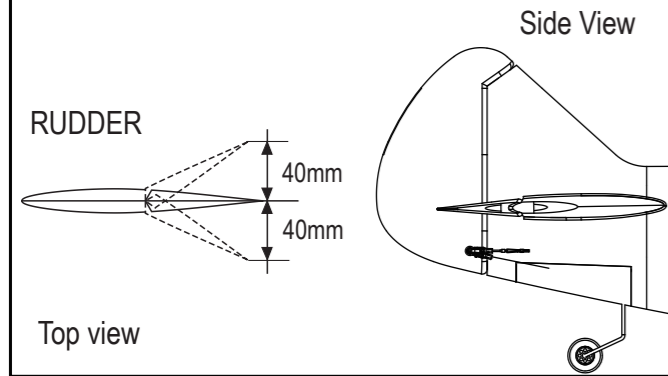


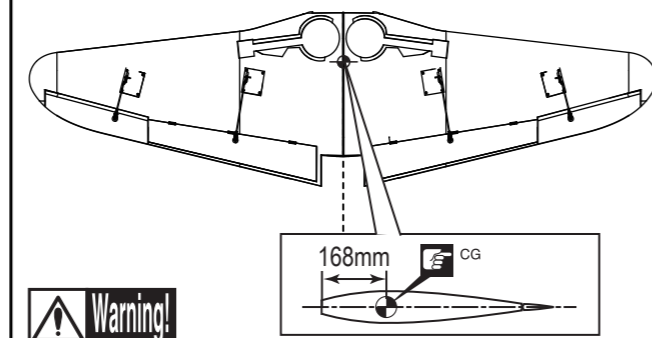
70 Adjustment.

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.



71 The centre of the Gravity.

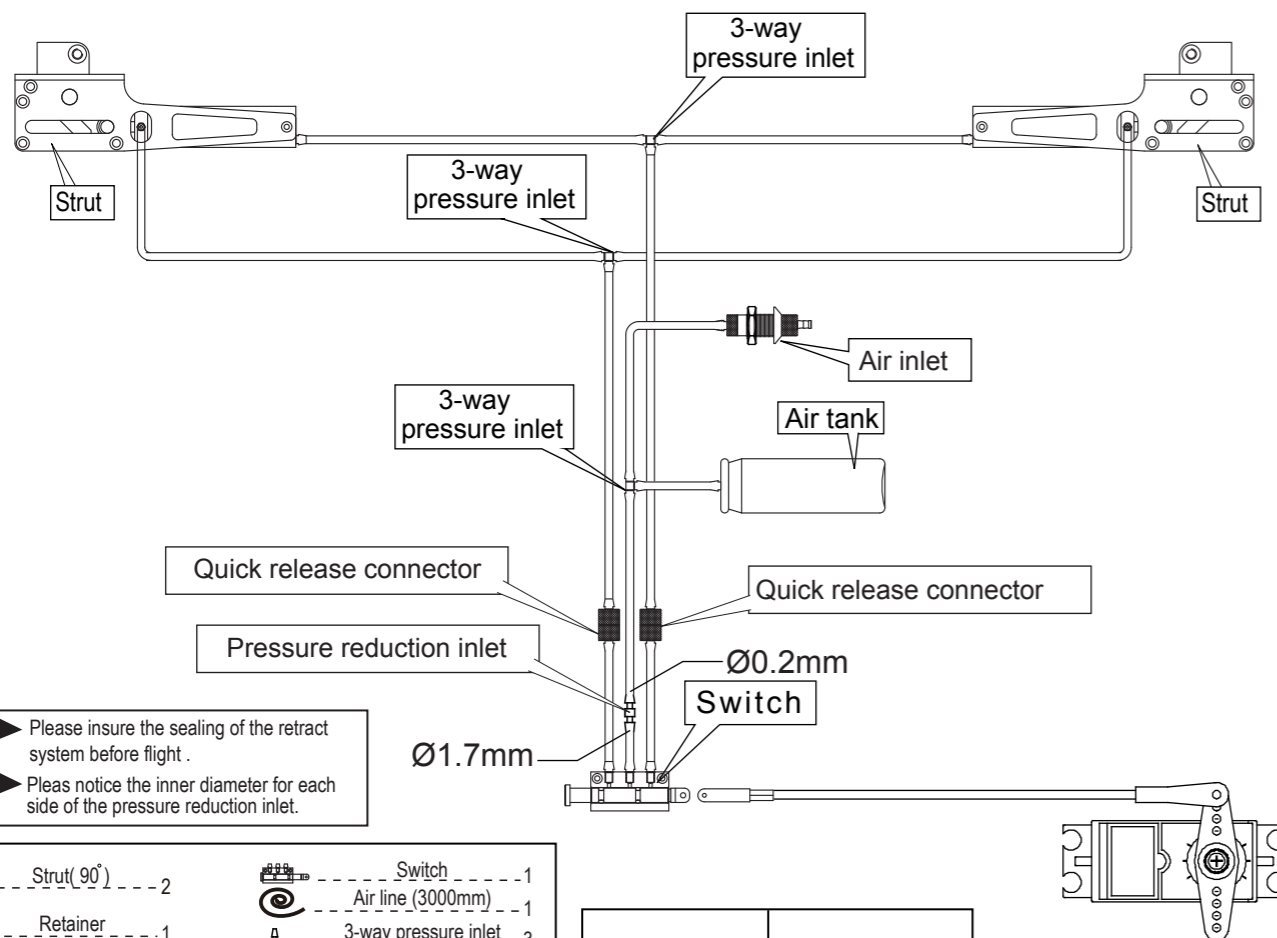
Never fly before checking the CG's required position. In order to obtain the CG specified, reposition the receiver and battery.



Warning!
NEVER fly the model without well balancing.

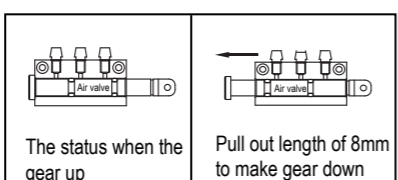
Two wheel retract system

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.

- | | |
|---------------------------|--------------------------------------|
| Strut (90°) 2 | Switch 1 |
| Retainer 1 | Air line (3000mm) 1 |
| Clevis 1 | 3-way pressure inlet 3 |
| Rod (2x300mm) 1 | Air tank 1 |
| TP Screw(2x14mm) 2 | Air inlet 1 |
| | Quick release connector 2 |
| | Pressure reduction inlet 1 |



Before start , please carefully read the explanations!

Lavochkin LA-7



- Specification:**
- Length :1650 mm(65")
 - Wing Span :2032 mm(80")
 - Wing Area :68.7 sq. dm
7.39 sq. ft
 - Wing Loading :113.6 g/sq. dm
37.2 oz/sq. ft
 - Flying Weight :7.7 kg(16.9 lbs)
 - Radio :6ch & 8 servos
 - Engine :180 4-cycle

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.

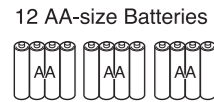
- | | | | |
|---|--|---------------------------|---|
| Apply epoxy glue. | Assemble left and right sides the same way. | Pay close attention here! | Do not overlook this symbol!
 |
| Apply instant glue (CA glue, super glue). | Ensure smooth non-binding movement while assembling. | Cut off shaded portion.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

REQUIRED FOR OPERATION (Purchase separately!)

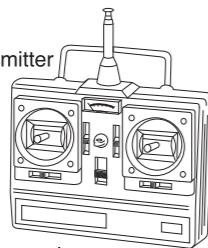
CAUTION: For details concerning the equipment listed below (size, maker, etc.), check with your hobby shop.

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.

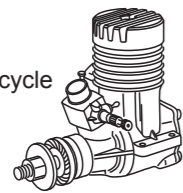
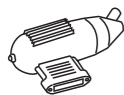


For handling the radio properly, refer to its instruction manual.

2 Engine and Muffler

Model Airplane Engine :180 4-cycle

Muffler



Glow Plug

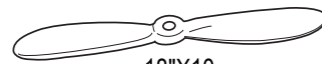


3 Propeller Spinner

Purchase a propeller that will match your engine.

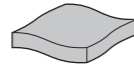


4.5inch Spinner



18"X10

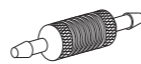
4 Sponge Sheet



Silicone Tube



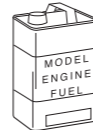
Fuel Filter



5 Required for engine starting:

WARNING: Normal gasoline cannot be used with glow engines.

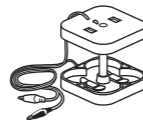
Glow engine fuel only.



Fuel Pump



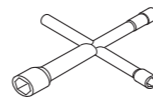
Booster Cord



4 D-size Batteries



Plug Wrench

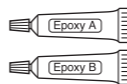


6 Glue

Instant Glue

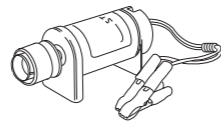


Epoxy Glue

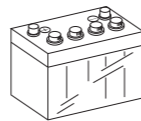


7 Other equipment for enhancing airplane operation & performance

Engine Starter



12V Battery (for starter)



9 Optional parts: rubber wheel with metal hub, oleo struts and retracts system.

TOOLS REQUIRED (Purchase separately!)

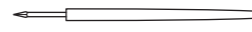
Sharp Hobby Knife



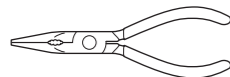
Phillips Screw Driver (l, m, s)



Awl



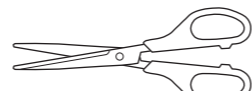
Needle Nose Pliers



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.

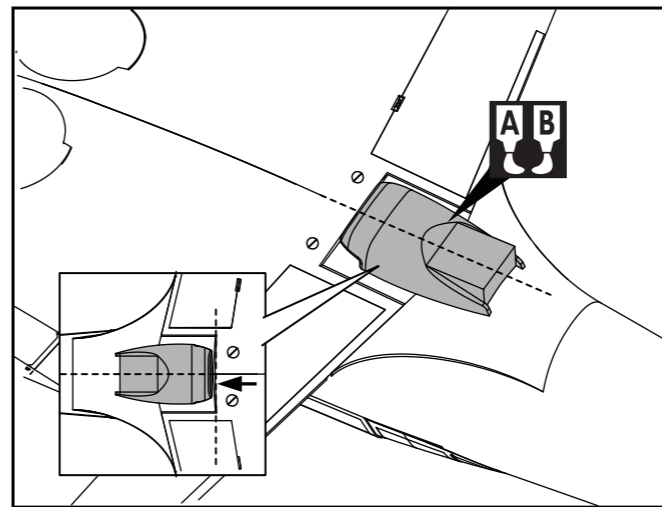
3 Symbols used throughout this instruction manual, comprise:

- 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!

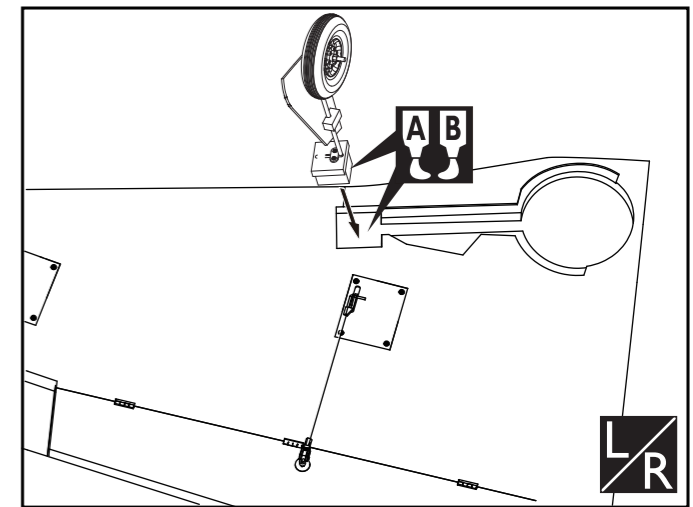
Do not overlook this Symbol!

Warning!

