

Before start ,please carefully read the explanations!

# F - 4u Corsair (50cc)



## Specification:

Length: 1735mm(68.3 " )  
Wing span: 2160mm(85 " )  
Wing area: 87.00sq.dm(9.39sq.ft)  
Wing loading: 135.6g/sq.dm(44.5oz/sq.ft)  
Flying weight: 11.8kg(26.0lbs)  
Radio: 6ch & 10servos  
Engine: 50cc gasoline engine

## ***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.

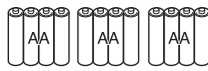
## REQUIRED FOR OPERATION (Purchase separately!)

**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 10 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.

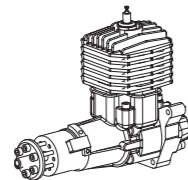


For handling the radio properly, refer to its instruction manual.

**2** Engine and Muffler

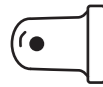
Model Airplane Engine 50cc gas engine

Muffler

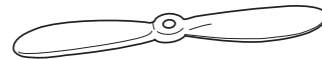


**3** Propeller Spinner

Purchase a propeller that will match your engine.



Spinner nut



22"x8-10

**4**

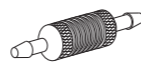
Sponge Sheet



Gasoline tube



Fuel Filter

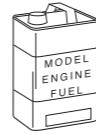


**5**

Required for engine starting:

**WARNING:** Normal gasoline cannot be used with glow engines.

Gasoline



Fuel Pump



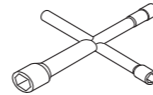
Booster Cord



4 D-size Batteries



Plug Wrench



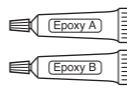
**6**

Glue



Instant Glue

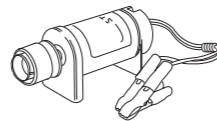
Epoxy Glue



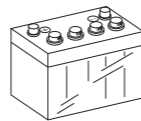
**7**

Other equipment for enhancing airplane operation & performance

Engine Starter



12V Battery (for starter)



**9**

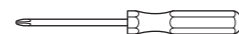
Optional parts: rubber wheel with metal hub.

## TOOLS REQUIRED (Purchase separately!)

Sharp Hobby Knife



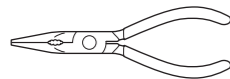
Phillips Screw Driver (l, m, s)



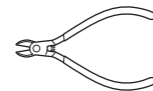
Awl



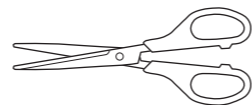
Needle Nose Pliers



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.



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!

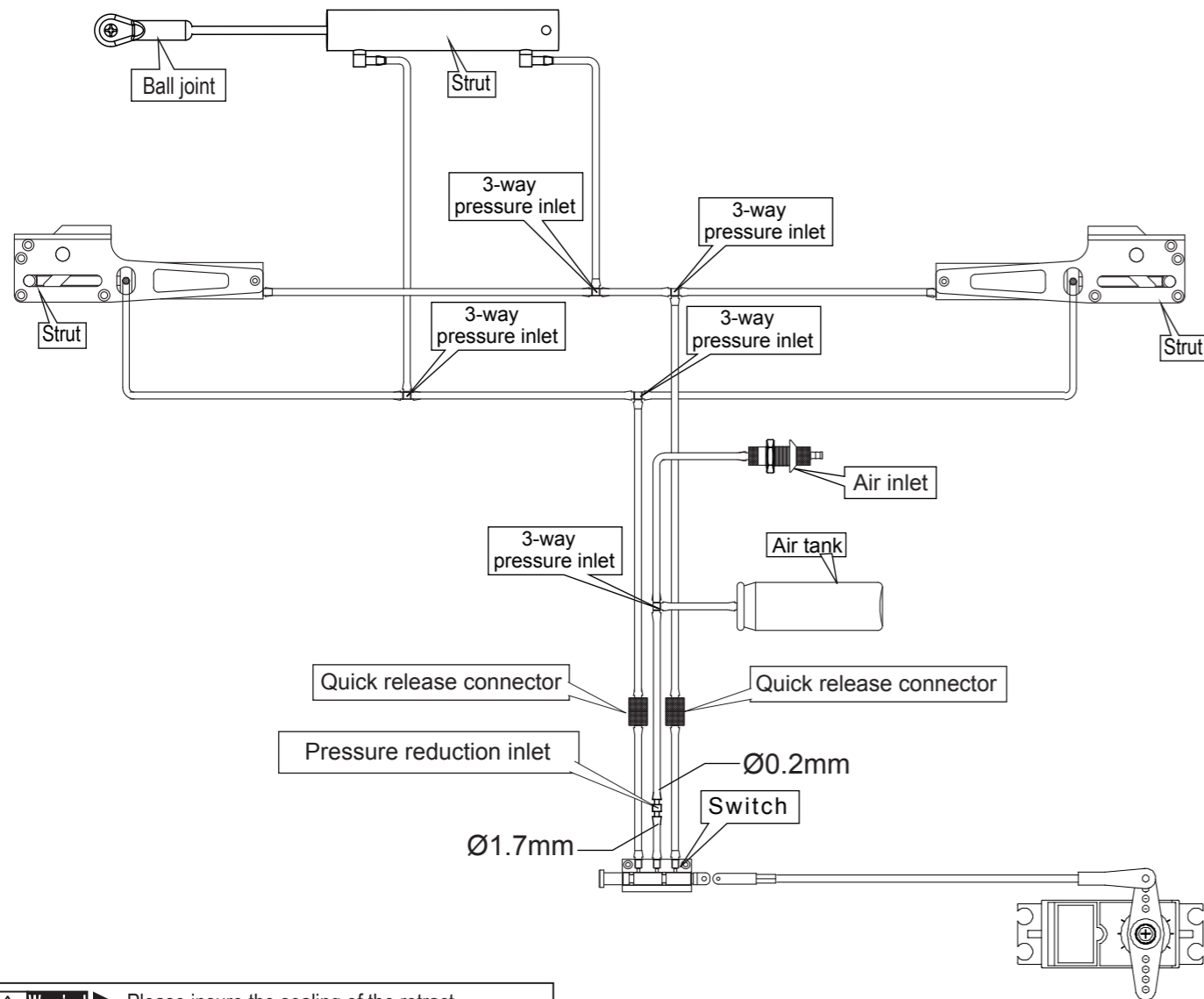
Do not overlook this Symbol!



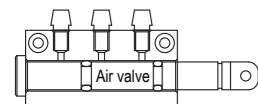
Warning!

# Two wheel retract system

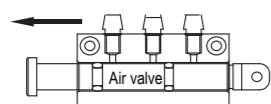
**Warning!** Make sure to assemble retracts as instructed below.



**Warning!** Please insure the sealing of the retract system before flight.  
 Please notice the inner diameter for each side of the pressure reduction inlet.



The status when the gear up



Pull out length of 8mm to make gear down

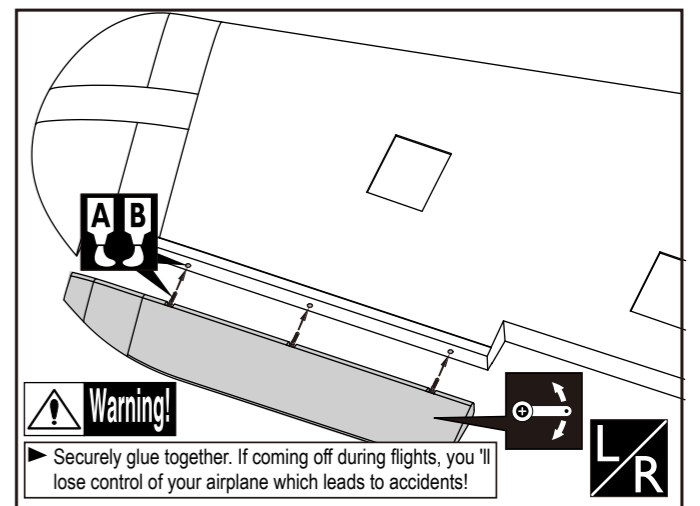
- |                      |                           |
|----------------------|---------------------------|
| TP Screw(2.6x14mm) 2 | Switch 1                  |
| Retainer 1           | Air line (3000mm) 1       |
| Clevis 1             | 3-way pressure inlet 5    |
| Rod (2X300mm) 1      | Air tank 1                |
|                      | Air inlet 1               |
|                      | Quick release connector 2 |
| Strut (110°) 1       | Strut (90°) 2             |

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.	

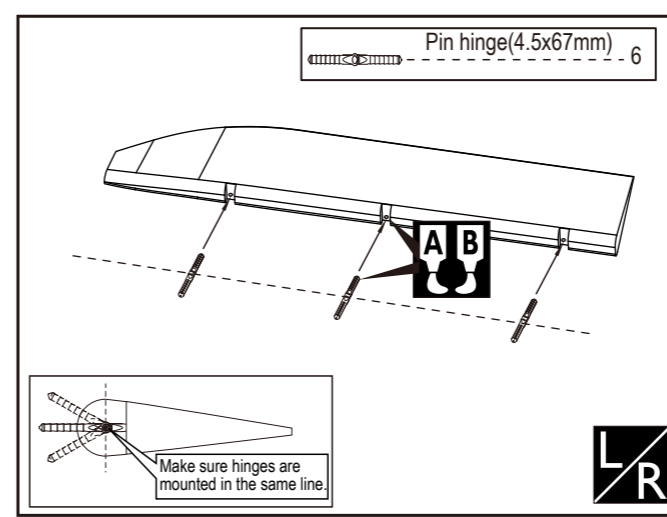
**Warning!** Accessory list for the coming installation steps.

- |  |                           |   |
|--|---------------------------|---|
|  | Clevis                    | 2 |
|  | Clevis                    | 2 |
|  | Collar (3mm)              | 2 |
|  | Rod (2x300mm)             | 2 |
|  | TP Screw (2.3x12mm)       | 8 |
|  | Servo tray(68.5x56.5x2mm) | 2 |
|  | Wooden Block(20x20x8mm)   | 2 |
|  | Pin hinge(4.5x67mm)       | 8 |
|  | Screw (4x45mm)            | 2 |
|  | Lock Nut (4mm)            | 2 |
|  | Washer(4x15mm)            | 4 |

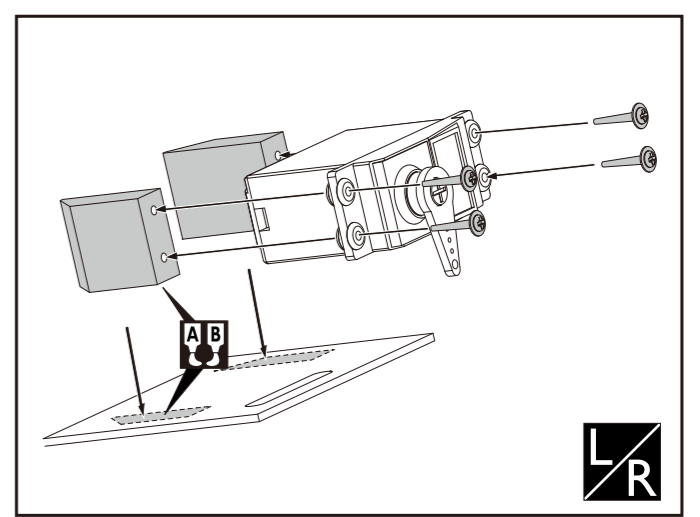
**3** Assemble the aileron to main wing with instant type AB glue.



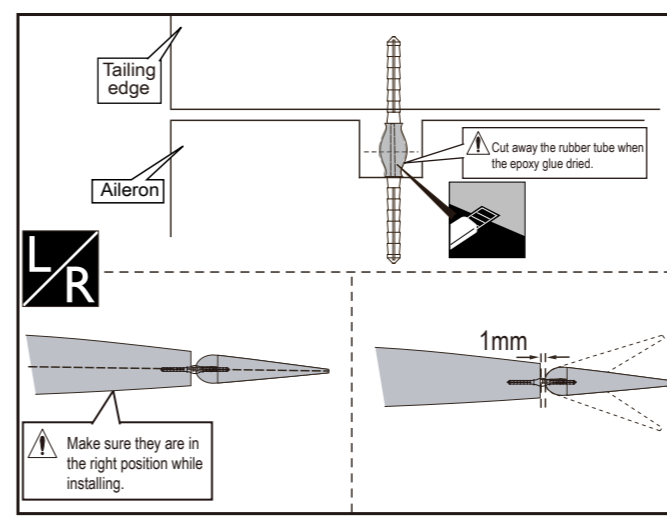
**1** Apply instant type AB glue to aileron and pin hinge.



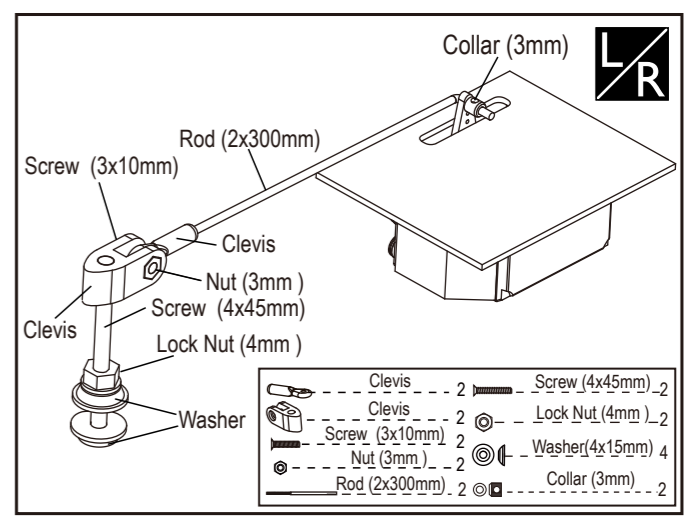
**4** Install the servo of aileron to the servo tray.



