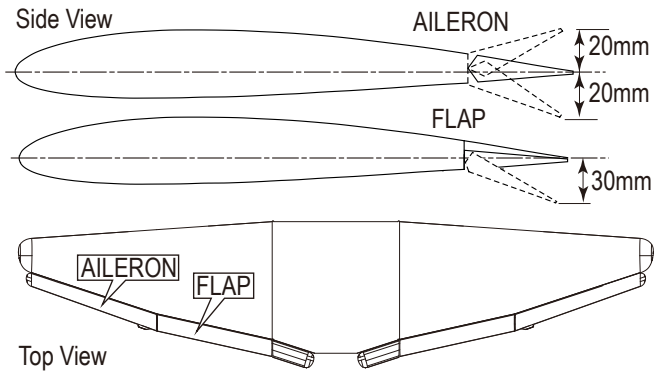


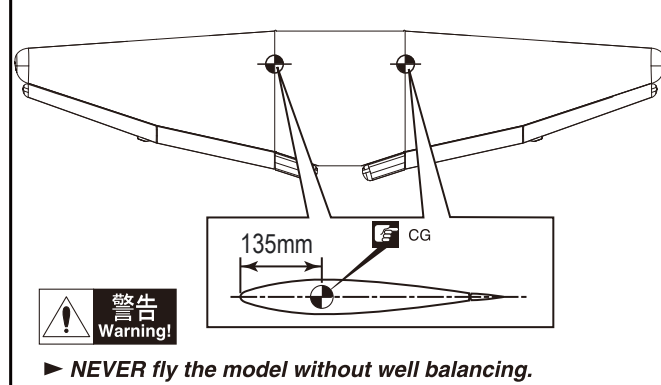
73 Adjustment.

Adjust the travel of each control surface to the values in the diagrams. These values fit general flight capabilities. Readjust according to your needs and flight level.

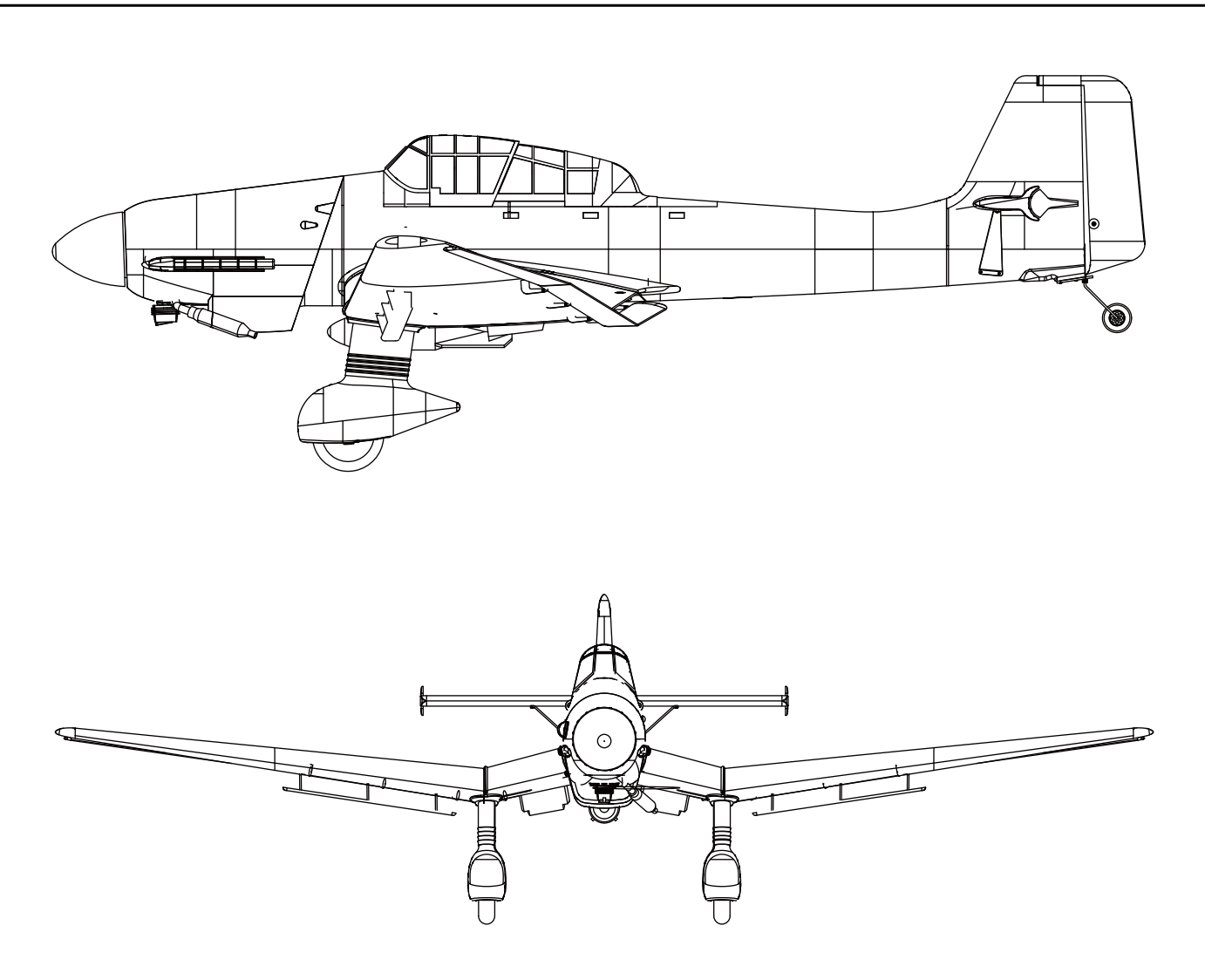


74 Centre of Gravity.

Never fly before checking the CG's required position. In order to obtain the CG specified, reposition the receiver and battery.



75 The front view when the drop tank and the bombs install completion.



Before start ,please carefully read the explanations!

JU-87D Stuka



Specification:

Length	:1691 mm(66.6")
Wing Span	:2032 mm(80")
Wing Area	:60.3 sq. dm 6.50 sq. ft
Wing Loading	:104.5 g/sq. dm 34.2 oz/sq. ft
Flying Weight	:6.5 kg(14.3 lbs)
Radio	:6ch&8 servos
Engine	:108 2-cycle 120 4-cycle

INSTRUCTION MANUAL

- 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!



SAFETY PRECAUTIONS

This R/C airplane is not a toy!
(The people under 18 years old is forbidden from flying this model)

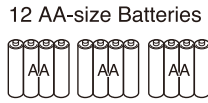
First-time builders should seek advice from people having building experience. If misused or abused, it can cause serious bodily injury and damage to property. Fly only in open areas and preferably at a dedicated R/C flying site. We suggest having a qualified instructor carefully inspect your airplane 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.



A minimum 6 channel transmitter for airplanes.

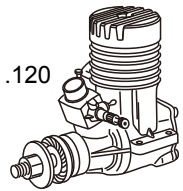
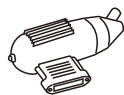


For handling the radio properly, refer to its instruction manual.

2 Engine and Muffler

Model Airplane Engine 4-cycle .120

Muffler



Glow Plug



3 Propeller Spinner

Purchase a propeller that will match your engine.



4.5 in Spinner



15"X7

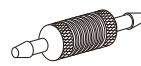
4 Sponge Sheet



Silicone Tube



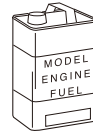
Fuel Filter



5 Required for engine starting:

WARNING: Normal gasoline cannot be used with glow engines.

Glow engine fuel only.



Fuel Pump



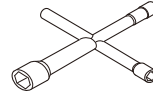
Booster Cord



4 D-size Batteries



Plug Wrench

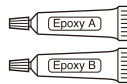


6 Glue

Instant Glue

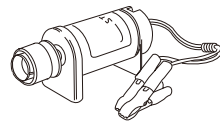


Epoxy Glue

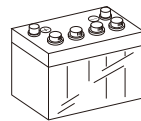


7 Other equipment for enhancing airplane operation & performance

Engine Starter



12V Battery (for starter)



9 Optional parts: rubber wheel with metal hub.

TOOLS REQUIRED (Purchase separately!)

Sharp Hobby Knife



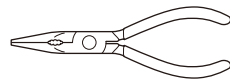
Phillips Screw Driver (l, m, s)



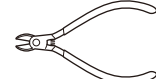
Awl



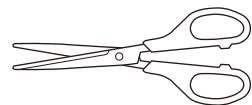
Needle Nose Pliers



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.

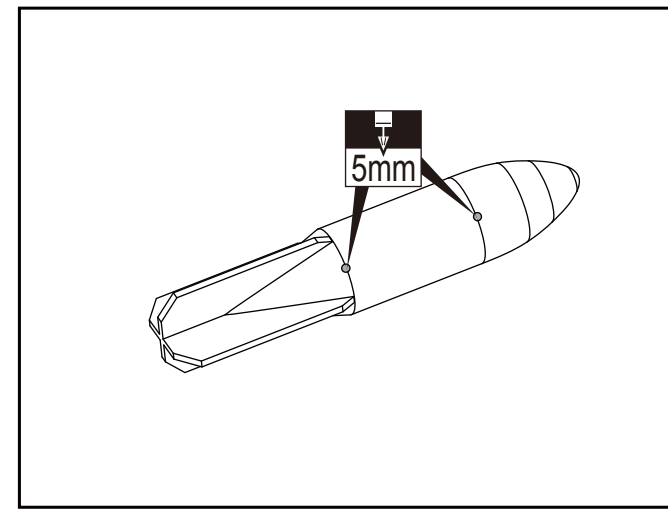
2 Check all parts. If you find any defective or missing parts, contact your local dealer.

3 Symbols used throughout this instruction manual, comprise:

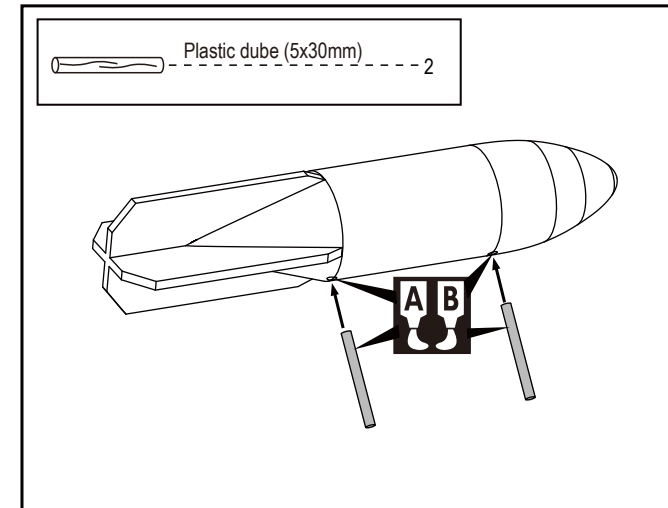
- Apply epoxy glue.
- Drill holes with the specified diameter (2mm).
- Cut off excess.
- Pay close attention here!
- Assemble left and right sides the same way.
- Apply instant glue (CA glue, super glue).
- Cut off shade portion.
- Ensure smooth non-binding movement while assembling.
- Must be purchased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

Do not overlook this Symbol!

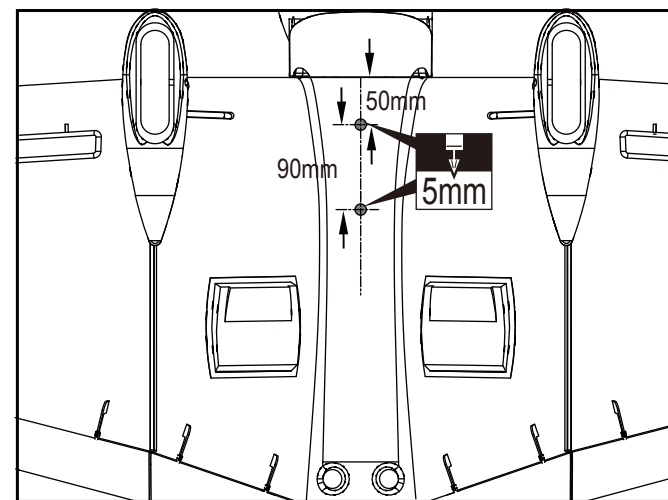
67 Drill holes to appropriate in the bomb.



