Before start , please carefully read the explanations!

T-28 Trojah

Specification:

Length	:1613 mm(63.5")
Wing Span	:2057 mm(81")
Wing Area	:70.12 sq. dm
	7.55 sq. ft
Wing Loading	:117 g/sq. dm
	39.5 oz/sq. ft
Flying Weight	:8.2 kg(18 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.

REQUIRED FOR OPERATION (Purchase separately!)

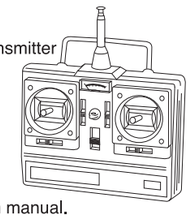
CAUTION: For details concerning the equipment listed below (size, maker, etc.), check with your hobby shop.

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 aiplane is highly recommended for this model.

12 AA-size Batteries

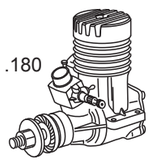
A minimum 6 channel transmitter for airplanes.



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

2 Engine and Muffler

Model Airplane Engine 4-cycle .180



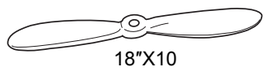
Muffler

Glow Plug

3 Propeller Spinner

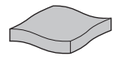
Spinner nut

Purchase a propeller that will match your engine.



18″X10

4 Sponge Sheet



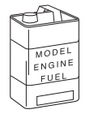
Silicone Tube

Fuel Filter

5 Required for engine starting:

WARNING: Normal gasoline cannot be used with glow engines.

Glow engine fuel only.

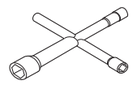


Fuel Pump

Booster Cord

4 D-size Batteries

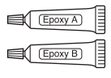
Plug Wrench



6 Glue

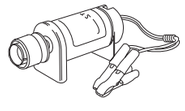
Instant Glue

Epoxy Glue

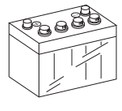


7 Other equipment for enhancing airplane operation & performance

Engine Starter



12V Battery (for starter)

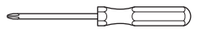


9 Optional parts: rubber wheel with metal hub.

TOOLS REQUIRED (Purchase separately!)

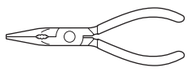
Sharp Hobby Knife

Phillips Screw Driver (l, m, s)

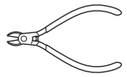


Awl

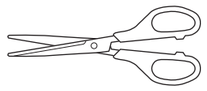
Needle Nose Pliers



Wire Cutters



Scissors



BEFORE YOU BEGIN

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

Do not overlook this Symbol!

Warning!

A B Apply epoxy glue.

C.A Apply instant glue (CA glue, super glue).

2mm Drill holes with the specified diameter (2mm).

Cut off shade portion.

Cut off excess.

Ensure smooth non-binding movement while assembling.

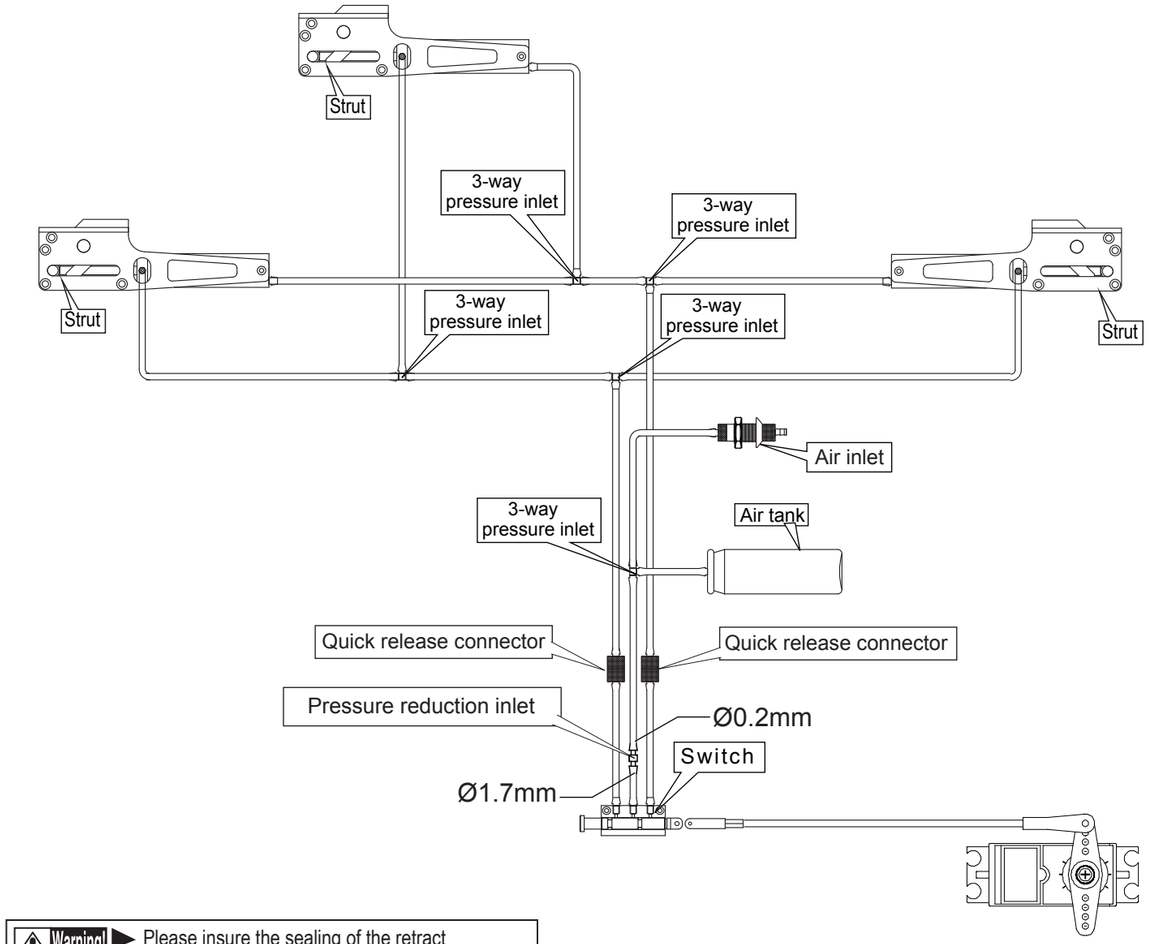
Pay close attention here!

L/R Assemble left and right sides the same way.

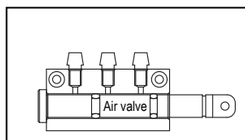
X Must be purchased separately!

Three wheel retract system

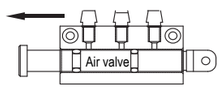
Warning! Make sure to assemble retracts as instructed below.



Warning!
- Please insure the sealing of the retract system before flight .
- Pleas 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

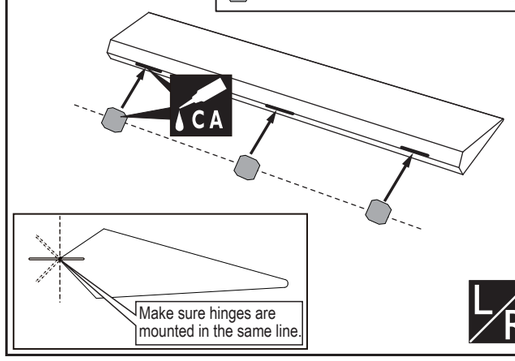
TP Screw(2.6x14mm)	2	Switch	1
Retainer	1	Air line (3000mm)	1
Clevis	1	3-way pressure inlet	5
Rod (2X300mm)	1	Air tank	1
Strut (90°)	1	Air inlet	1
		Quick release connector	2
		Strut (90°)	2

Accessory list for the coming installation steps.

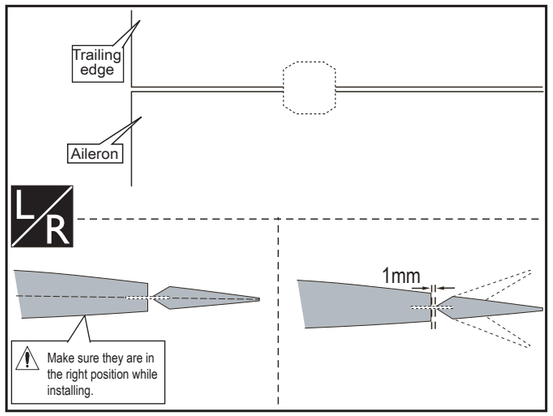
Clevis	2
Retainer	2
Rod (2x300mm)	2
TP Screw (2.3x12mm)	8
Screw (3x50mm)	2
Servo tray(68.5x56.5x2mm)	2
Wooden Block(20x20x8mm)	4
Pin hinge(24x24mm)	6
Washer(3x15mm)	2
Lock Nut (3mm)	2
Washer(3x15mm)	2

1 Apply instant CA glue to aileron and pin hinge.

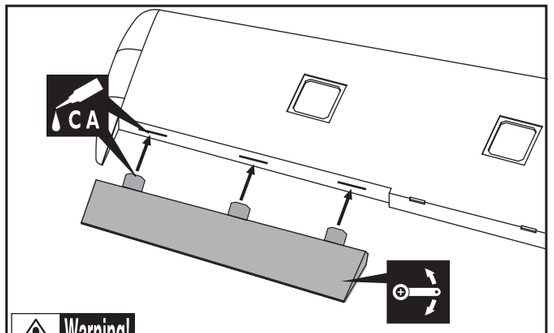
Pin hinge(24x24mm) 6



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



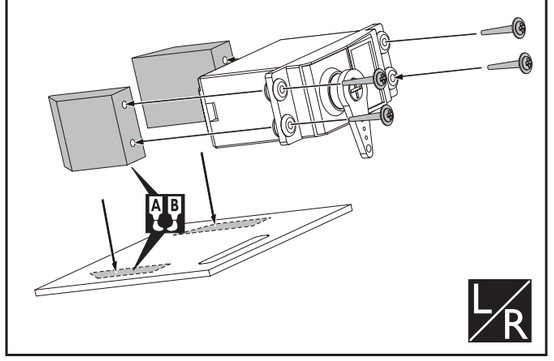
3 Assemble the aileron to main wing with instant type CA glue. Be careful to ensure the moving parts of the hinges are able to move freely.



