Before start , please carefully read the explanations!

Zero Fighter 52#

Specification:
Wing Span: 2362mm/93in
Length: 1916mm/75.4in
Flying Weight: 12.3kg
Wing area: 93.7dm2
Engine: 60-80cc
R/C System: 8+ channel radio system
Servo: 10
C.G: 145mm back from the leading edge at wing root

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!)

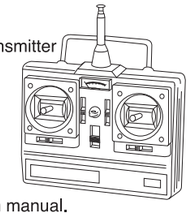
CAUTION: For details concerning the equipment listed below (size, maker, etc.), check with your hobby shop.

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

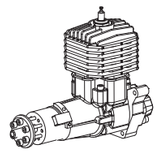
A minimum 6 channel transmitter for airplanes.



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

2 Engine and Muffler

Model Airplane Engine 35cc gas engine



Muffler

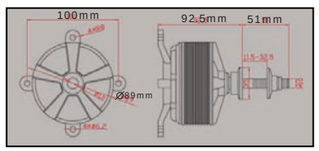
3 Propeller Spinner

4.1 in scale spinner

Purchase a propeller that will match your engine.

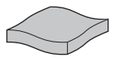
Engine 22″X10

Motor 24″X10



Motor: 12S 5000MAH 180KV
High Voltage ESC 130A

4 Sponge Sheet



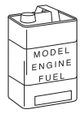
Gasoline tube

Fuel Filter

5 Required for engine starting:

WARNING: Normal gasoline cannot be used with glow engines.

Gasoline

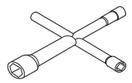


Fuel Pump

Booster Cord

4 D-size Batteries

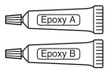
Plug Wrench



6 Glue

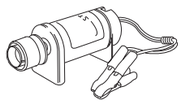
Instant Glue

Epoxy Glue

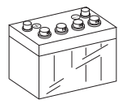


7 Other equipment for enhancing airplane operation & performance

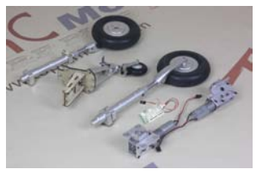
Engine Starter



12V Battery (for starter)



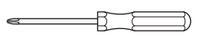
9 Optional electric retract set



TOOLS REQUIRED (Purchase separately!)

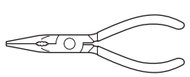
Sharp Hobby Knife

Phillips Screw Driver (l, m, s)

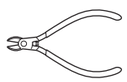


Awl

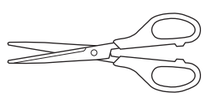
Needle Nose Pliers



Wire Cutters



Scissors



BEFORE YOU BEGIN

1 Read through the manual before you begin, so you will have an overall idea of what to do.

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

3 Symbols used throughout this instruction manual, comprise:

4 We strongly 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!

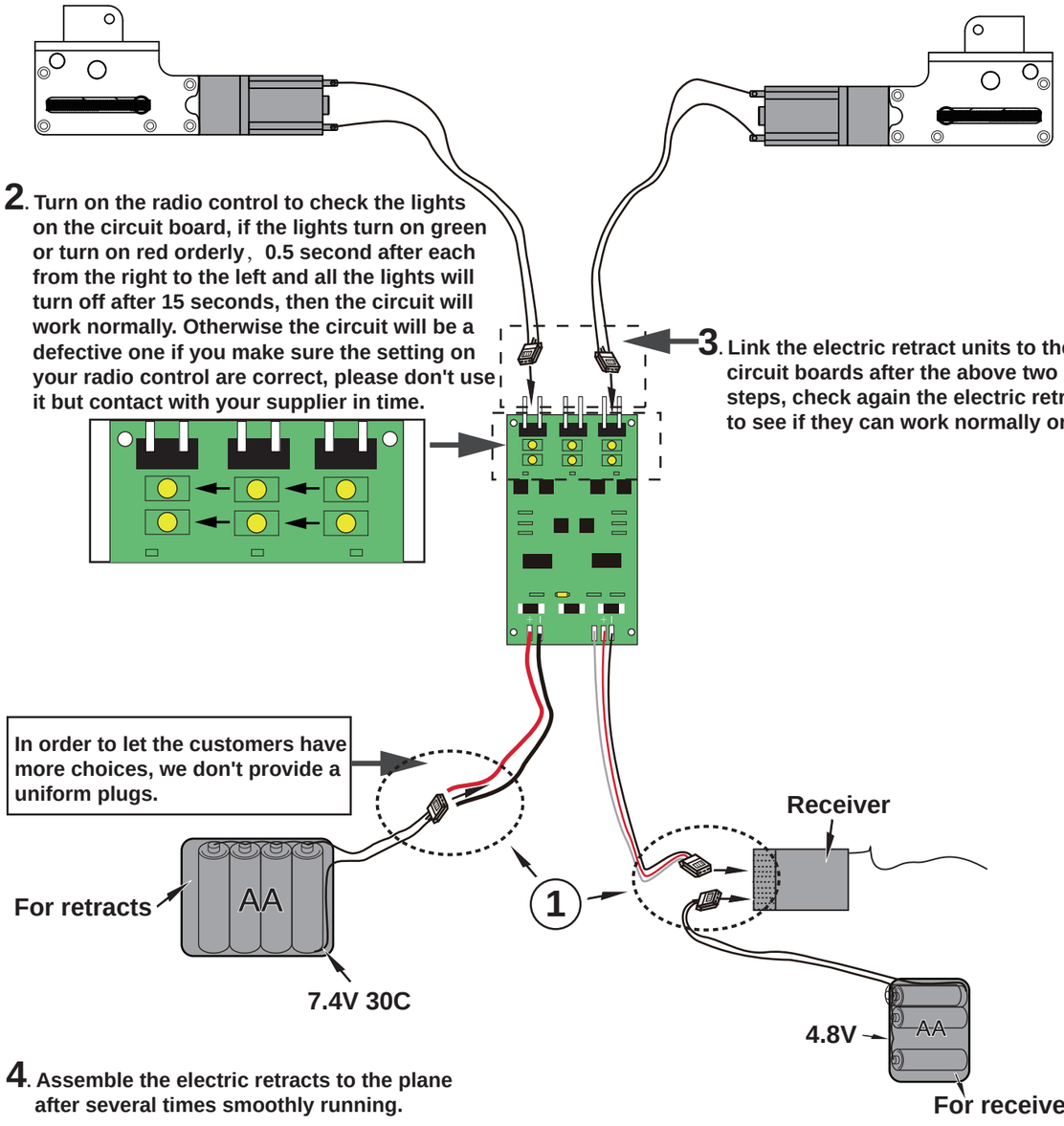
L R Assemble left and right sides the same way.

X Must be purchased separately!