65 Epoxy the fairing parts to appropriate position in the fuselage and mid wing.



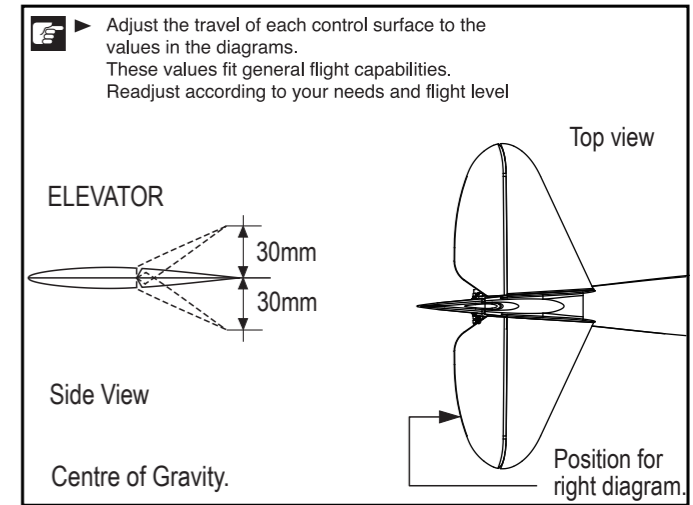
67 Epoxy the landing gear to the wing steadily.



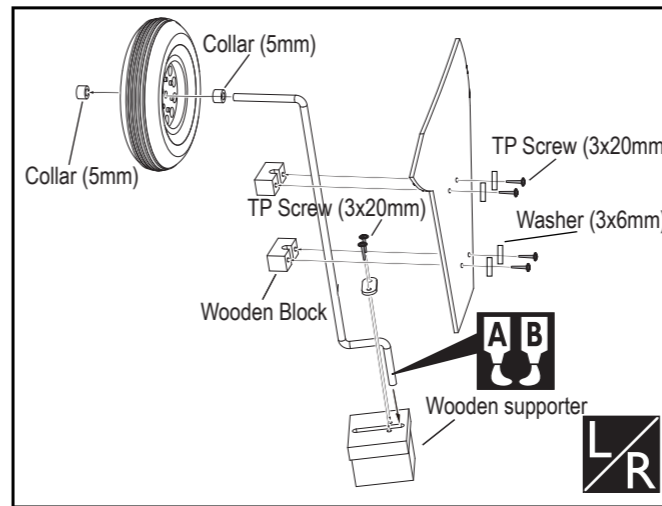
Accessory list for the coming installation steps.

- Wheel (100mm) ----- 2
- Collar (5mm) ----- 4
- Wooden Block(43x28x26mm) ----- 2
- Landing gear(5mm) ----- 1
- TP Screw (3x20mm) ----- 12
- Washer (3x6mm) ----- 8
- Landing gear straps ----- 2
- Gear door ----- 1
- Wooden Block(25x15x13mm) ----- 4

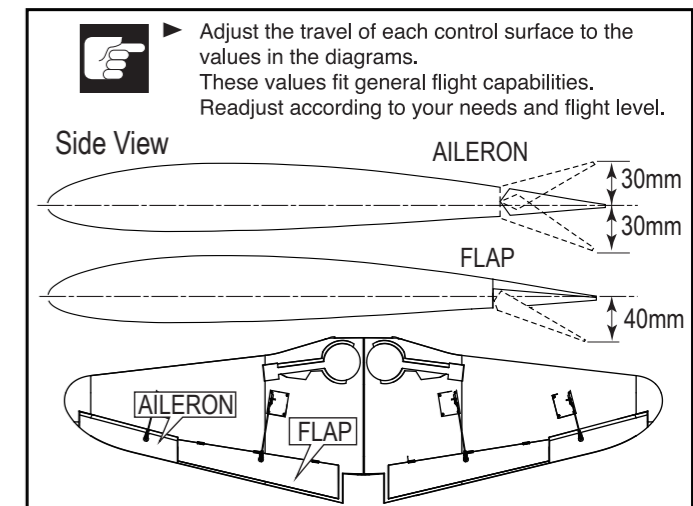
68 Adjustment.



66 Assemble the wheel and gear door to landing gear.

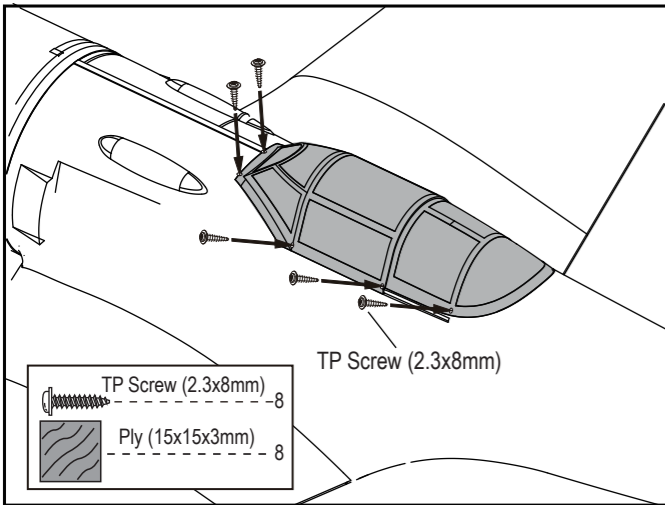


69 Adjustment.

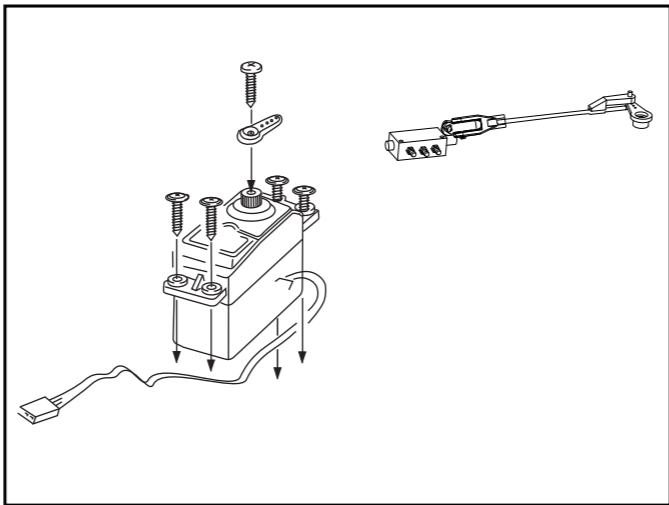


- Apply epoxy glue.
- Assemble left and right sides the same way.
- Pay close attention here!
- Do not overlook this symbol!
- Apply instant glue (CA glue, super glue).
- Ensure smooth non-binding movement while assembling.
- Cut off shaded portion.

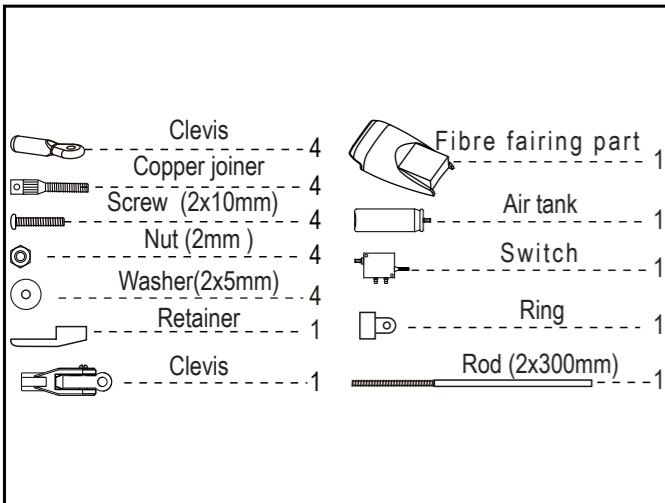
60 Epoxy plies inside the fuselage under the coving and mount the coving with TP screw as illustration.



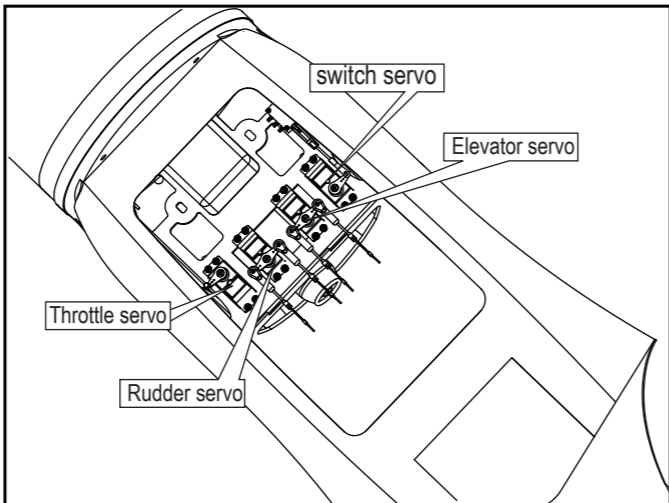
62 Install the servo of switch.



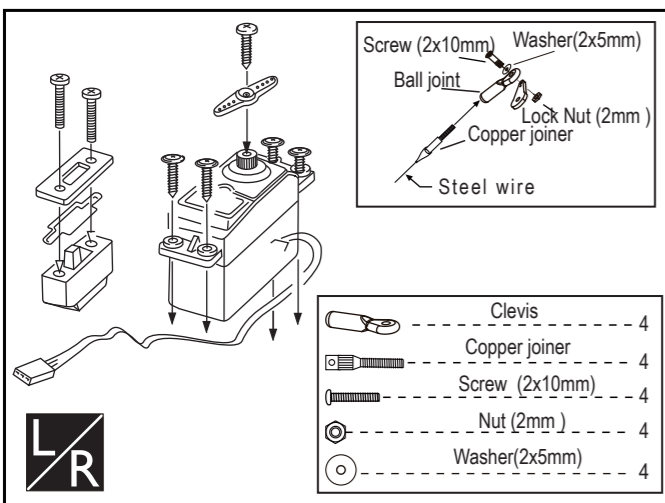
Accessory list for the coming installation steps.



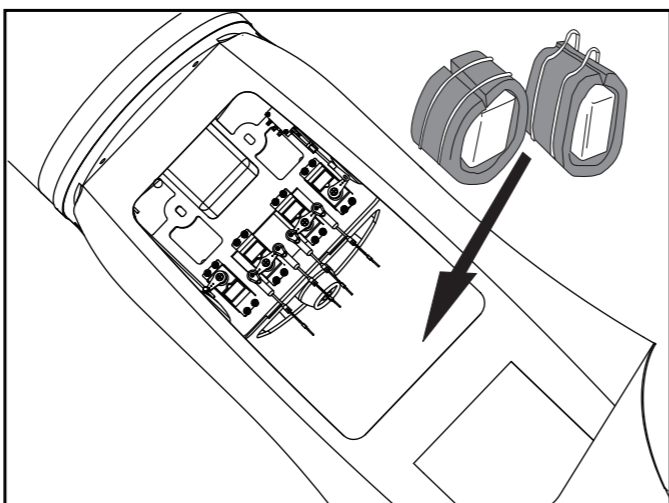
63 The servos installation finished sketch map.



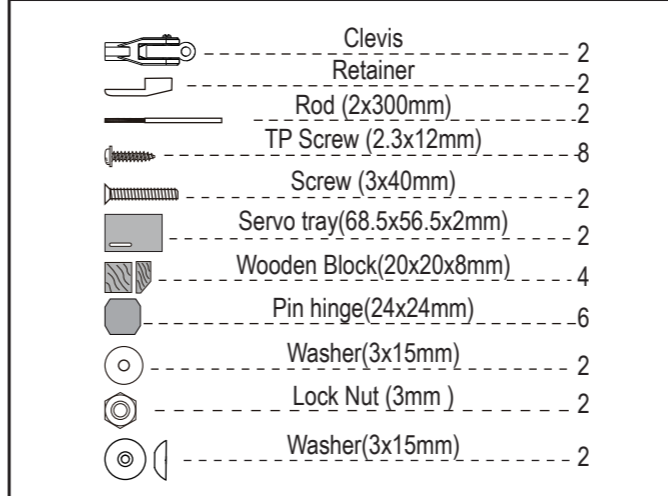
61 Install the servo.



