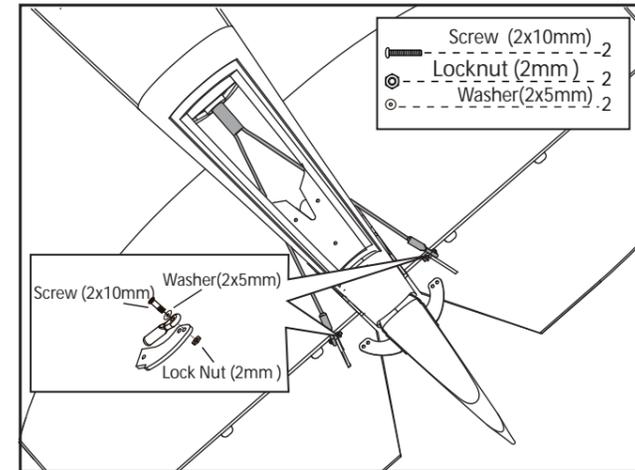
34 The sketch map of the push rod working in the fuselage.



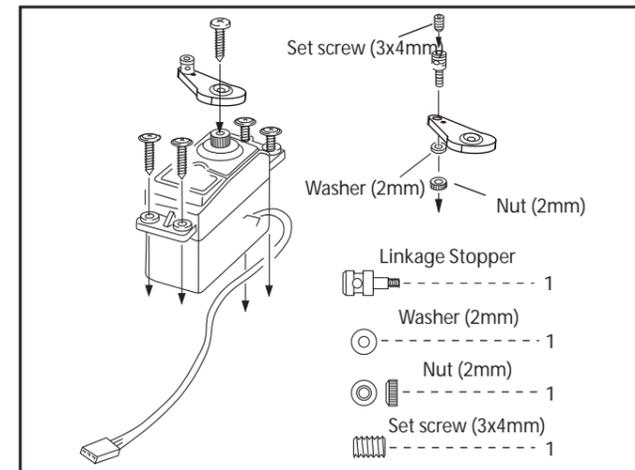
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

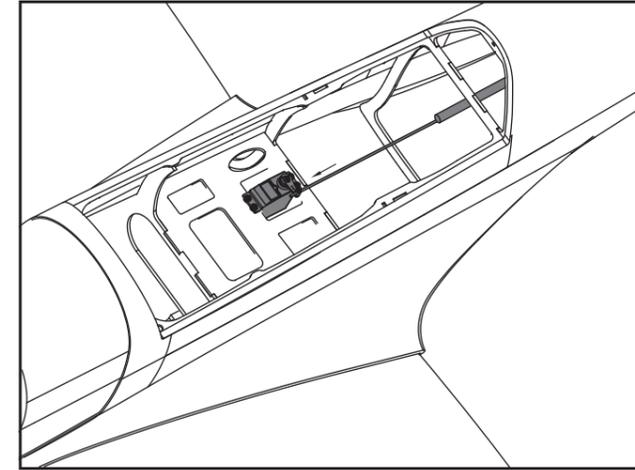
35 Assemble the push rod branches to the horns on the elevator.



36 Assemble the servos.



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



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

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