Electric retract system

Thank you very much for purchasing our TRCM optional electric retract set, all our products were passed strict QC before they shipped out to the customers. In order to avoid probably trouble happen, we still would like you to follow the steps below before you assemble our electric retracts to your plane.

1. Connecting the circuit board to the battery and receiver.



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

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

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

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

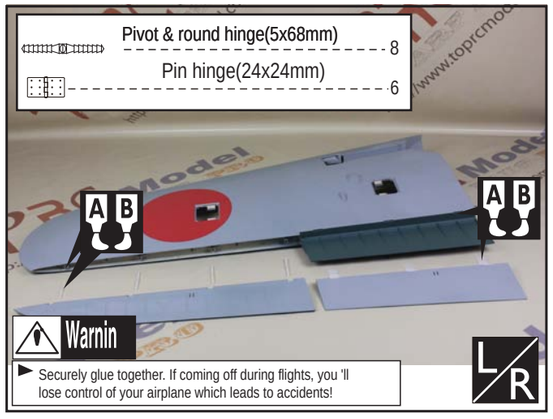
Warning! Please don't ceaselessly turn and off the switch in 2 seconds, if you do this way, the circuit board will be heated.

Accessory list for the coming installation steps.

Horn	4	Screw (3x6mm)	8
Horn	4	L bracket	8
Pivot & round hinge(5x68mm)	8	Screw (3x10mm)	16
Pin hinge(24x24mm)	6	Servo tray(68.5x56.5x2mm)	4
Clevis (2mm)	8	Main wing joiner(30x415mm)	2
Push rod (115x2mm)	2	Main wing joiner(20x227mm)	2
Push rod (138x2mm)	2	TP Screw (2.3x12mm)	16
Screw (2x12mm)	8		
Locknut (2mm)	8		

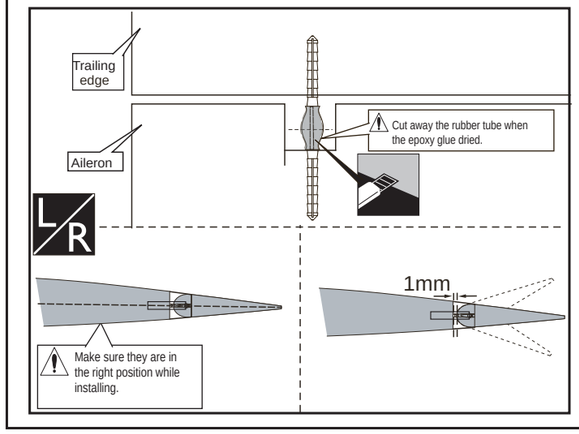
1

Apply instand type AB glue to the holes in the ailerons, flaps and hinges.



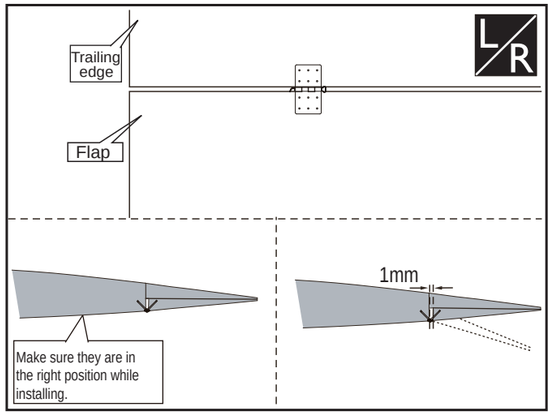
2

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



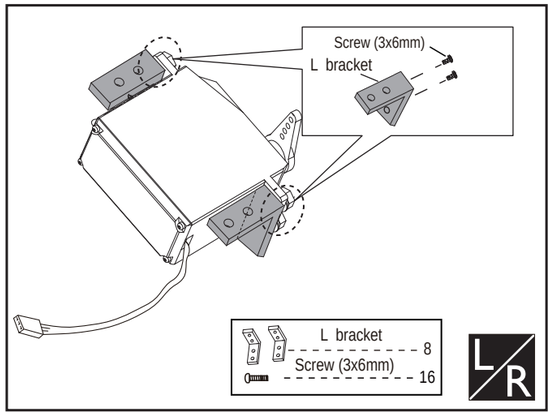
3

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



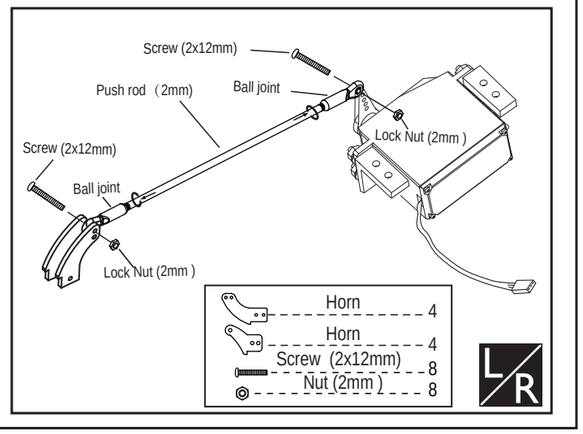
4

Install the L brackets to the servo of ailerons and flaps as illustration below.



5

Install the nylon control horn and connect the linkage.



A B Apply epoxy glue.

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

Pay close attention here!

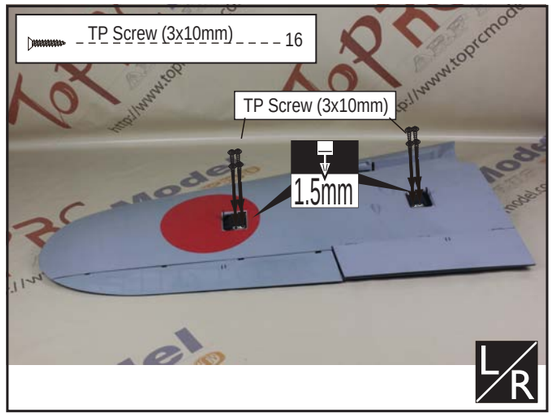
Do not overlook this symbol! Warning!

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

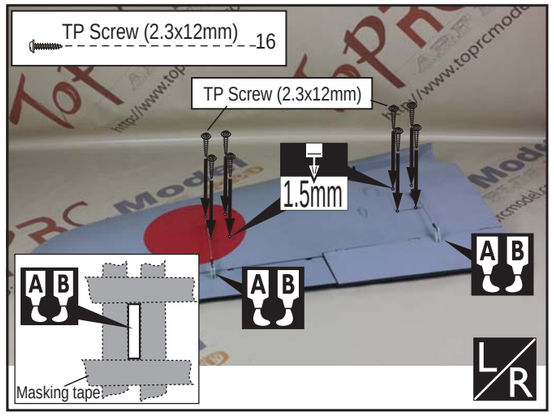
Ensure smooth non-binding movement while assembling.

Cut off shaded portion.