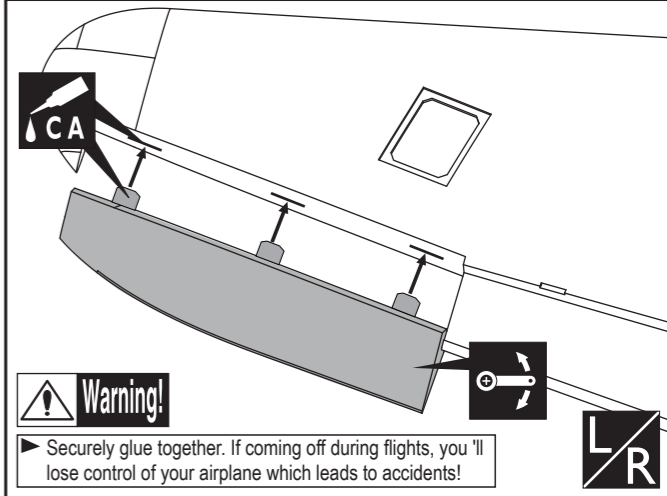
64 Assemble the receiver and the battery to appropriate position in the fuselage.



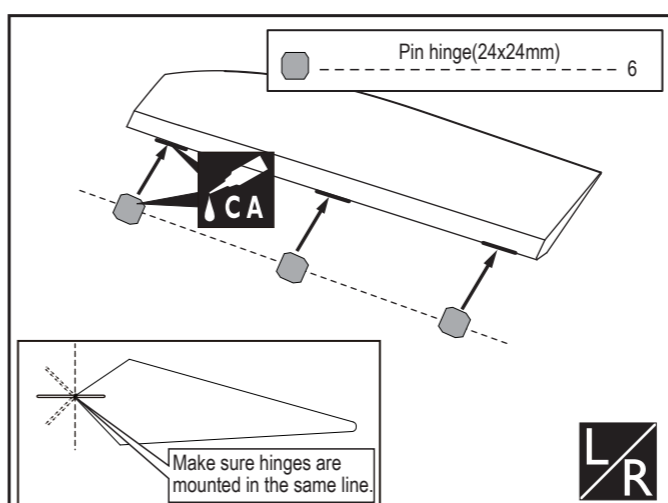
Accessory list for the coming installation steps.



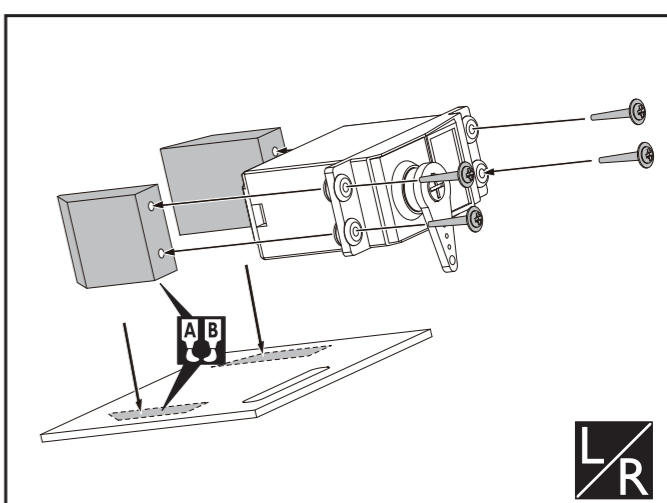
3 Assemble the aileron to main wing with instant type CA glue. Be careful to ensure the moving parts of the hinges are able to move freely.



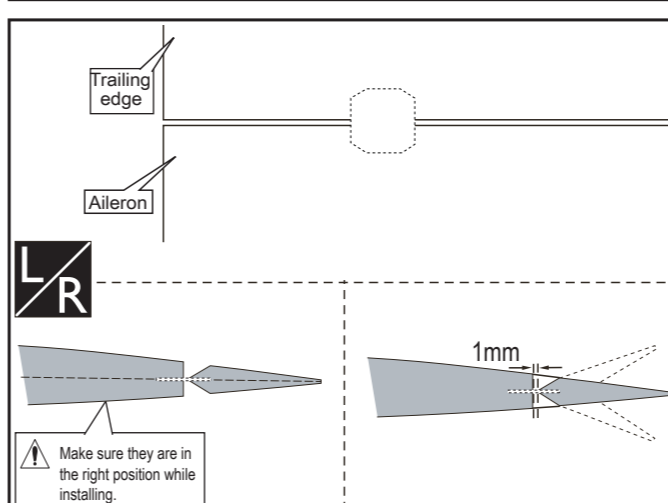
1 Apply instant CA glue to aileron and pin hinge.



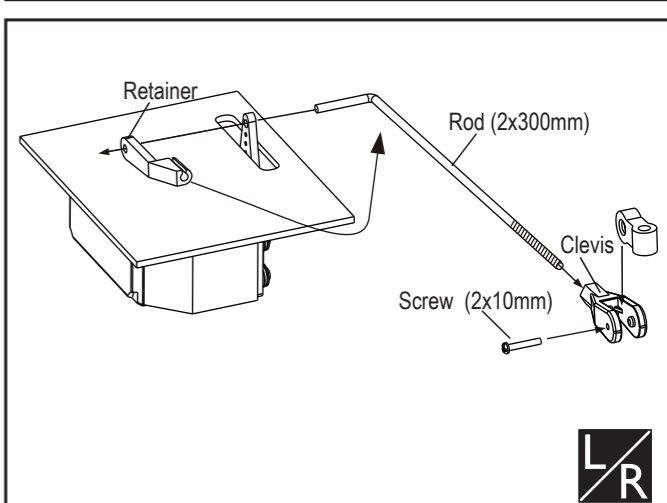
4 Install the servo as the illustration below



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



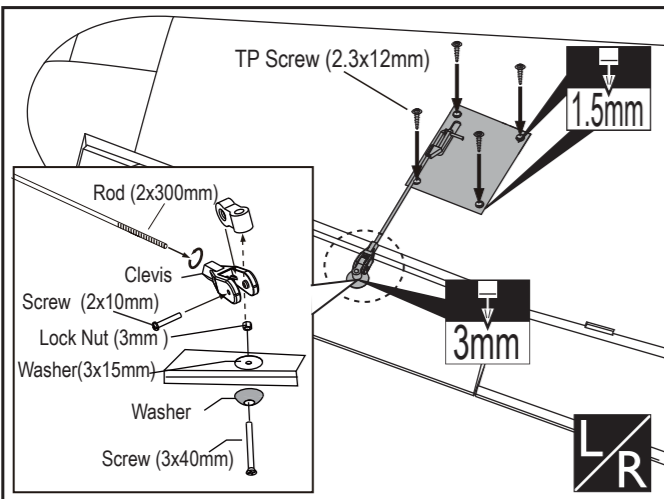
5 Install the nylon control horn and connect the linkage.



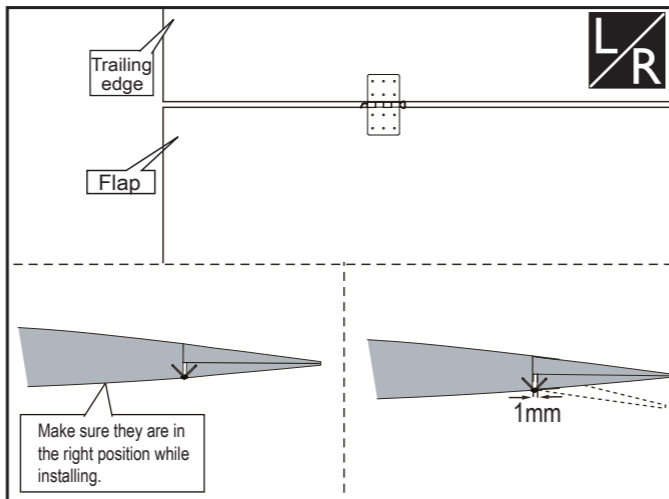
AB Apply epoxy glue.	LR Assemble left and right sides the same way.	Hand Pay close attention here!	Do not overlook this symbol! Warning!
CA Apply instant glue (CA glue, super glue).	Arrow Ensure smooth non-binding movement while assembling.	Scissors Cut off shaded portion.	

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

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



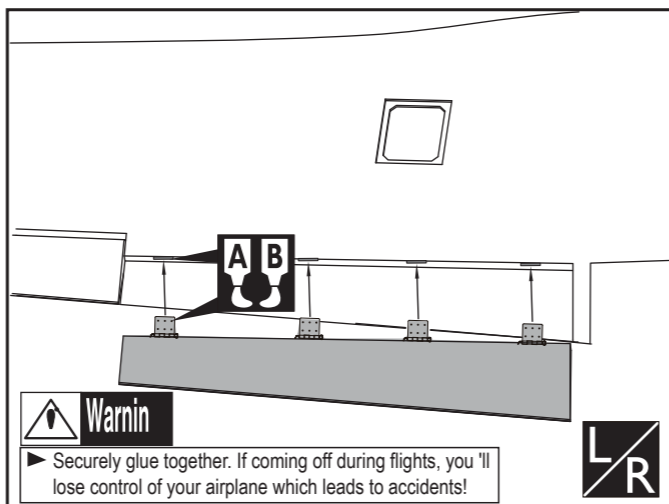
8 Keep some space about 1mm width between trailing edge and flap.



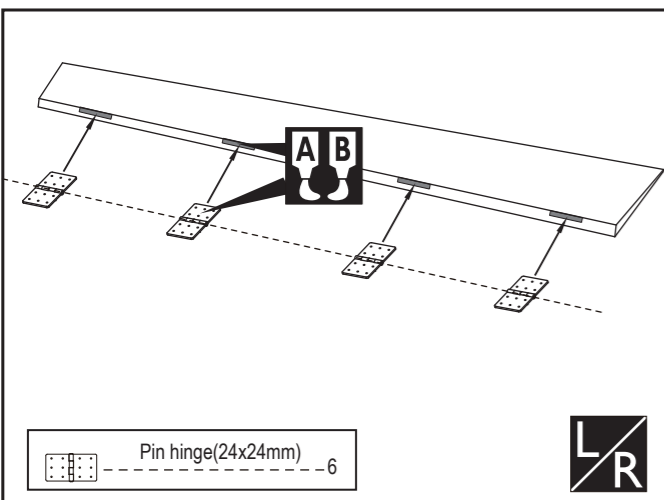
Accessory list for the coming installation steps.

	Clevis	2
	Retainer	2
	Rod (2x300mm)	2
	TP Screw (2.3x12mm)	8
	Screw (3x30mm)	2
	Servo tray(68.5x56.5x2mm)	2
	Wooden Block(20x20x8mm)	4
	Pin hinge(24x24mm)	8
	Washer(3x15mm)	2
	Lock Nut (3mm)	2
	Washer(3x15mm)	2

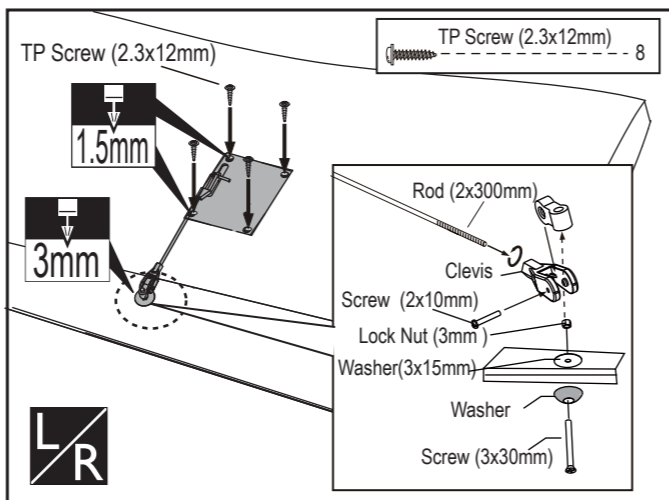
9 Epoxy the flaps to the wings as illustration.