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

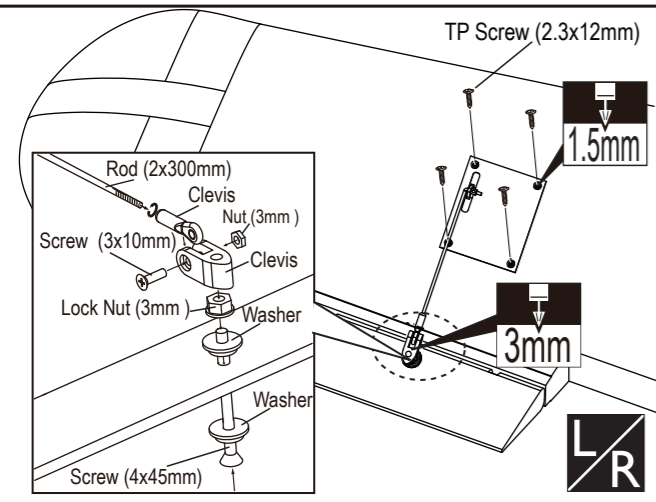


**5** Install the nylon control horn and connect the linkage for the servo of aileron.

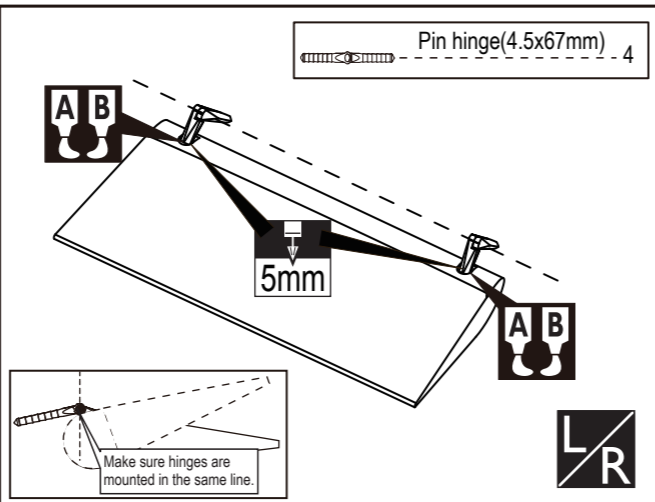


Apply epoxy glue.	Assemble left and right sides the same way.	Pay close attention here!	Do not overlook this symbol! 
Apply instant glue (CA glue, super glue).	Ensure smooth non-binding movement while assembling.	Cut off shaded portion.	

**6** Secure the servo, assemble the servo to the relevant position in the outer wing.



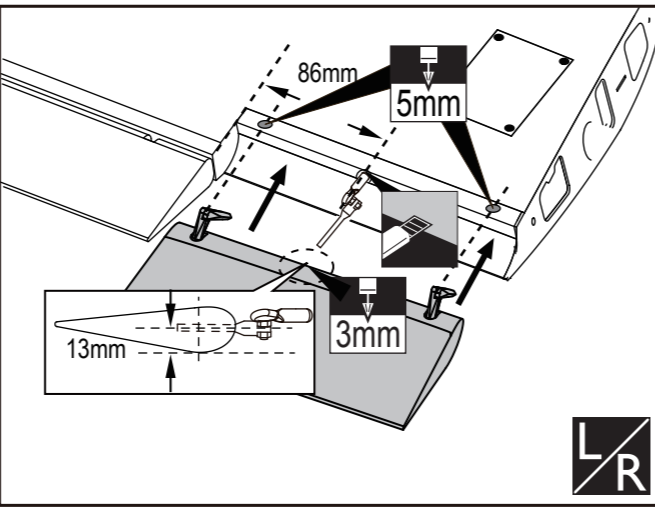
**8** Drill holes in the flap and epoxy the pin hinges in them.



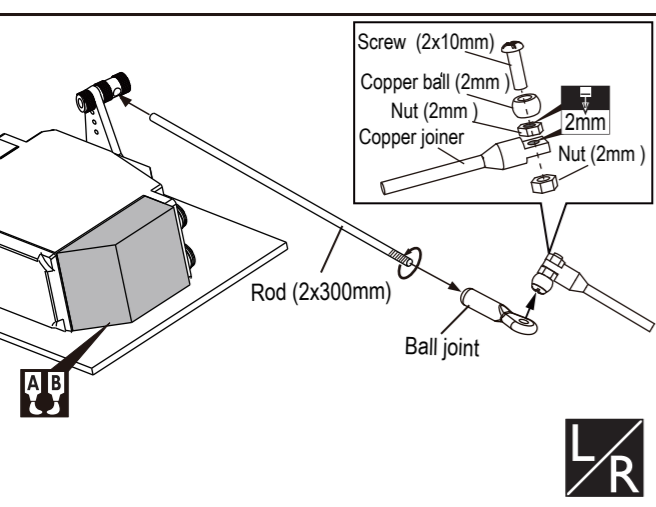
**Accessory list for the coming installation steps.**

- Clevis ----- 4
- Copper joiner ----- 4
- Screw (2x10mm) ----- 4
- Nut (2mm) ----- 8
- Rod (2x300mm) ----- 4
- TP Screw (2.3x12mm) ----- 16
- Servo tray (68.5x56.5x2mm) ----- 4
- Wooden Block (20x20x8mm) ----- 4
- Pin hinge (4.5x67mm) ----- 12
- Linkage Stopper ----- 4
- Fiberboard (1.5mm) ----- 2
- Main wing joiner (30x400mm) ----- 2
- Wood dowel (6x30mm) ----- 4
- Rib template (2mm ply) ----- 1
- Fiberboard (2mm) ----- 2
- Screw (3x15mm) ----- 2
- Wooden plate (2mm Ply) ----- 2

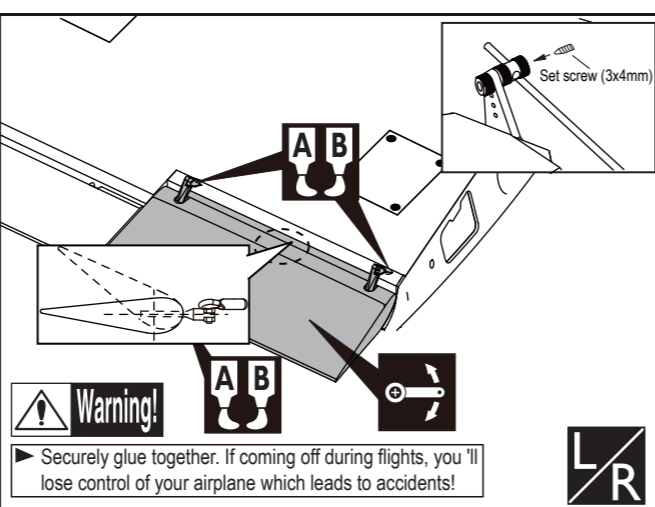
**9** Drill holes to relevant position in the trailing edge and flap, trim a hole to appropriate position in the trailing edge for the linkage of flap servo.



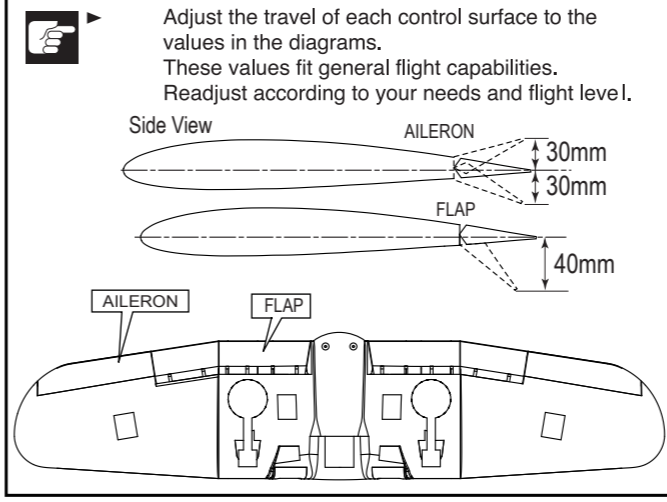
**7** Install the nylon control horn and connect the linkage for the servo of flap.



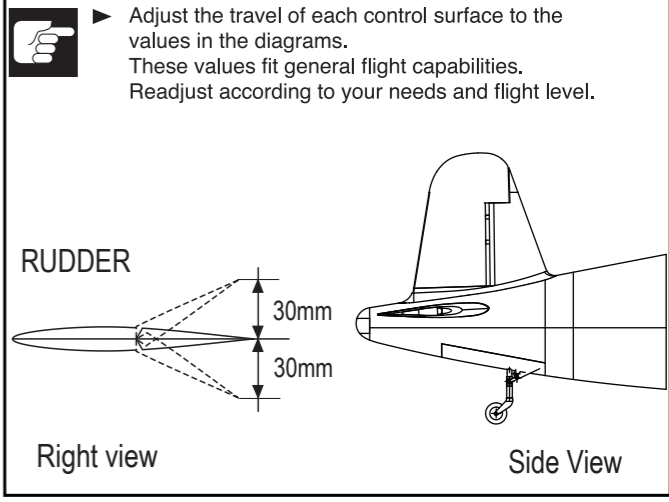
**10** Secure the servo, assemble the servo of flap from the big hole in the outer wing root and epoxy the flap to the outer wing.



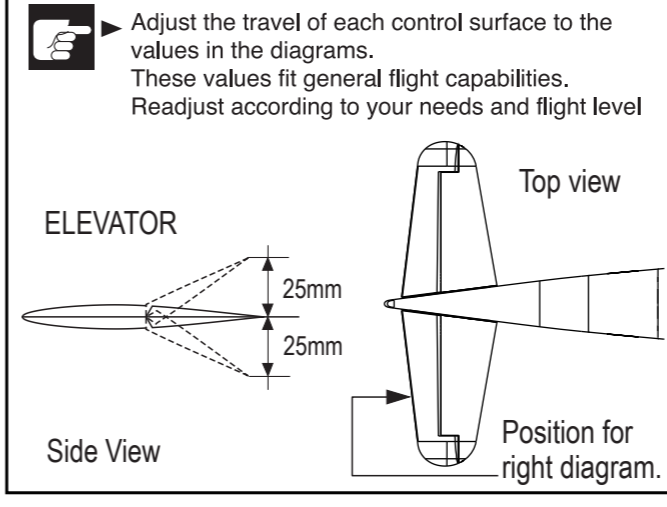
**76** Adjustment.



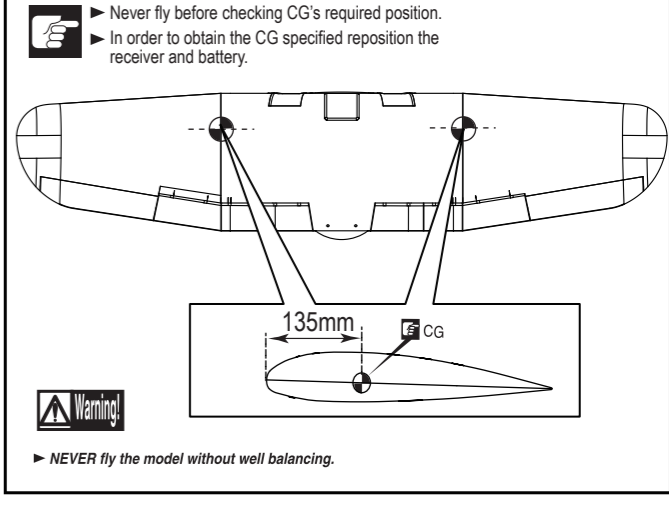
**77** Adjustment.



**78** Adjustment.



**79** The centre of the Gravity.



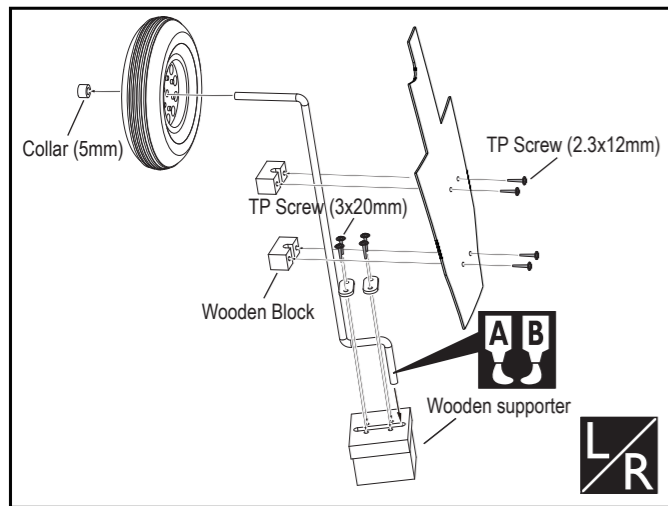
**AB** Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning!** Do not overlook this symbol!

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

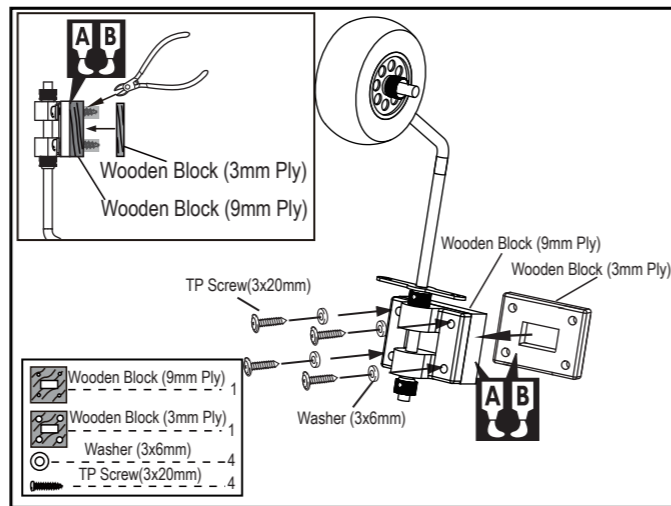
**AB** Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning!** Do not overlook this symbol!