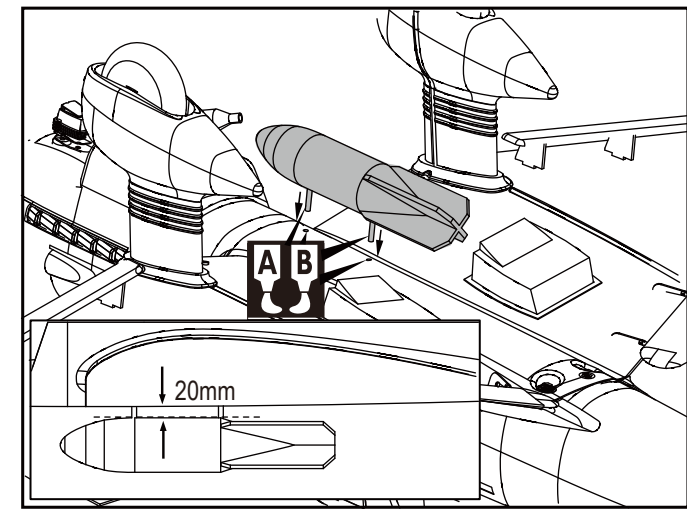
68 Epoxy plastic tube into the holes.



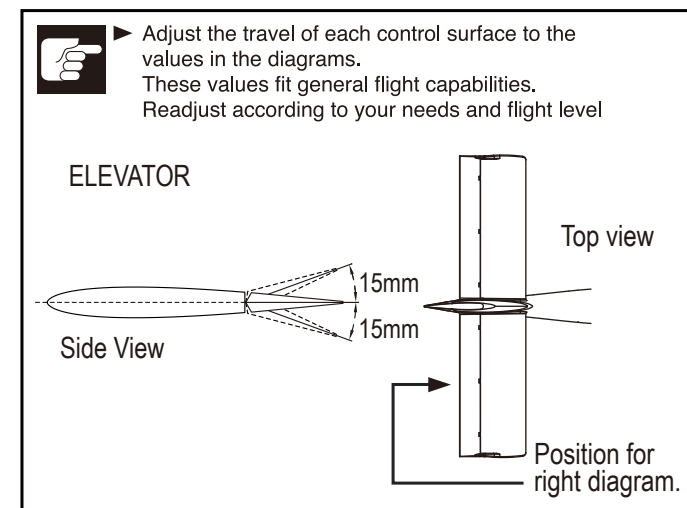
69 Drill holes to relevant position in the centet wing.



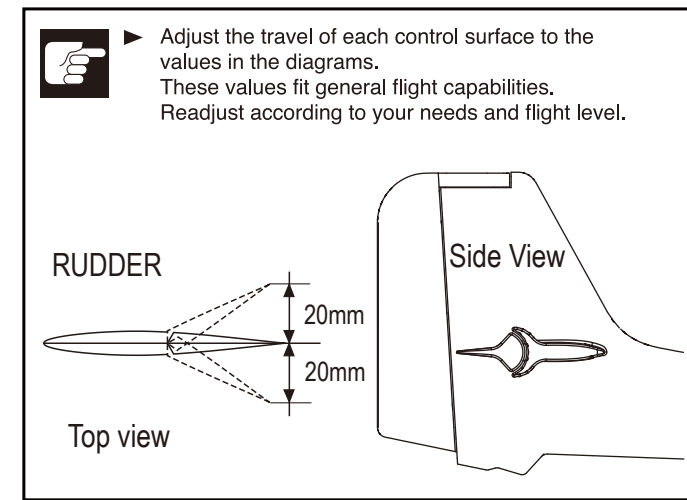
70 Epoxy the bomb to the bottom wing.



71 Adjustment.

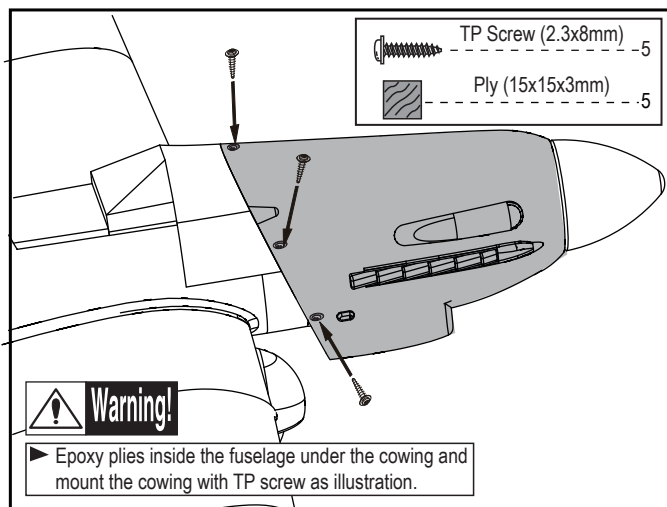


72 Adjustment.



- 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.

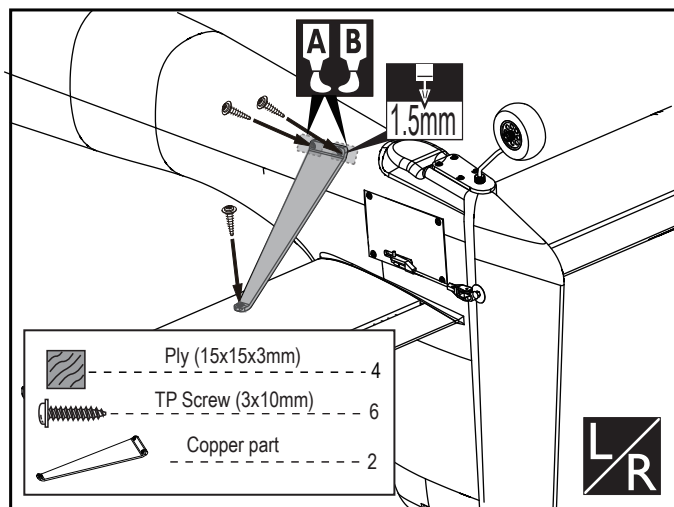
60 Assemble the cowling.



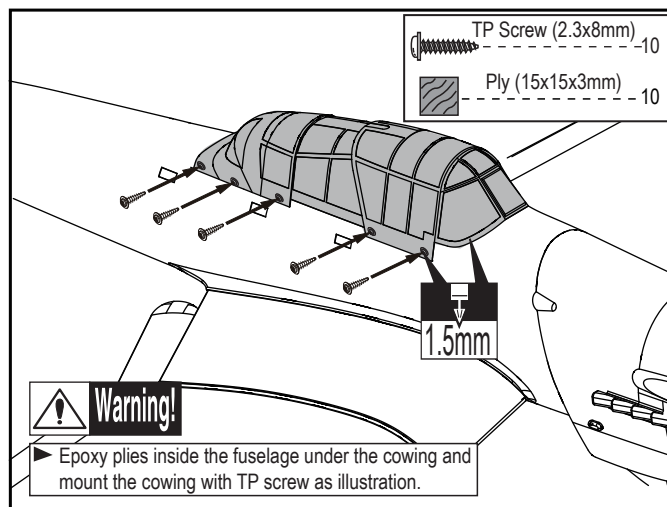
Warning!

▶ Epoxy plies inside the fuselage under the cowling and mount the cowling with TP screw as illustration.

63 Assemble the stabilizer strut by TP serew.



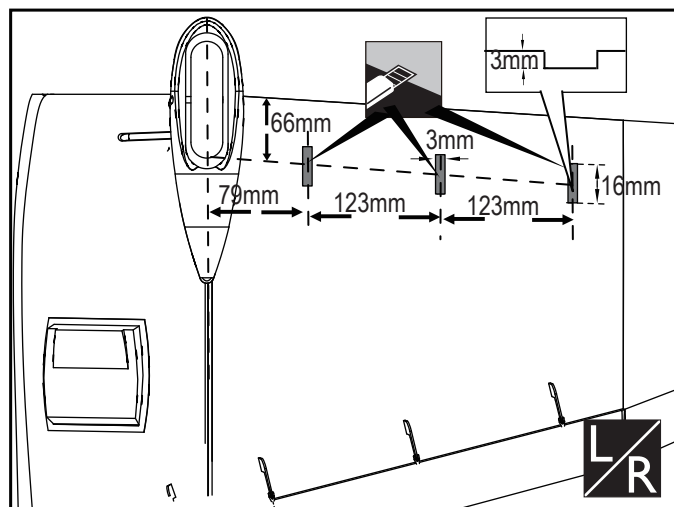
61 Fix the canopy with self - tapping screws.



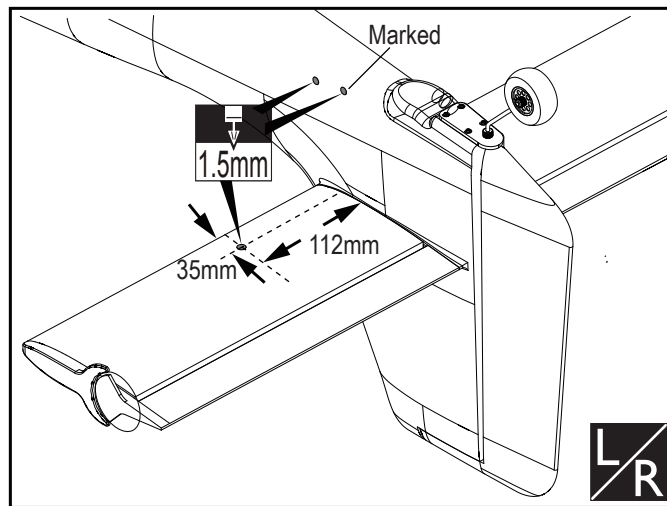
Warning!

▶ Epoxy plies inside the fuselage under the cowling and mount the cowling with TP screw as illustration.

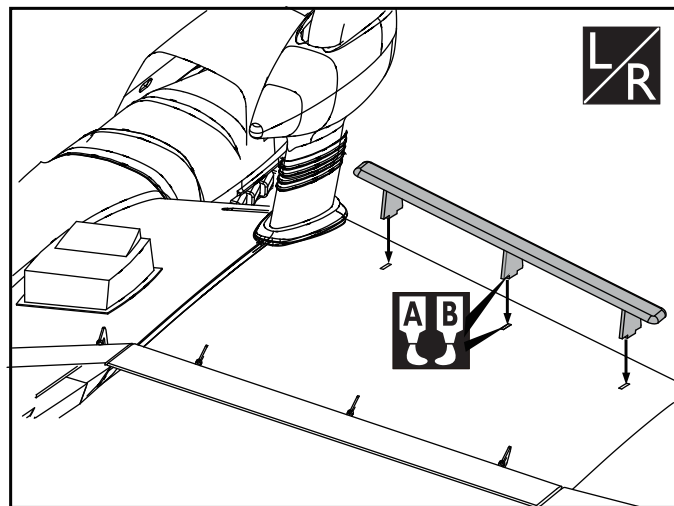
64 Trim slots in right position in the bottem wing.



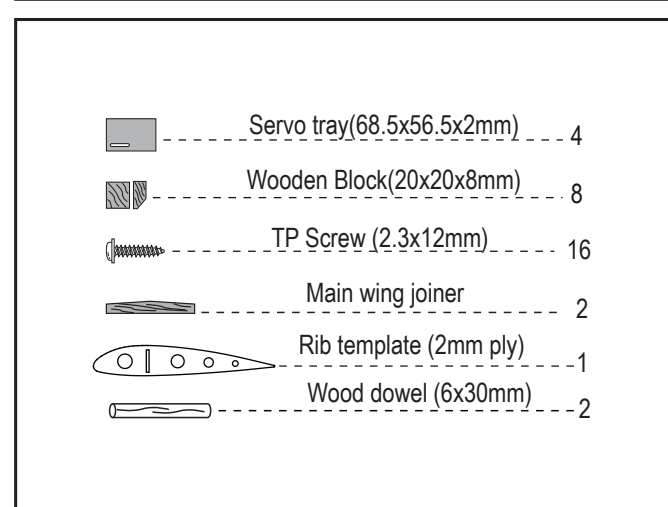
62 Drill holes to the marked position in the fuselage, Drill holes relevant position in the stabilizers.