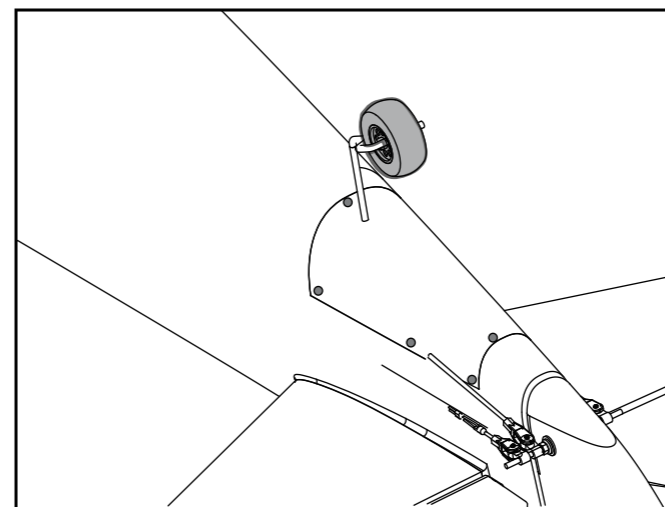
7 Epoxy the pin hinges to the flap.



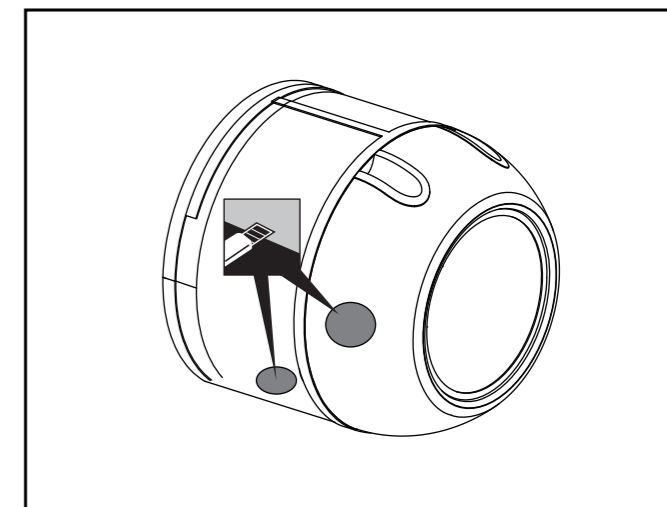
10 Secure the servo. Install the nylon control horn and connect the linkage.



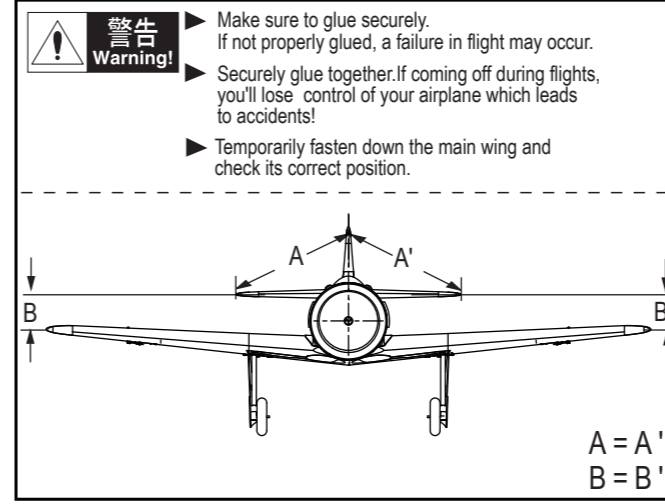
55 Assemble the tail wheel to the tail landing gear.



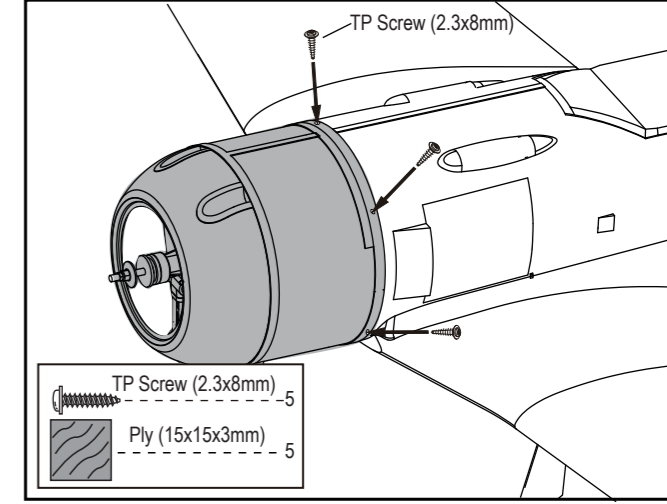
57 Trim the cowling for engine and muffler.



56 Assembly of the stabilizer.



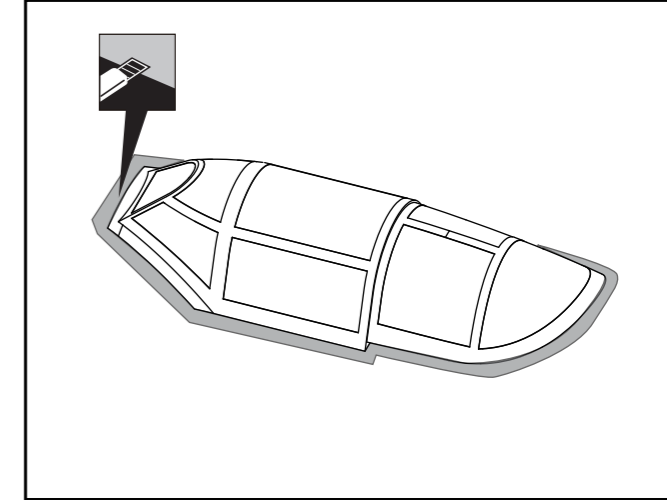
58 Epoxy plies to relevant position inside the fuselage as below for assembling the cowling.



Accessory list for the coming installation steps.

	Canopy	1
	TP Screw (2.3x8mm)	13
	Ply(15x15x3mm)	13

59 Cut off the surplus shaded portion carefully of the canopy below.



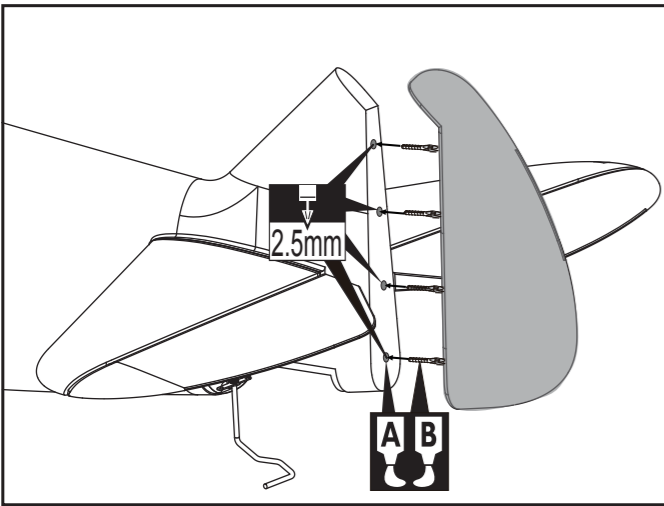
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

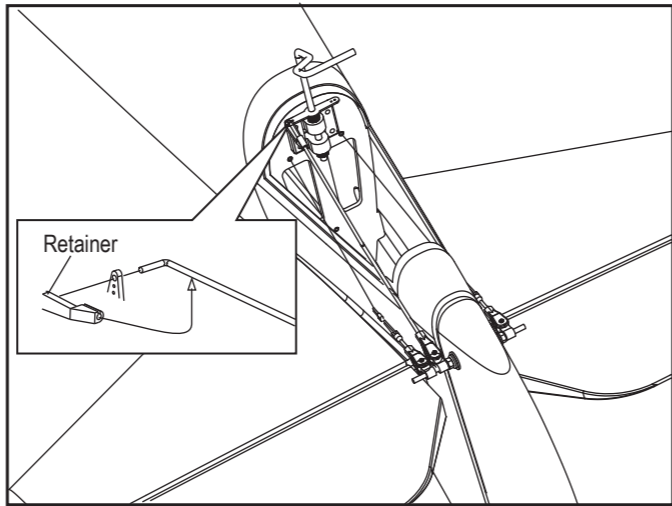
AB Apply epoxy glue. **LR** Assemble left and right sides the same way. **Hand icon** Pay close attention here! **Warning icon** Do not overlook this symbol!

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

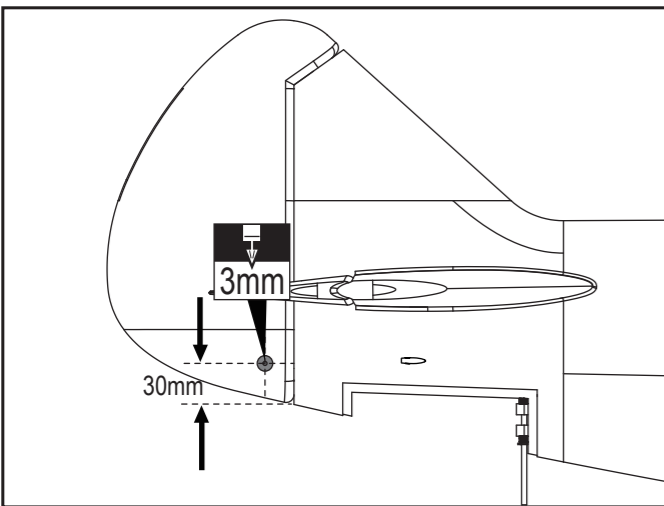
49 Drill holes to the relevant position in the trailing edge and epoxy the rudder to them.



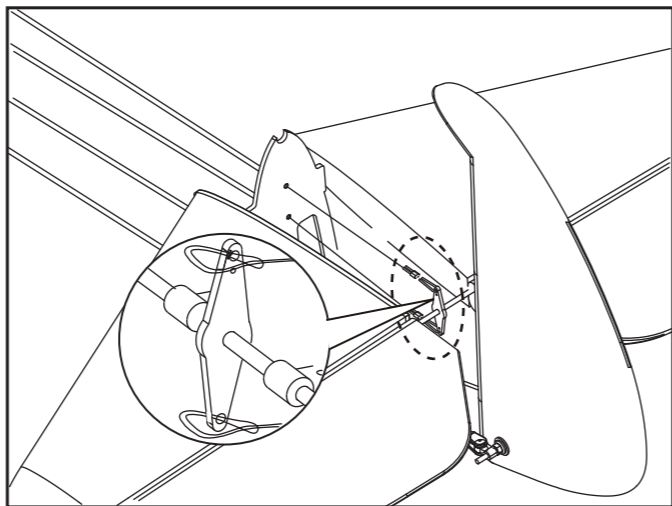
52 The sketch map of the linkage for the rudder and the tail wheel.



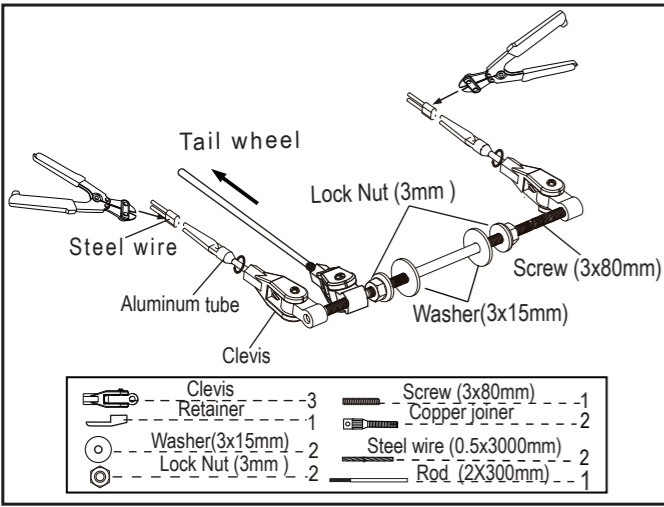
50 Drill a hole to appropriate position in the rudder as illustration.



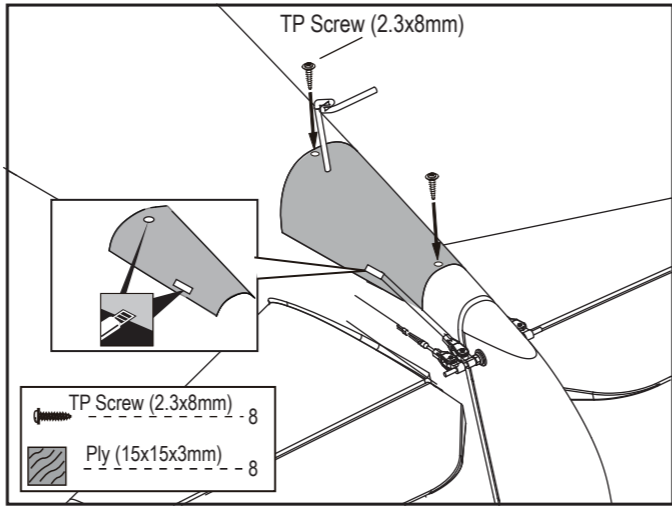
53 The sketch map of the linkages for the rudder and elevator in the fuselage.