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

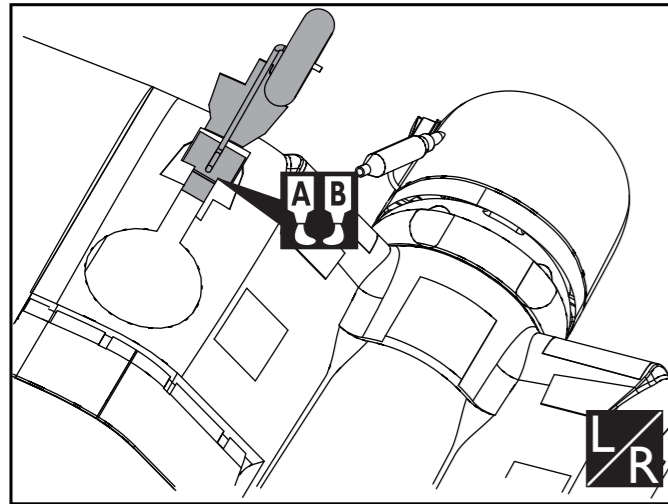
**72** Install the wheel to the fixed landing gear.



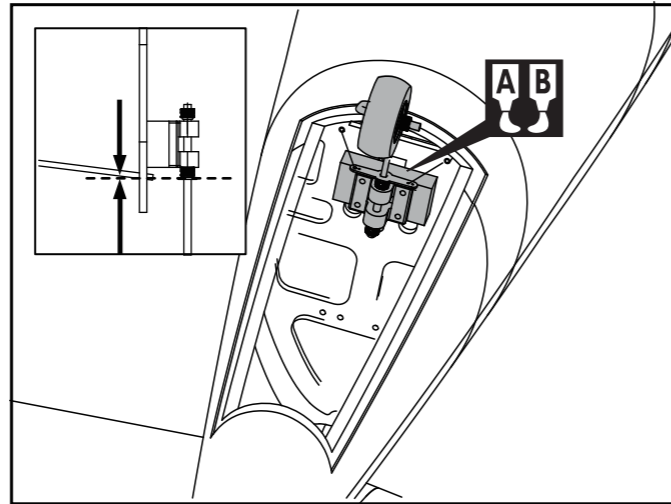
**74** Assemble the wheel mount to the thick wooden block with screw, cut the surplus parts and epoxy the thinner wooden block to it as illustration.



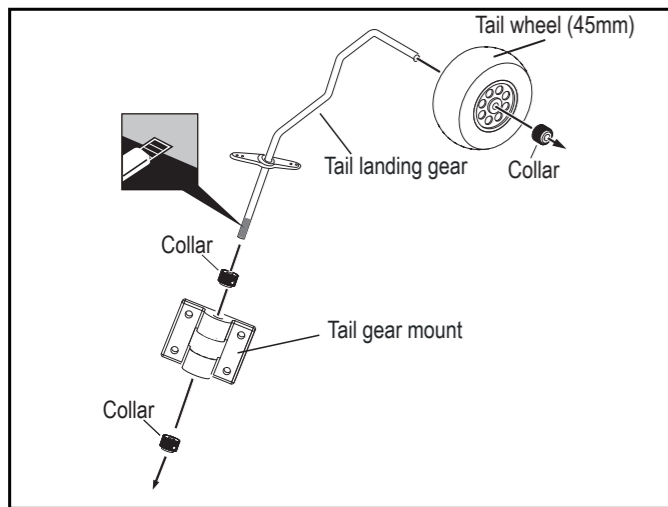
**73** Epoxy the fixed landing gear to the main wing.



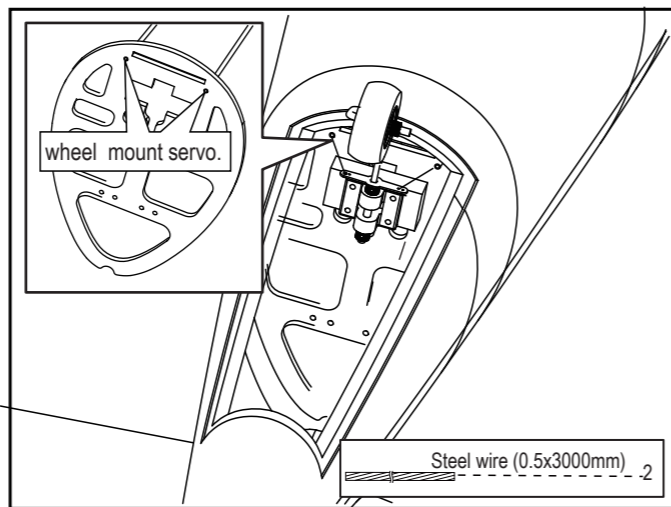
**75** Epoxy the whole wheel mount set to the form in the fuselage and be careful don't let the arm touch the fuselage when it works.



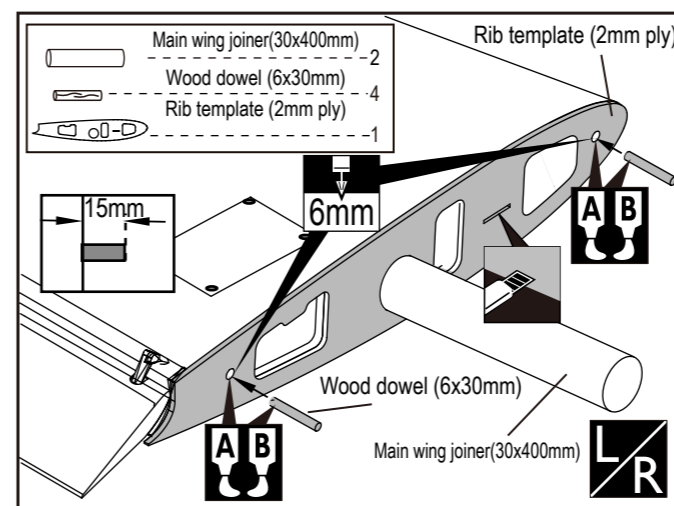
**73** The sketch map when assemble the tail landing gear to the wheel steeling mount.



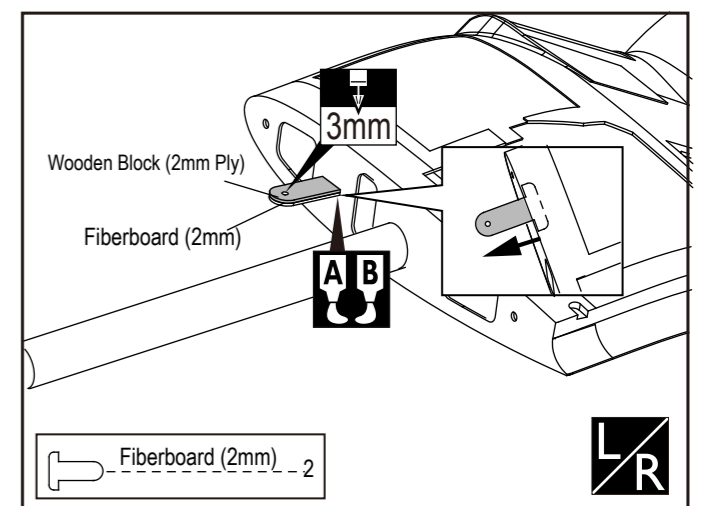
**75** Connect the servo of rudder and the arm of tail landing gear with steel wire.



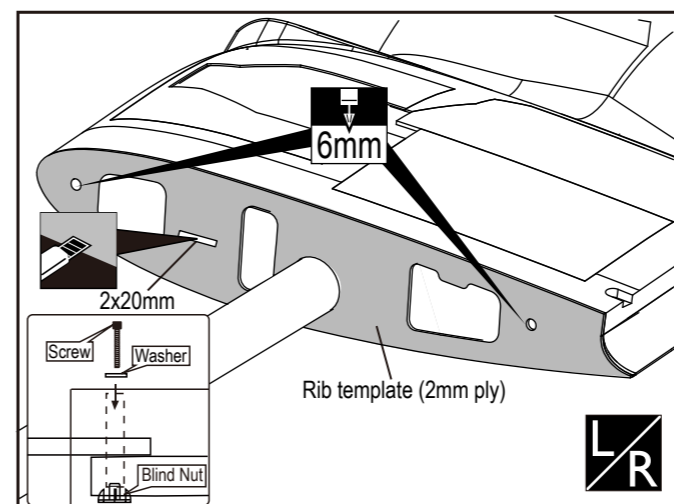
**11** According to the rib template drill holes and trim a slot in the outer wing root and epoxy wood dowels in the holes.



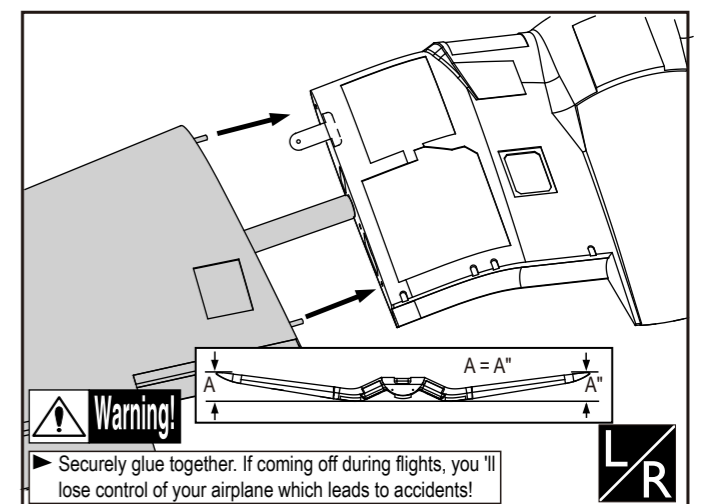
**14** Drag one side of the fiberboard out from the slot in the center wing root until the length of the outer parts of the fiberboard is same as the wooden plate. Drill a hole to the fiberboard according to the wooden plate and epoxy the it hardly in the center wing root.



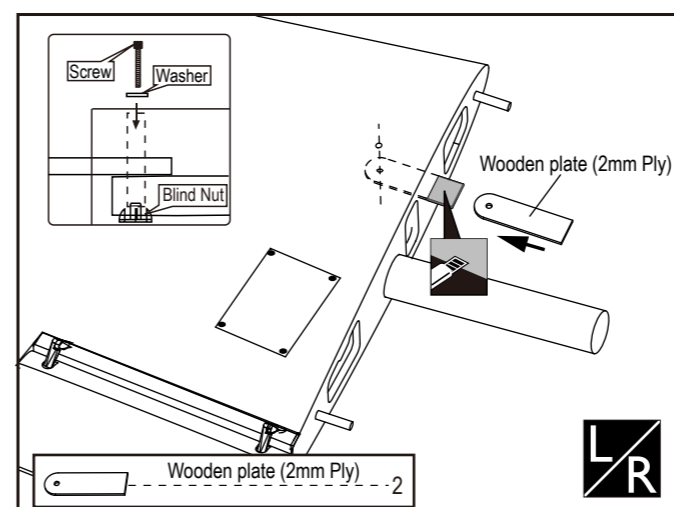
**12** According to the rib template drill holes and trim a slot in the centre wing root.



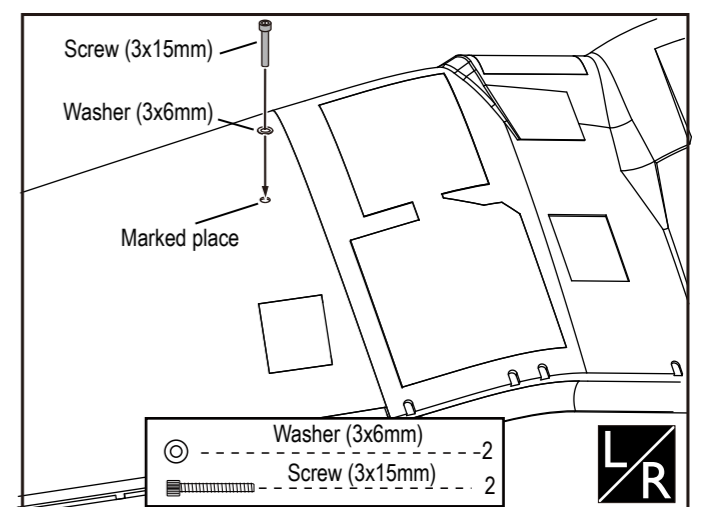
**15** Assemble the outer wing to the center wing.



**13** Trim the covering of the hole for wing fastening. Put the wooden supplied plate into the wing root slot until the holes match very well, mark out and cut off the surplus parts.



**16** Fix the outer wing to the center wing with screw as illustration.



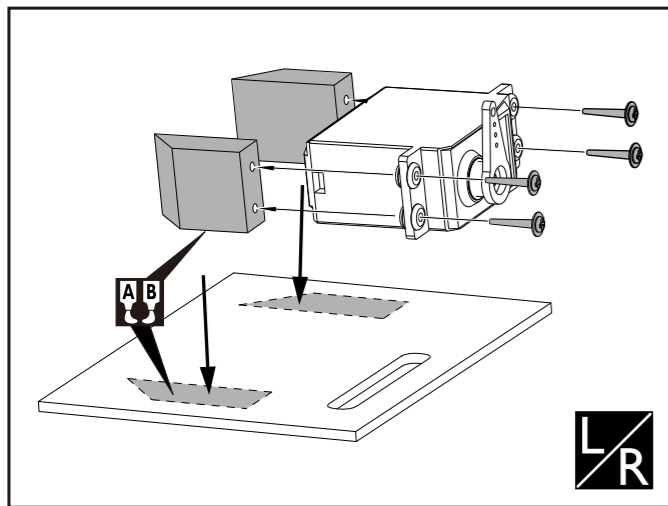
**A B** Apply epoxy glue. **L/R** Assemble left and right sides the same way. **Hand** Pay close attention here! **Warning!** Do not overlook this symbol!