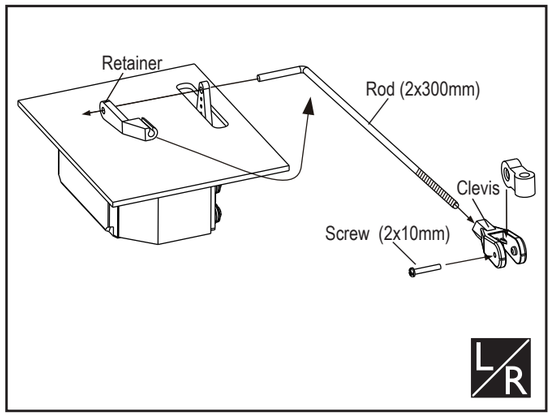
Warning!
- Securely glue together. If coming off during flights, you 'll lose control of your airplane which leads to accidents!

L/R

4 Install the servo as the illustration below



5 Install the nylon control horn and connect the linkage.



A B Apply epoxy glue.

C.A Apply instant glue (CA glue, super glue).

L/R Assemble left and right sides the same way.

Ensure smooth non-binding movement while assembling.

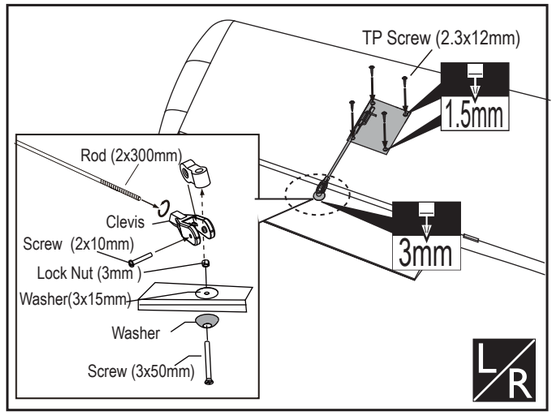
Pay close attention here!

Cut off shaded portion.

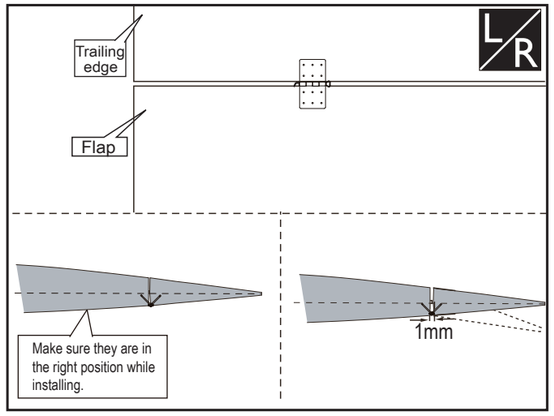
Do not overlook this symbol!

Warning!

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



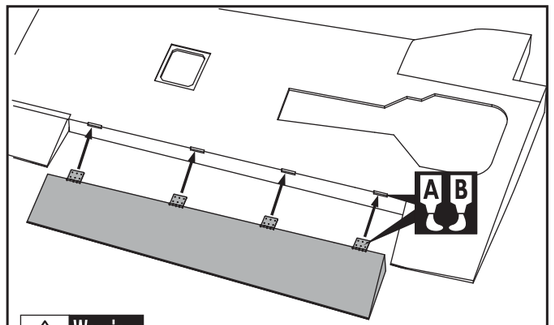
8 Keep some space about 1mm width between trailing edge and flap.



Accessory list for the coming installation steps.

Clevis	2
Retainer	2
Rod (2x300mm)	2
TP Screw (2.3x12mm)	8
Screw (3x50mm)	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

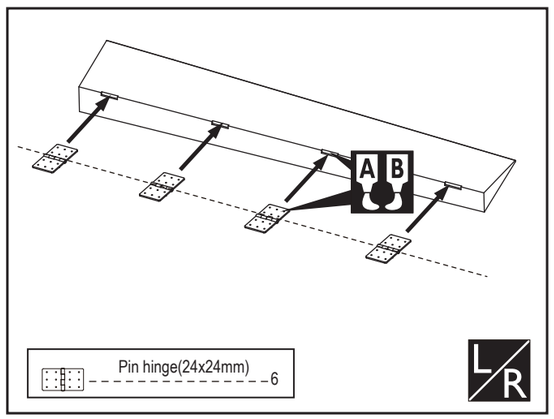
9 Epoxy the flaps to the wings as illustration.



Warnin

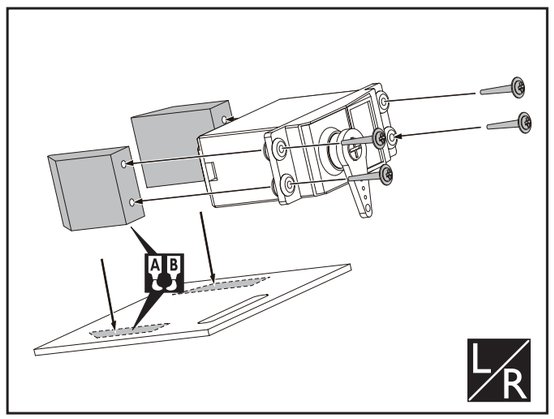
► Securely glue together. If coming off during flights, you 'll lose control of your airplane which leads to accidents!

7 Epoxy the pin hinges to the flap.



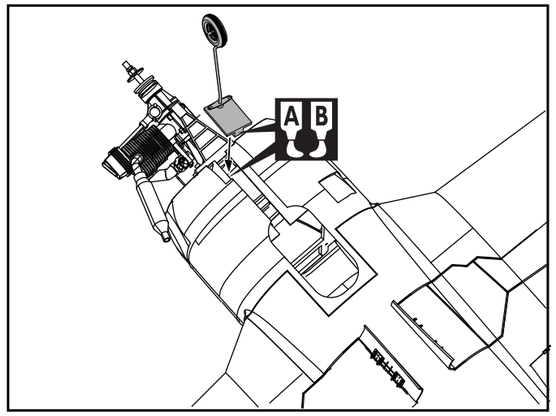
Pin hinge(24x24mm)	6

10 Install the servo as the illustration below



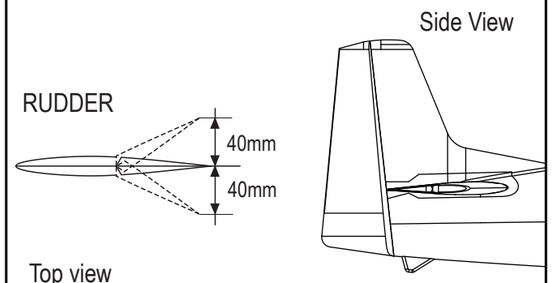
Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol!
Warning!

76 Epoxy the fixed landing gear to the relevant position in the fuselage.



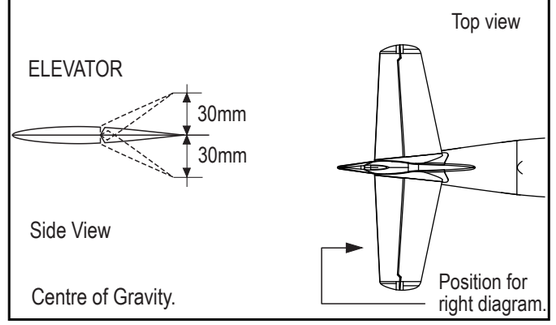
77 Adjustment.

► 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.



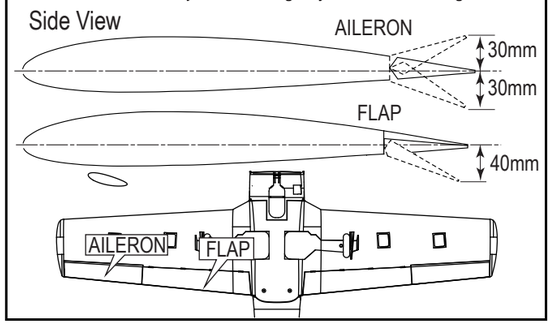
78 Adjustment.

► 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



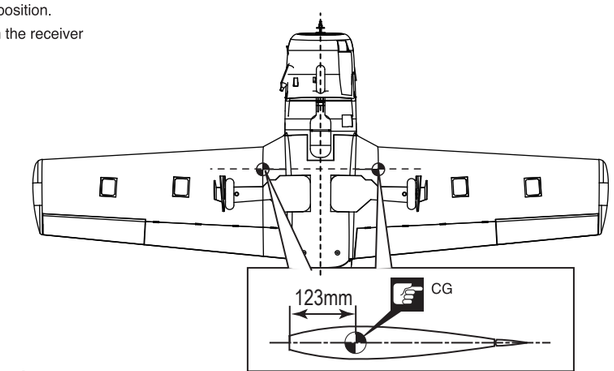
79 Adjustment.