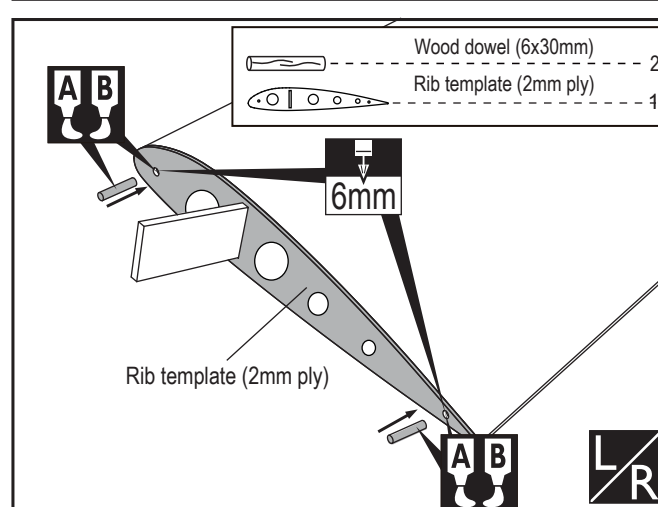
65 Epoxy the dummy flaps to the wings.



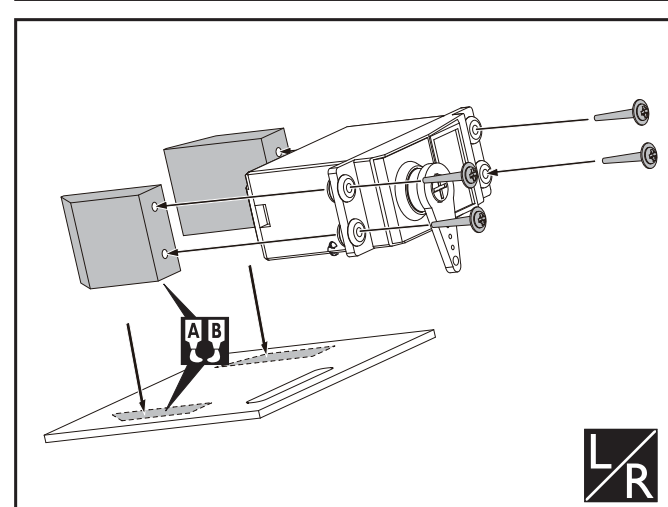
Accessory list for the coming installation steps.



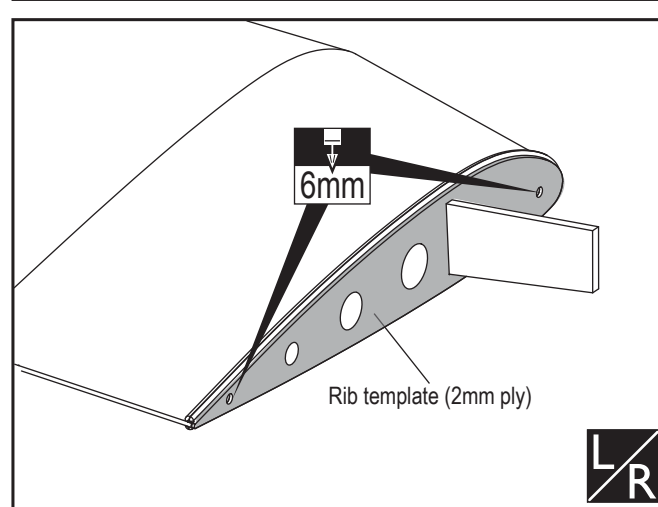
3 According to the rib template drill holes in one wing and epoxy wood dowel in them.



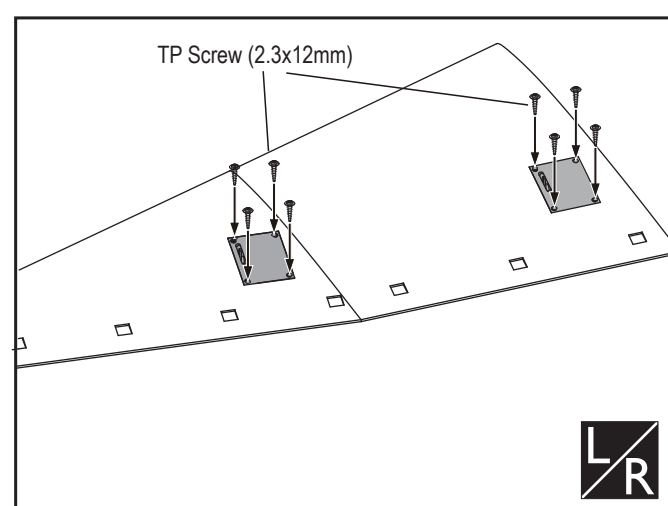
1 Fix the aileron servo to the serve tray with epoxy. Fix the flap servo to the servo tray with epoxy.



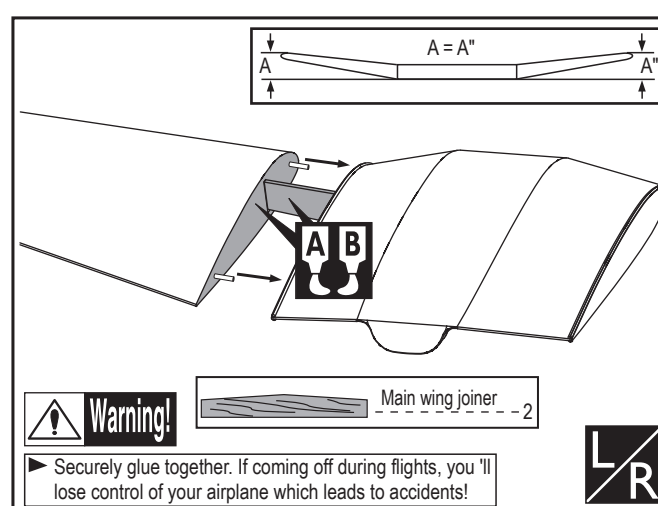
4 According to the rib template drill holes to another main wing.



2 Assemble the aileron servo to the wing with screws as below. Assemble the flap servo to the main wing with screws.



5 Epoxy main wings to the centre wing by main wing joiners.



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

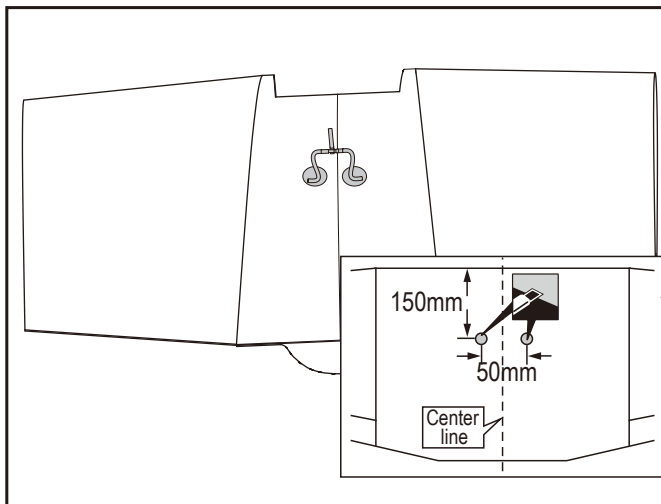
CA Apply instant glue (CA glue, super glue). **Hand** Ensure smooth non-binding movement while assembling. **Scissors** Cut off shaded portion.

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). **Hand** Ensure smooth non-binding movement while assembling. **Scissors** Cut off shaded portion.

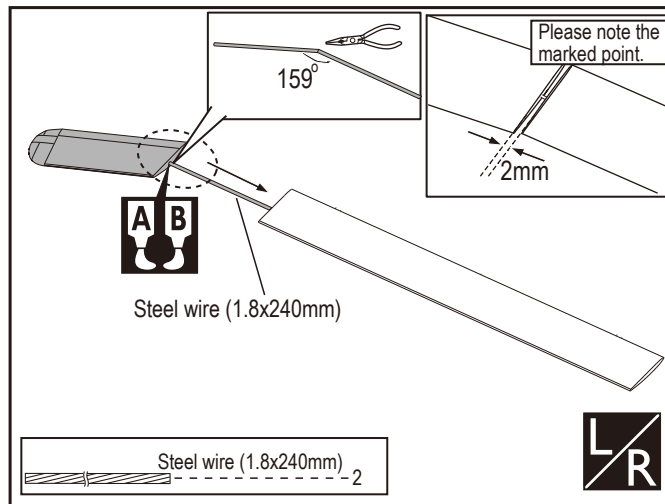
6

Trim two holes to pull the servo extension lines and fuel tube from the holes.



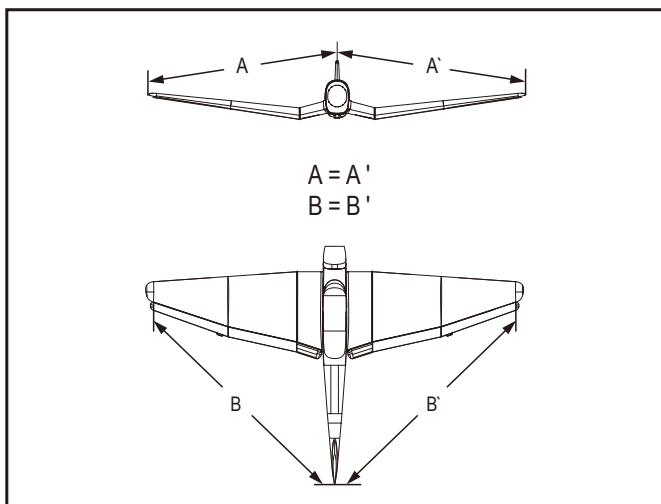
8

Connect the two flaps with the bended steel wire and keep about 2mm between the two flap.



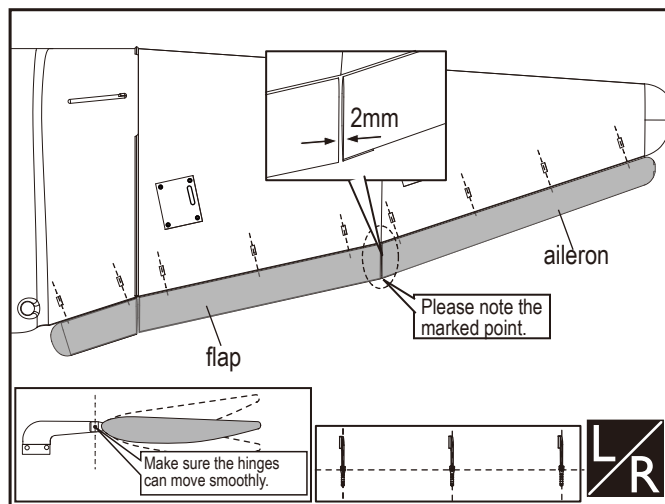
7

The sketch when the wings assemble finished.



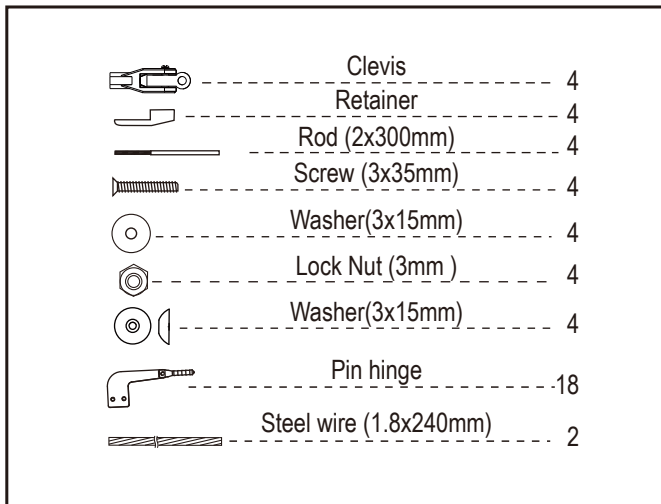
9

According the holes for hinges in the wings make mark in the flaps and aileron (Please take step 11 as reference).



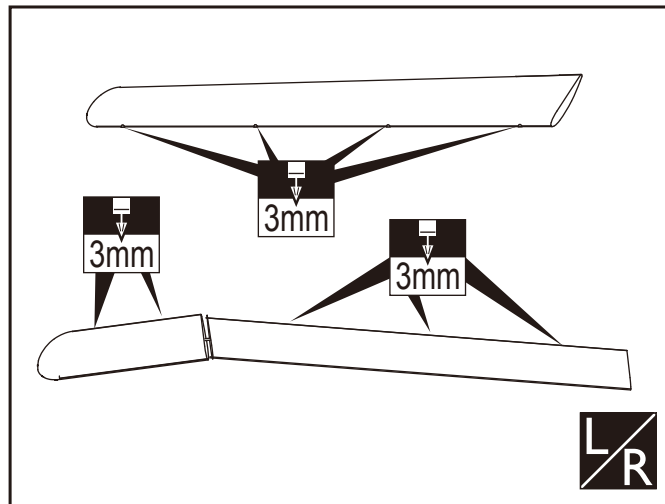
Warning symbol

Accessory list for the coming installation steps.