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

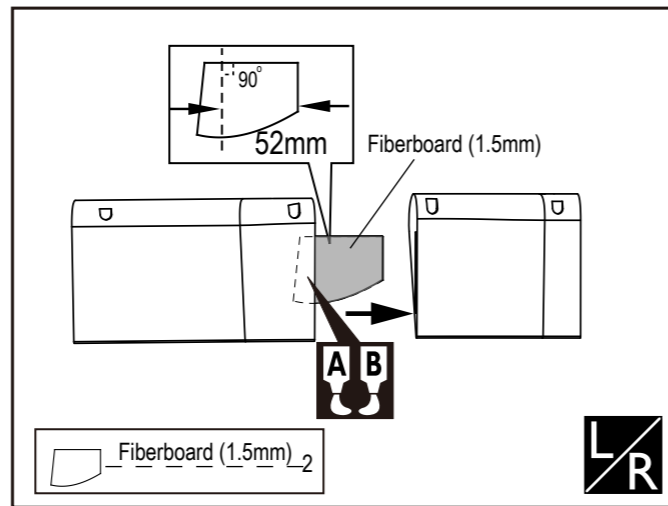
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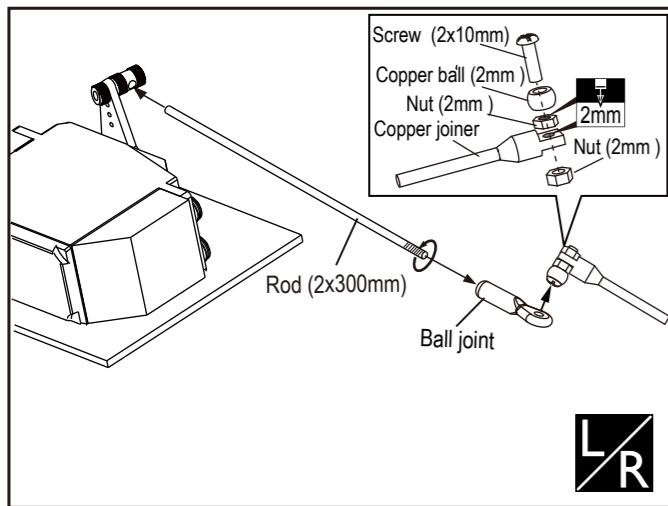
**17** Install the servo of flap to the servo tray.



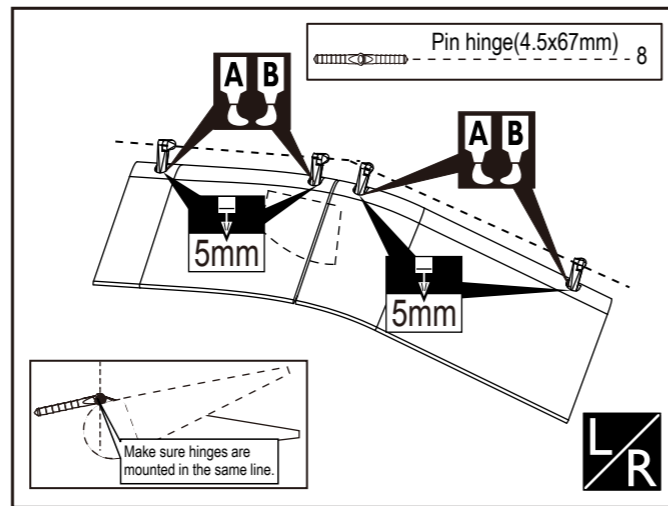
**20** According to the illustration, epoxy one side of the fiberboard in one flap and connect another flap through the fiberboard.



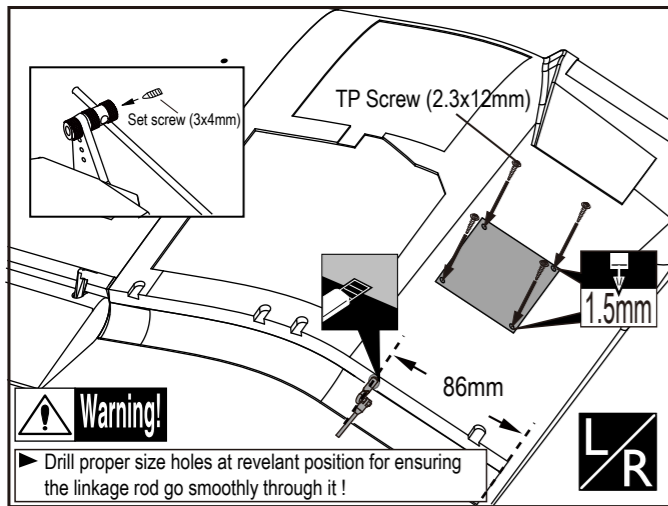
**18** Install the nylon control horn and connect the linkage.



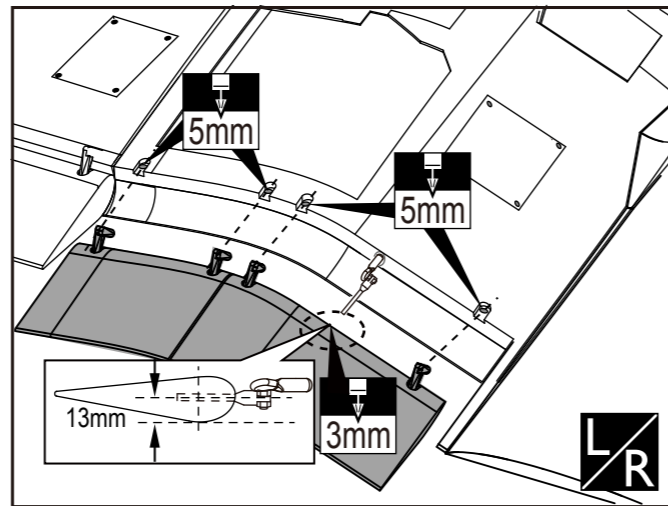
**21** Drill holes to relevant position in the flaps and epoxy the pin hinges in them.



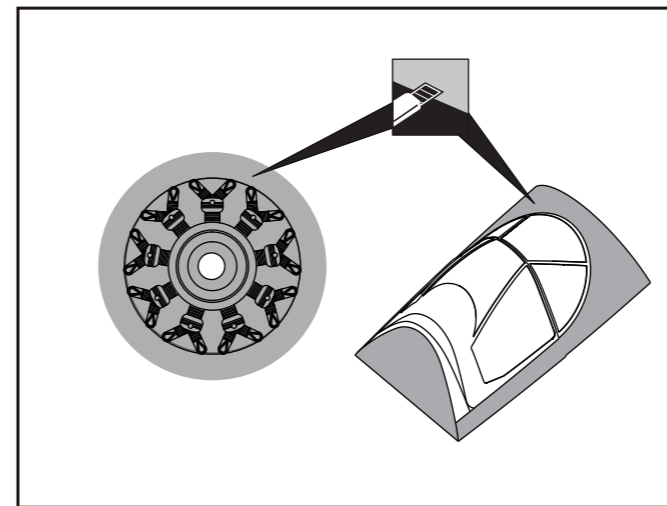
**19** Trim a hole to appropriate position in the trailing edge for the linkage of the flap servo and assemble the flap servo in the center wing.



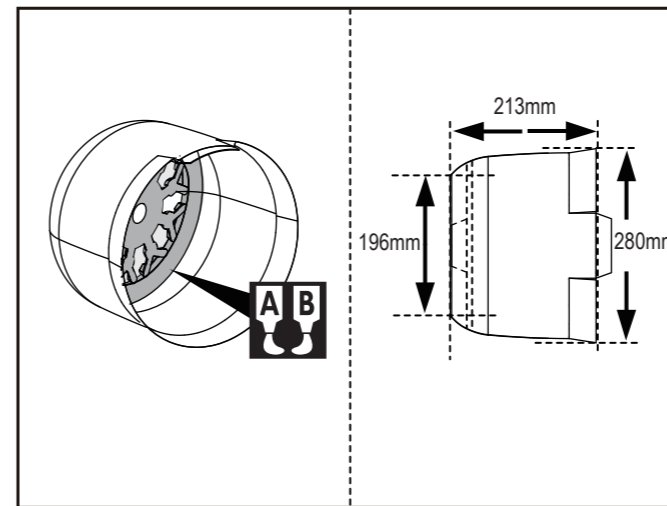
**22** Drill holes to relevant position in the trailing edge of the center wing.



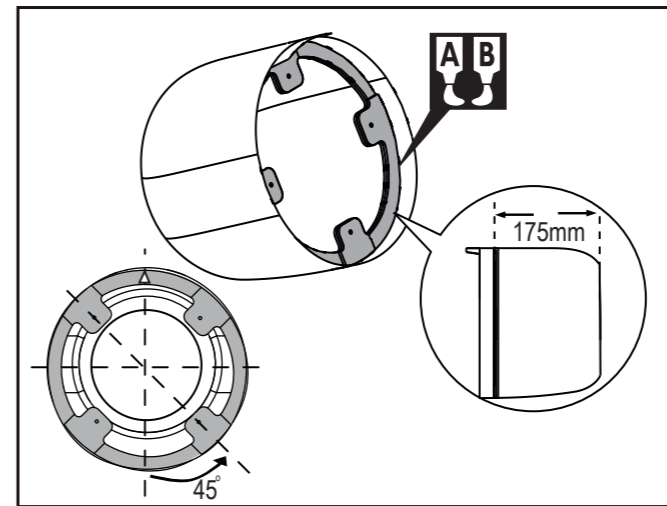
**67** Trim the dummy engine cover and the canopy carefully along the shaded line.



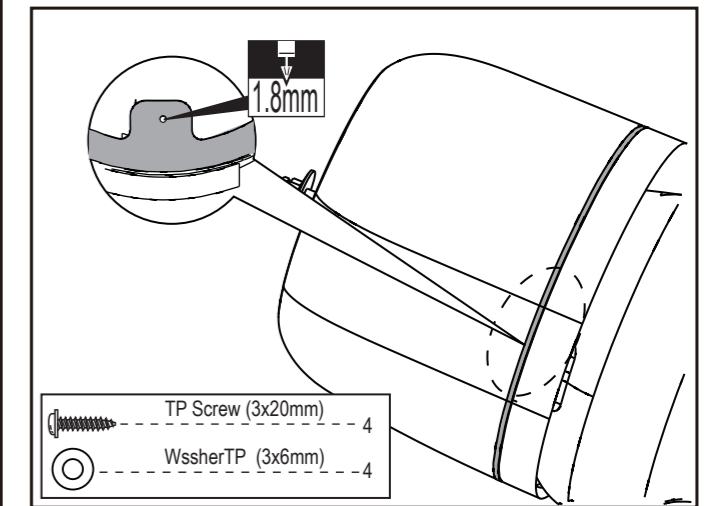
**68** Epoxy the dummy engine cover and the cowl frame to appropriate position in the cowl.



**69** Epoxy the wooden form to appropriate in the cowling.

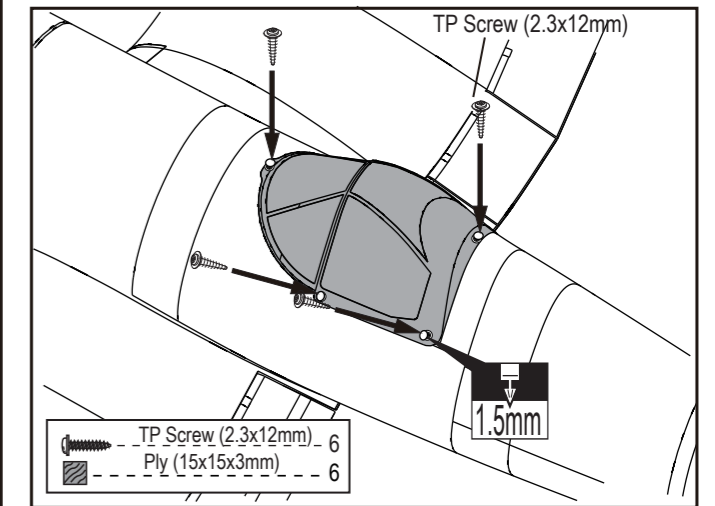


**70** Assemble the cowl to the fuselage with TP screws.



- TP Screw (3x20mm) - 4
- WssherTP (3x6mm) - 4

**71** Epoxy plies under the canopy and assemble the canopy to fuselage with screw.



- TP Screw (2.3x12mm) - 6
- Ply (15x15x3mm) - 6

**Warning!** Accessory list for the coming installation steps.

- |                               |                             |
|-------------------------------|-----------------------------|
| Wheel (115mm) - 2             | Tail gear mount - 1         |
| Collar (5mm) - 4              | Washer (3x6mm) - 4          |
| Wooden Block (43x28x26mm) - 2 | TP Screw (3x20mm) - 4       |
| TP Screw (3x20mm) - 8         | Wooden Block (9mm Ply) - 1  |
| Landing gear straps - 2       | Wooden Block (3mm Ply) - 1  |
| Gear door - 1                 | Tail landing gear (3mm) - 1 |
| Wooden Block (25x15x13mm) - 2 | Tail wheel (45mm) - 1       |
| TP Screw (2.3x12mm) - 4       | Collar (3mm) - 1            |
| Landing gear (5mm) - 1        | Steel wire (0.5x3000mm) - 2 |

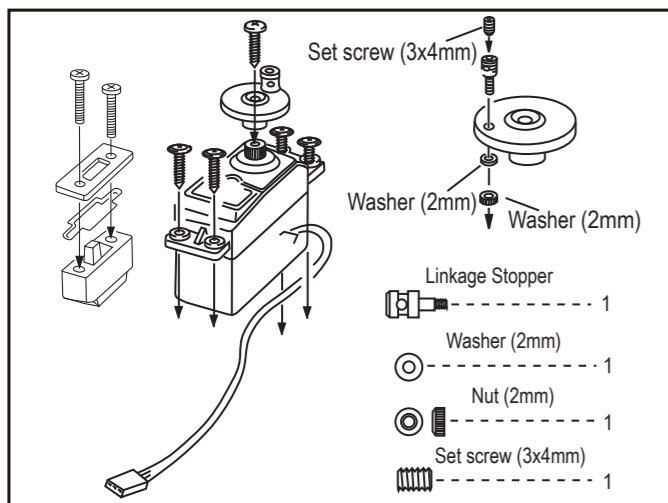
**A B** Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning!** Do not overlook this symbol!