► 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.



80 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.

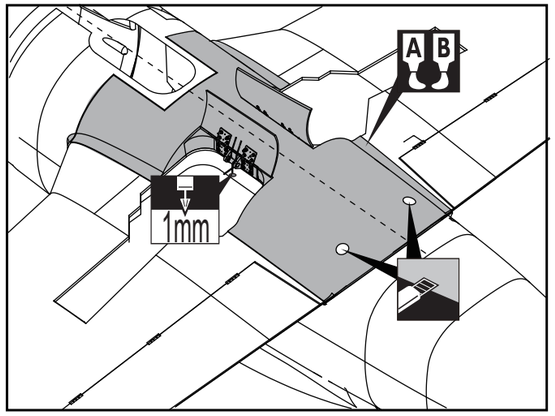


Warning!

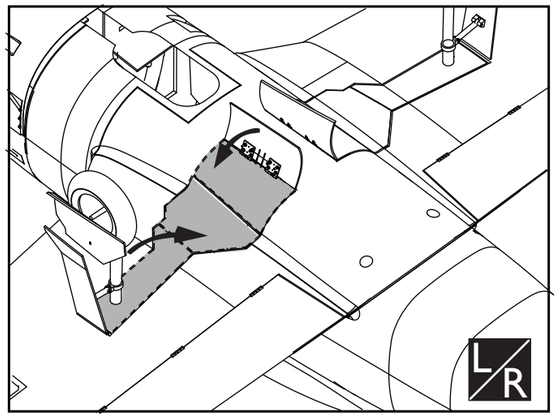
► ***NEVER fly the model without well balancing.***

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

71 Drill holes to appropriate position in the belly pants and the wings and epoxy the belly pant to the wing as diagram.



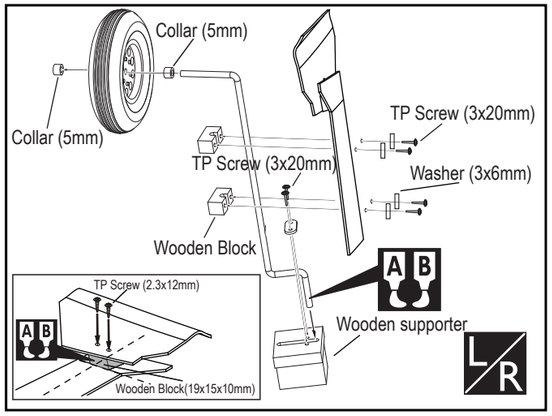
72 The sketch map when the gear up and down.



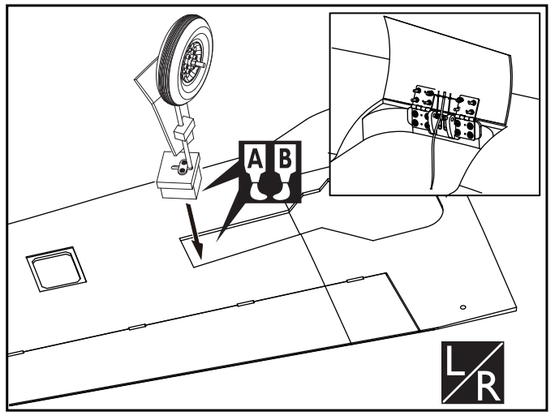
Accessory list for the coming installation steps.

Wheel (100mm)	2	Wheel (90mm)	1
Collar (5mm)	7	Wooden supporter (46x28x14mm)	1
Wooden supporter (41.5x28x26mm)	2	Landing gear(5mm)	1
Landing gear(5mm)	1	TP Screw (2.3x12mm)	4
TP Screw (3x20mm)	12	Aluminum part(60x6mm)	1
Landing gear straps	2	Gear door	2
Wooden Block(49x22x12mm)	2	Wooden Block(19x15x10mm)	1
Wooden Block(53x22x12mm)	2		

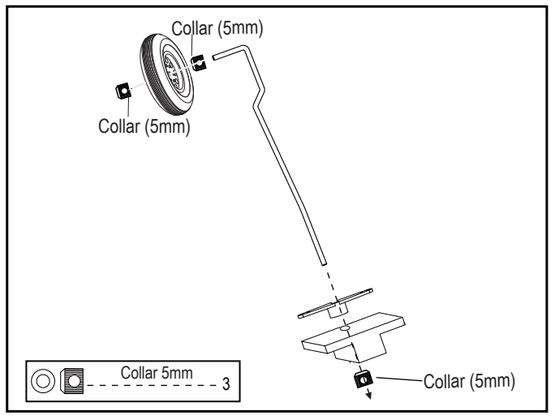
73 Assemble the wheel and gear door to landing gear.



74 Epoxy the landing gear to the wing steadily.

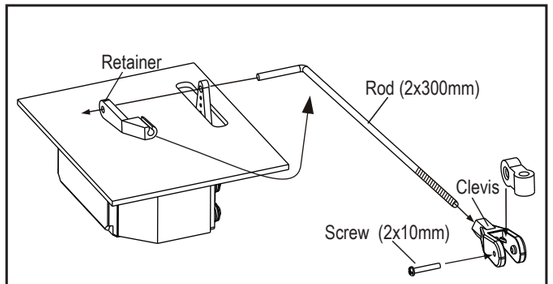


75 Install the wheel to the fixed landing gear.

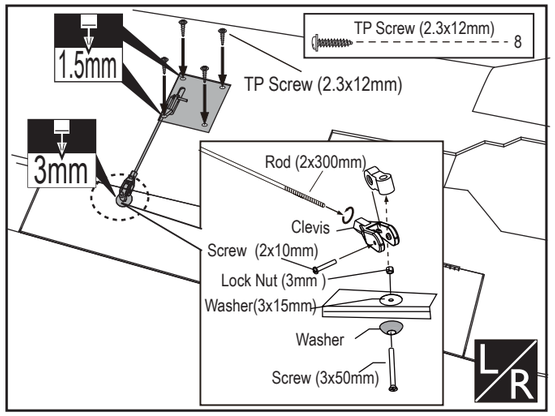


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol! Warning!

11 Install the nylon control horn and connect the linkage.



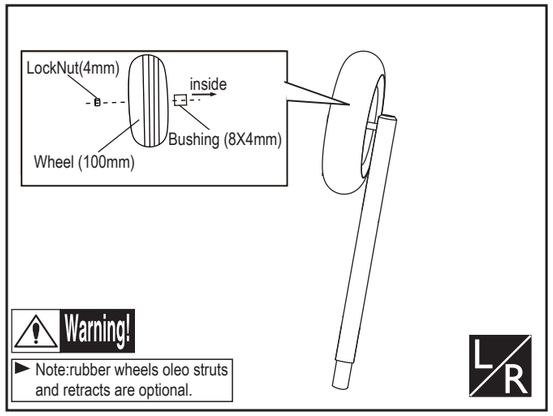
12 Secure the servo.Install the nylon control horn and connect the linkage.



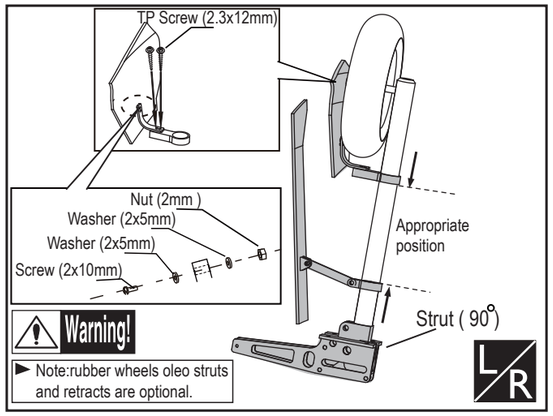
Accessory list for the coming installation steps.

Wheel (100mm)	2	PVC part	2
Bushing (8x4mm)	2	Main wing joiner	1
LockNut (4mm)	2	Rib template (2mm ply)	1
TP Screw (2.3x12mm)	8	Wood dowel (6x50mm)	2
TP Screw (3x20mm)	8	Screw(6x50mm)	2
Wood dowel (6x30mm)	2	Blind Nut (6mm)	2
Washer (3x6mm)	8	Reinforcement Plate	1
Screw (2x10mm)	4	Pin hinge (36x20x1mm)	2
Washer (2x5mm)	8	Gear door	1
Nut (2mm)	4	Gear door	2
Wooden Block(9mm)	2		
Mounting plate	2		

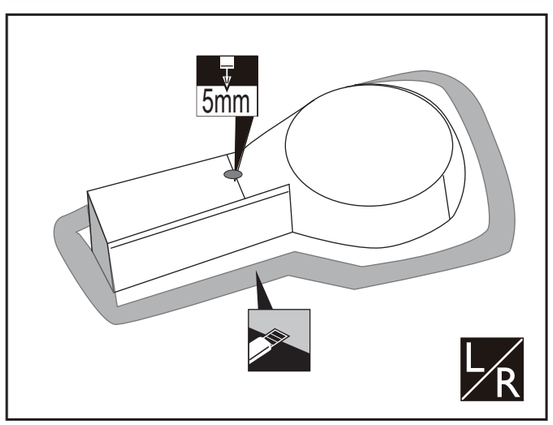
13 Mount the gear door and the wheel to the retract.