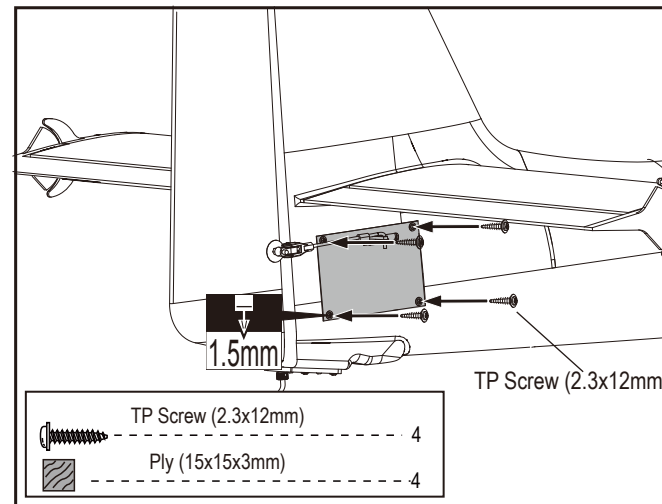
10

Drill holes at the marked position in the flap and aileron.



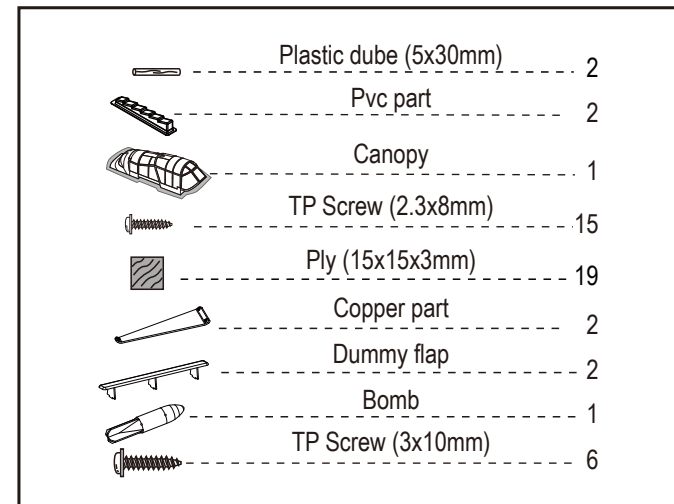
55

Install the servo in tail of fuselag.



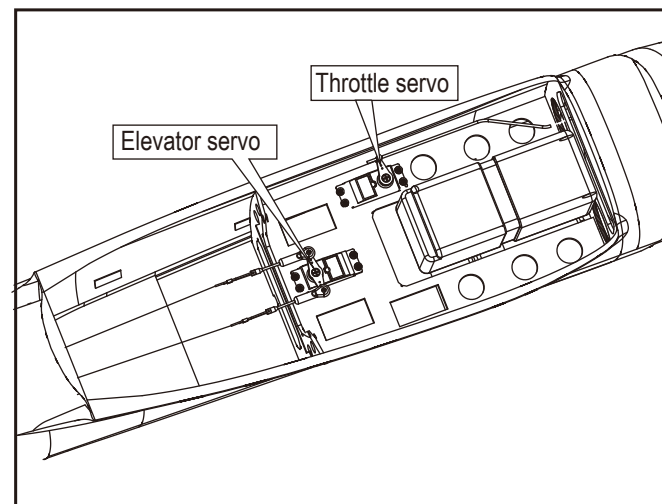
Warning symbol

Accessory list for the coming installation steps.



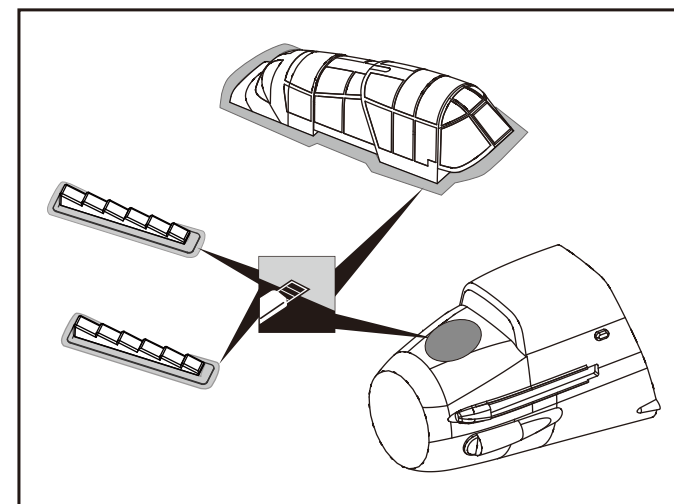
56

The sketch map when the servos install completion.



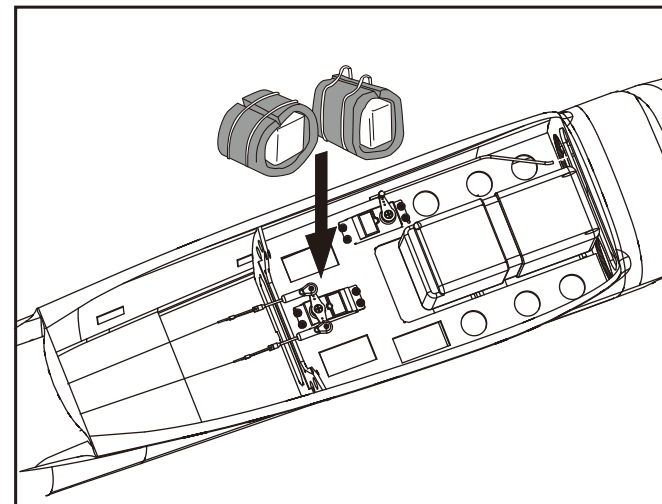
58

Trim the cowling for engine and muffler.



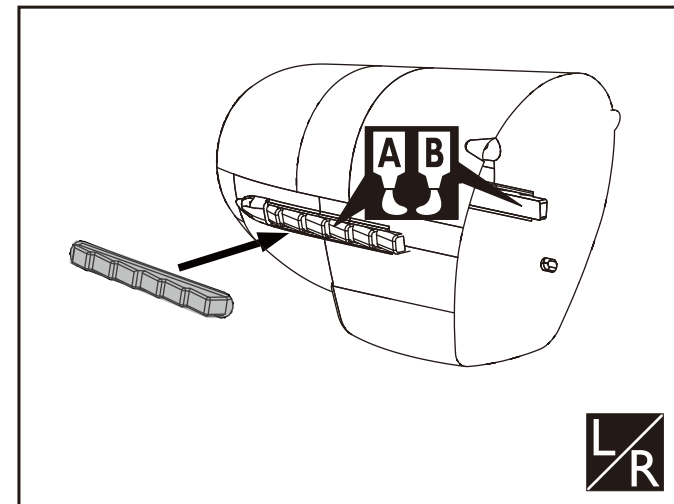
57

Mounting of the receiver and the battery.



59

Epoxy the exhaust to the cowling from inner of the cowling.



AB

Apply epoxy glue.

LR

Assemble left and right sides the same way.

Hand icon

Pay close attention here!

Do not overlook this symbol!



CA

Apply instant glue (CA glue, super glue).

Hand icon

Ensure smooth non-binding movement while assembling.

Hand icon

Cut off shaded portion.

AB

Apply epoxy glue.

LR

Assemble left and right sides the same way.

Hand icon

Pay close attention here!

Do not overlook this symbol!



CA

Apply instant glue (CA glue, super glue).

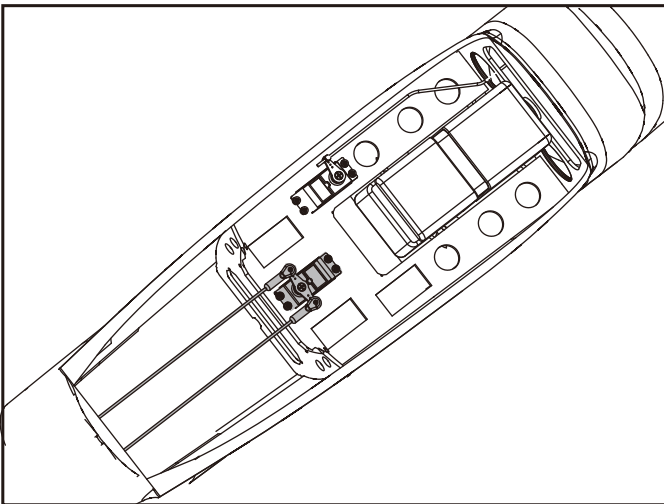
Hand icon

Ensure smooth non-binding movement while assembling.

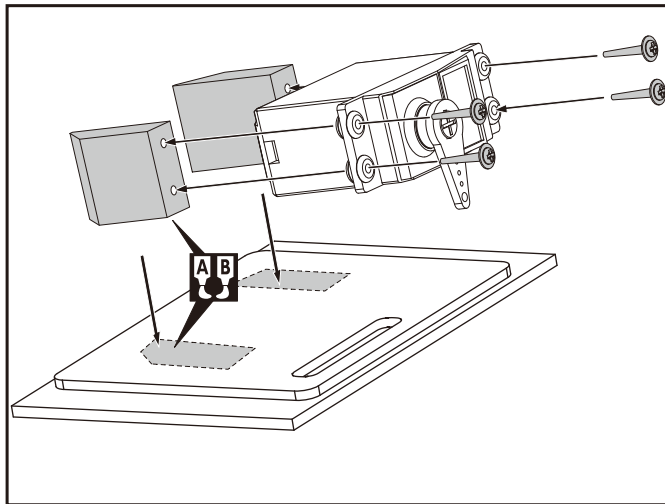
Hand icon

Cut off shaded portion.

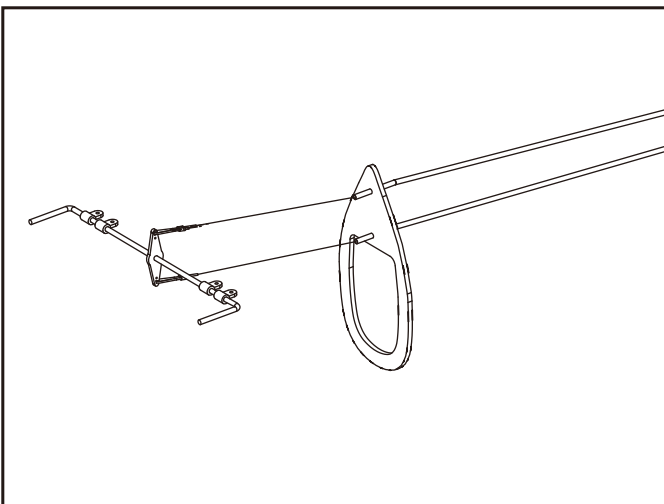
50 Assemble the rudder servo in the fuselage.



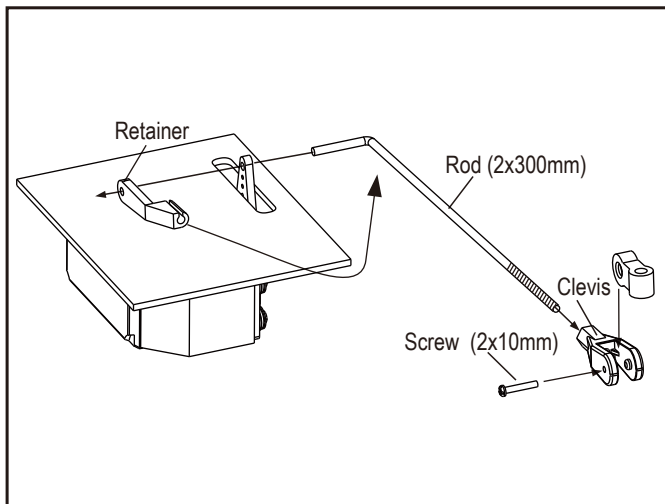
53 Install the servo to the board.