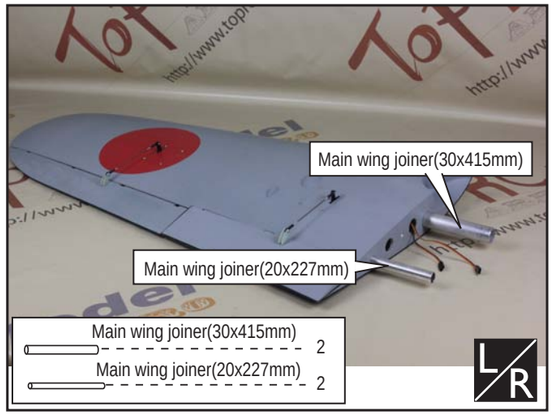
6 Assemble the servo to the wing with screws.



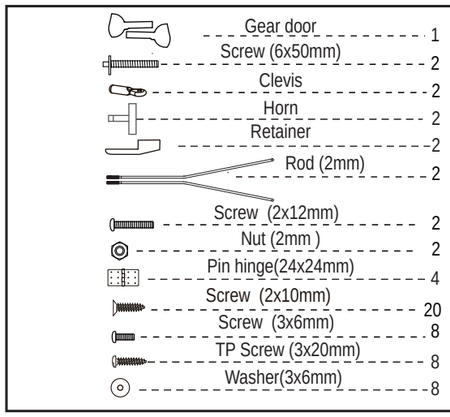
7 Epoxy the fiber horns to the ailerons and flaps, secure the servos.Install the nylon control horn and connect the linkage.



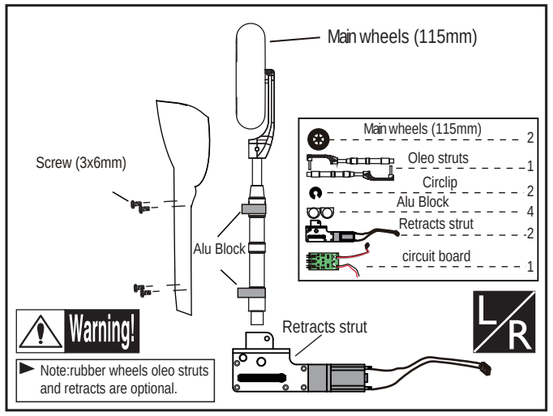
8 Assemble the wing tubes to the wing and drag the servo lines out from the hole as illustration.



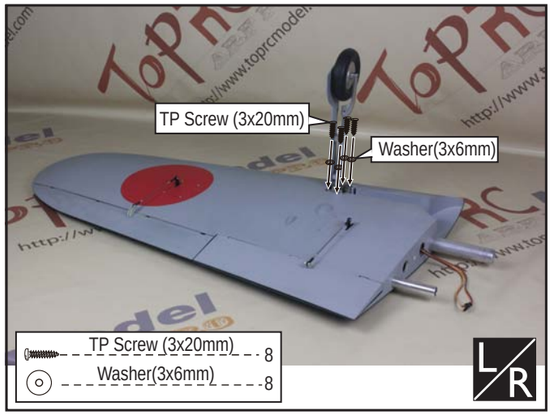
Accessory list for the coming installation steps.



9 The sketch map of the landing gear and landing gear door.



10 Assemble the landing gear to the appropriate position in the landing gear mount and install the wing to the fuselage.



Apply epoxy glue.

Apply instant glue (CA glue, super glue).

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!

Accessories packing list

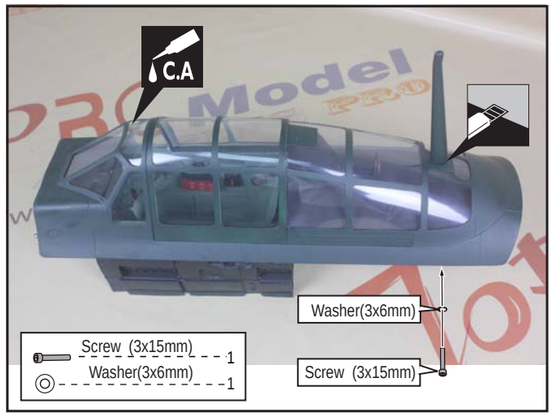
TP Screw (2.3x8mm)	28
TP Screw (2.3x12mm)	26
TP Screw (3x30mm)	6
Screw (2.6x12mm)	4
Screw (2x10mm)	20
Screw (3x10mm)	16
Screw (2x10mm)	16
Screw (3x6mm)	16
Screw (3x12mm)	19
Screw (3x15mm)	3
Locknut (2mm)	19
Washer(3x8mm)	19
Copper joiner	4
Aluminum tube	4
Linkage Stopper	2
L bracket	8
Scale exhaust tubes	7
Push rod (2x115mm)	2
Push rod (2x138mm)	2
Push rod (2x70mm)	2
Rod (2mm)	1
Rod (2mm)	1
Rod (2mm)	1
Plastic tube (2x650mm)	1
Steel wire (0.5x3000mm)	4
Rudder steering arm(3mm)	1
Horn(2mm)	4
Horn(2mm)	8
Horn	2
Retainer	3
Clevis	19
pivot & round hinge(5x68mm)	19
Pin hinge(24x24mm)	10
Screw (6x50mm)	2
Servo tray(2mm)	4
Ply plate (6mm)	1
Ply plate (3mm)	1
Exhaust template (3mm)	1
Cowling Wooden Frame	1

Gear door A	1
Gear door B	1
Antenna	1
Drop tank	1
Canopy (PVC)A	1
Canopy (PVC)B	1
Canopy (PVC)C	1
Main wing joiner(30x415mm)	2
Main wing joiner(20x227mm)	2
carbon fiber tube(12x480mm)	2
Fuel tank (800cc)	1

Purchased separately

Tail landing gear	1
Main wheels (100mm)	2
Oleo struts	1
Circlip	2
Alu Block	4
Retracts strut	2
circuit board	1
TP Screw (3x20mm)	8
Washer(3x6mm)	8

50 Assemble the clear canopy to the cockpit with AC glue and fix the antenna to the cockpit with screw.

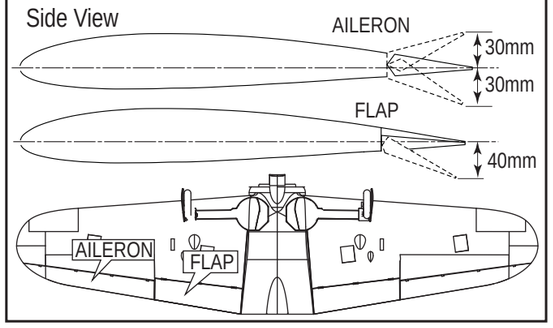


Screw (3x15mm) 1
Washer(3x6mm) 1

51 Assemble the entire cockpit to the fuselage.

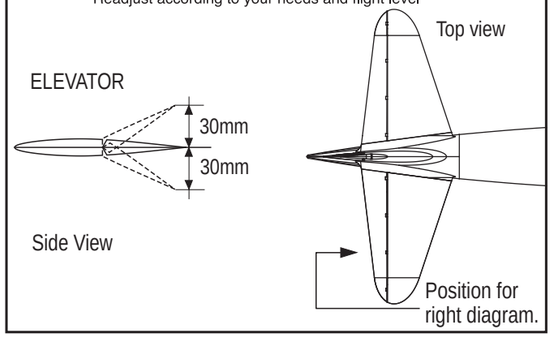
52 Adjustment.