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

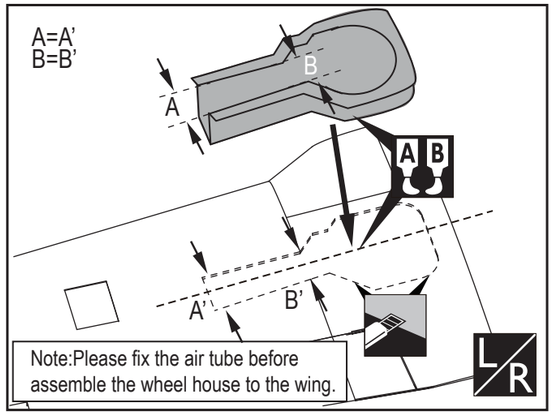


15 Cut away the surplus parts of plastic cover carefully along the shaded line.

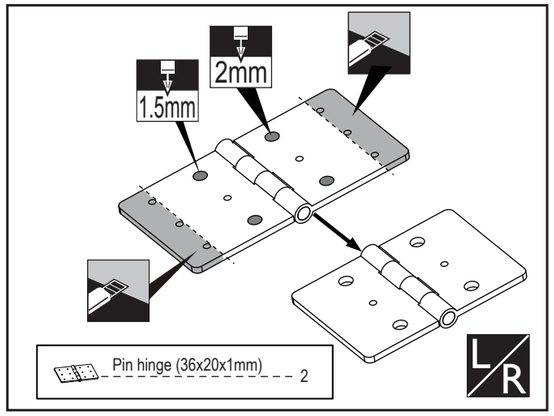


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol! Warning!

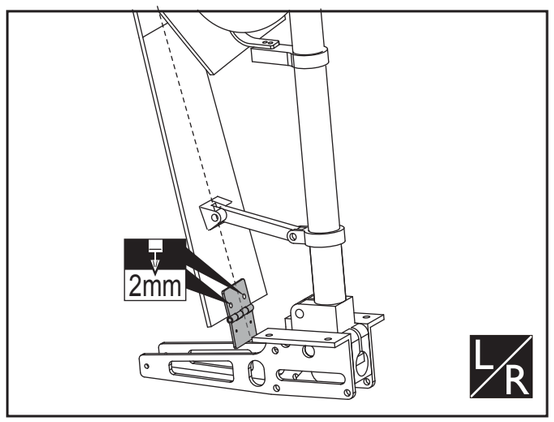
16 Epoxy the wheel house to the wings carefully.



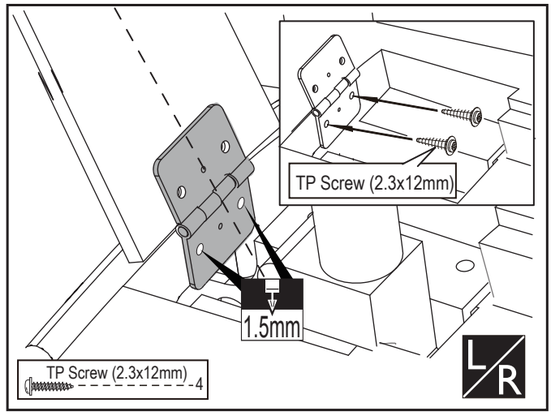
17 Cut the shaded portion away from the available pin hinges and enlarge the holes as below.



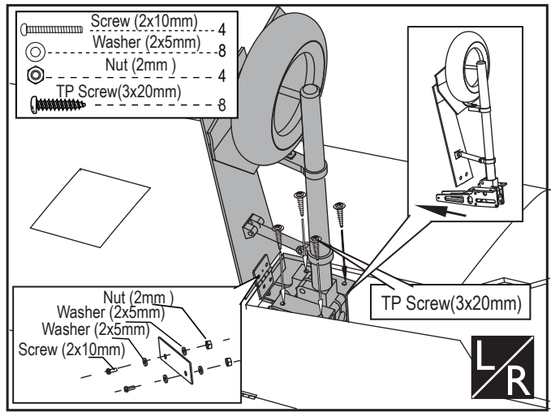
18 Put the pin hinge to appropriate position on the baffle and drill holes in the baffle as illustration.



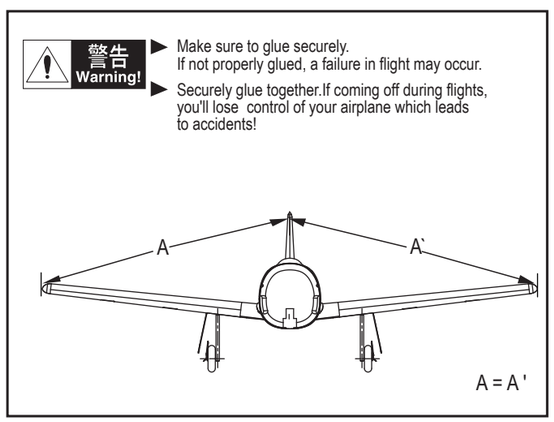
19 Put the retracts to the wing and find out the relevant position the other part of the pin hinge,drill holes in the clapboard



20 Assemble the retracts and the baffle to the landing gear as illustration.

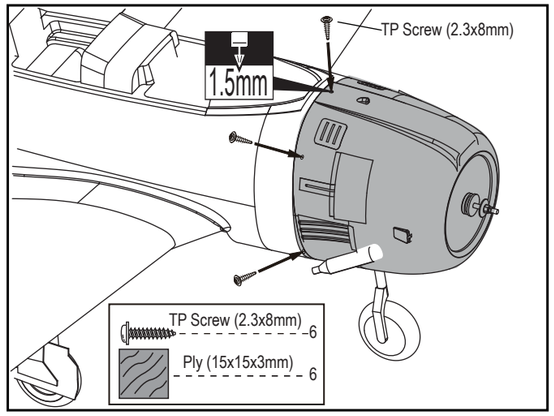


21 The sketch map when the main wing assembled completely.

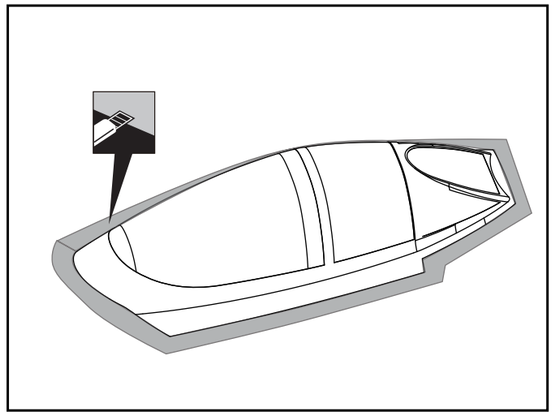


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol!
Warning!

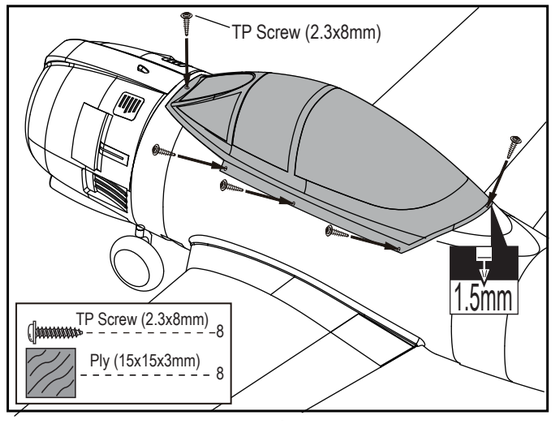
65 Epoxy plies to relevant position inside the fuselage as below for assembling the cowling.



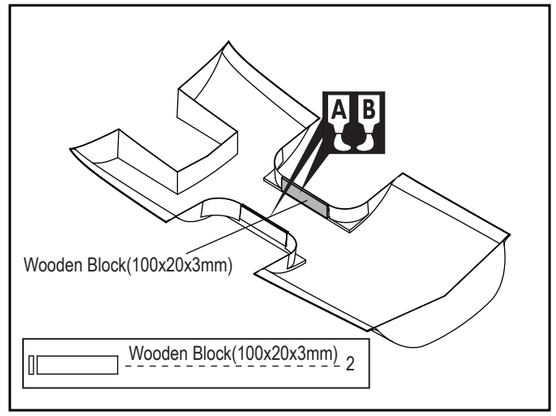
66 Cut off the surplus shaded portion carefully of the canopy below.



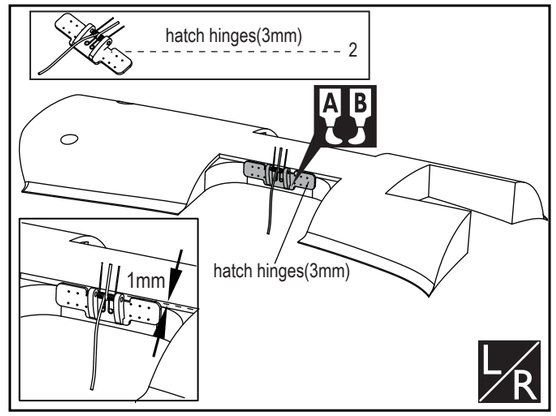
67 Epoxy plies inside the fuselage under the cowing and mount the cowling with TP screw as illustration.



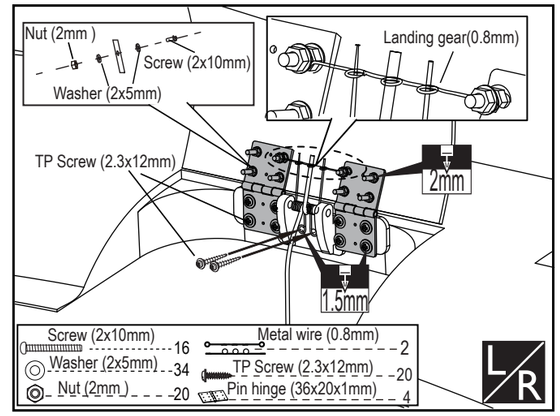
68 Epoxy the wood plates to the appropriate position inside the belly cover as picture.