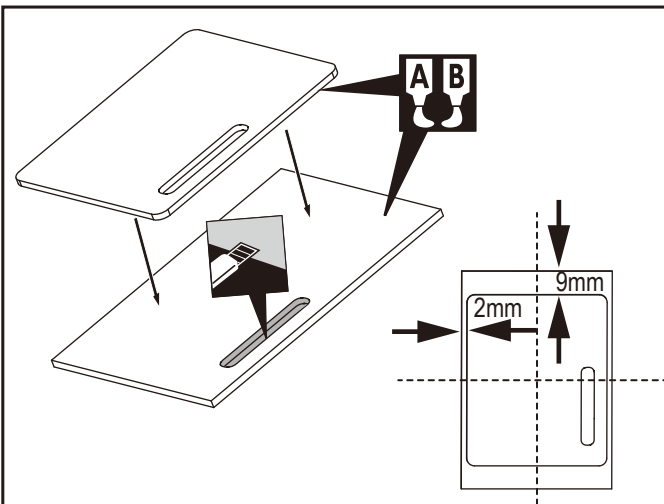
51 The sketh amp of the steel wires in the fuselage



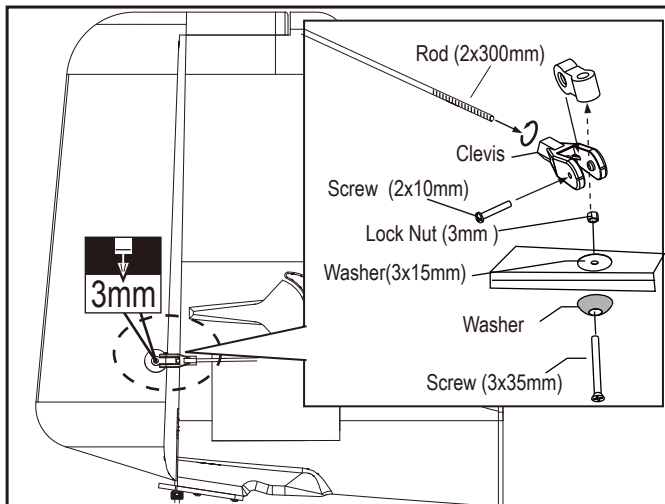
54 Install the metal rod control horn and connect the linkage.



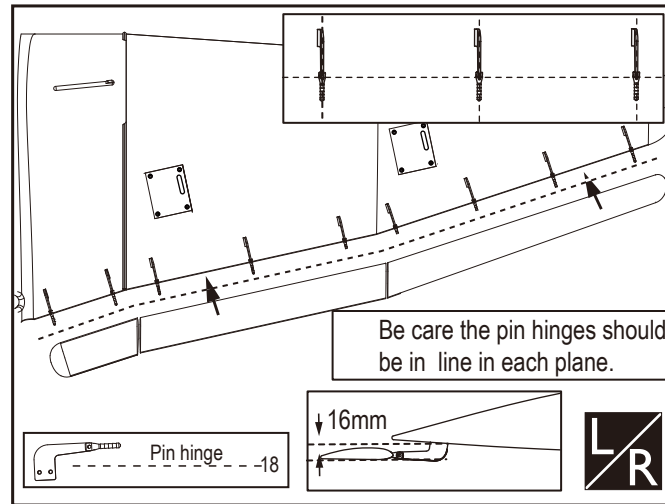
52 Epoxy two board together and trim a slot to appropriate position in the boards.



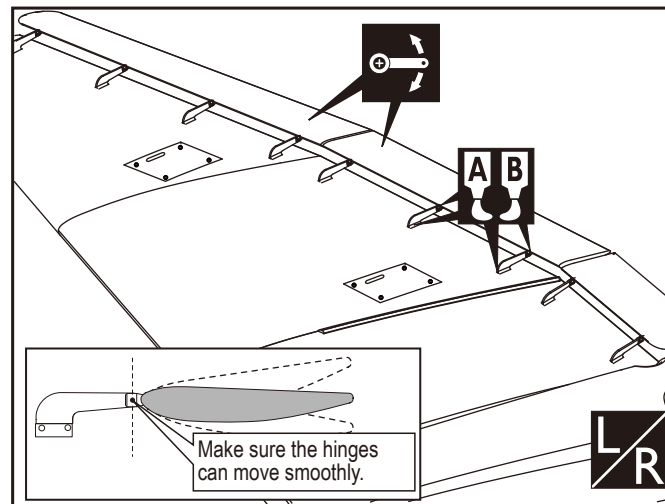
55 Drill a hole to appropriate position in the rudder and assemble the metal rod horn to it.



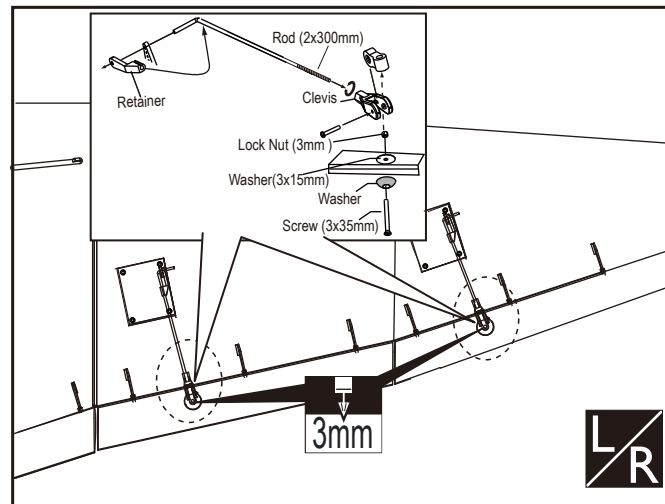
11 Assemble the pin hinge to the wings ,the flaps & the ailerons. Adjust them to the perfect position.



12 Epoxy the pin hinge steadily in the wings, the flaps and the ailerons.



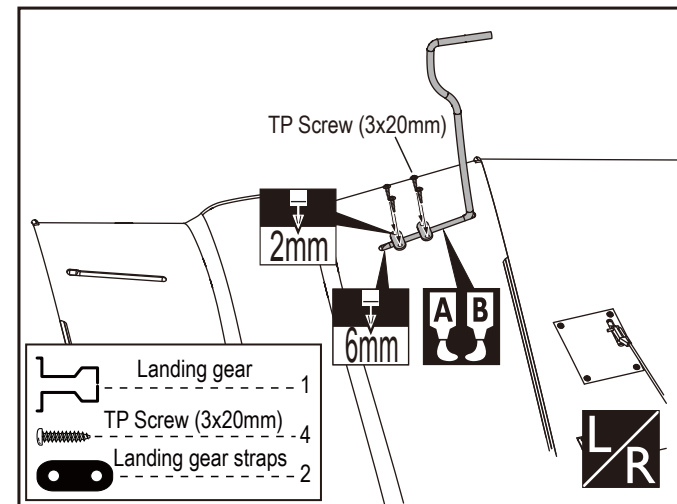
13 Assemble the arms in the flaps and aileron and connect the servo arms to them with rods as below.



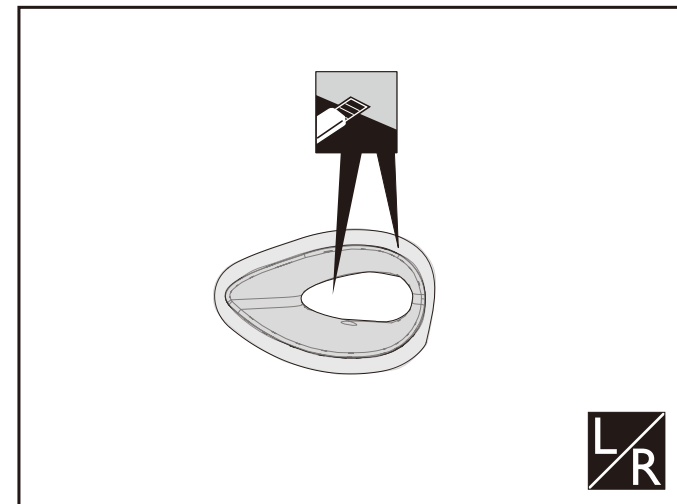
Accessory list for the coming installation steps.

	Wheel pants	2
	PVC part	2
	Wheel (115mm)	2
	Collar (6mm)	4
	Ply (15x15x3mm)	8
	TP Screw (3x14mm)	16
	Landing gear straps	8
	Screw (6x50mm)	2
	Blind Nut (6mm)	2
	Wood dowel (6x50mm)	2
	Landing gear	1

14 Mount landing gear on the underside of wing.



15 Cut off the surplus part of Wheel pants.



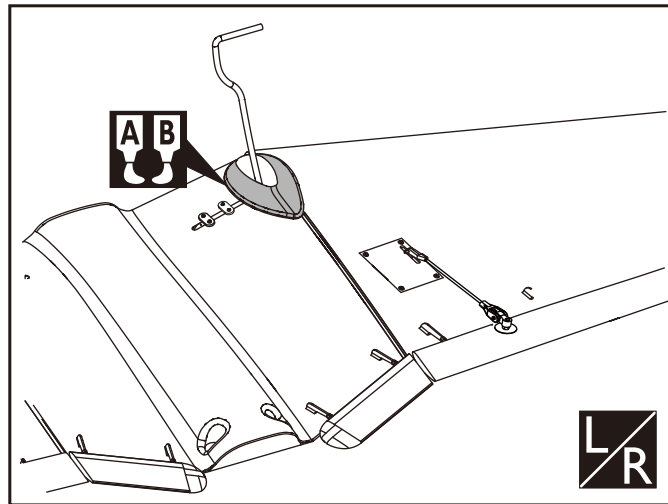
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

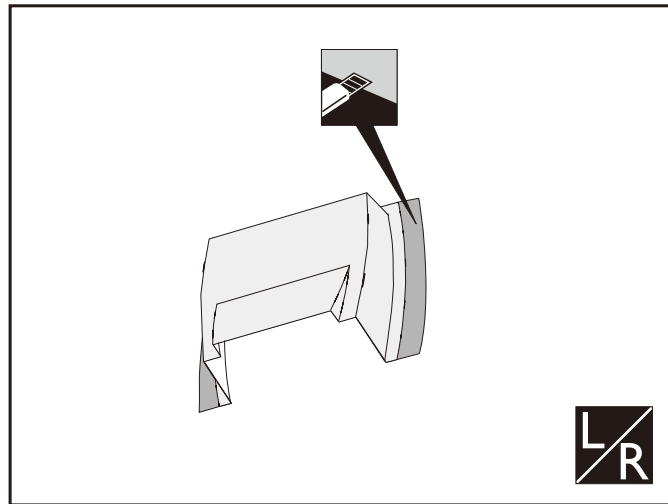
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

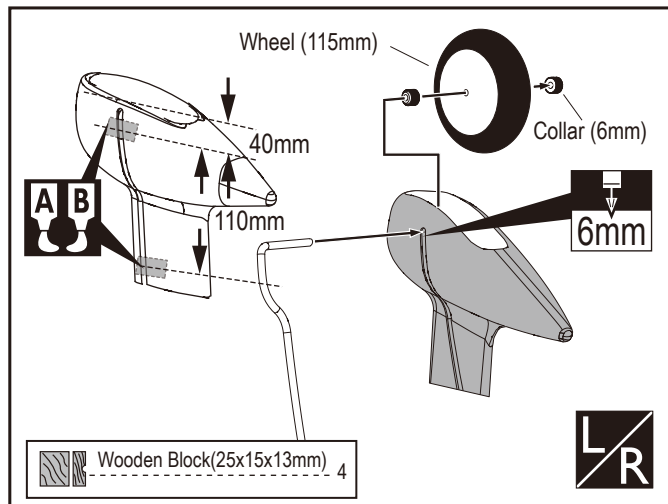
16 According to the back steps, epoxy the PVC part to the appropriate place.



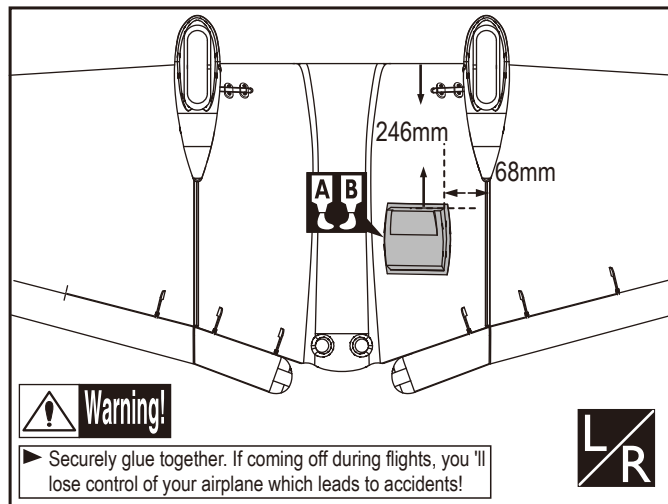
19 Cut off the surplus part of pvc parts.