► 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.



53 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

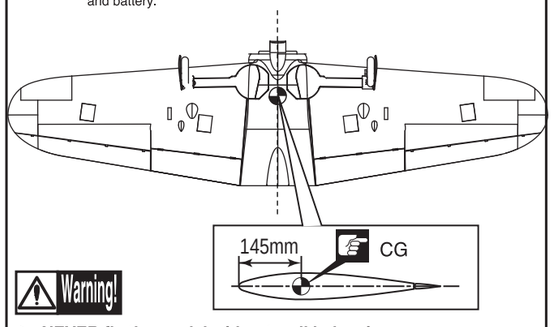


54 Adjustment.

► 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.

55 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.

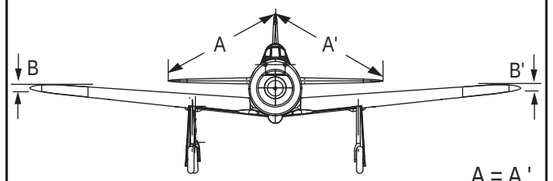


Warning!
► ***NEVER fly the model without well balancing.***

Apply epoxy glue.
Apply instant glue (CA glue, super glue).
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!

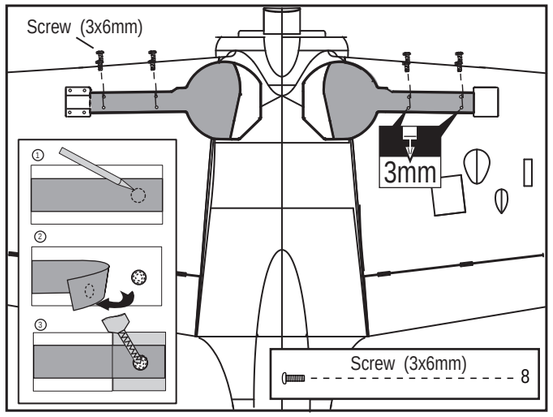
11 The sketch map should be when the wing assembly completion.

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 '

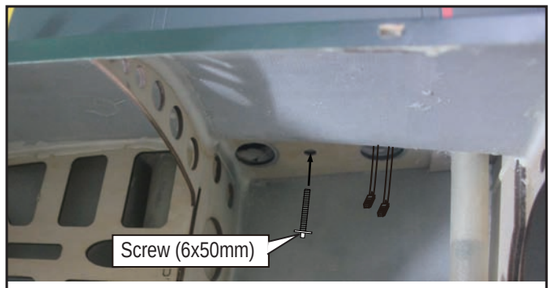
12 Drill holes to the landing gear doors and assemble them to the landing gears with screws.



Screw (3x6mm) 8

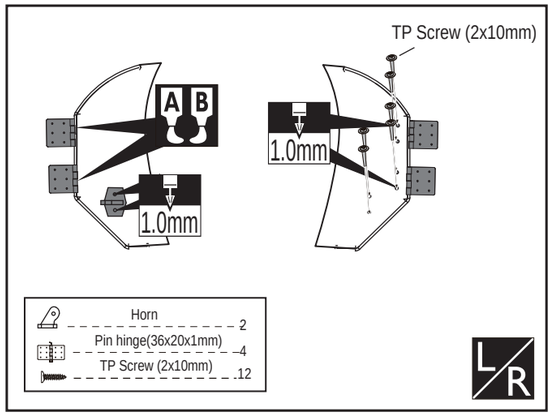
13 The sketch map when the gear get down.

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



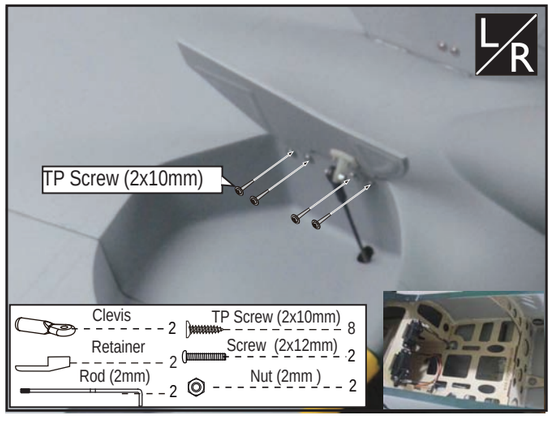
Screw (6x50mm) 2

15 Epoxy the pinned hinges,horns to the inner gear door carefully, drill holes through the gear door and pinned hinges and fix the pinned hinges tightly to the inner gear door.



Horn 2
Pin hinge(36x20x1mm) 4
TP Screw (2x10mm) 12

16 Assemble the inner gear doors to the fuselage with screws and epoxy, connect the horn on the inner gear door to the servo with push rod.



Clevis 2
Retainer 2
Rod (2mm) 2
TP Screw (2x10mm) 8
Screw (2x12mm) 2
Nut (2mm) 2

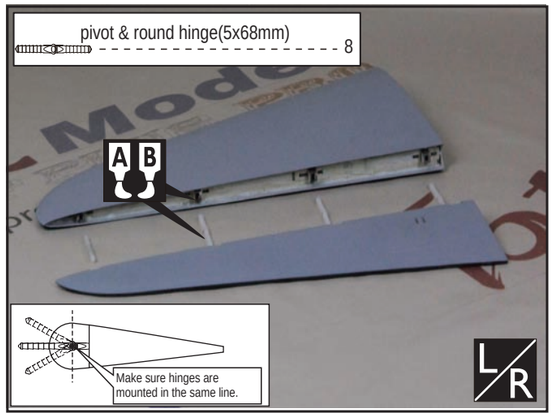
Apply epoxy glue.
Apply instant glue (CA glue, super glue).
Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.
Do not overlook this symbol! Warning!

Accessory list for the coming installation steps.