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

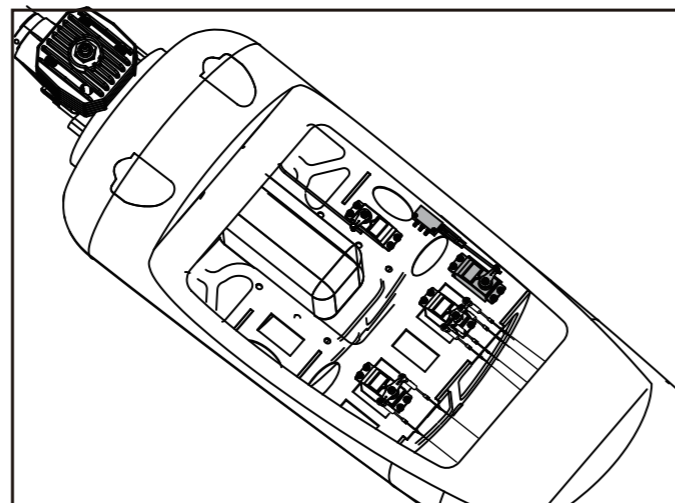
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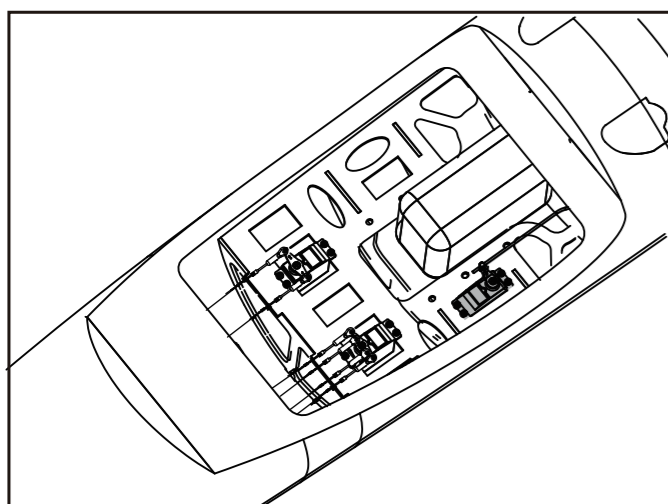
**62** Install the switch and the throttle servo



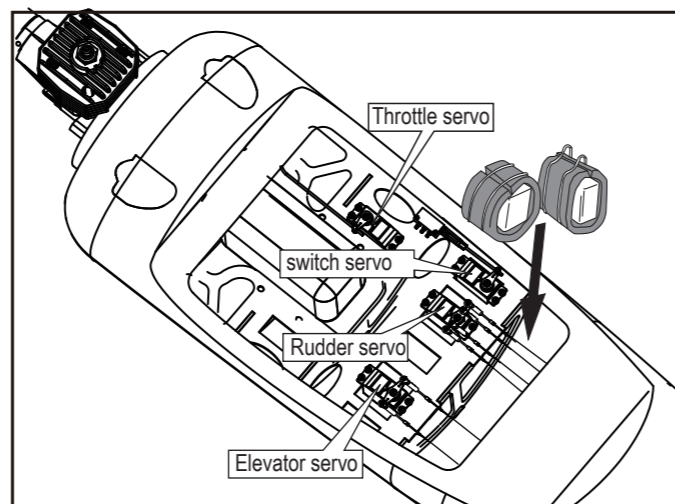
**65** Install the servo of switch in the fuselage.



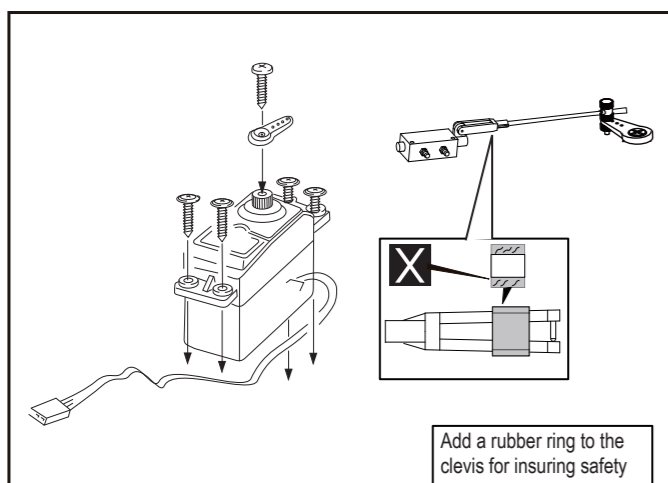
**63** Install the throttle servo to appropriate position in the fuselage.



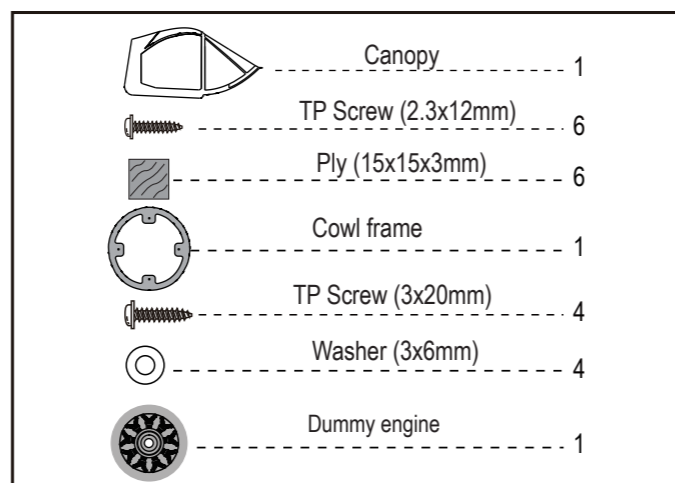
**66** Mount the receiver and the battery in the fuselage.



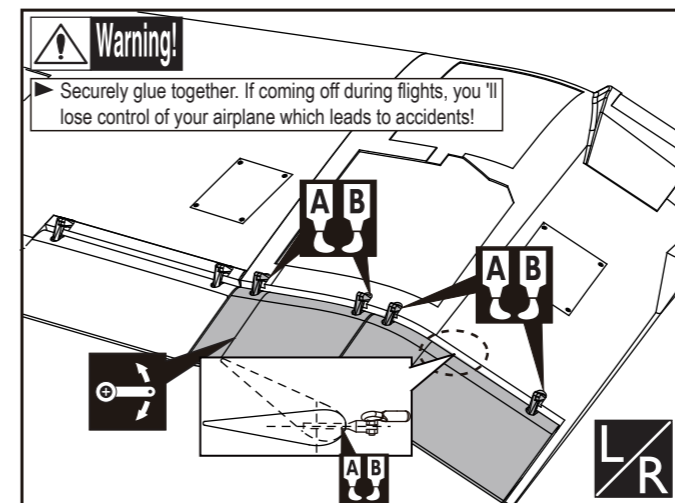
**64** Install the servo of swith.



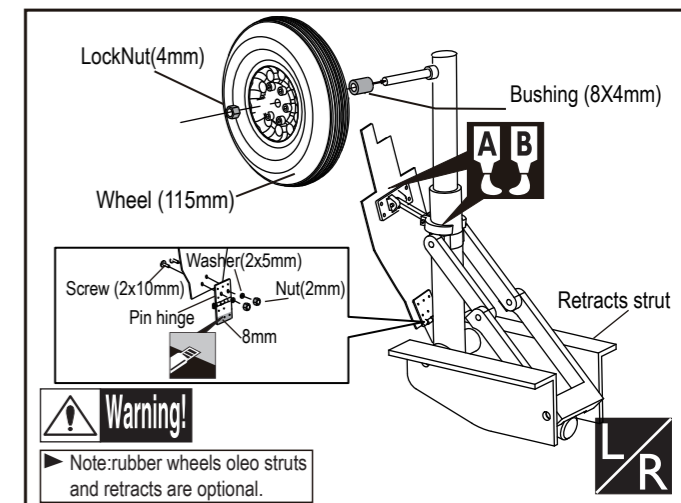
**Accessory list for the coming installation steps.**



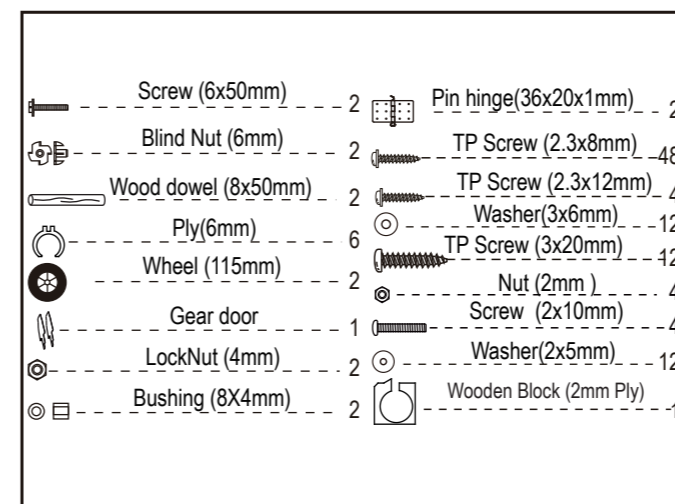
**23** Epoxy the flaps to the center wing.



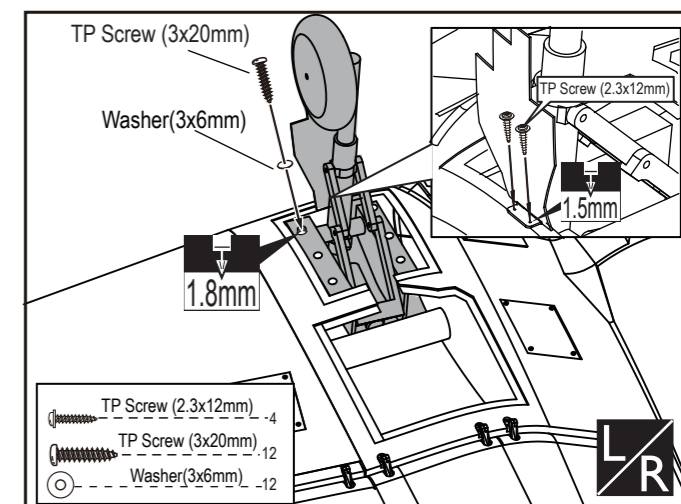
**25** Assemble the gear doors and the wheels to the retracts.



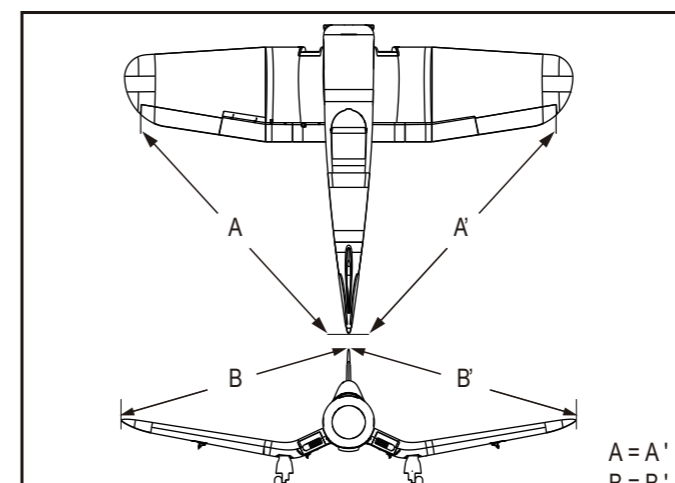
**Accessory list for the coming installation steps.**



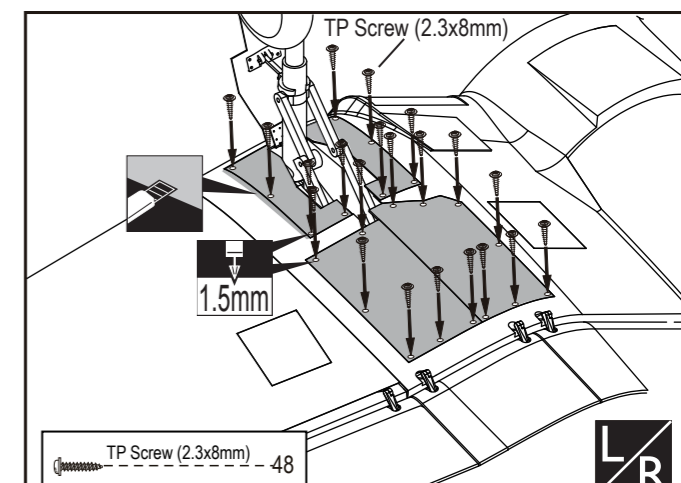
**26** Assemble the the retract.