69 Epoxy the wood plates to the relevant place outside the belly cover as picture.

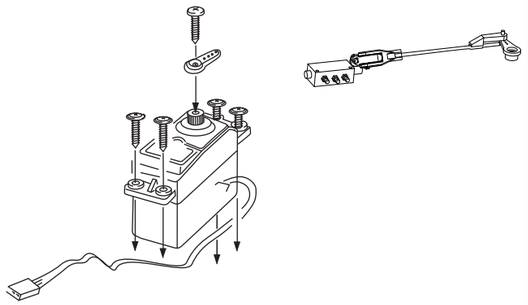


70 Fix the pinned hinges to the belly cover and the wheel pants,let the the spring pass the holes in the metal wire and fix the matel wire to the pinned hinges as illustration.

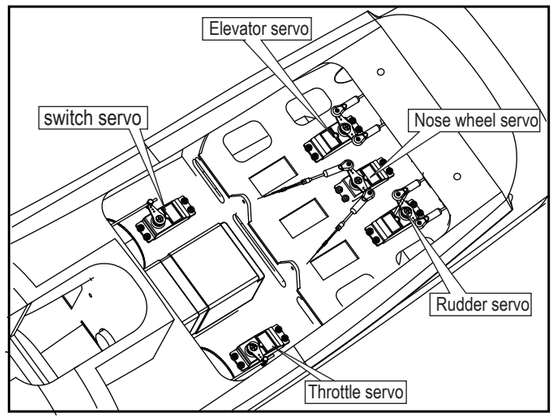


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol!
Warning!

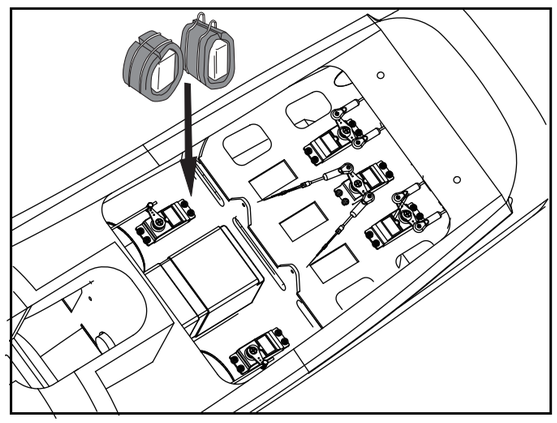
60 Install the servo of switch.



61 The servos installation finished sketch map.



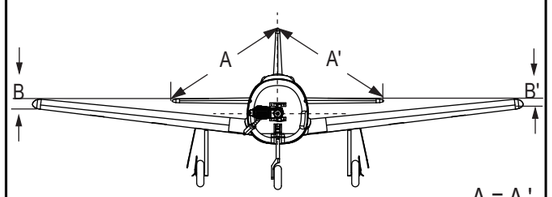
62 Assemble the receiver and the battery to appropriate positon in the fuselage.



63 Assembly of the stabilizer.

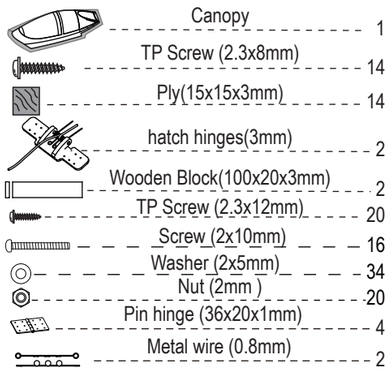
警告 Warning!

- Make sure to glue securely. If not properly glued, a failure in flight may occur.
- Securely glue together.If coming off during flights, you'll lose control of your airplane which leads to accidents!
- Temporarily fasten down the main wing and check its correct position.



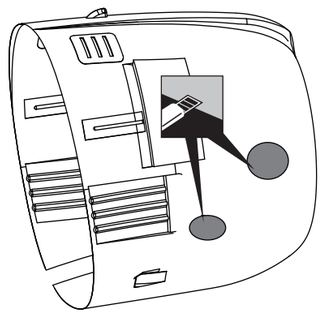
A = A '
B = B '

Accessory list for the coming installation steps.



Canopy	1
TP Screw (2.3x8mm)	14
Ply(15x15x3mm)	14
hatch hinges(3mm)	2
Wooden Block(100x20x3mm)	2
TP Screw (2.3x12mm)	20
Screw (2x10mm)	16
Washer (2x5mm)	34
Nut (2mm)	20
Pin hinge (36x20x1mm)	4
Metal wire (0.8mm)	2

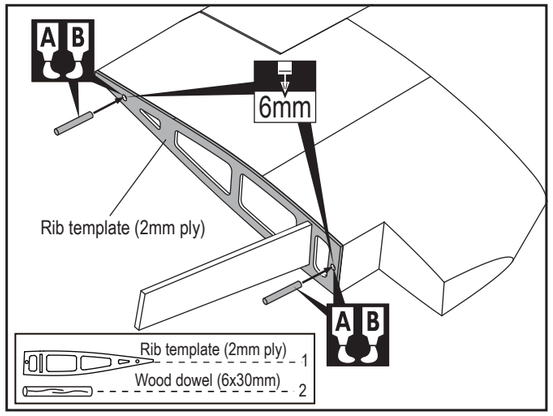
64 Trim the cowling for engine and muffler.



A B Apply epoxy glue.
C.A Apply instant glue (CA glue, super glue).
L/R Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.

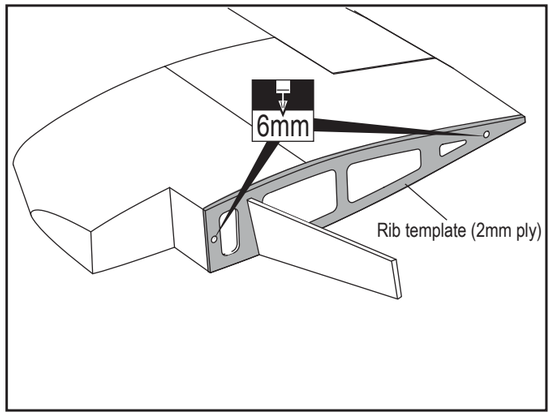
Do not overlook this symbol!
Warning!

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

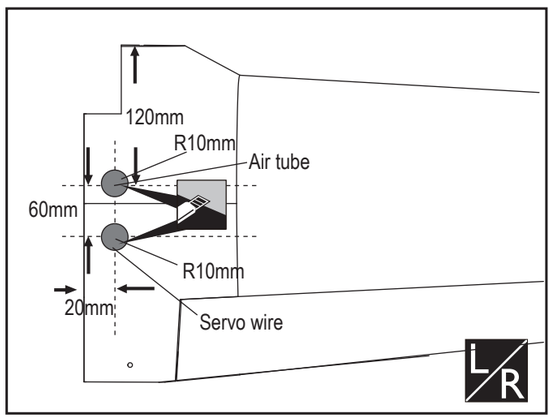


Rib template (2mm ply)	1
Wood dowel (6x30mm)	2

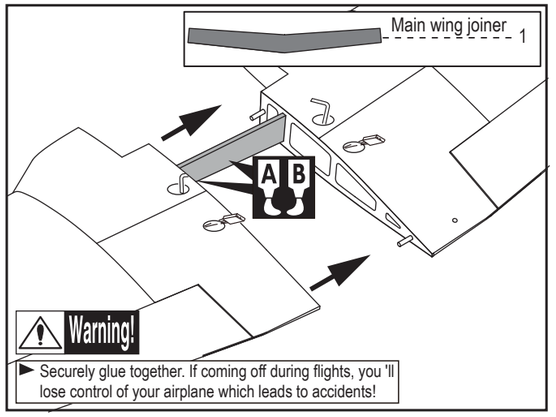
23 According to the rib template drill holes to another main wing.



24 Trim holes in the appropriate position in the wings and drag the servo wire and the air tube out.

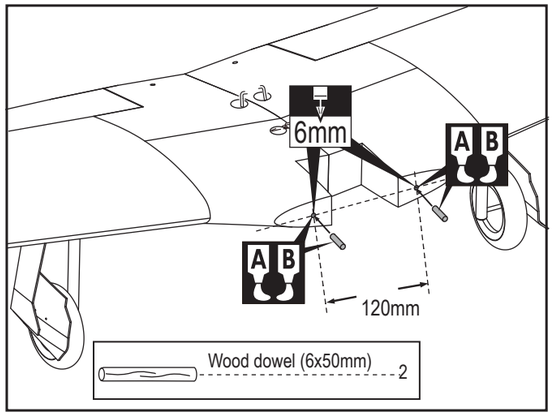


25 Epoxy the main wing hardly together with wing joiner.



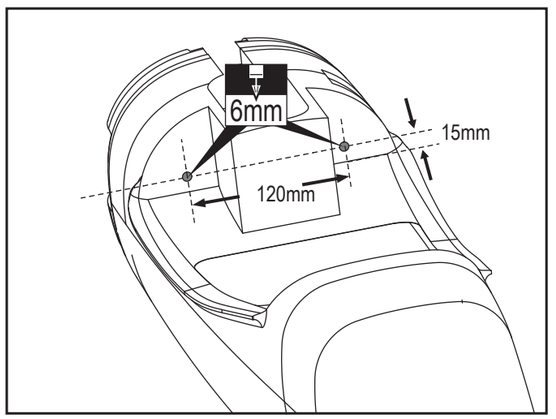
Securely glue together. If coming off during flights, you 'll lose control of your airplane which leads to accidents!