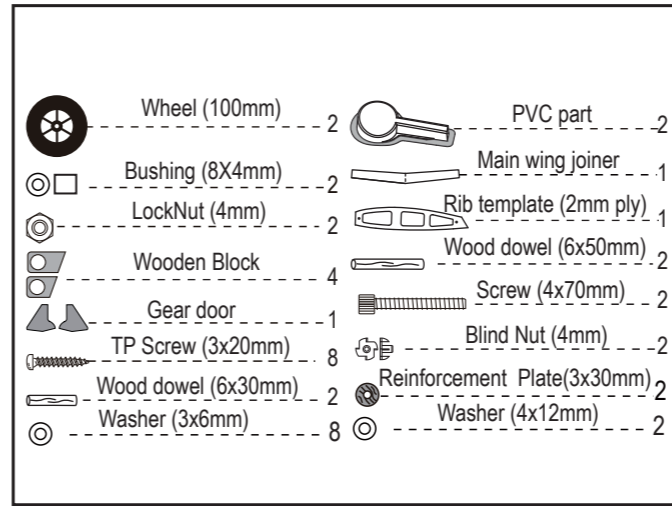
51 The sketch map after the rudder shaft assemble finished.



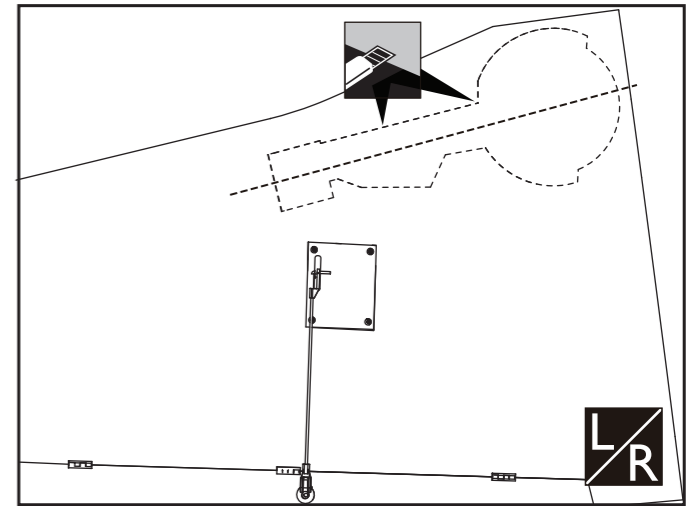
54 Epoxy ply to appropriate position in the fuselage and assemble the tail gear cover with screw.



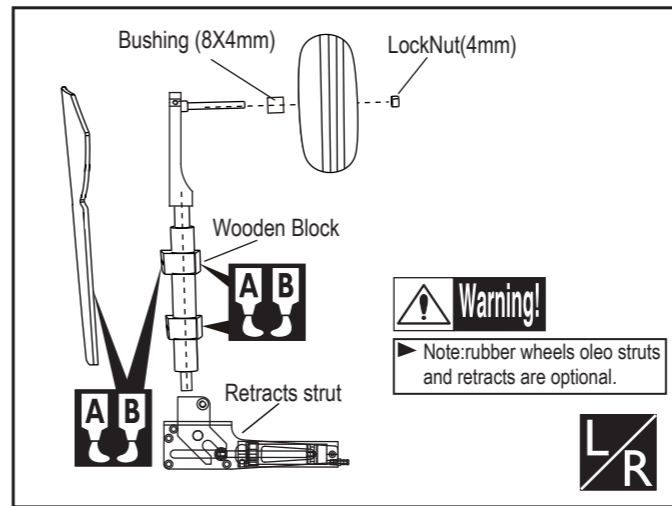
Accessory list for the coming installation steps.



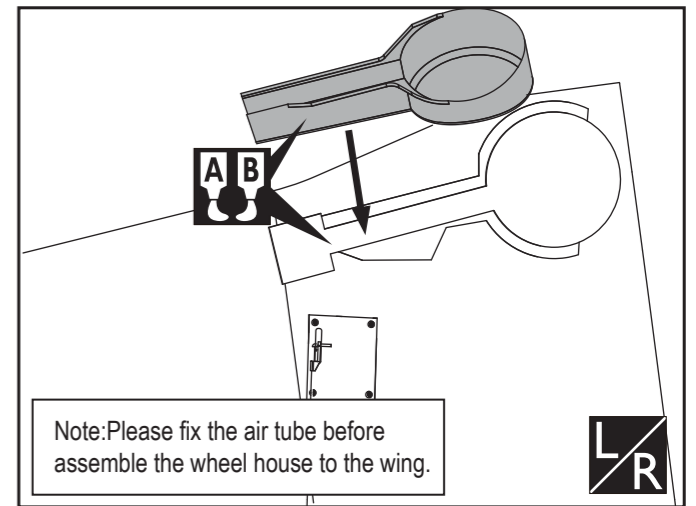
13 Cut away the shaded portion for assembling the gear house very well.



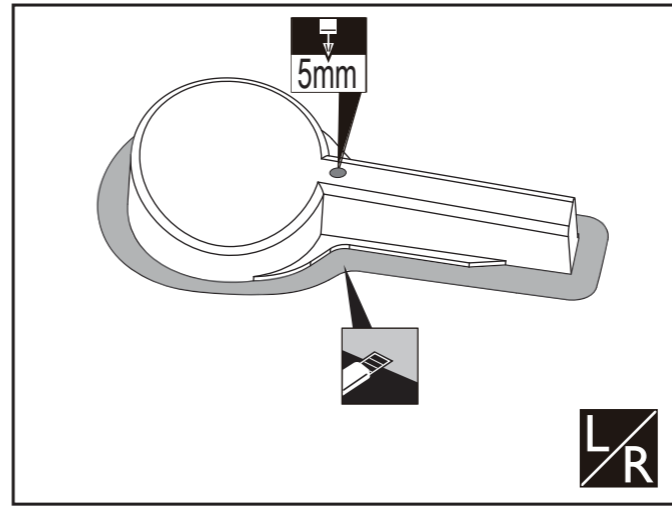
11 Mount the gear door and the wheel to the retract.



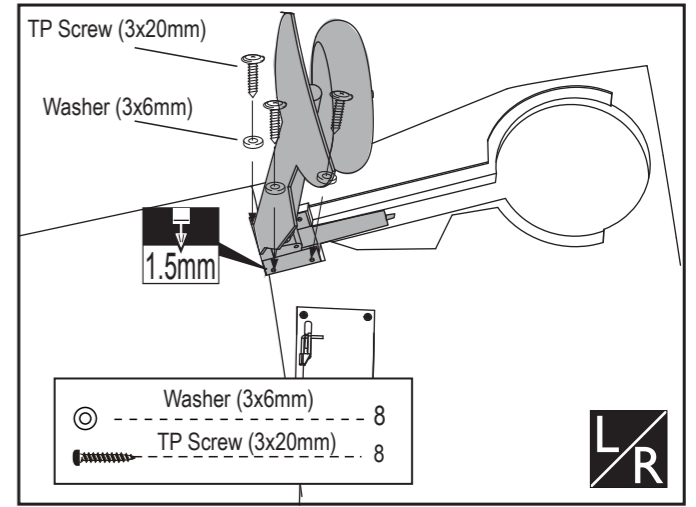
14 Epoxy the wheel house to the wings carefully.



12 Cut away the surplus parts of plastic cover carefully along the shaded line.



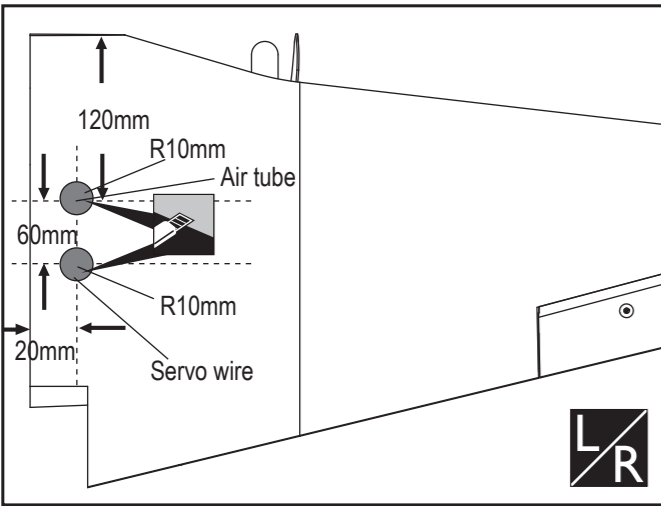
15 Assemble the landing gear to the wheel house.



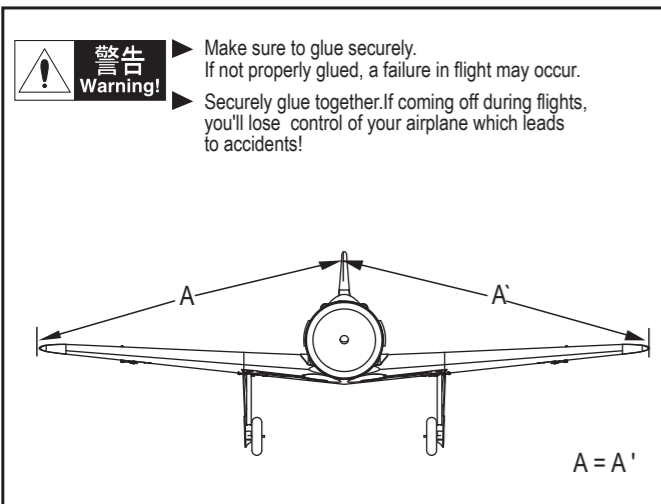
Apply epoxy glue.	Assemble left and right sides the same way.	Pay close attention here!	Do not overlook this symbol!
Apply instant glue (CA glue, super glue).	Ensure smooth non-binding movement while assembling.	Cut off shaded portion.	

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

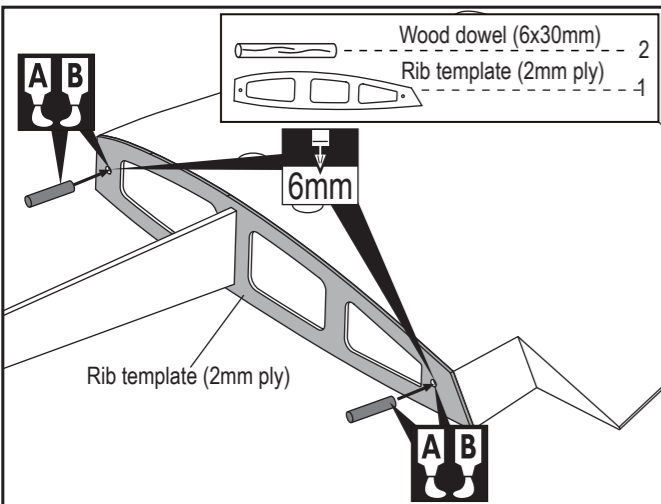
16 Trim holes in the appropriate position in the mid wing and drag the servo wire and the air tube out.