Horn	4
pivot & round hinge(5x68mm)	8
Clevis	4
Push rod(70x2mm)	2
Screw (2x12mm)	4
Lock Nut (2mm)	4
Washer(3x8mm)	4
Screw (2.6x12mm)	4
Carbon fiber stab bolt tube(12x480mm)	2

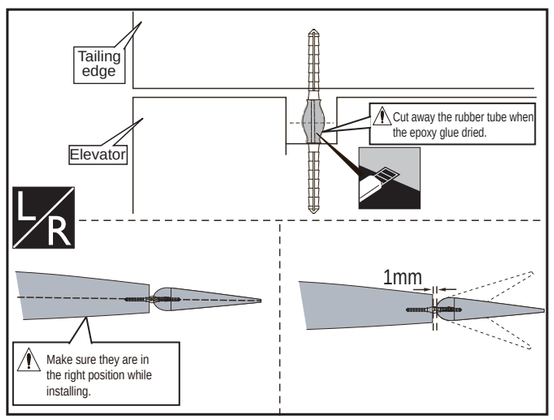
17

Apply instand type AB glue to the holes in the stabilizer and hinges.



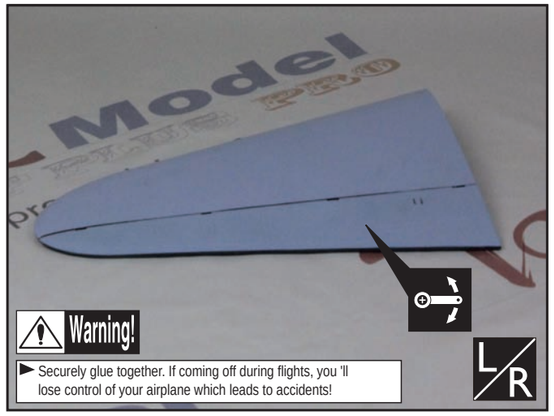
18

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



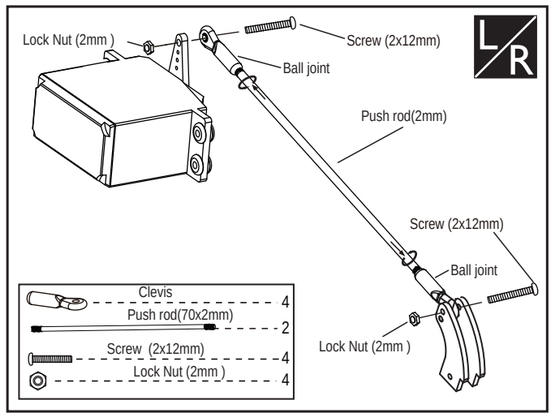
19

Epoxy the elevator to the stabilizer.



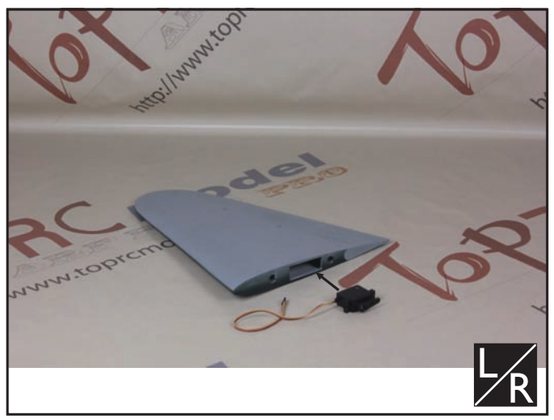
20

Install the control horn and connect the linkage.



21

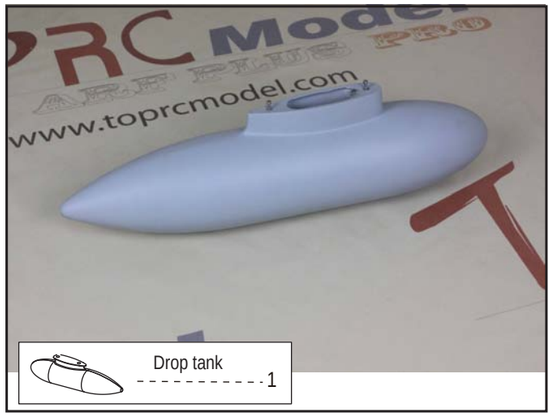
The steps to assemble the servo for elevator.



Apply epoxy glue.
Apply instant glue (CA glue, super glue).
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!

44

Steps for assembling the drop tank.Factory already set blind nuts in the drop tank.

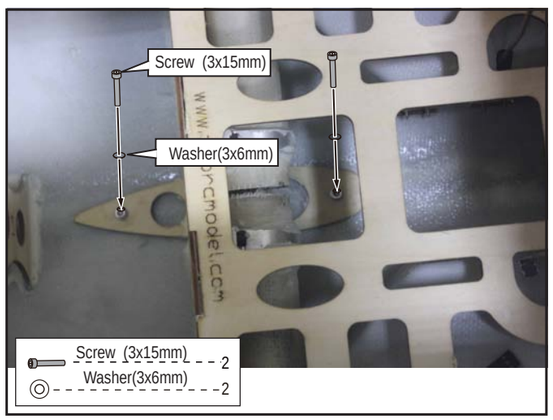


45

Put the drop tank to the belly of fuselage.

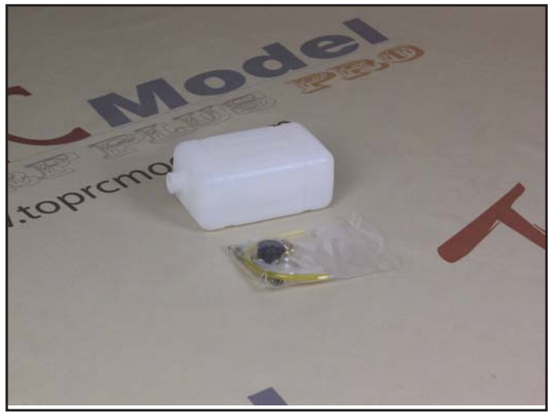
46

Fix the drop tank by screws from the inner fuselage as illustration.



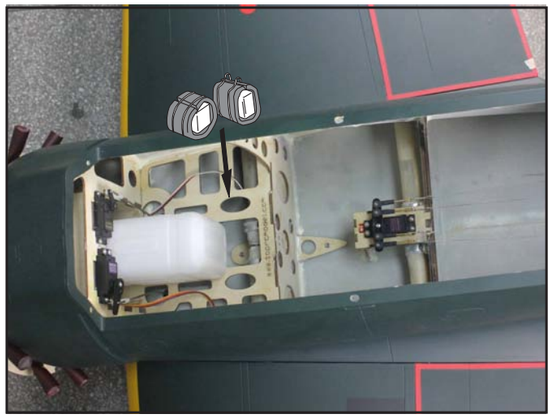
47

Step for assembling the fuel tank.



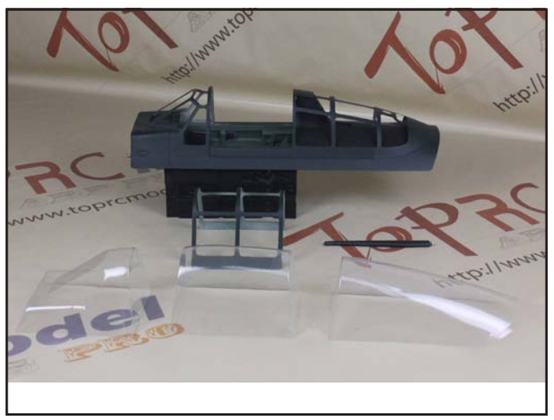
48

Mount the fuel tank, battery and receiver to the fuselage.