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



Wood dowel (6x50mm)	2

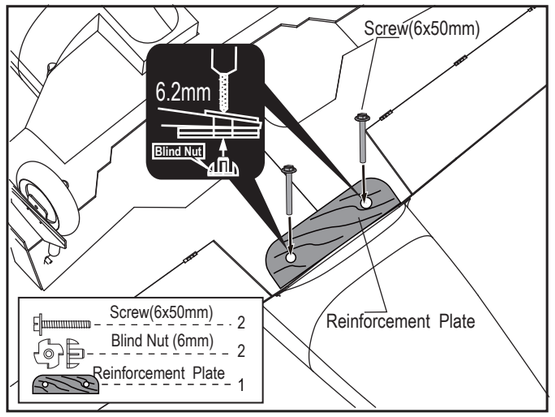
27 Drill holes to relevant position in the fuselage.



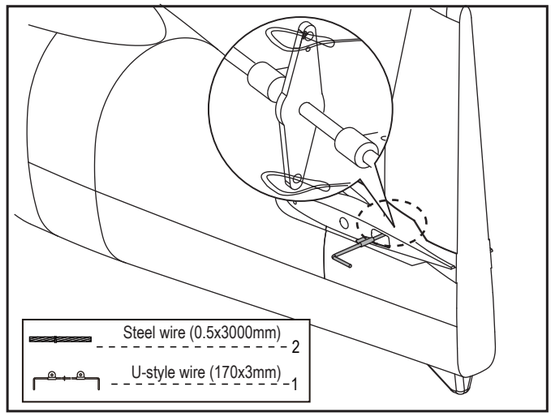
A B Apply epoxy glue.
C.A Apply instant glue (CA glue, super glue).
L/R Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.

Do not overlook this symbol!
Warning!

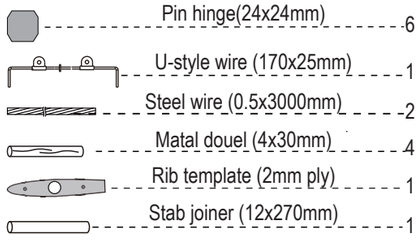
28 Assemble the wings to the fuselage with screw and blind nut as below.



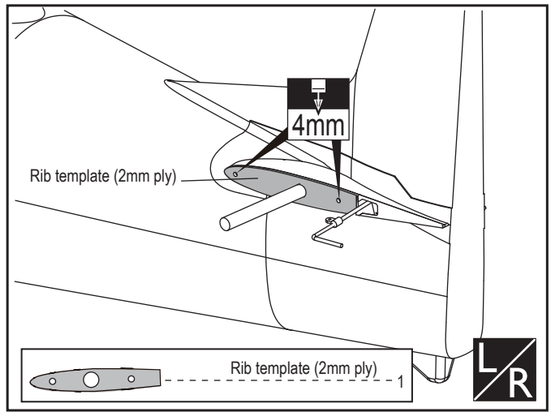
30 Set the U-style wire through the enlarge hole as below.



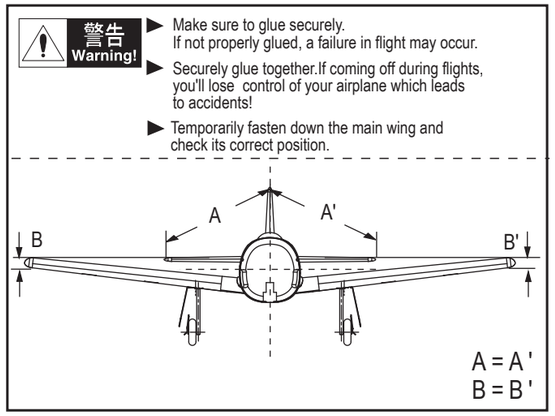
Accessory list for the coming installation steps.



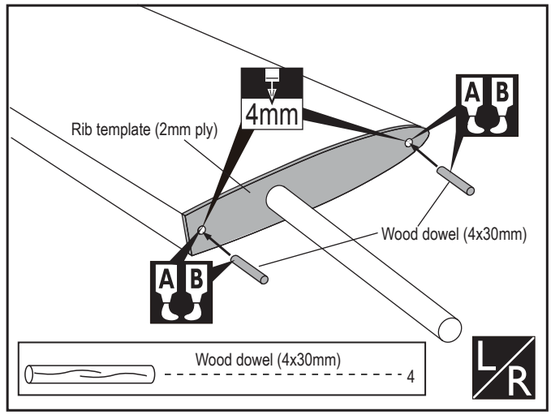
31 A cording to thr rib template drill holes to the tail of fuselage as below.



29 Assembly of the stabilizer.

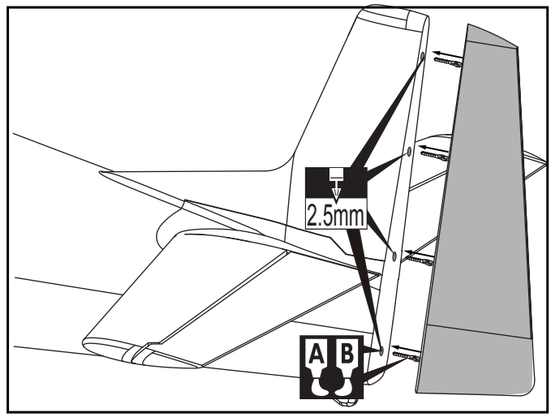


32 Drill two holes at the stabilizer root base via rib template and epexy the wood dowel in them.

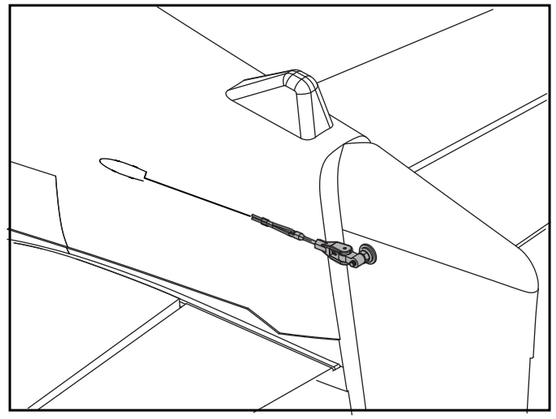


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol! Warning!

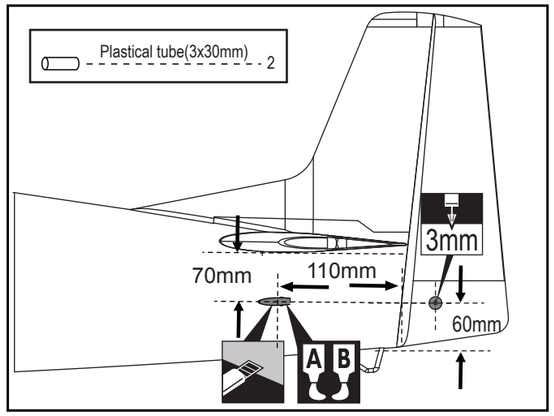
55 Drill holes to the relevant position in the tailing edge and epoxy the rudder to them.



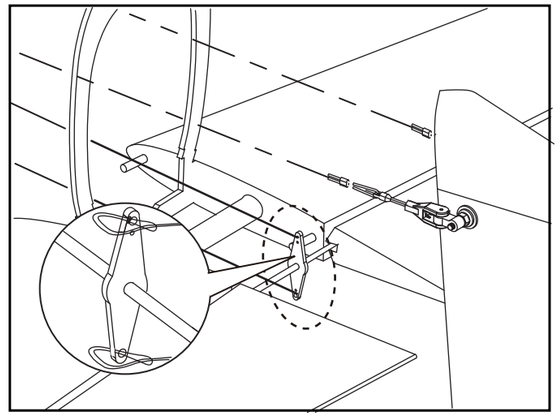
58 The sketch map of the linkage for the rudder and the tail wheel.



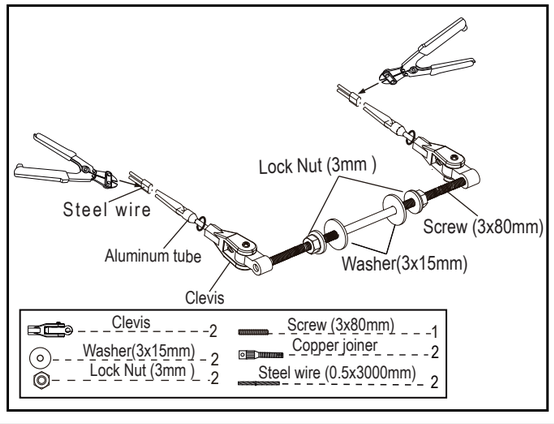
56 Drill a small hole to appropriate possition in the fuselage for installing the plastical tube.