**24** Assembly of the main wings



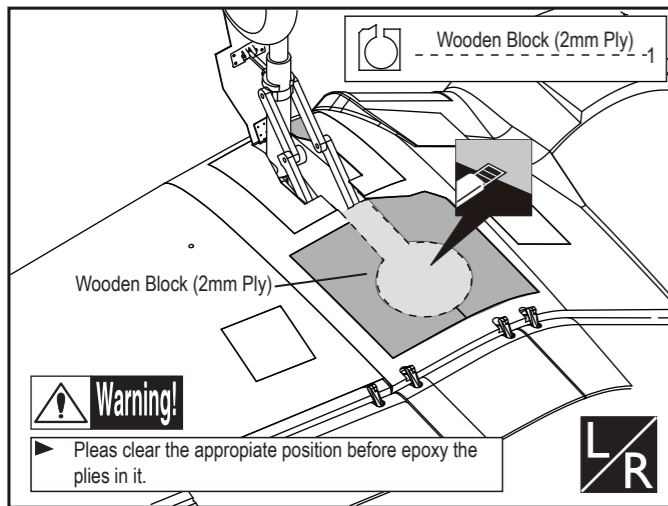
**27** Assemble the wheel door with TP screws. Trim the surplus section from the wheel door.



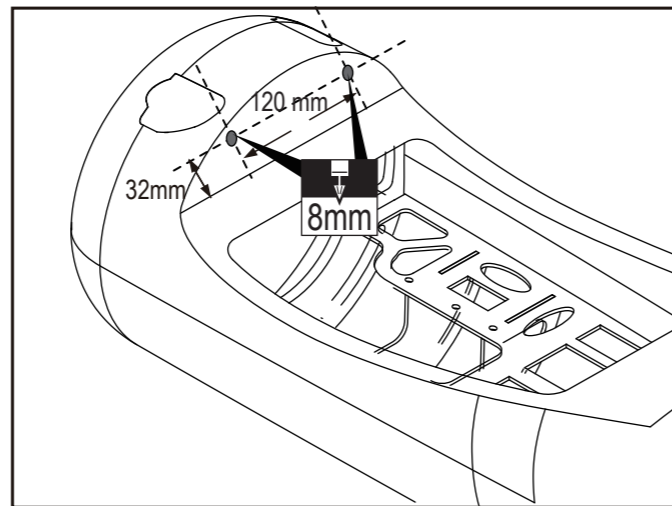
Apply epoxy glue.	Assemble left and right sides the same way.	Pay close attention here!	<b>Do not overlook this symbol!</b> 
Apply instant glue (CA glue, super glue).	Ensure smooth non-binding movement while assembling.	Cut off shaded portion.	

Apply epoxy glue.	Assemble left and right sides the same way.	Pay close attention here!	<b>Do not overlook this symbol!</b> 
Apply instant glue (CA glue, super glue).	Ensure smooth non-binding movement while assembling.	Cut off shaded portion.	

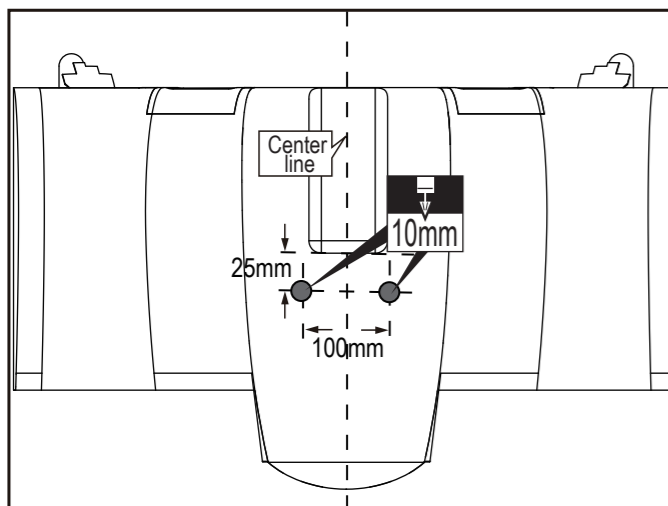
**28** Trim the surplus section from the wheel door and make sure the retract system can retract into the wings accurately when the gear up.



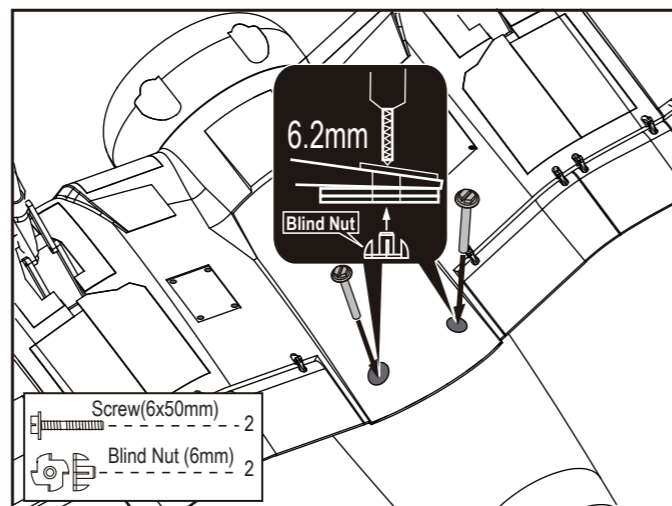
**31** Drill two holes to relevant position in the fuselage



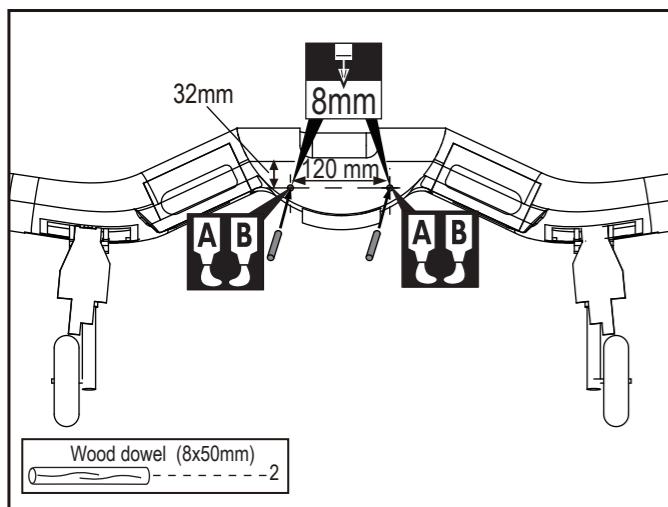
**29** Drill two holes for pulling out the servo extension line.



**32** Mount the wings to the fuselage with screw .



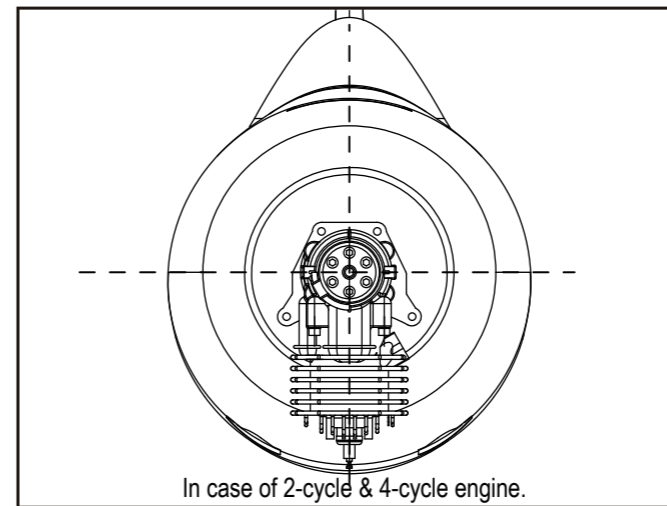
**30** Drill two holes to appropriate position in the leading edge of the center wing and mount the wood dowels in them.



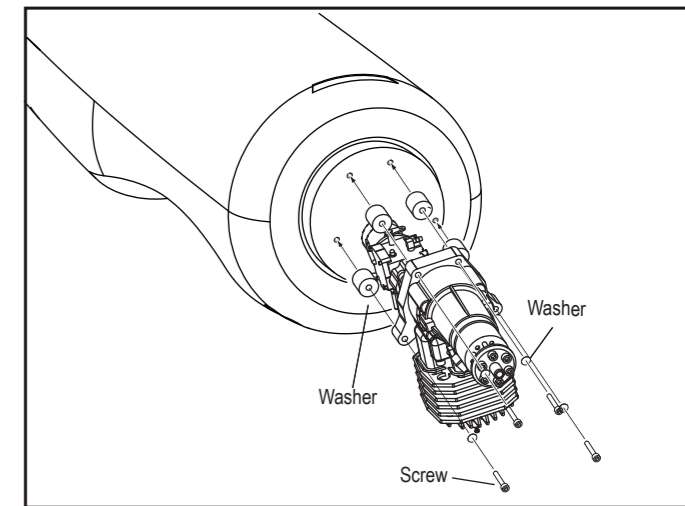
**Warning!** Accessory list for the coming installation steps.

- Stab joiner (12x290mm) - 1
- Pin hinge(2.5x48mm) - 6
- Steel wire (0.5x3000mm) - 2
- U-style wire (150x25x3mm) - 1
- Matal douel (4x30mm) - 4
- Rib template (2mm ply) - 1
- Clevis - 2
- Copper joiner - 2
- Aluminum tube(3x6mm) - 2
- Screw (2x10mm) - 2
- Nut (2mm) - 2
- Washer(2x5mm) - 2

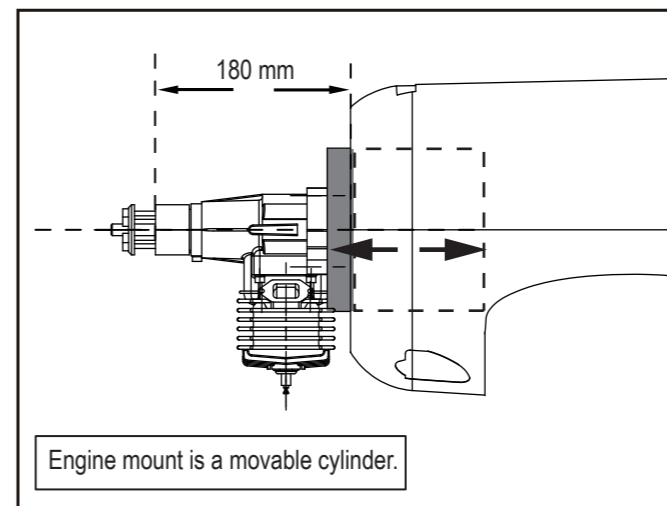
**55** The front view of the engine install completion.



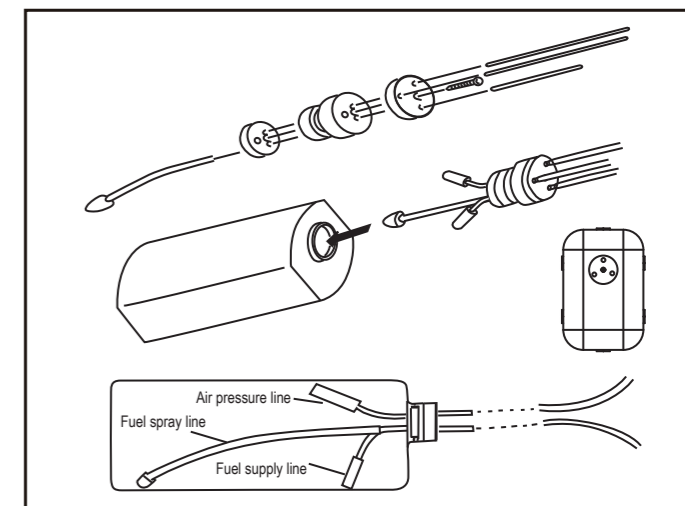
**58** Assemble the engine.



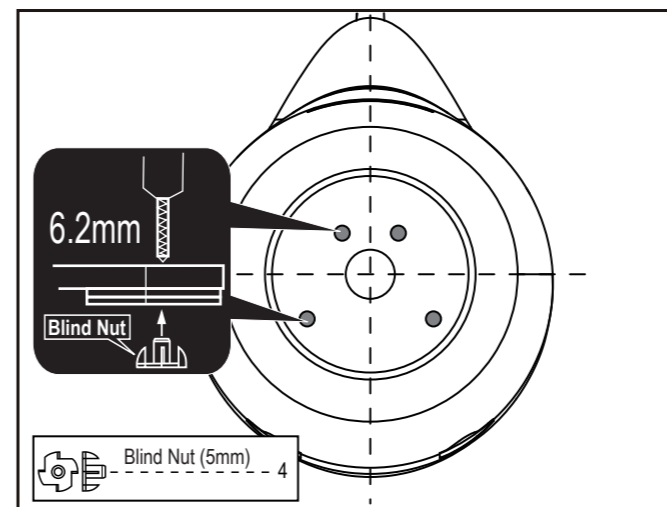
**56** The side view when the engine install completion, customers can adjust the engine position by move the engine mount.



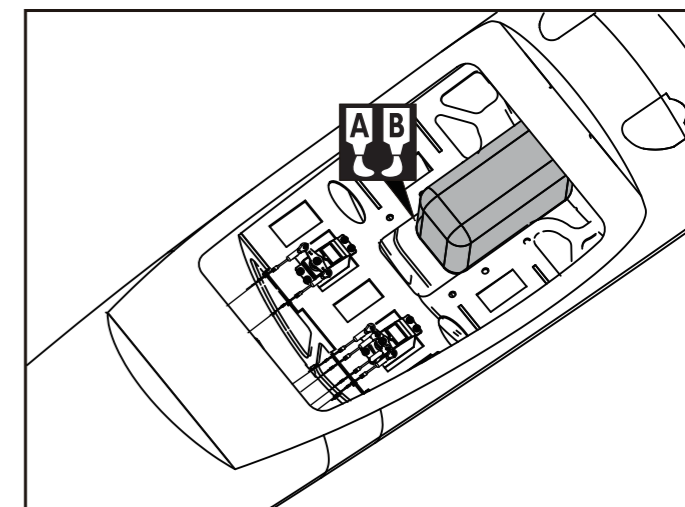
**59** Assembly of the fuel tank.