49

Step for assembling the cockpit and canopy.

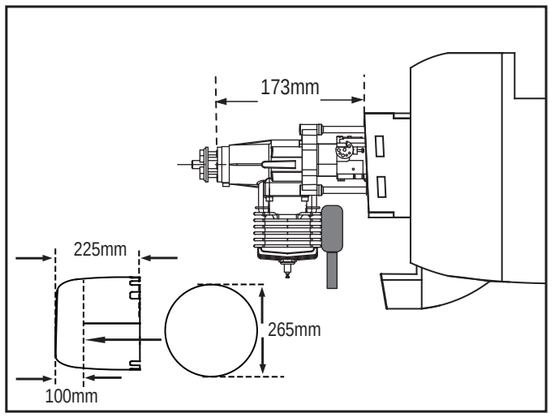


Apply epoxy glue.
Apply instant glue (CA glue, super glue).
Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.
Do not overlook this symbol! Warning!

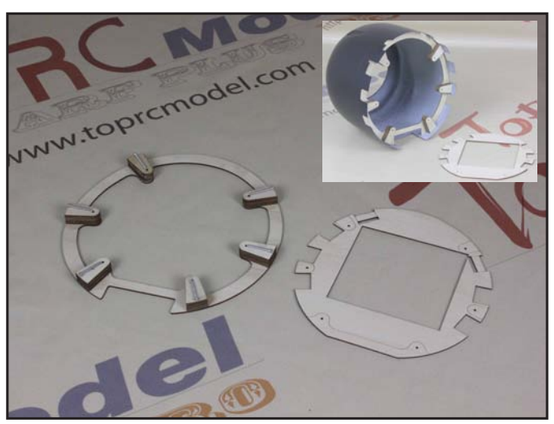
Accessory list for the coming installation steps.

Linkage Stopper	2	Canopy (PVC)	1
Plastic tube (2x650mm)	1	Canopy (PVC)	1
Fuel tank (800cc)	1	Canopy (PVC)	1
Scale exhaust tubes	7	Antenna	1
Screw (3x30mm)	6	Drop tank	1
Washer(3x6mm)	6	Screw (3x15mm)	3
Exhaust template (3mm)	1	Washer(3x6mm)	3
Cowling Wooden Frame	1	TP Screw (2.3x8mm)	14
TP Screw (2.3x12mm)	6		

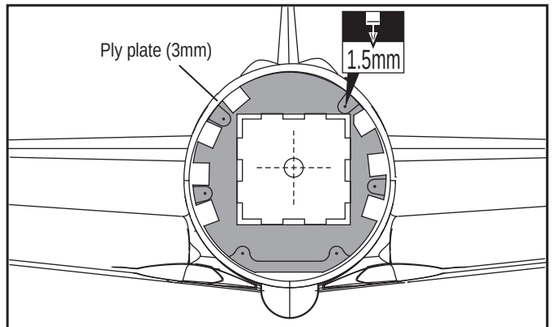
39 The side view when the engine install completion.



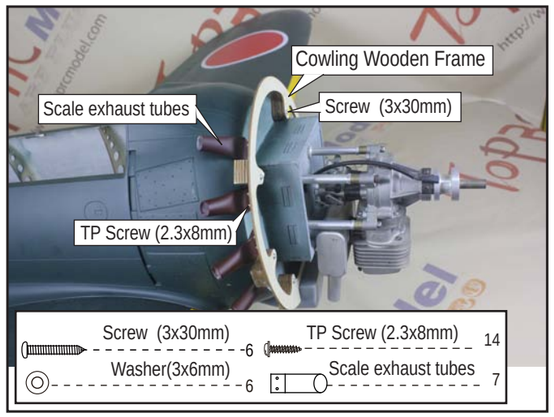
40 The picture of the cowling wooden frame to the cowling.



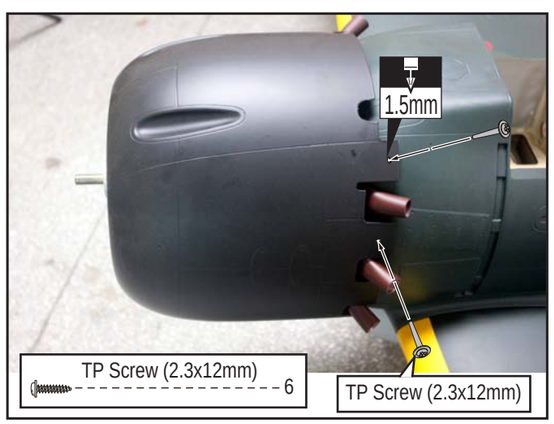
41 Put the the cowling frame and the exhaust template on the firewall place, mark the exhaust position out base on the exhaust template.



42 Install the scale exhaust tubes and the cowling wooden frame in place on the fuselage with screws, assemble the engine to the engine mount.



43 Fix the cowling to the cowling wooden frame with TP screws.

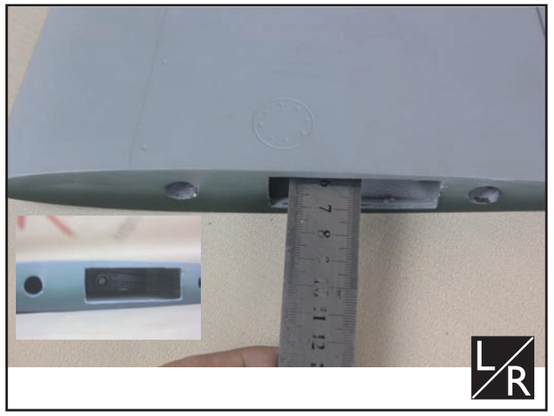


Apply epoxy glue. Assemble left and right sides the same way. Pay close attention here!

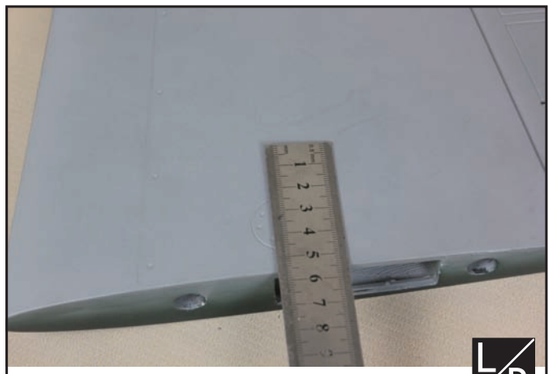
Apply instant glue (CA glue, super glue). Ensure smooth non-binding movement while assembling. Cut off shaded portion.