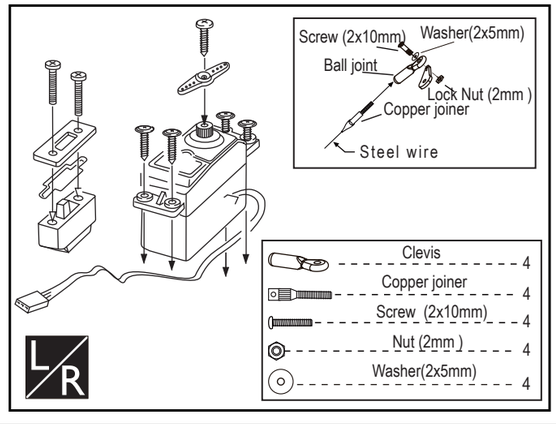
59 The sketch map of the linkages for the rudder and elevator in the fuselage.



57 The sketch map after the rudder shaft assemble finished.

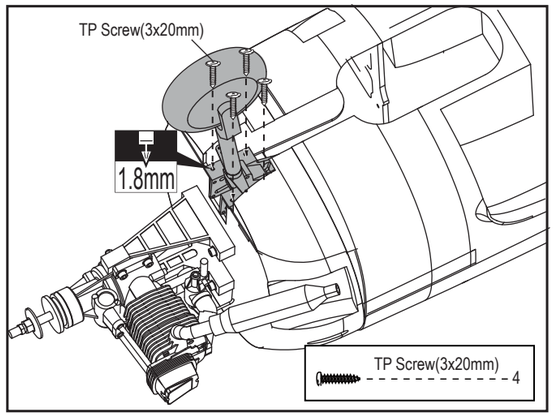


60 Install the servo.

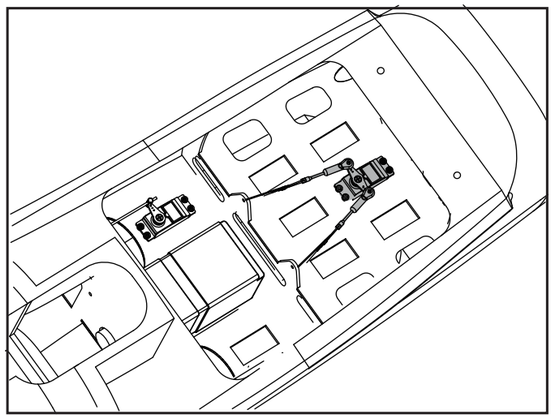


Apply epoxy glue.
Assemble left and right sides the same way.
Pay close attention here!
Apply instant glue (CA glue, super glue).
Ensure smooth non-binding movement while assembling.
Cut off shaded portion.
Do not overlook this symbol! Warning!

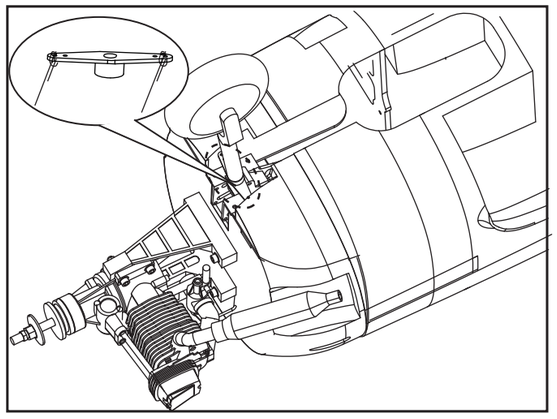
49 Assemble the retract to the fuselage with TP Screw as illustration.



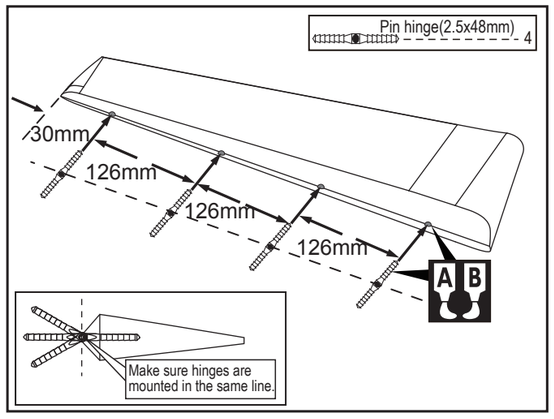
52 Mount the servo of nose wheel to the fuselage.



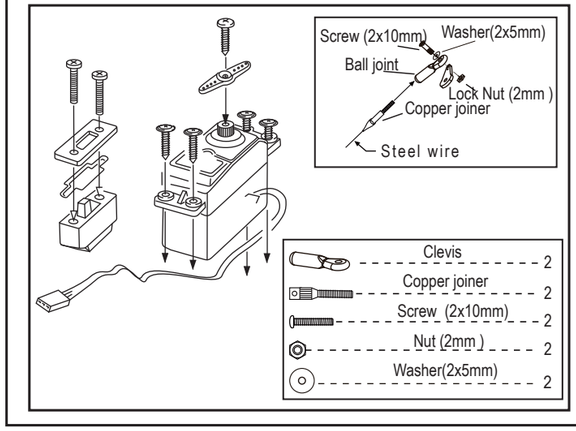
50 Assemble the steel wire to the nose arm.



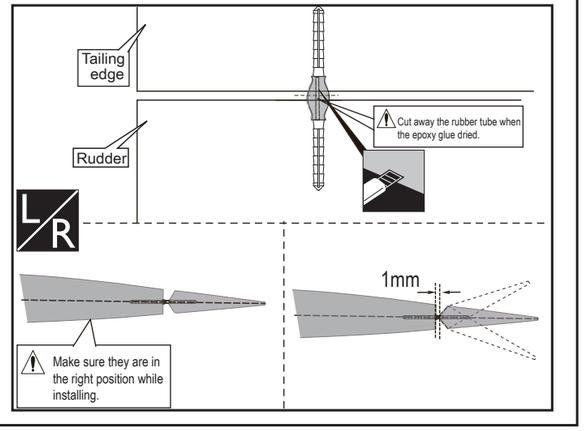
53 Drill holes to appropriate position in the rudder and epoxy the ping hinges in them



51 Install the servo.

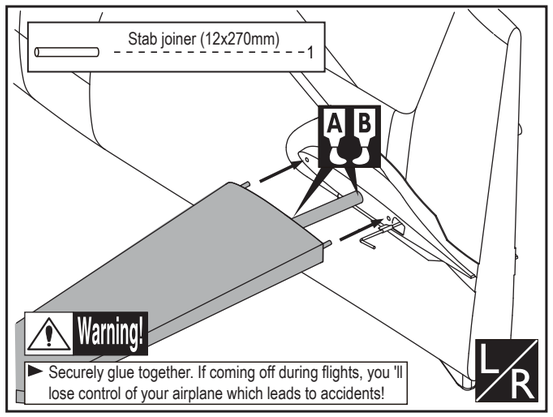


54 Keep some space about 1mm width between the tailing edge and the rudder.

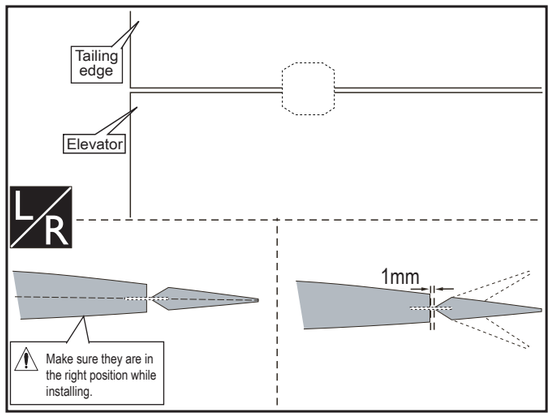


A B Apply epoxy glue.
C.A Apply instant glue (CA glue, super glue).
L R Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.
Do not overlook this symbol! Warning!

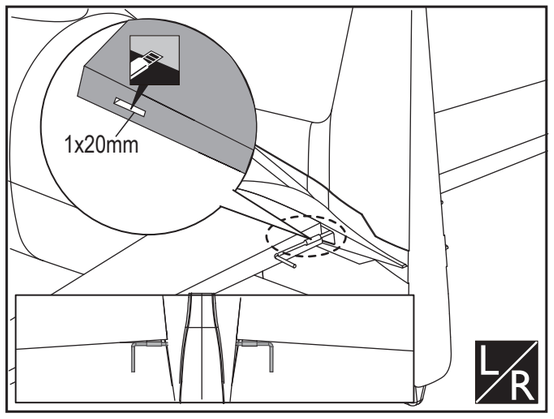
33 Assemble the stablilizers carefwly to fuselage.



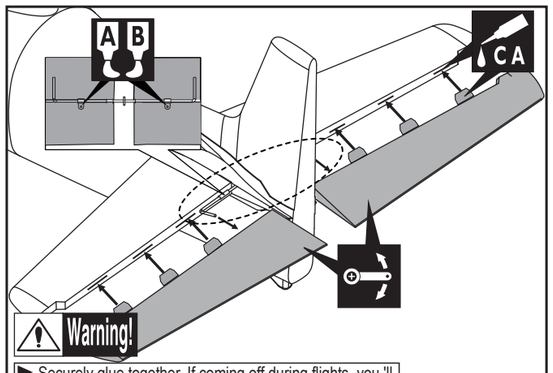
36 Keep some space about 1mm width between elevator and tailing edge.