**57** Drill four holes at the diameters as shown for engine mount.



**60** Epoxy the fuel tank to the fuselage.



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

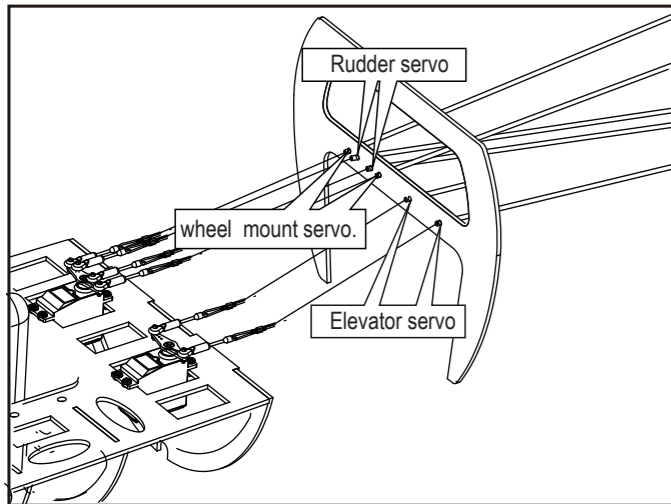
**CA** Apply instant glue (CA glue, super glue). **Hand icon** Ensure smooth non-binding movement while assembling. **Scissors icon** Cut off shaded portion.

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

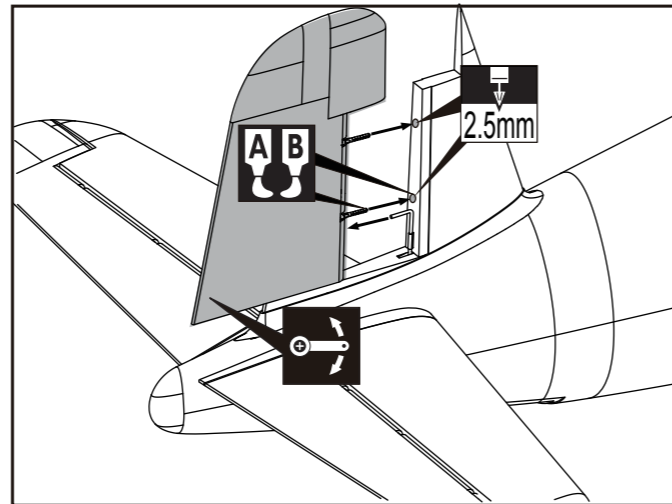
**CA** Apply instant glue (CA glue, super glue). **Hand icon** Ensure smooth non-binding movement while assembling. **Scissors icon** Cut off shaded portion.



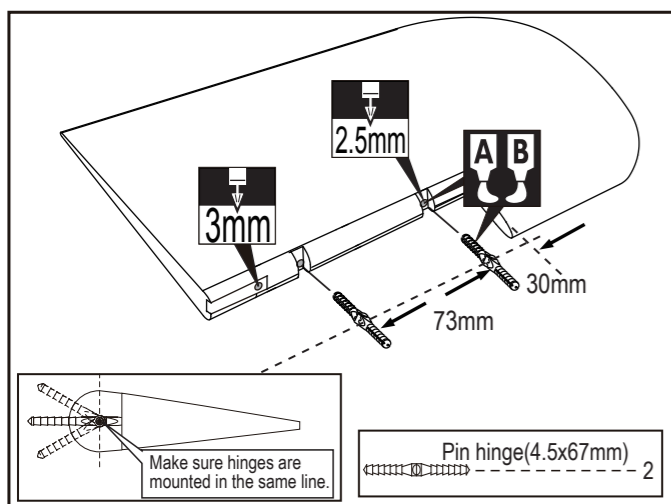
**50** The sketch map of the servo wires pass through the frame in the fuselage.



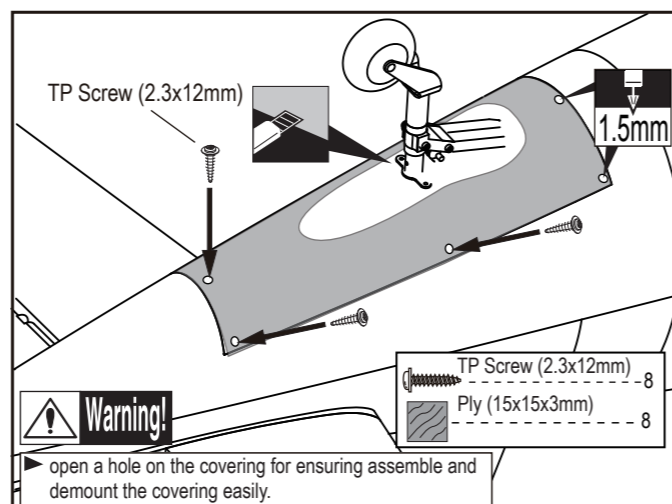
**53** Drill holes to relevant position in the trailing edge of vertical fin and epoxy the rudder to it.



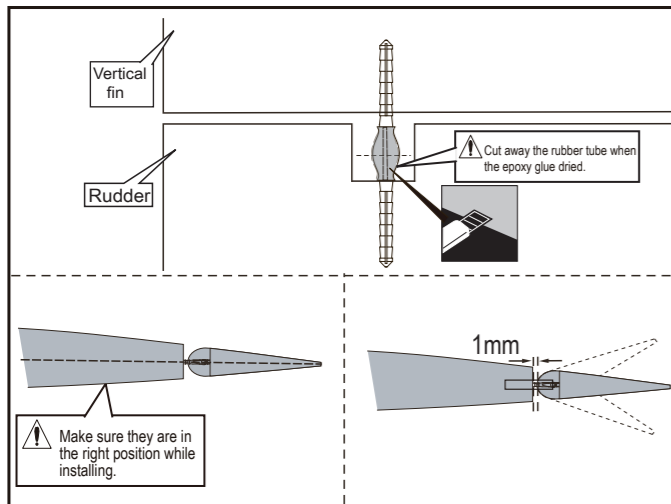
**51** Drill holes to appropriate position in the rudder and epoxy the pin hinges in them.



**54** Trim the surplus parts off the tail wheel cover carefully and make sure the tail retract can get into the tail fuselage when the gear up.



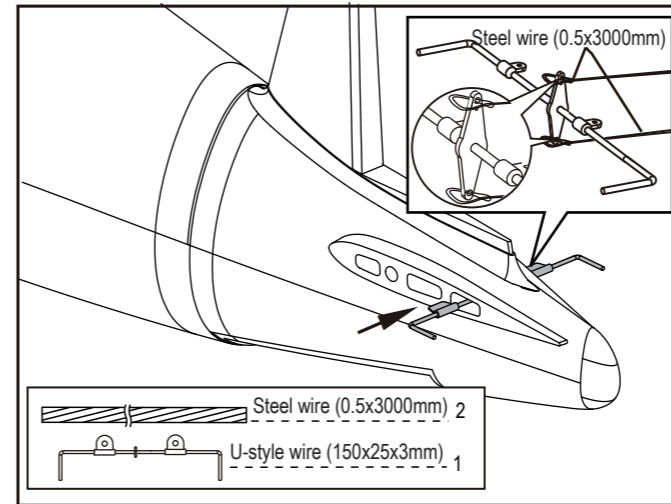
**52** Keep some space about 1mm width between the vertical fin and rudder.



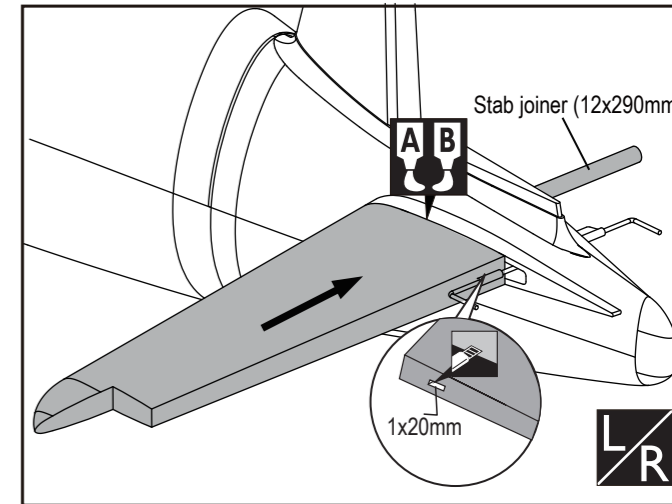
**Warning!** Accessory list for the coming installation steps.

- Screw(5mm) ----- 4
- Washer(5mm) ----- 12
- Spring Washer(5mm) ----- 4
- Linkage Stopper ----- 1
- Plastic tube (2x450mm) ----- 1
- Blind Nut (5mm) ----- 4
- Washer ----- 4
- Fuel tank (800cc) ----- 1

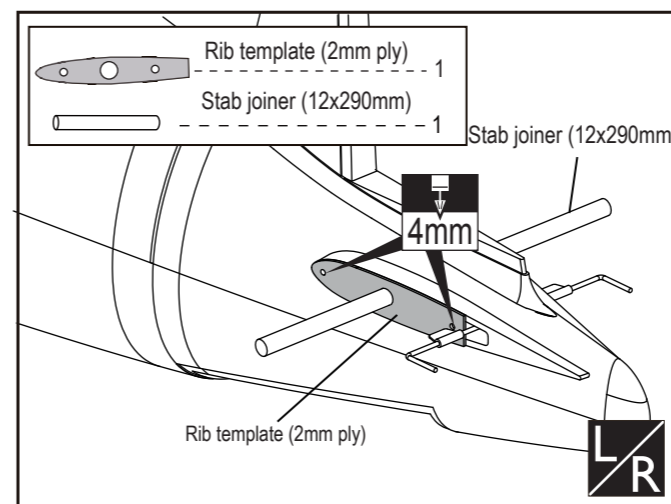
**33** Set the U-style wire through the tail of fuselage as below.



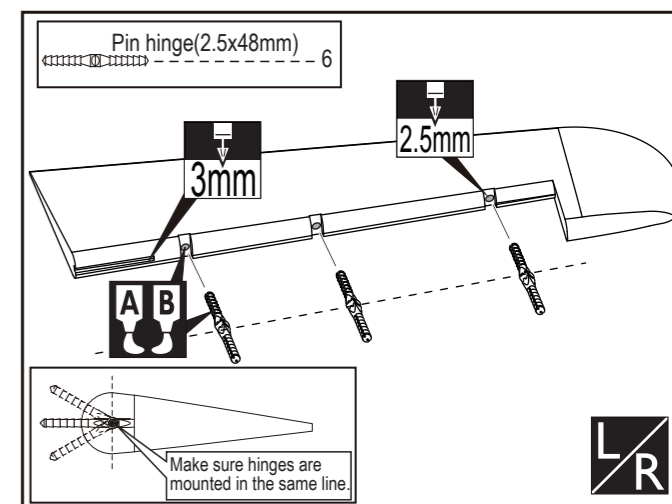
**36** Assemble the stabilizer to fuselage and trim slot to appropriate position in the trailing edge of the stabilizer.



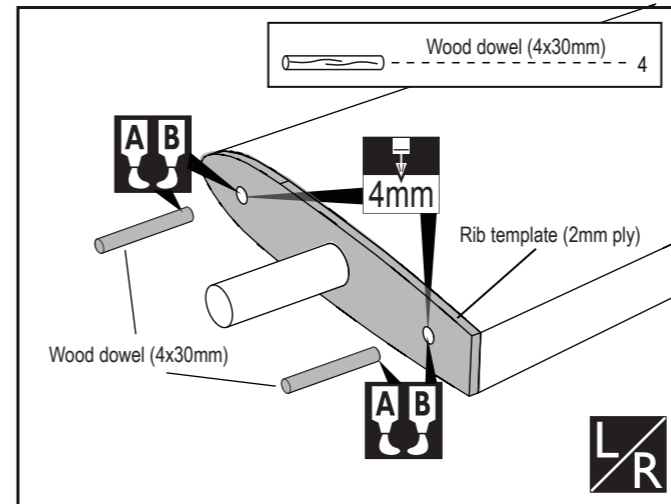
**34** According to the rib template drill holes to the tail of fuselage as illustration.



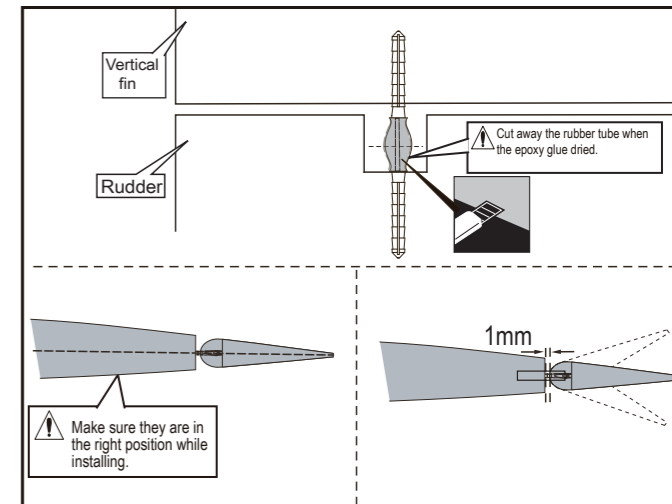
**37** Drill holes to appropriate position in the elevator and epoxy the pin hinges to them.