17 The sketch map when the main wing assembled completely.



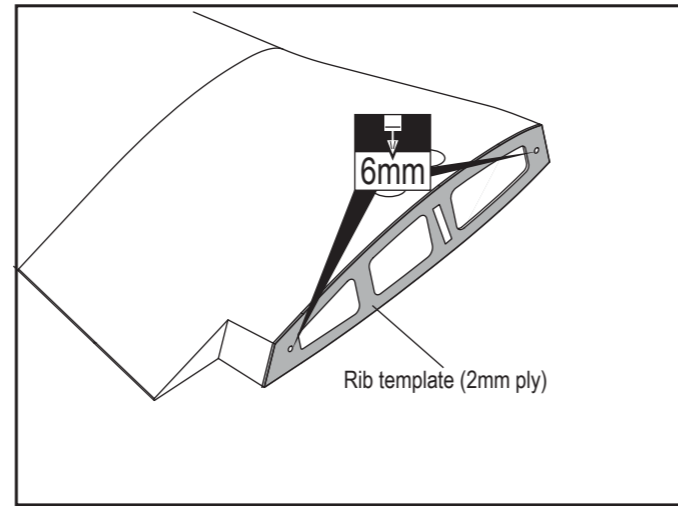
18 According to the rib template drill holes in one wing and epoxy wood dowel in them.



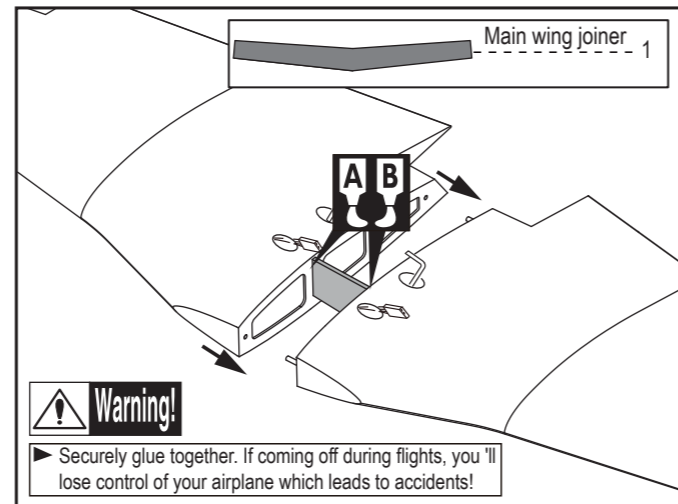
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

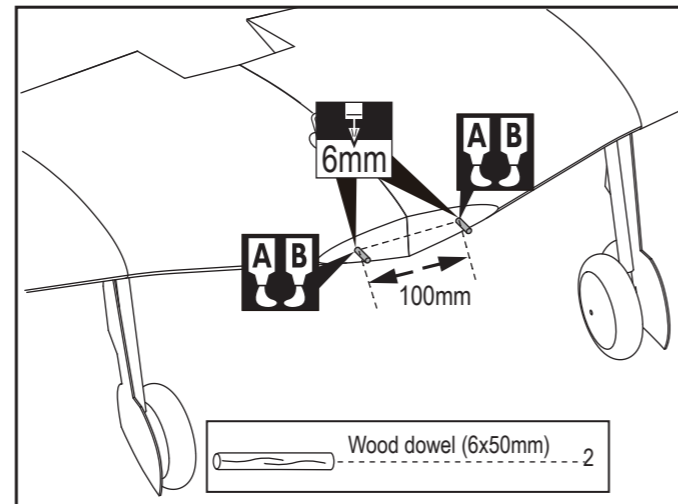
19 According to the rib template drill holes to another main wing.



20 Epoxy the main wing hardly together with wing joiner.



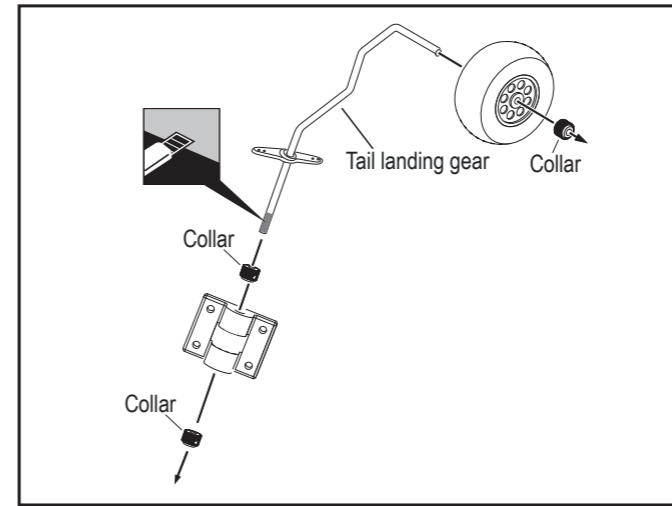
21 Drill holes to appropriate position in the front of mid wing and epoxy wood dowel in them.



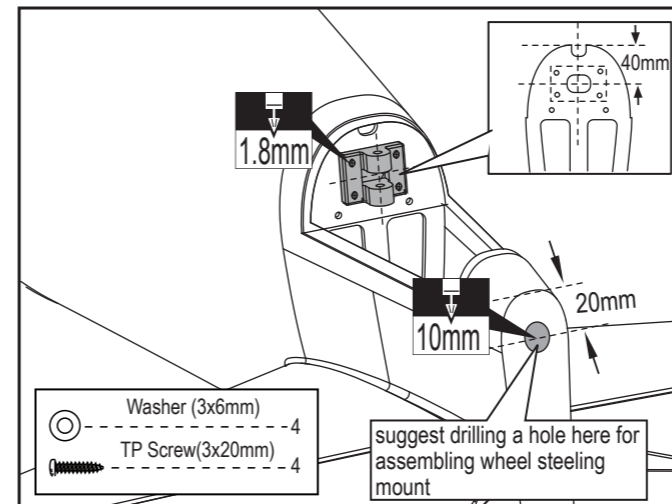
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

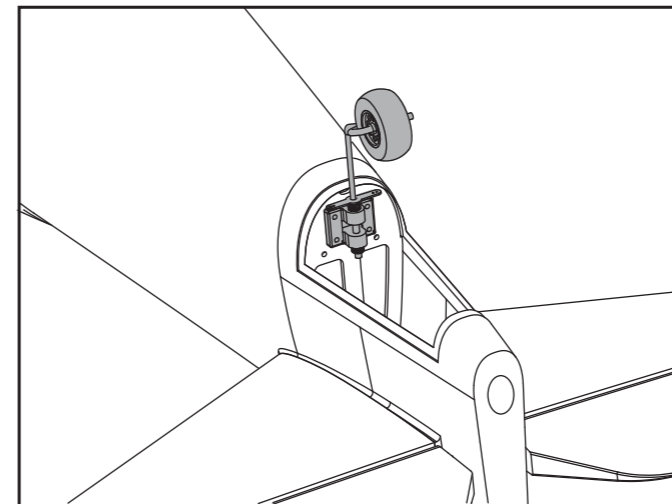
43 The sketch map when assemble the tail landing gear to the wheel steeling mount.



44 The sketch map of assembling the wheel steeling mount to appropriate position in the fuselage.



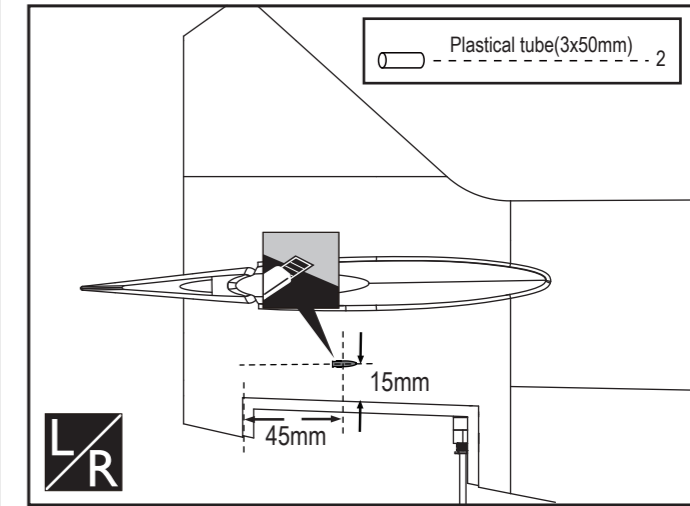
45 The sketch map when tail wheel assemble completion.



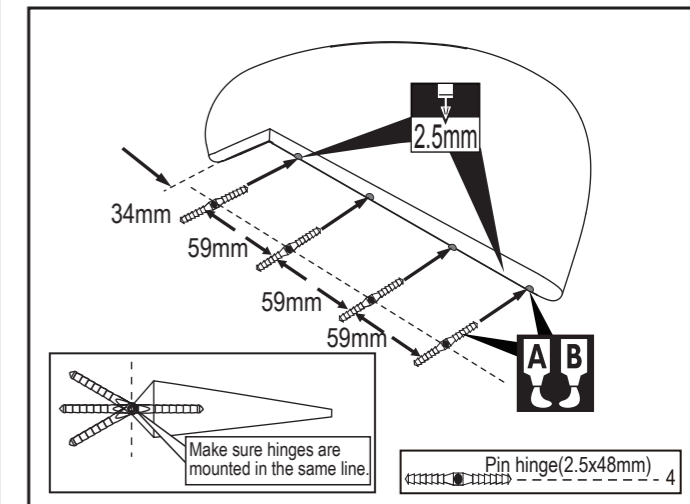
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

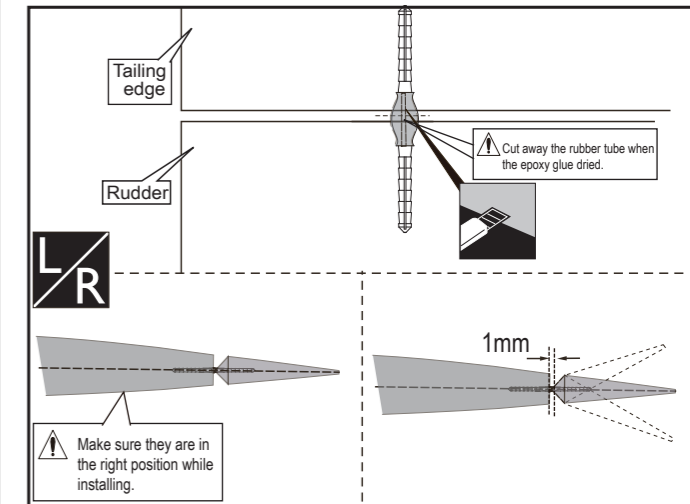
46 Drill a small hole to appropriate position in the fuselage for installing the plastical tube.



47 Drill holes to appropriate position in the rudder and epoxy the ping hinges in them



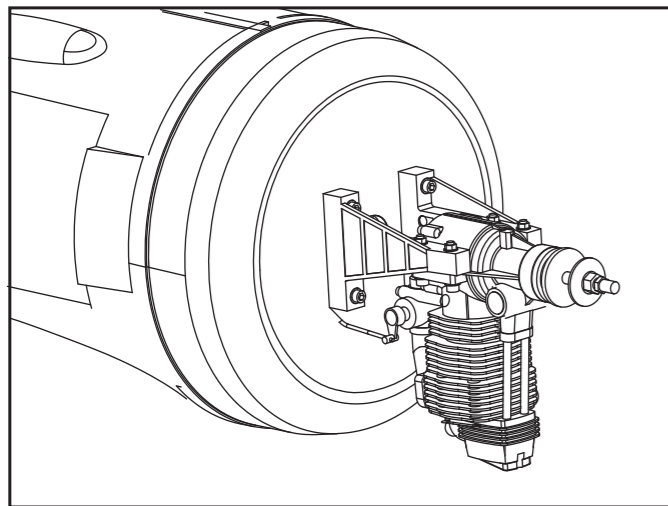
48 Keep some space about 1mm width between the tailing edge and the rudder.