Do not overlook this symbol! Warning!

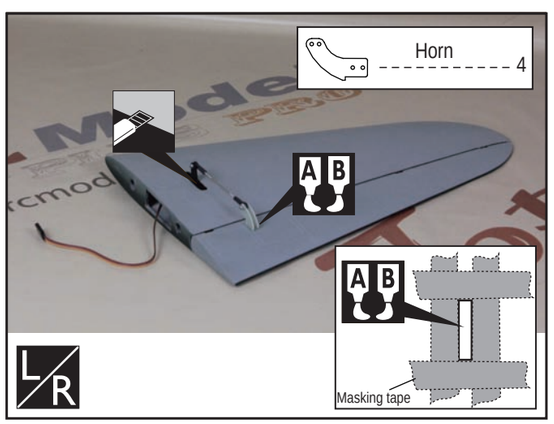
22 Measure the deepth to confirm what the servo position will be as illustration.



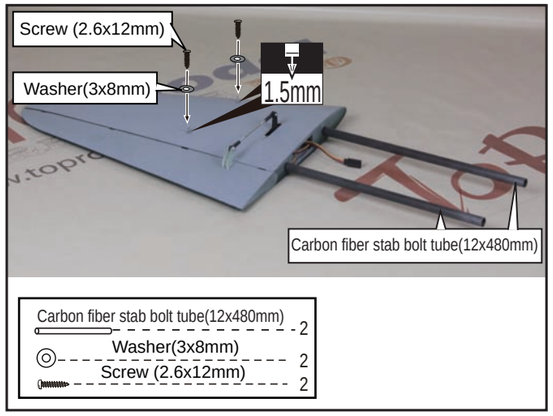
23 Mark out the position of the elevator servo on the stabilizer.



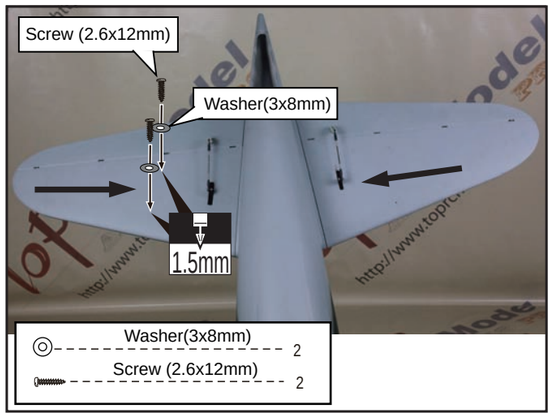
24 Trim a slot in the stabilizer base on the mark, put the servo of elevator into the stabilizer through the hole in the wing root,install the servo to appropriate possition with screws and epoxy the horn to the slot in the elevator.



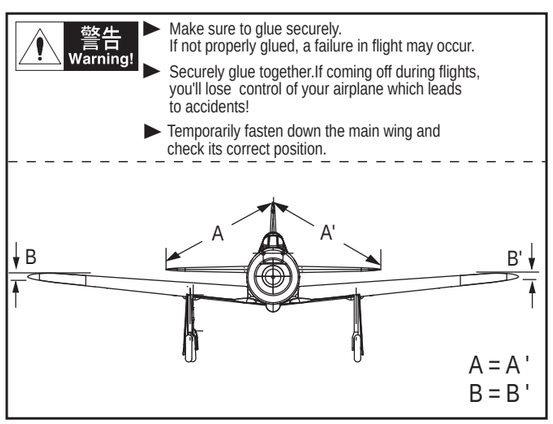
25 The sketch map after the stabilizer and elevator assemble completely.



26 Assemble the fixed stabilizer to the fuselage carefully and put the other stabilizer to the fuselage through the fiber tubes, drill holes carefully to the carbon fiber tube through the holes in the stabilizer and fix the stabilizer.



27 The sketch map after the stabilizer and elevator assemble completely.



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

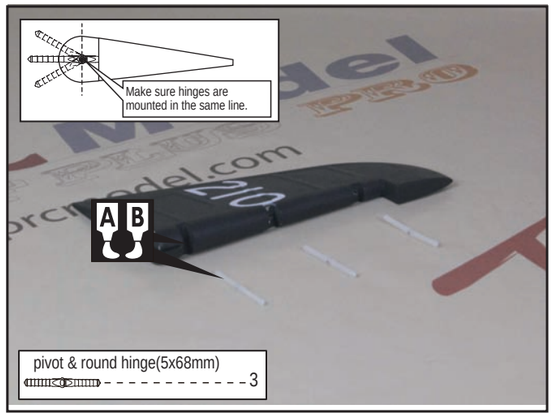
Apply instant glue (CA glue, super glue). Ensure smooth non-binding movement while assembling. Cut off shaded portion.

Do not overlook this symbol! Warning!

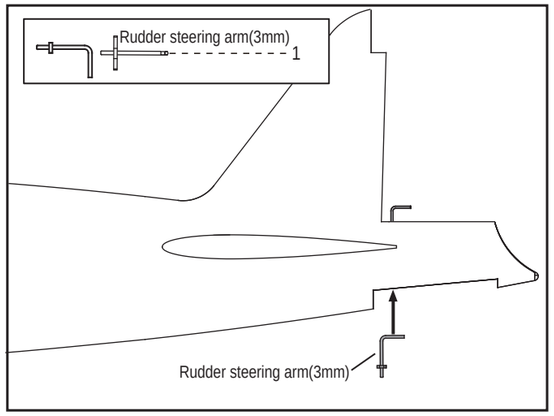
Accessory list for the coming installation steps.

pivot & round hinge(5x68mm)	3	TP Screw (2.3x12mm)	4
Retainer	1	TP Screw (2.3x8mm)	6
Clevis	5	Rod (2x200mm)	1
Rudder steering arm(3mm)	1	Copper joiner	4
Steel wire (0.5x3000mm)	4	Aluminum tube(3x6mm)	4
Ply plate (6mm)	1	Screw (2x10mm)	5
Ply plate (3mm)	1	Nut (2mm)	5

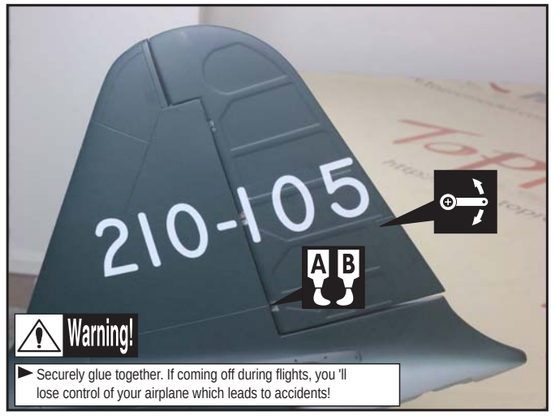
28 Epoxy the pivot & round hinges to the rudder.