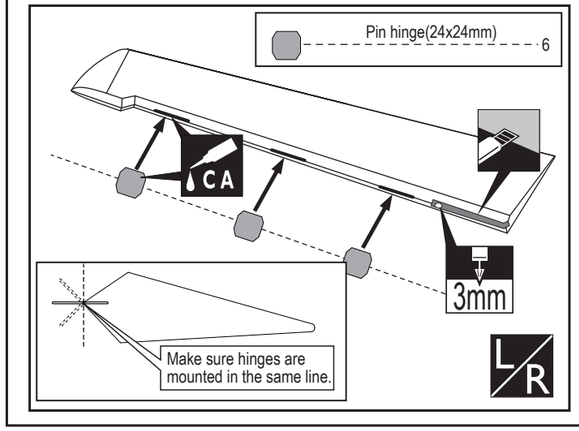
34 Trim slot to appropriate position in the stabilizer .



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



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

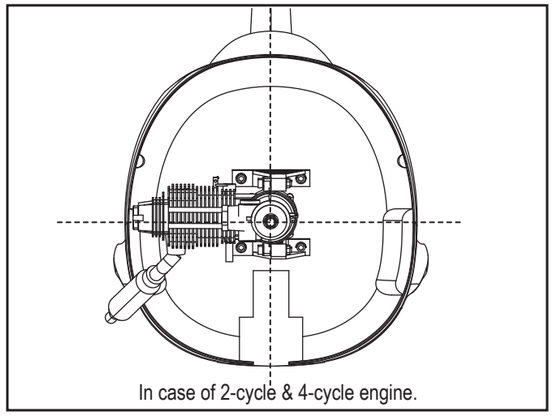


Accessory list for the coming installation steps.

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 (2x650mm)	1
Engine mount (68x105mm)	2
Fuel tank (550cc)	1

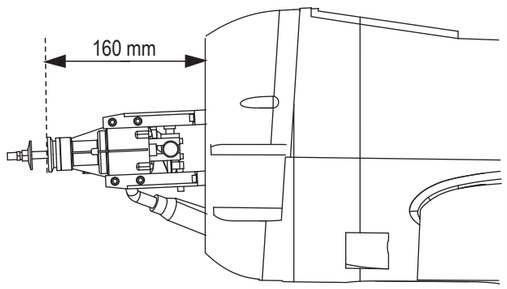
A B Apply epoxy glue.
C.A Apply instant glue (CA glue, super glue).
L R Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.
Do not overlook this symbol! Warning!

38 The front view of the engine installation finished.

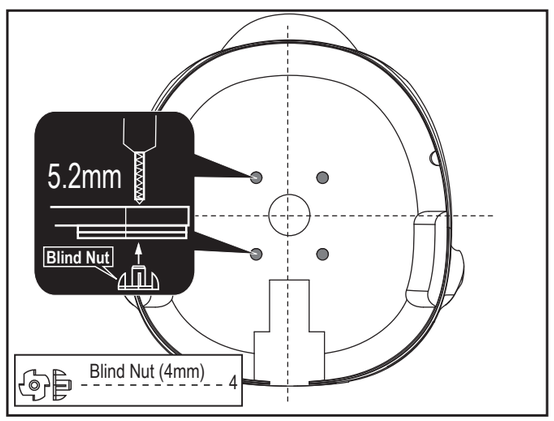


In case of 2-cycle & 4-cycle engine.

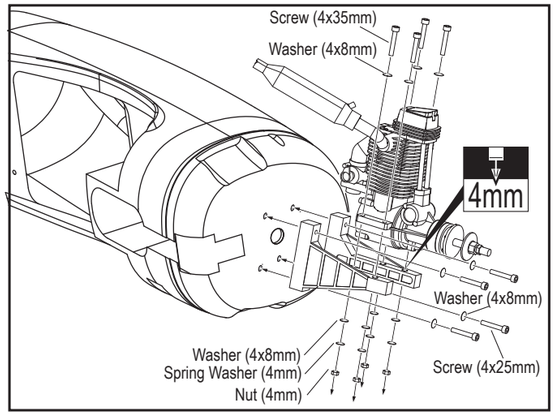
39 The side sketch map of the engine installation finished.



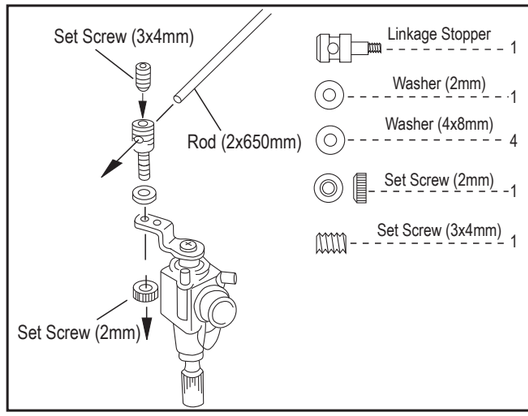
40 Drill 4 holes and set blind nut in appropriate position in the firewall before install the engine.



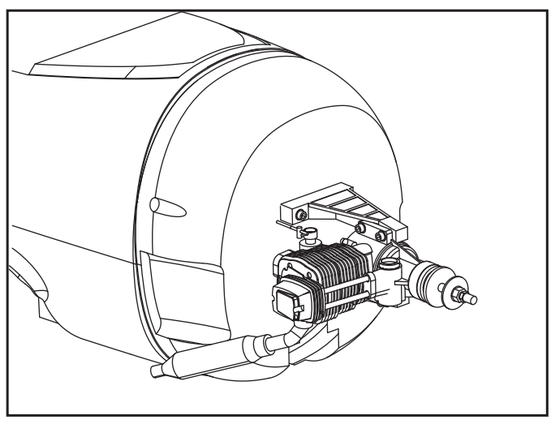
41 Install the engine carefully.



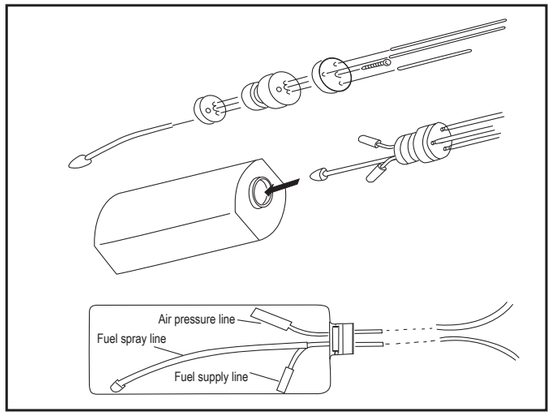
42 Assemble the accelerator push rod to the engine.



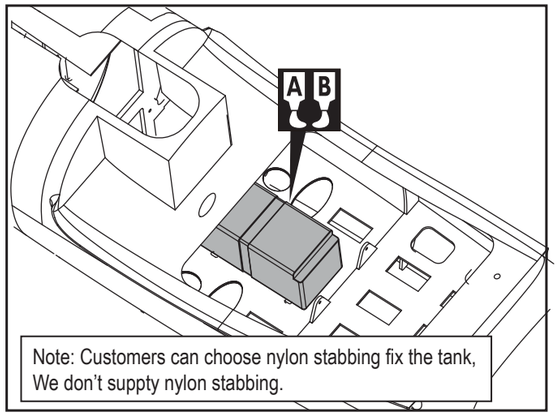
43 Engine installation finished sketch map.



44 Assembly of the fuel tank.

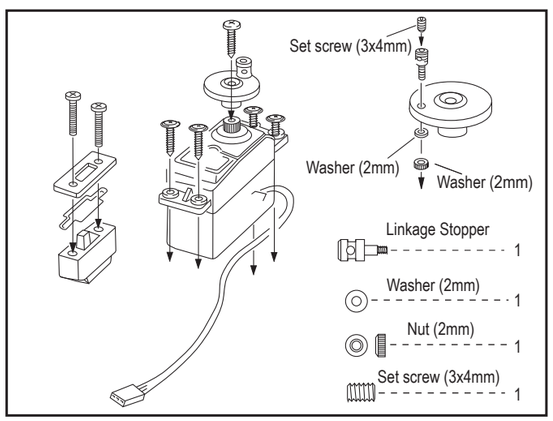


45 Mount the fuel tank to the fuselage.

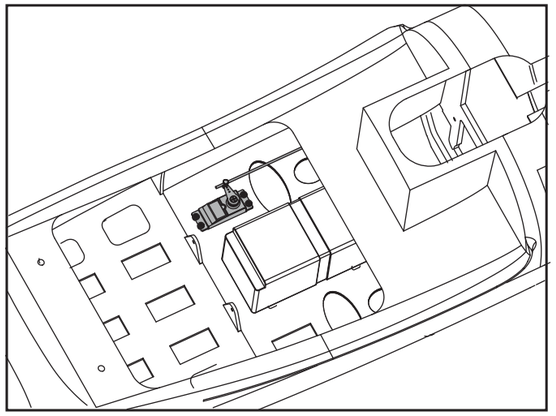


Note: Customers can choose nylon stabbing fix the tank, We don't suppty nylon stabbing.

46 Install the servo.



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



Accessory list for the coming installation steps.

Steel wire (0.5x3000mm)	2	Steel wire (0.5x1500mm)	2
Clevis	2	Clevis	6
Washer(3x15mm)	2	Copper joiner	6
Lock Nut (3mm)	2	Screw (2x10mm)	6
Screw (3x80mm)	1	Nut (2mm)	6
Copper joiner	2	Washer(2x5mm)	6
Plastical tube(3x30mm)	2	Retainer	1
Pin hinge(2.5x48mm)	4	Clevis	1
wheel (90mm)	1	Air tank	1
Bushing (8X4mm)	2	Switch	1
Lock Nut (4mm)	2	Ring	1
TP Screw(3x20mm)	4	Rod (2x300mm)	1

48 Assemble the wheel and oleo strut to the retract as illustration.