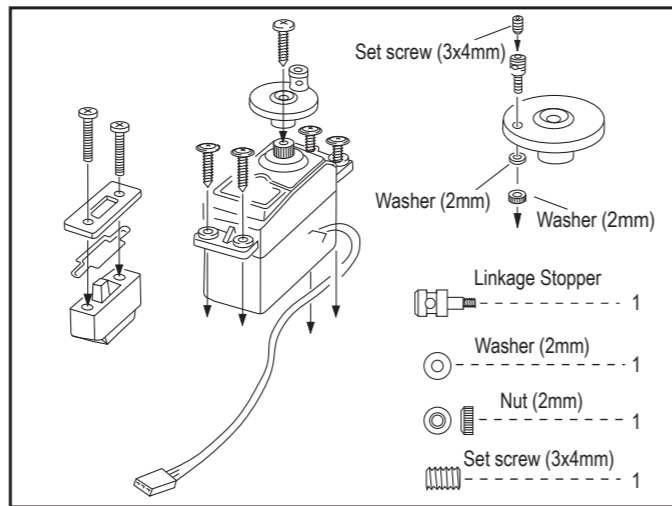
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

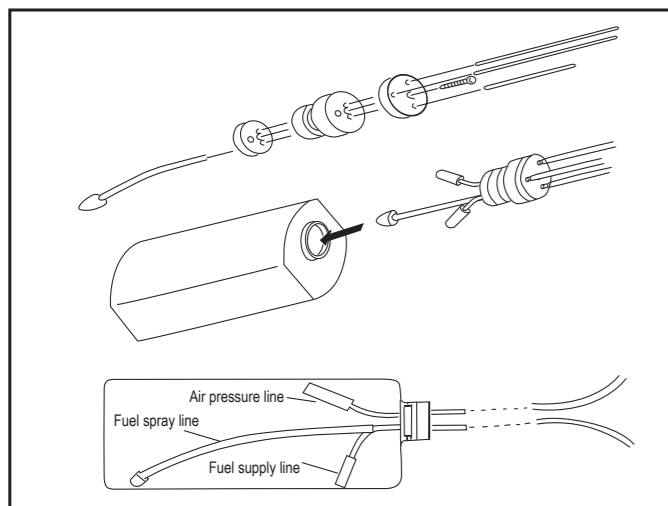
38 Engine installation finished sketch map.



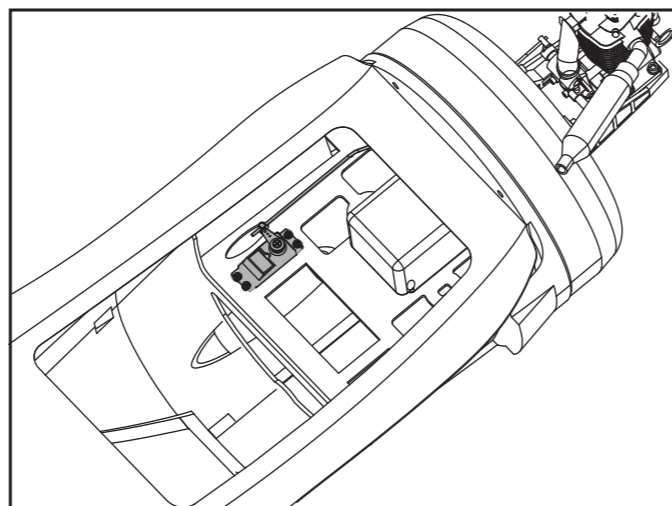
41 Install the servo.



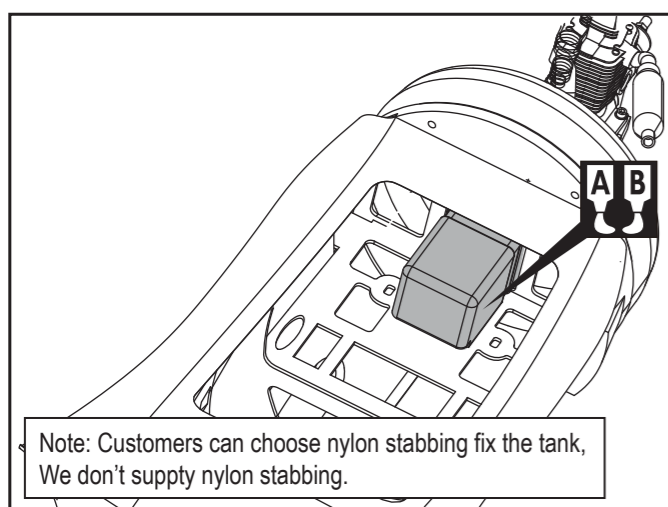
39 Assembly of the fuel tank.



42 Assemble the throttle servo to appropriate position in the fuselage.



40 Mount the fuel tank to the fuselage.

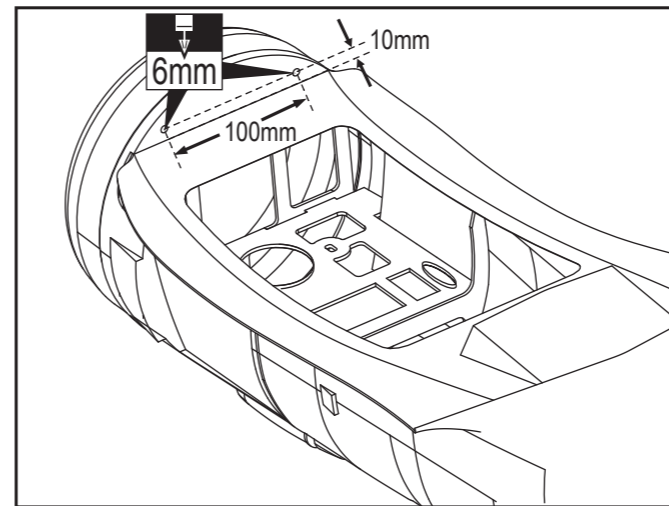


Note: Customers can choose nylon stabbing fix the tank, We don't supply nylon stabbing.

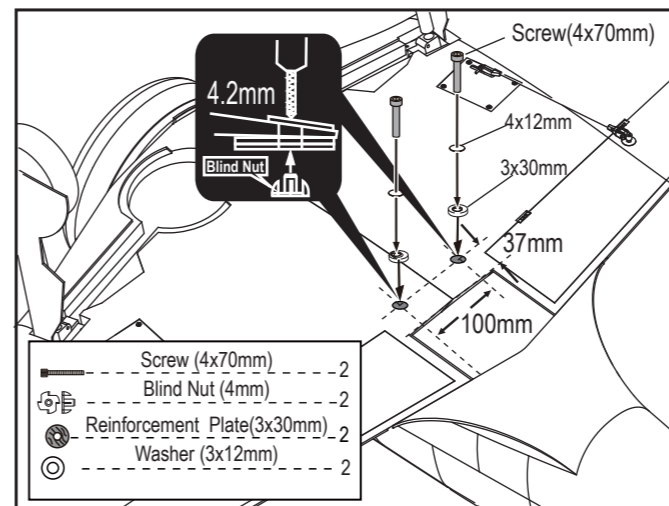
Accessory list for the coming installation steps.

Retainer	1	Steel wire (0.5x3000mm)	2
Nose arm(3mm)	1	Clevis	3
Washer (3x6mm)	4	Washer(3x15mm)	2
TP Screw(3x20mm)	4	Lock Nut (3mm)	2
Tail landing gear(3mm)	1	Screw (3x80mm)	1
Tail wheel (45mm)	1	Copper joiner	2
Collar (3mm)	3	Plastical tube(3x50mm)	2
Rod (2X300mm)	1	Pin hinge(2.5x48mm)	4
TP Screw (2.3x8mm)	8	Ply (15x15x3mm)	8

22 Drill holes to relevant position in the fuselage.



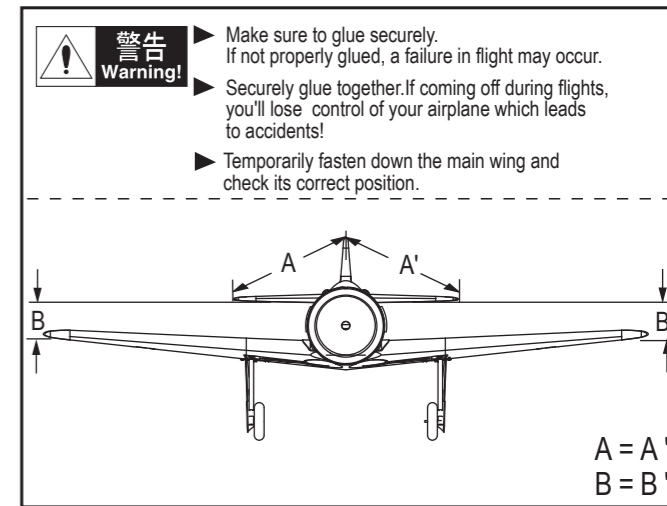
23 Assemble the wings to the fuselage with screw and blind nut as below.



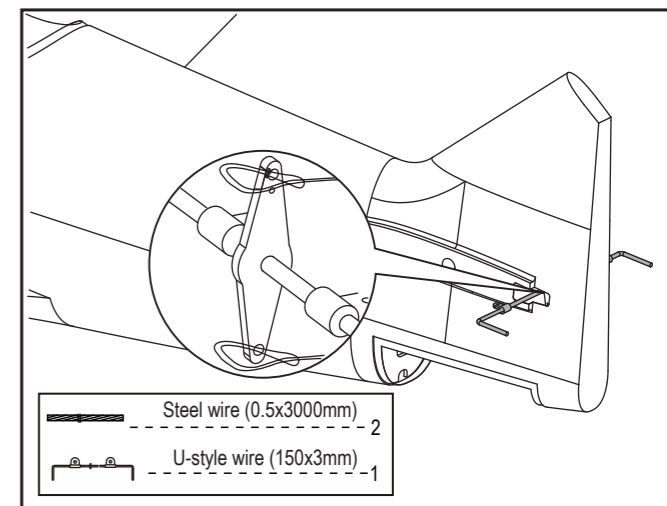
Accessory list for the coming installation steps.

Pin hinge(24x24mm)	6
U-style wire (130x25mm)	1
Steel wire (0.5x3000mm)	2
Matal douel (4x30mm)	4
Rib template (2mm ply)	1
Stab joiner (12x200mm)	1

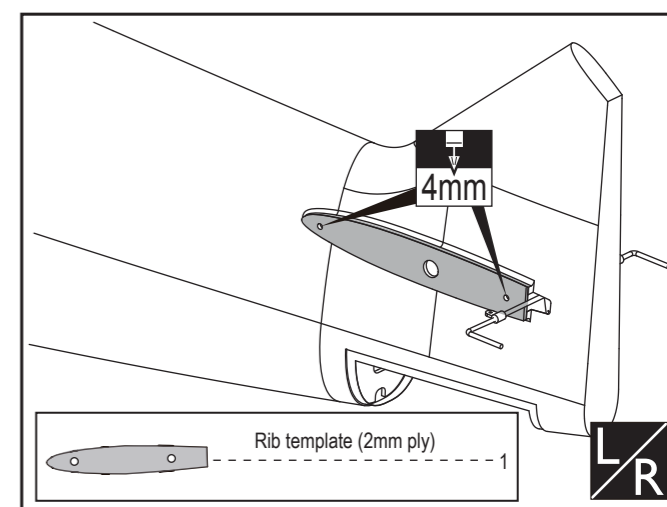
24 Assembly of the stabilizer.



25 Set the U-style wire through the enlarge hole as below.



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



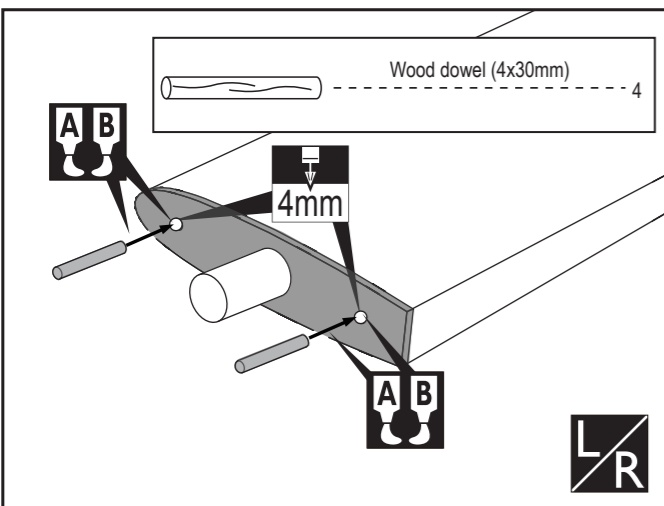
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

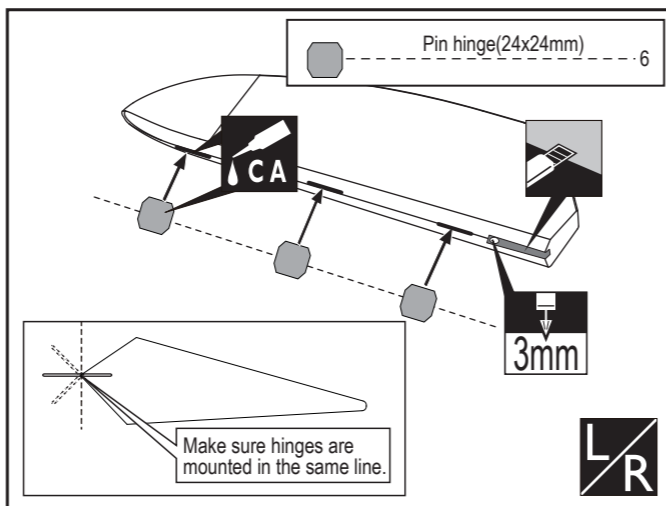
Apply epoxy glue.
 Assemble left and right sides the same way.
 Pay close attention here!
 Do not overlook this symbol!