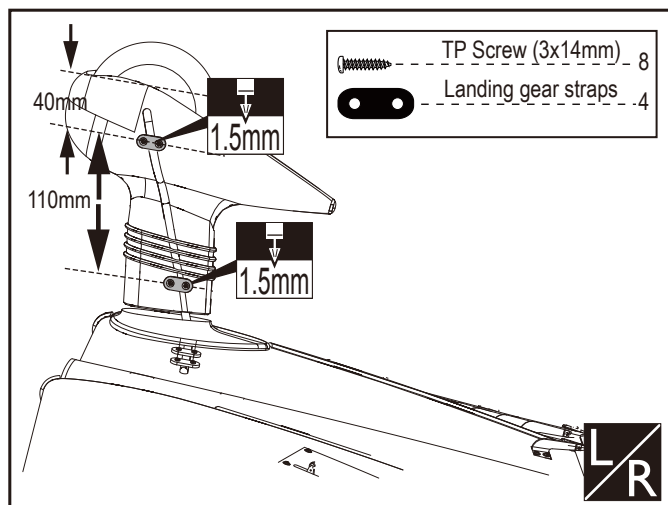
17 Mount wheel pant and tire.



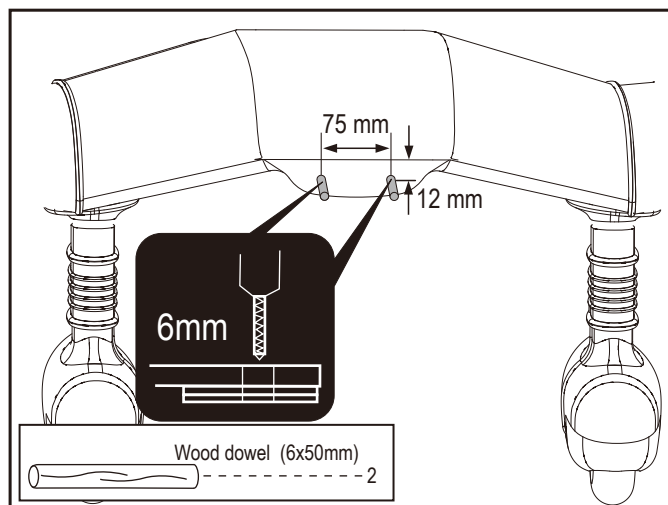
20 Epoxy plastic part underneath the wing.



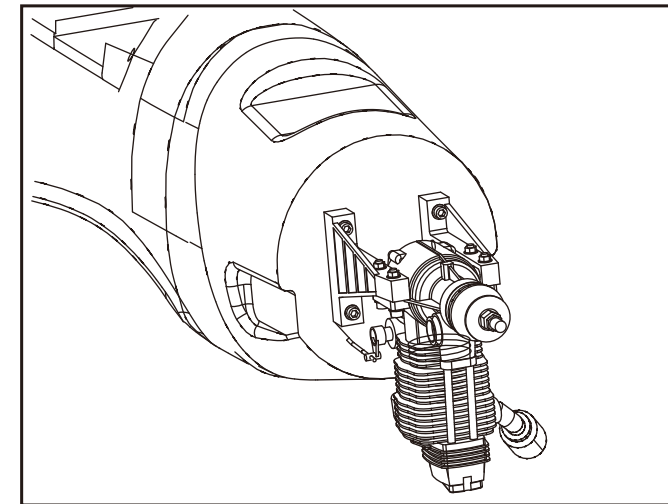
18 Attach landing wire to wheel pant steadily.



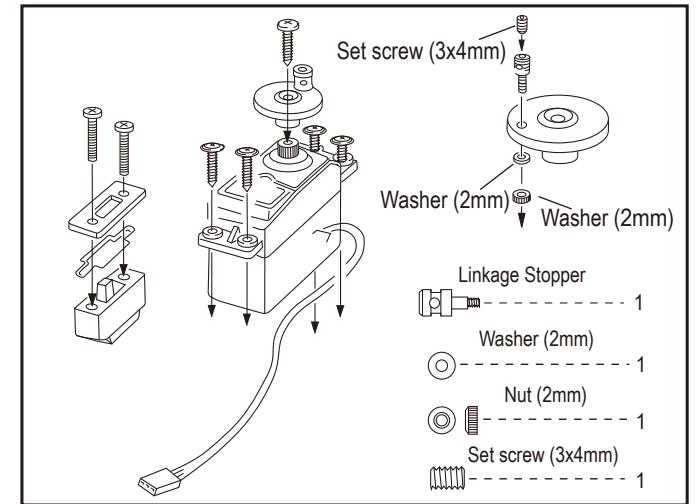
21 Epoxy the dowel on the leading edge of wing.



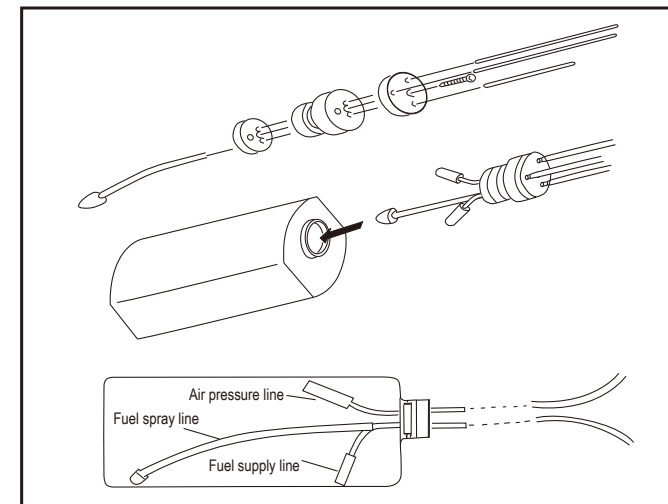
44 Install the engine.



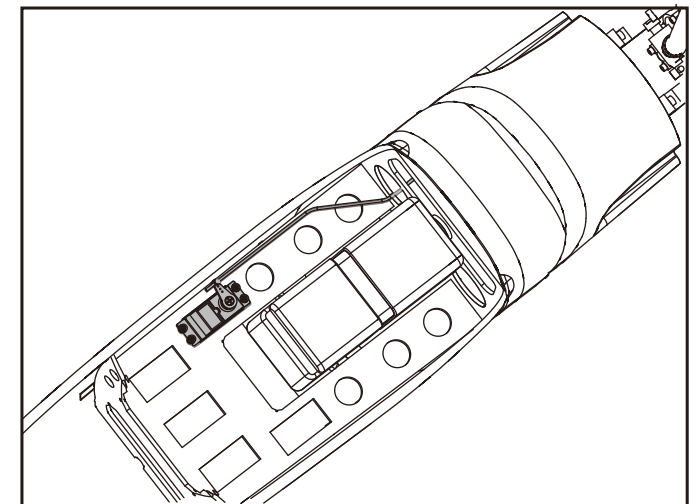
47 Assemble the servos and switch.



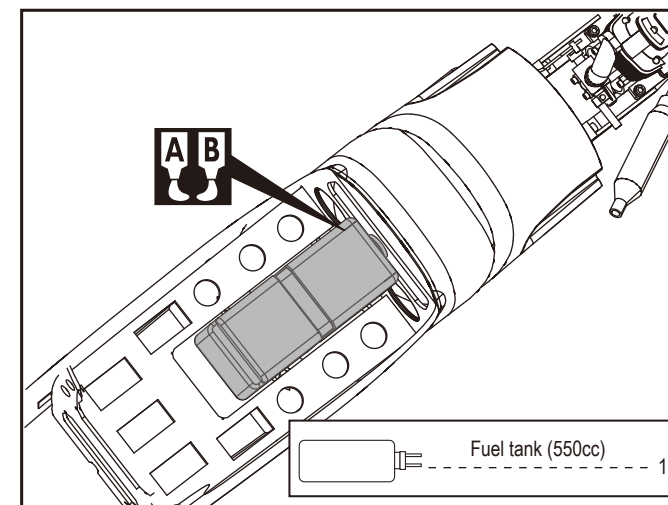
45 Assembly of the fuel tank.



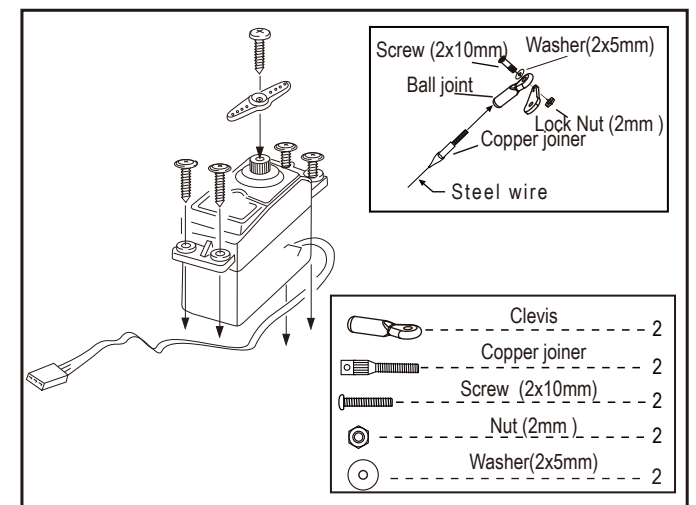
48 Assemble the servo to fuselage.



46 Mount the fuel tank into the fuselage.



49 Install the nylon control ring for switch 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). **Arrow icon** Ensure smooth non-binding movement while assembling. **Scissors icon** Cut off shaded portion.

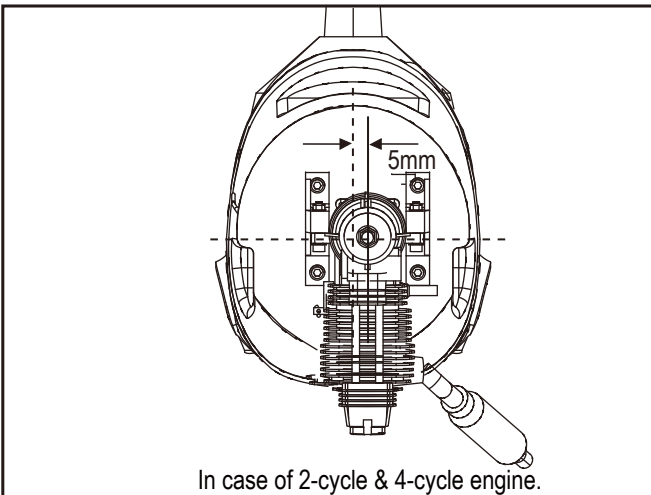
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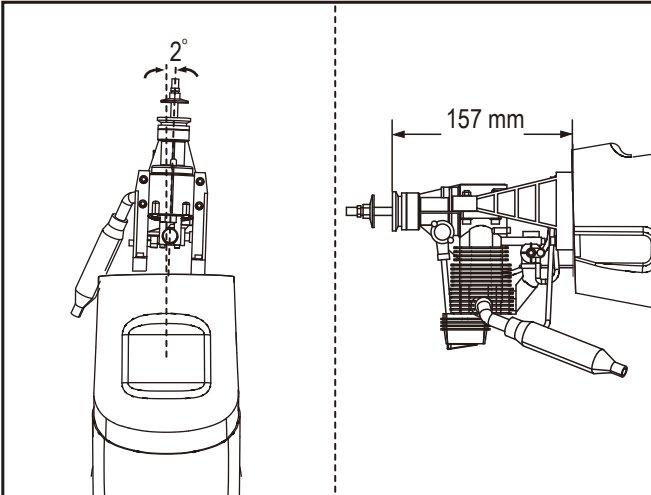
Accessory list for the coming installation steps.