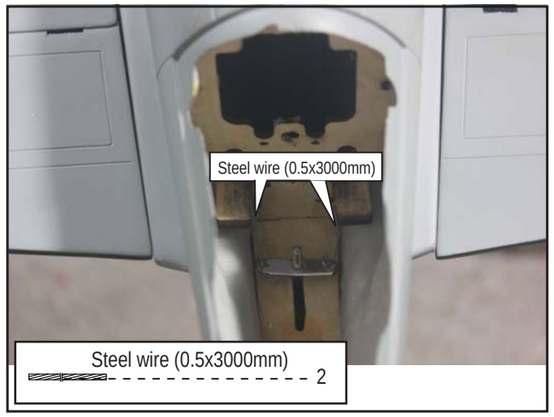
29 Assemble the rudder steering arm to the tair fuselage as illustration.



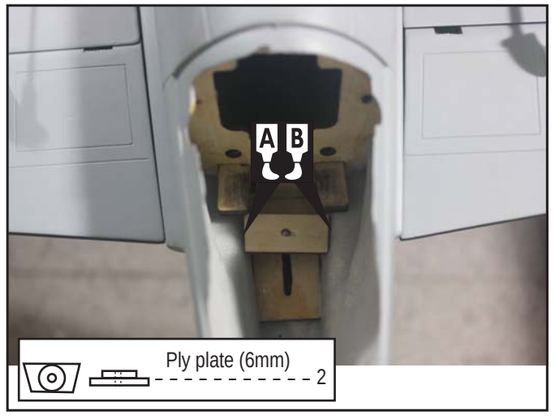
30 Epoxy the rudder to the vertical fin.



31 The sketch map of the steel wires work for the rudder.

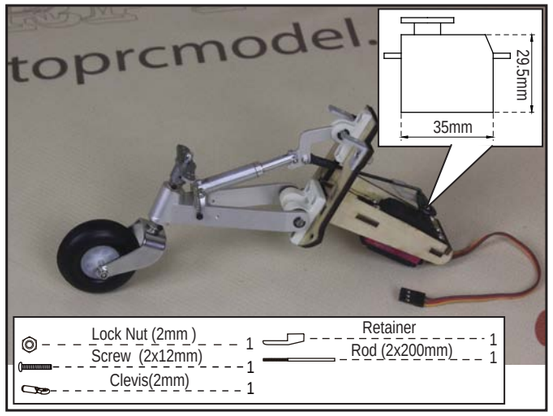


32 Epoxy the ply plate to the position to fix the rudder steering arm.

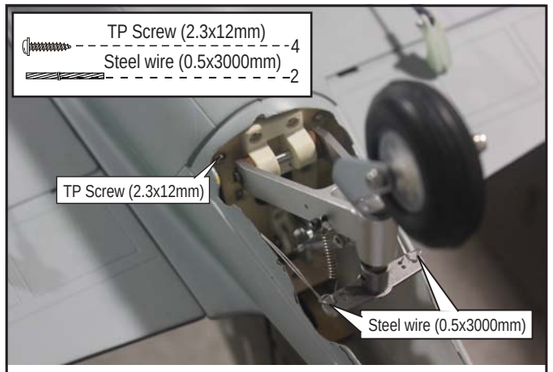


A B Apply epoxy glue.
C.A Apply instant glue (CA glue, super glue).
L/R Assemble left and right sides the same way.
Ensure smooth non-binding movement while assembling.
Pay close attention here!
Cut off shaded portion.
Do not overlook this symbol! Warning!

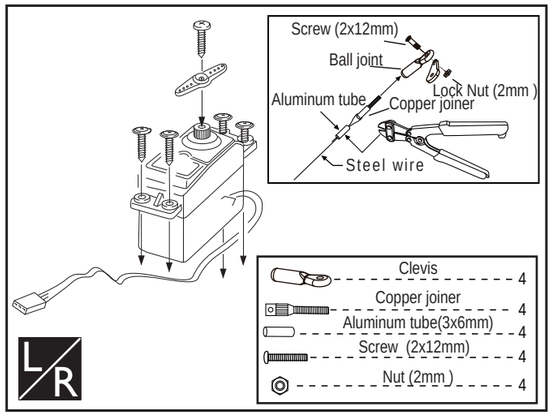
33 The picture of the tail landing gear after the servo install completion.



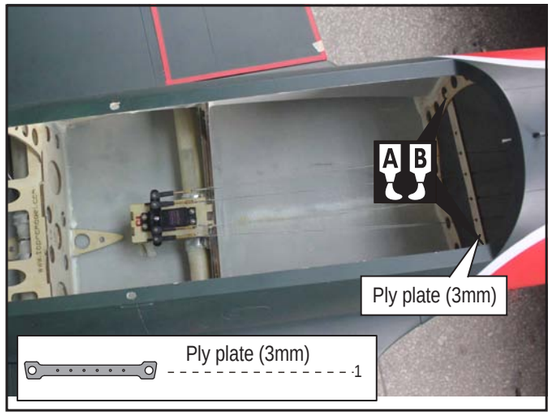
34 Assemble the tail landing gear to the fuselage as show in figure below.



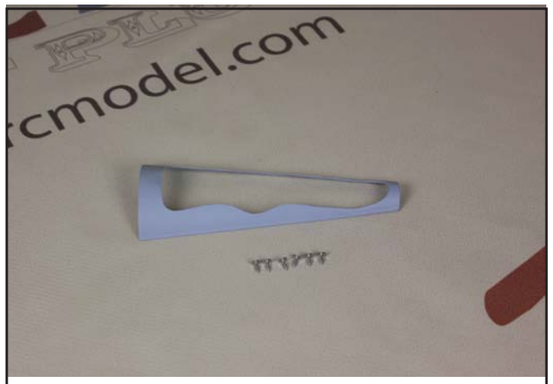
35 Install the control horn and connect the linkage of the rudder servo.



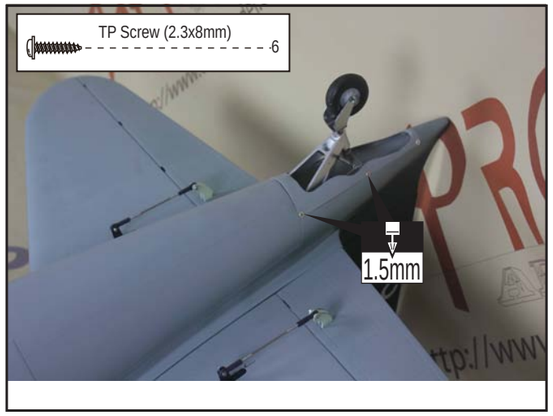
36 Connect the steel wires of the rudder horn and tail gear to the servo.



37 The picture of the tail wheel cover.



38 Assemble the tail wheel cover to the fuselage with TP screws.



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!