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

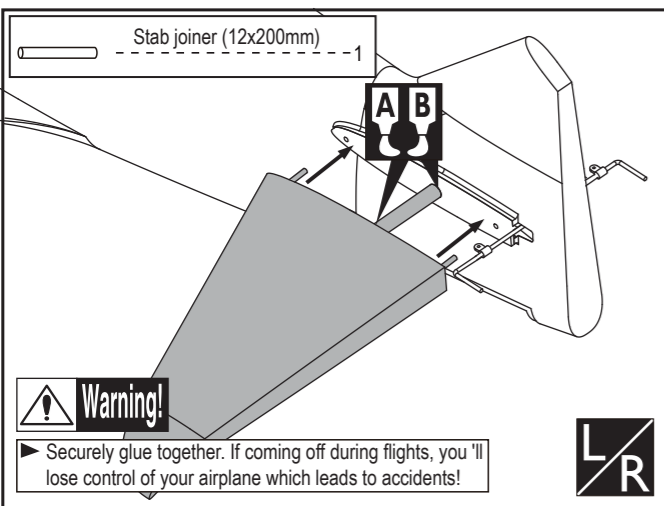
27 Drill two holes at the stabilizer root base via rib template and epoxy the wood dowel in them.



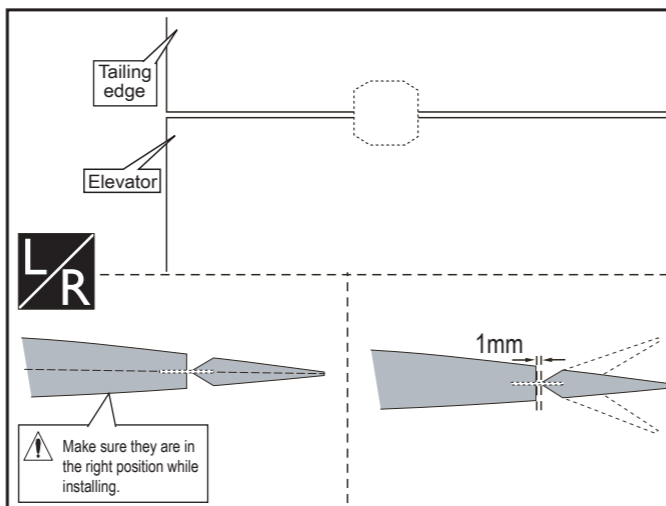
30 Apply instant type CA glue to elevator and pin hinge.



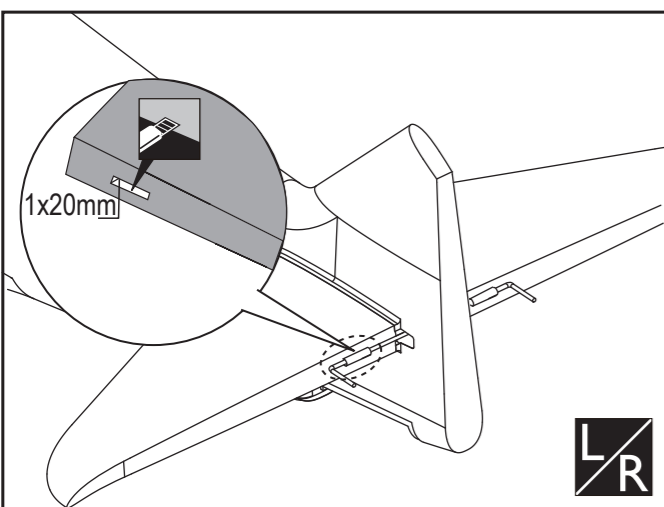
28 Assemble the stabilizers carefully to fuselage.



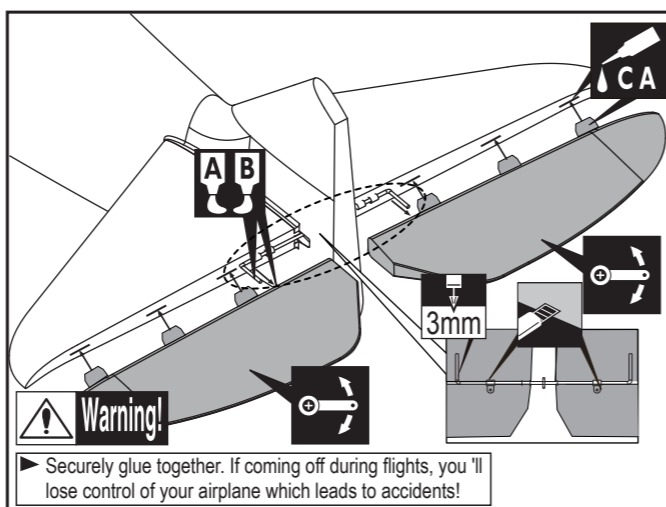
31 Keep some space about 1mm width between elevator and tailing edge.



29 Drill holes to appropriate position in the stabilizer.



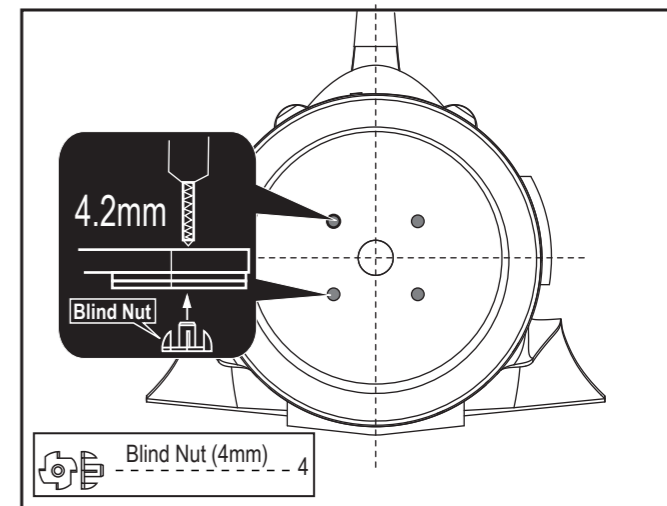
32 Glue the elevator to the stabilizer by CA and epoxy.



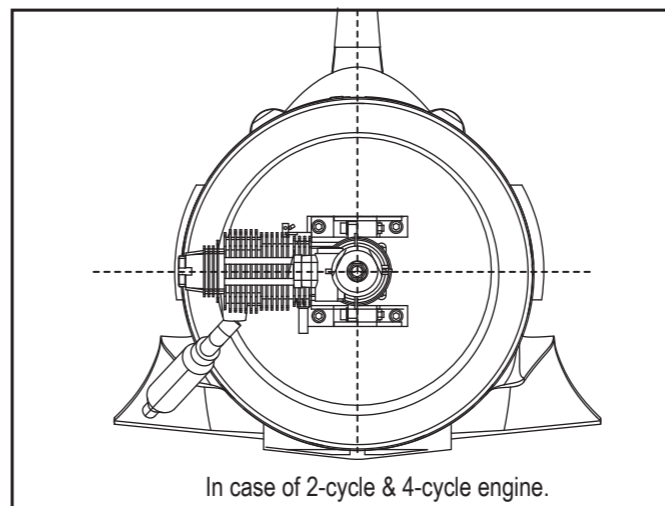
! Accessory list for the coming installation steps.

	Blind Nut (4mm)	4
	Screw (4x35mm)	4
	Screw (4x25mm)	4
	Washer (4x8mm)	12
	Spring Washer (4mm)	4
	Nut (4mm)	4
	Linkage Stopper	2
	Plastic tube (2x400mm)	1
	Engine mount (68x105mm)	2
	Fuel tank (550cc)	1

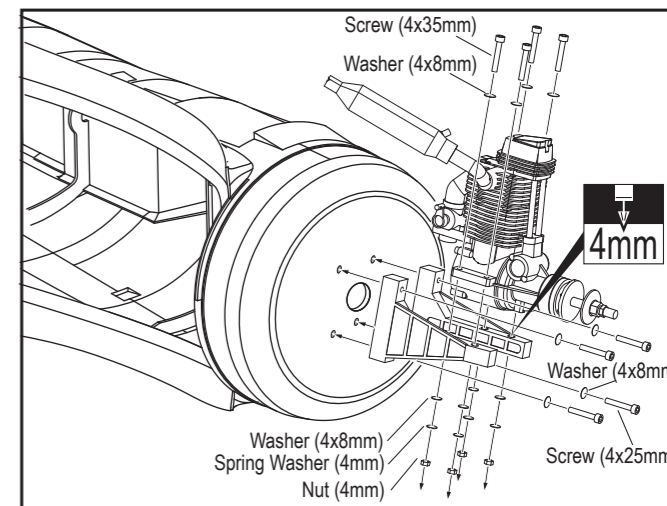
35 Drill 4 holes and set blind nut in appropriate position in the firewall before install the engine.



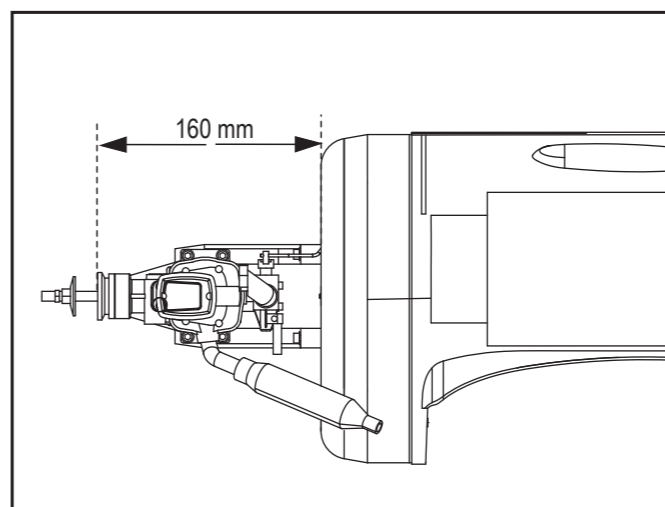
33 The front view of the engine installation finished.



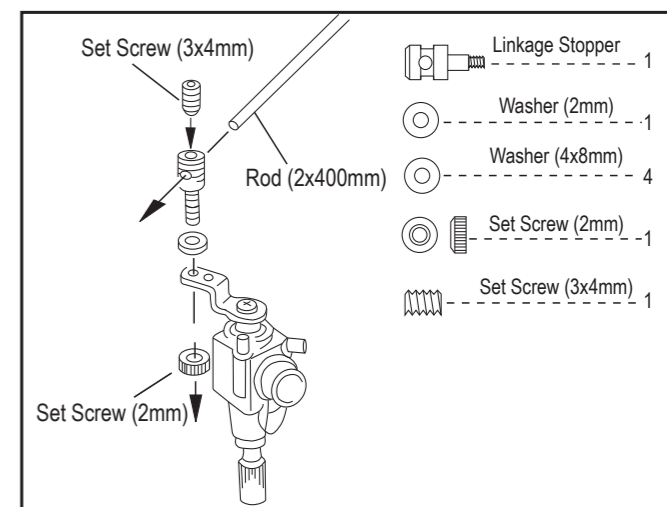
36 Install the engine carefully.



34 The side sketch map of the engine installation finished.



37 Assemble the accelerator push rod to the engine.



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

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

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

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