Blind Nut (4mm) ----- 4	Clevis Retainer ----- 1
Screw (4x35mm) ----- 4	Screw (3x35mm) ----- 1
Screw (4x25mm) ----- 4	Washer(3x15mm) ----- 1
Washer(4x8mm) ----- 12	Lock Nut (3mm) ----- 1
Spring Washer (4mm) ----- 4	Washer(3x15mm) ----- 1
Nut (4mm) ----- 4	Clevis ----- 2
Linkage Stopper ----- 2	Copper joiner ----- 2
Plastic tube (2x500mm) ----- 1	Screw (2x10mm) ----- 2
Engine mount (68x105mm) ----- 2	Nut (2mm) ----- 2
Fuel tank (550cc) ----- 1	Washer(2x5mm) ----- 2
Plastic tube(3x50mm) ----- 2	Clevis ----- 1
	Fiberglass pushrod(3x775mm) ----- 2
	Steel wire (0.5x1500mm) ----- 2
	TP Screw (2.3x12mm) ----- 4
	Ply (15x15x3mm) ----- 4

39 The front view of the engine install completion. There is 5mm left deflection as illustration.



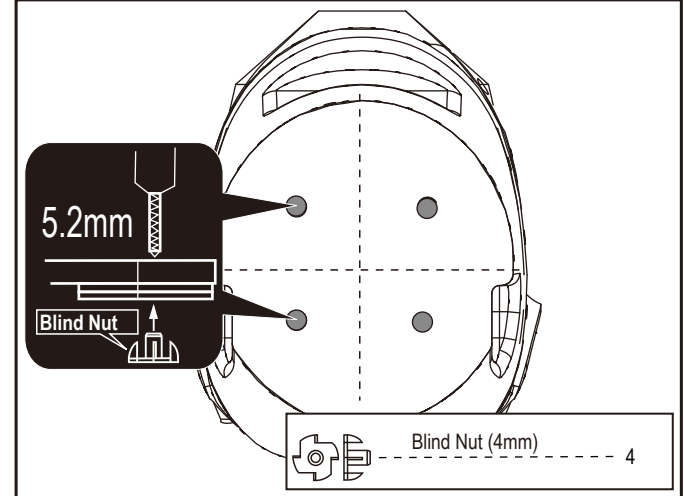
40 The side view of the engine install completion, There is 2 degree right deflection.



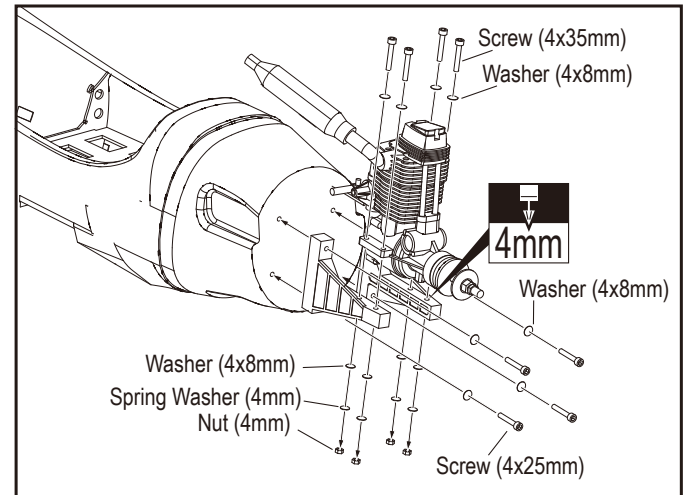
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here!

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

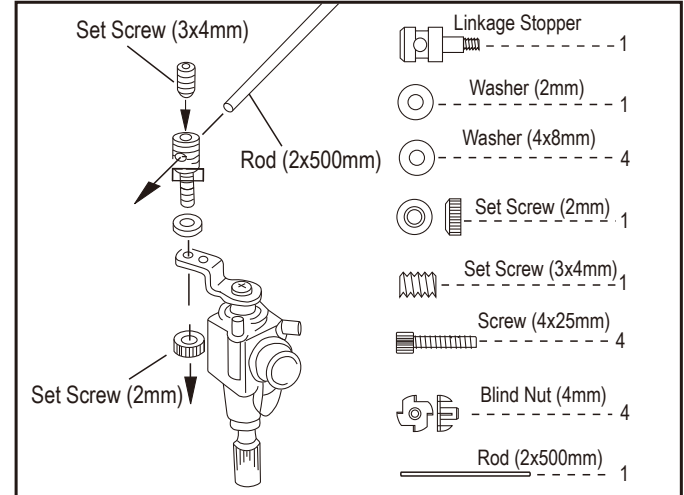
41 Drill four holes at the diameters as shown for engine mount.



42 Assemble the engine.

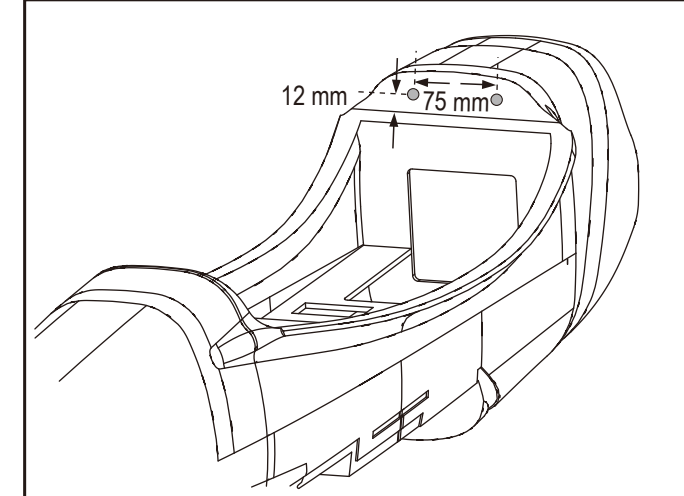


43 Assemble the throttle linkage.

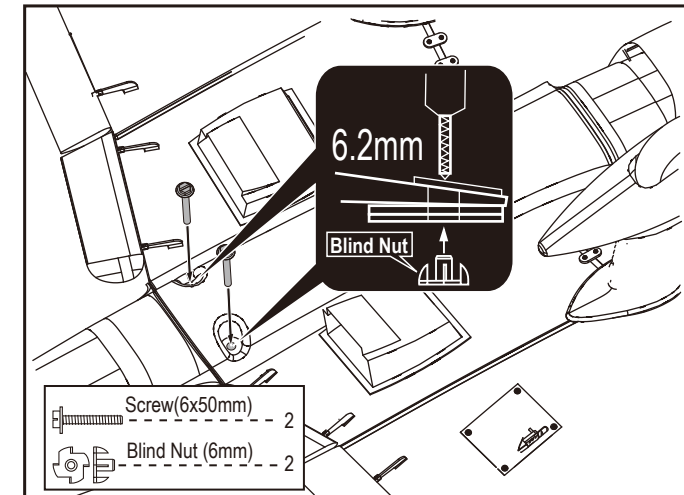


Warning! Do not overlook this symbol!

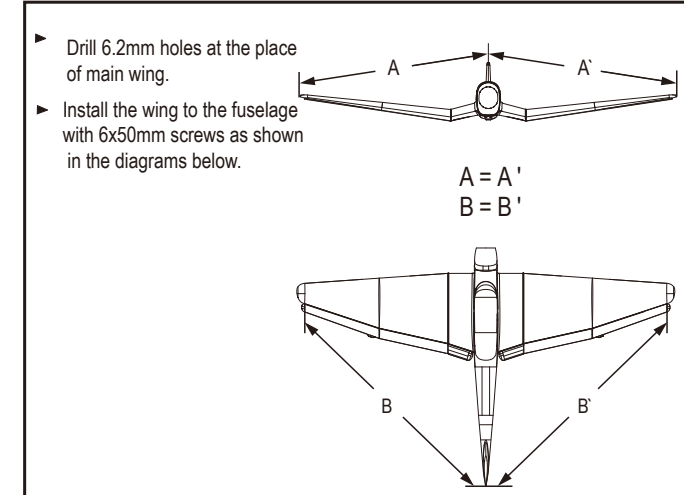
22 Drill holes in the fuselage to install the main wing.



23 Mount the main wing on the fuselage.



24 Assembly of main wing.



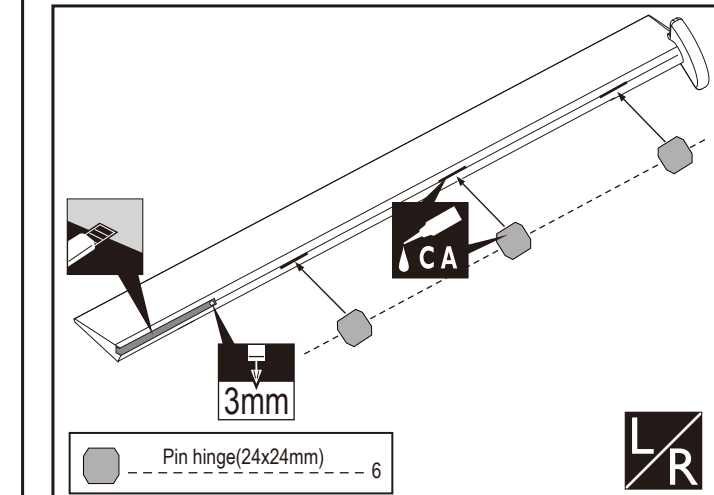
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here!

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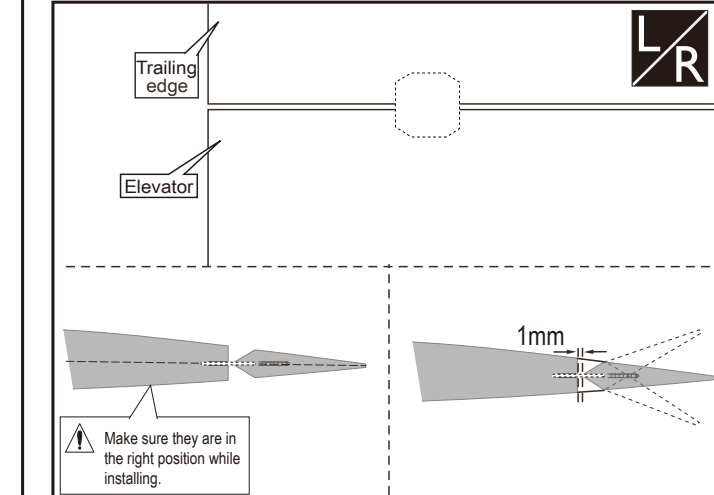
Accessory list for the coming installation steps.

Pin hinge(2.5x48mm) ----- 3
Stab joiner (12x230mm) ----- 1
Metal douel (4x30mm) ----- 4
Rib template (3mm ply) ----- 1
Pin hinge(24x24mm) ----- 6
Steel wire (0.5x3000mm) ----- 2
U-style wire (3mm) ----- 1
Tail landing gear ----- 1
Tail gear supporter ----- 1
TP Screw (.3x20mm) ----- 4
Ply (30x20x9mm) ----- 1
Collar (3mm) ----- 1
Tail wheel (45mm) ----- 1

25 Epoxy pin hinges to elevator.

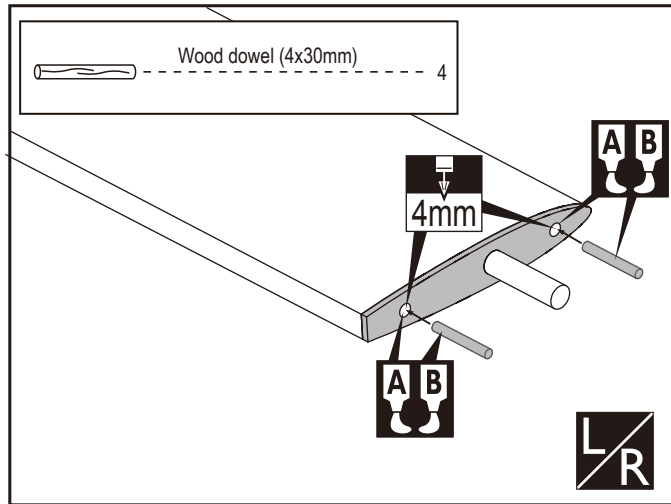


26 Keep some space about 1mm width between the elevator and horizontal tail edge.

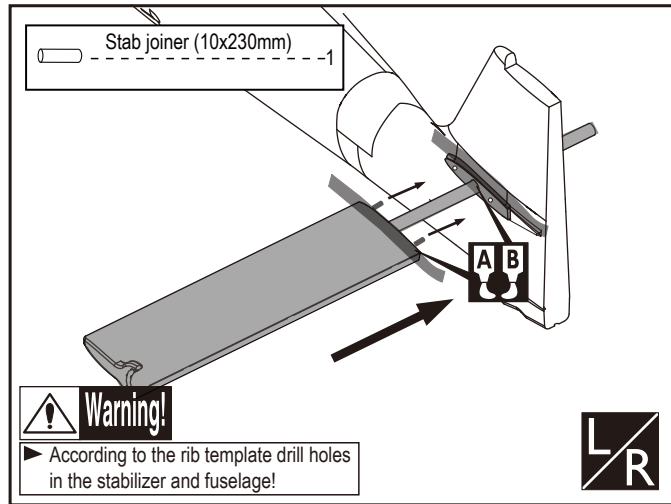


Warning! Do not overlook this symbol!