**35** Drill two holes in the stab root base on the rib template and epoxy the wood dowels in them



**38** Keep some space about 1mm width between the elevator and horizontal tail edge.



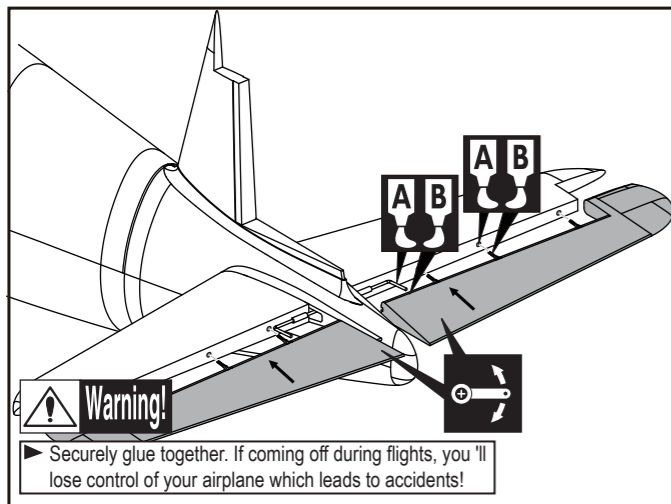
**AB** Apply epoxy glue. **LR** Assemble left and right sides the same way. Pay close attention here! **Warning!** Do not overlook this symbol!

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

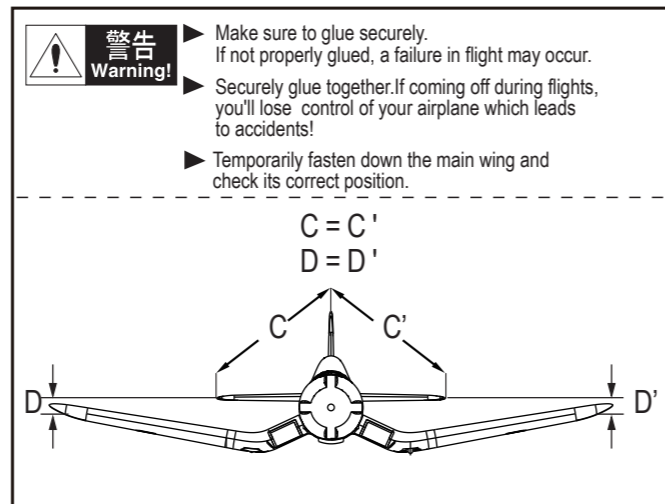
**AB** Apply epoxy glue. **LR** Assemble left and right sides the same way. Pay close attention here! **Warning!** Do not overlook this symbol!

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

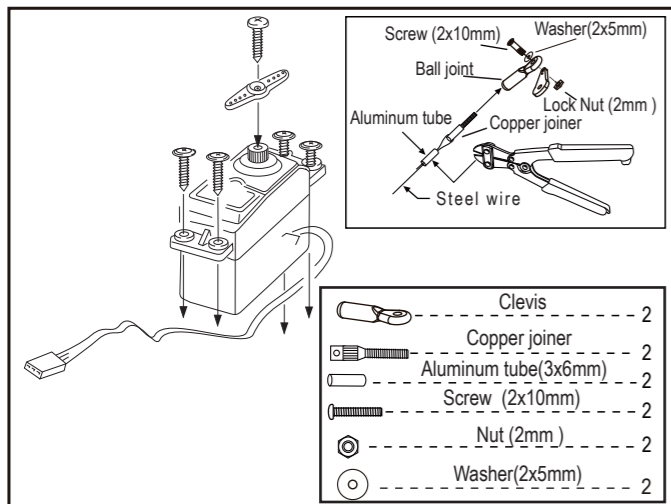
### 39 Epoxy the elevator to the stabilizer.



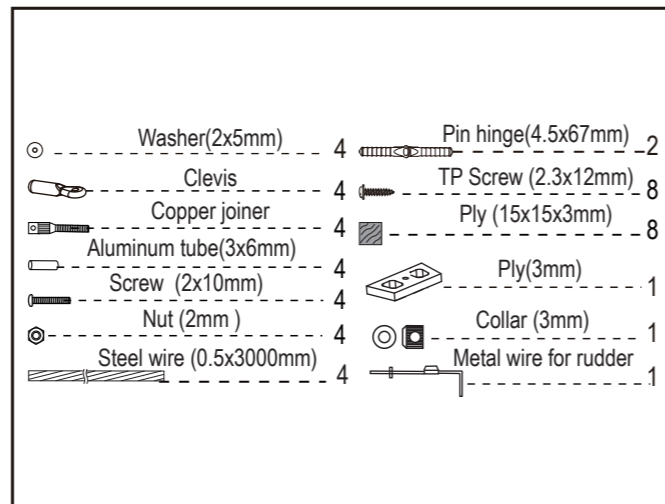
### 42 Assembly of the stabilizer.



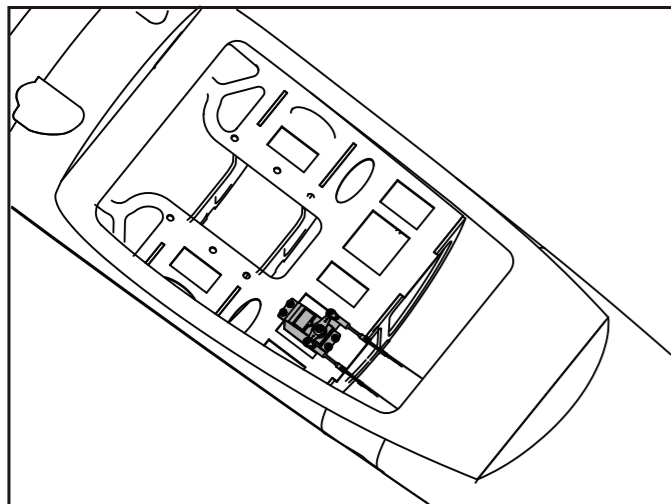
### 40 Install the elevator servo.



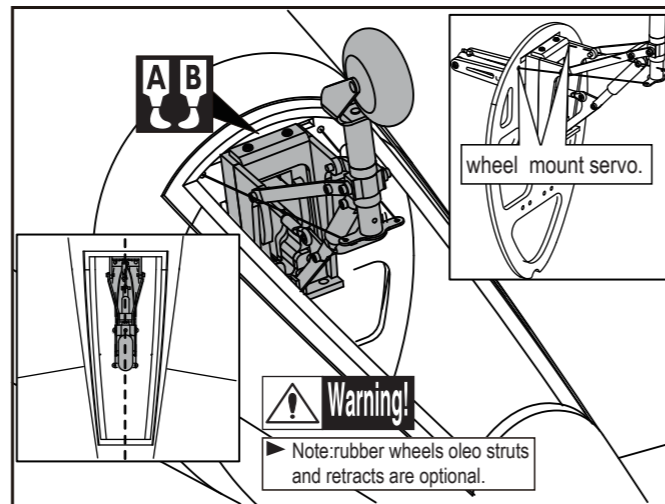
### Accessory list for the coming installation steps.



### 41 Assemble the elevator servo to appropriate position in the fuselage.



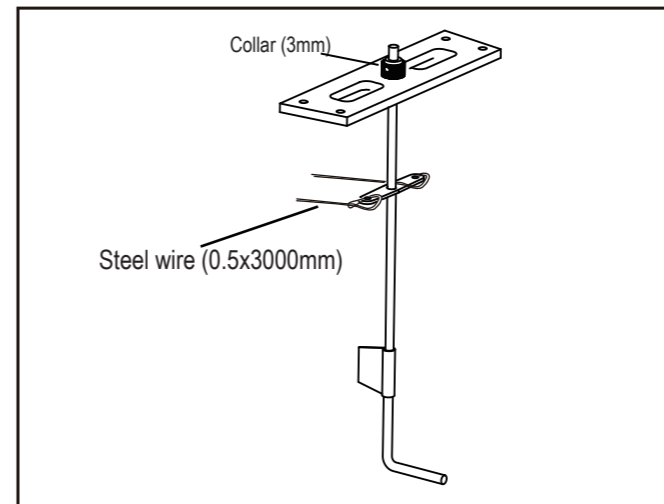
### 43 Epoxy the tail retract to the former in the fuselage and connect the steel wires as illustration.



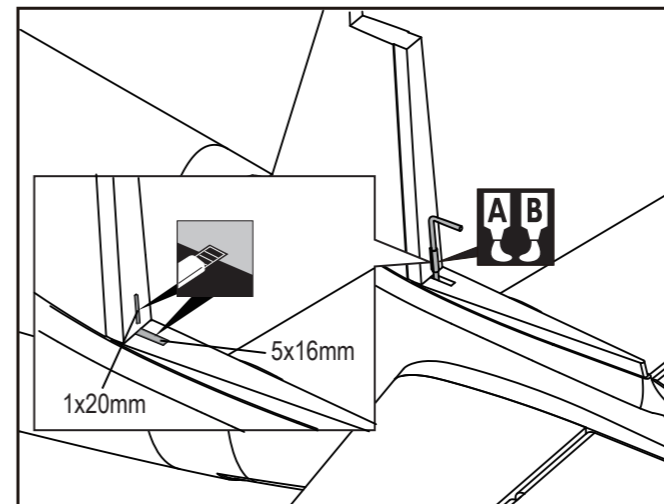
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

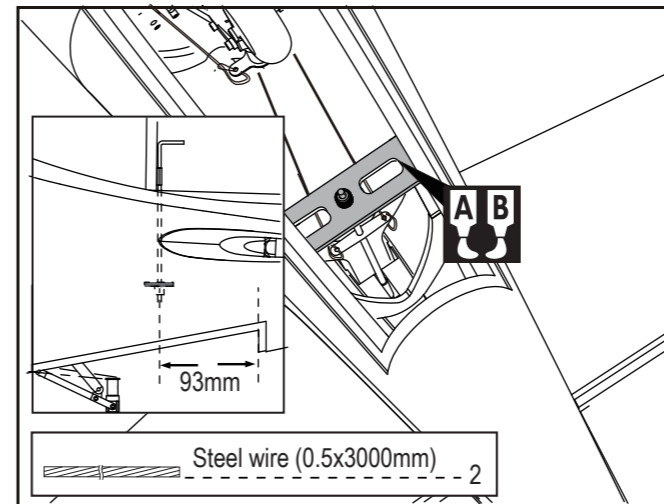
### 44 Put the frame in the rudder metal wire.



### 45 Trim slots in appropriate position to the tail fuselage as illustration and epoxy the rudder metal wire to the slot in the fin.



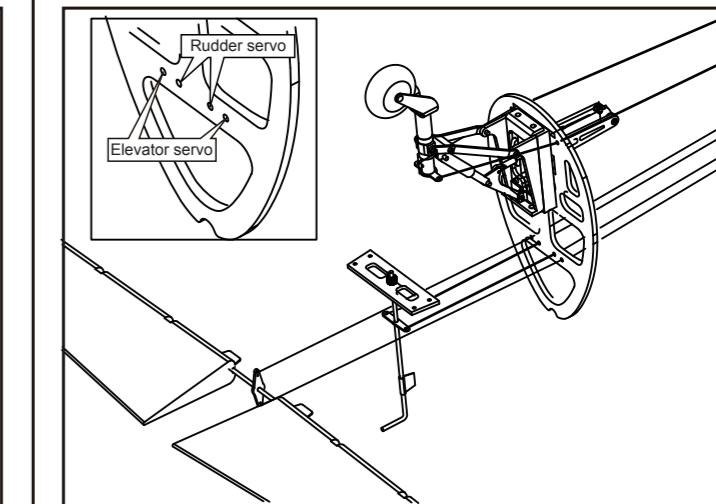
### 46 Epoxy the frame to the appropriate position in the fuselage and fix it to the metal wire with collar.



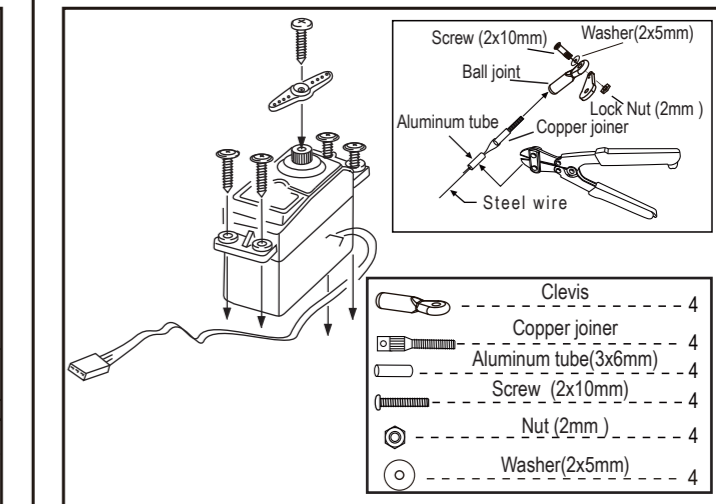
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

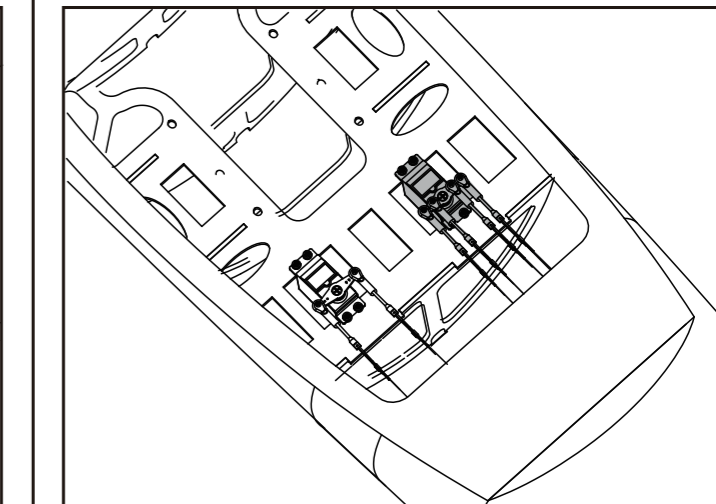
### 47 The sketch map of all the steel wires pass the former in the fuselage.



### 48 Install the rudder servo.



### 49 Assemble the rudder servo to appropriate position in the fuselage.



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.