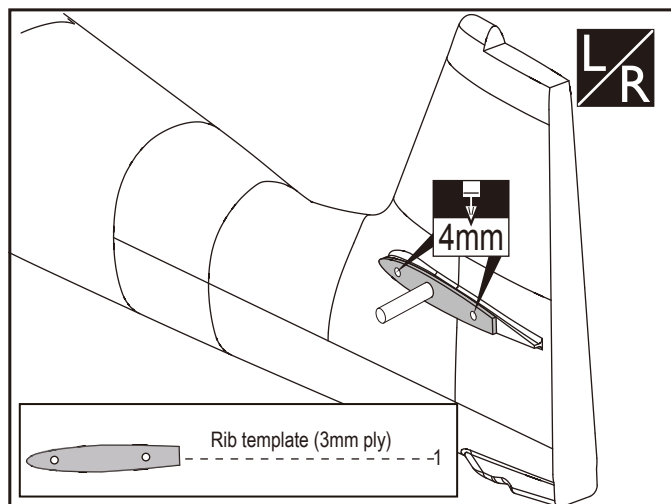
27 Drill two holes at the stabilizer root base on rib template and epoxy the metal dowel in them.



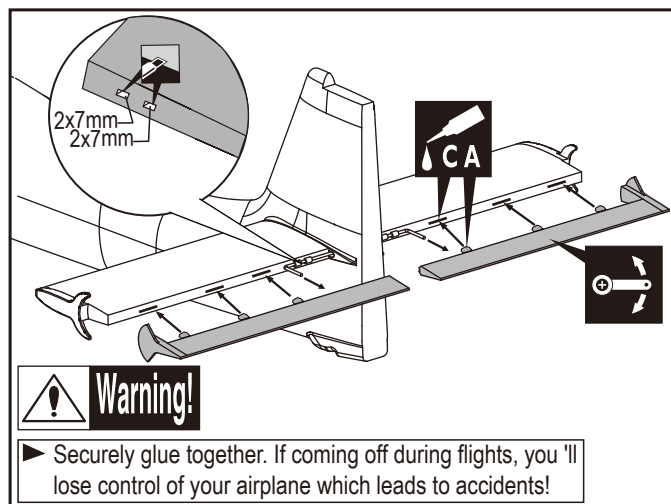
30 Epoxy the horizontal tail to fuselage. Remove paint at fuselage horizontal mating surfaces before epoxy.



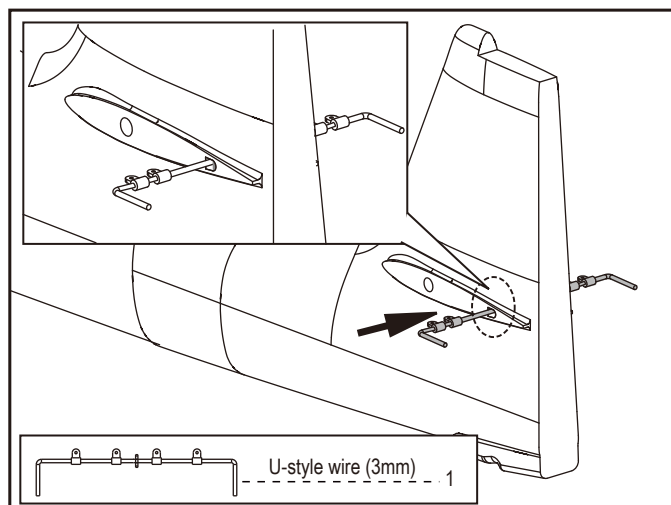
28 According to the rib template drill holes to the tail of fuselage as below.



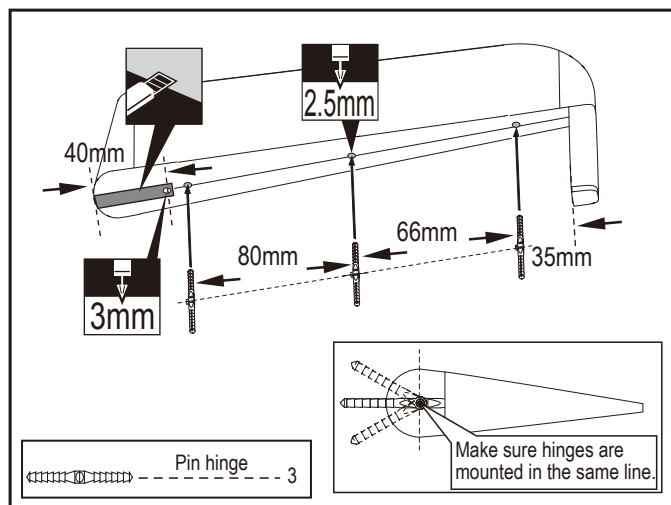
31 Glue the elevator to the stabilizer by CA and epoxy.



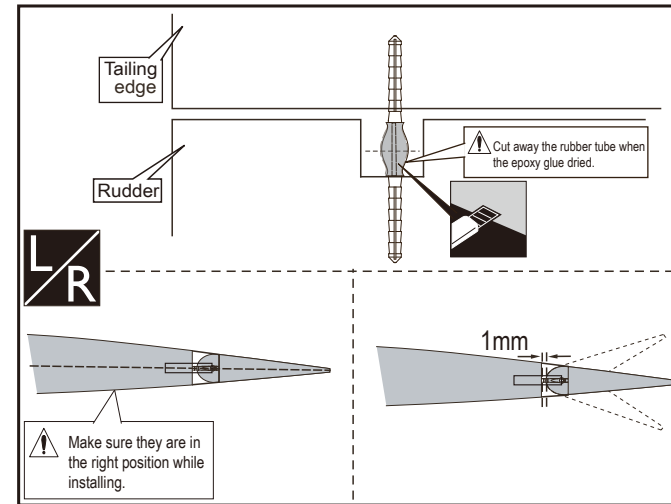
29 Set the U-style wire through the tail of fuselage as below.



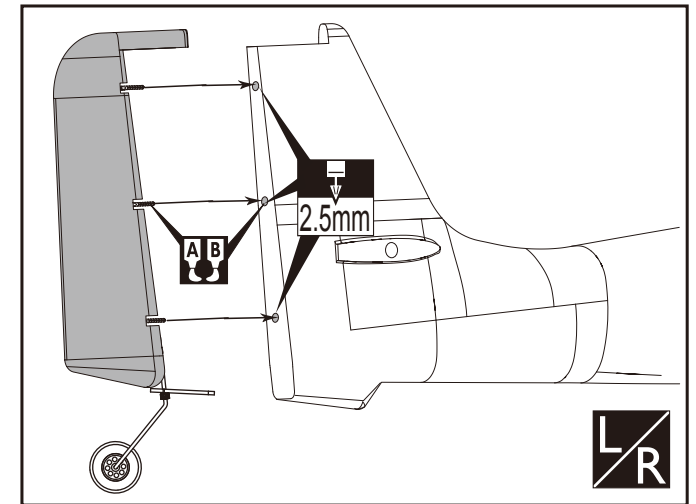
32 Epoxy pin hinges to rudder.



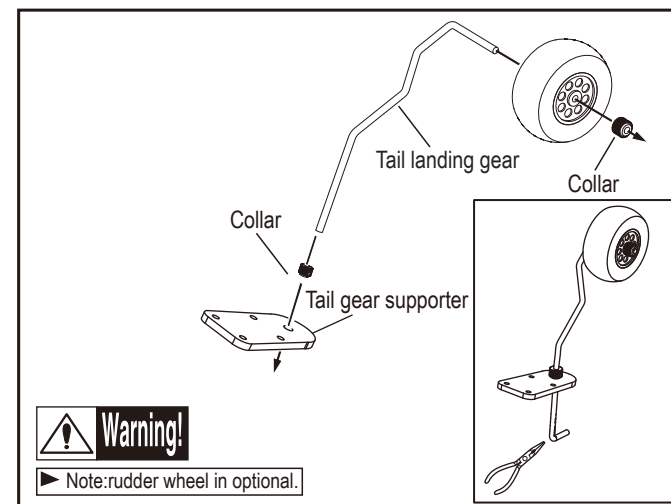
33 Epoxy the fibre glass tubes to appropriate position as below.



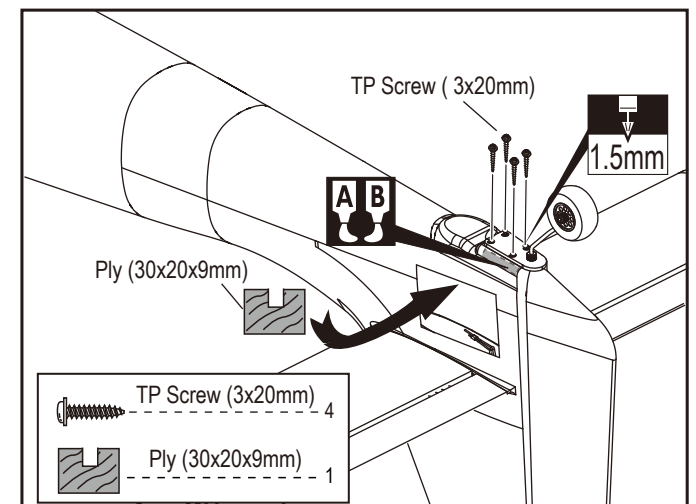
36 Drill holes to appropriate position in the vertical tail and epoxy the rudder to the vertical tail steadily.



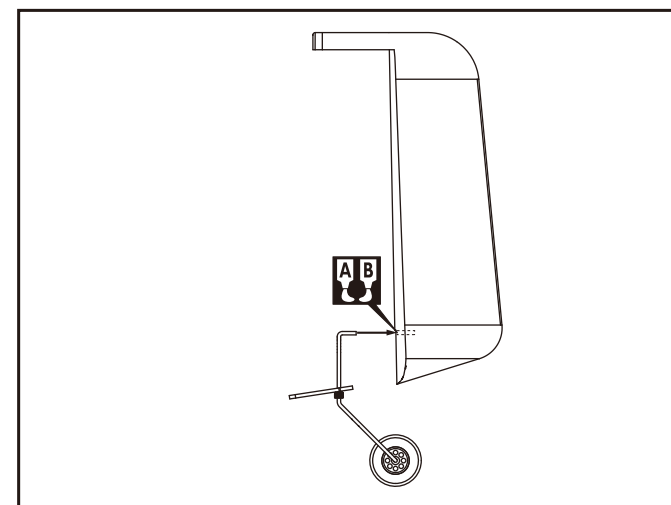
34 Assemble the tail wheel as below.



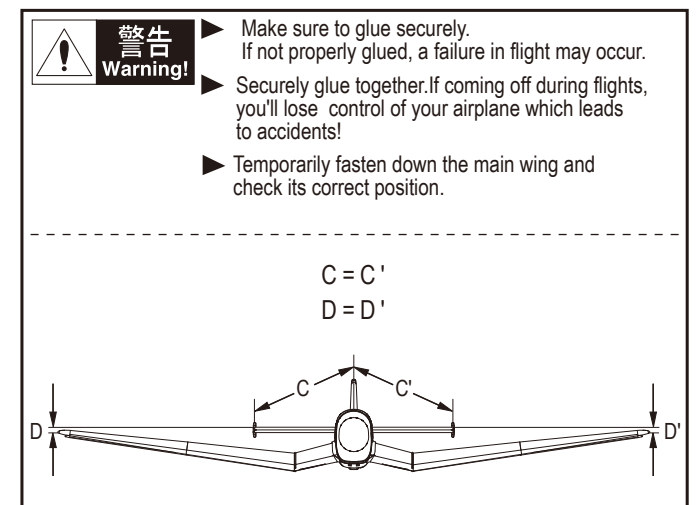
37 Fix the tail gear supporter to fuselage.



35 Epoxy the tail landing gear to the rudder.



38 Assemble horizontal tail, vertical tail, tail gear separately.



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

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