

FUN WORLD 3D

INSTRUCTION MANUAL



1.20 cubic inch displacement 4 stroke (glow)
Radio required : 8 channels, 8 servos airplane radio

Specifications

Wing Span	70.5 in / 1790 mm
Wing Area	1392 sq in / 89.8 sq dm
Flying Weight	9.5 lbs / 4300 g
Fuselage Length	70.0 in / 1780 mm

* Specifications are subject to change without notice. *

Warning! This model is not a toy.

It is designed for maximum performance. Please seek advice if one is not familiar with this kind of engine powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.

**THE WORLD MODELS
MANUFACTURING CO. LTD.**

FACTORY PRE-FABRICATED
ALMOST-READY-TO-FLY (ARF) SERIES
MADE IN CHINA
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FUN WORLD 3D

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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. Please DRY FIT and check for defects for all parts that will require CA or Epoxy for final assembly. Any parts you manufacturer will replace any defective parts, but will be difficult to extend to the good parts that are good before gluing to defective parts during assembly.
- 3 Symbols used throughout this instruction manual comprise of the following.



Apply epoxy glue.



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



Assemble left and right
sides the same way.



Ensure smooth non-binding
movement while assembling.



Peel off shaded portion
covering film.



Cut off shaded portion.



Drill holes with the specified
diameter (here: 3 mm).



Must be purchased separately!



Pay close attention here!



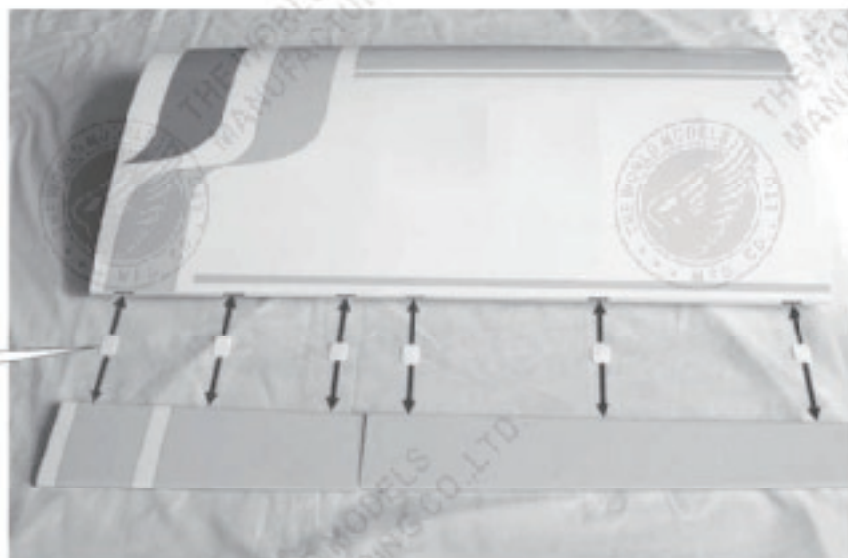
Warning!

Do not overlook this symbol!



Pierce the shaded portion
covering film.

1 Aileron

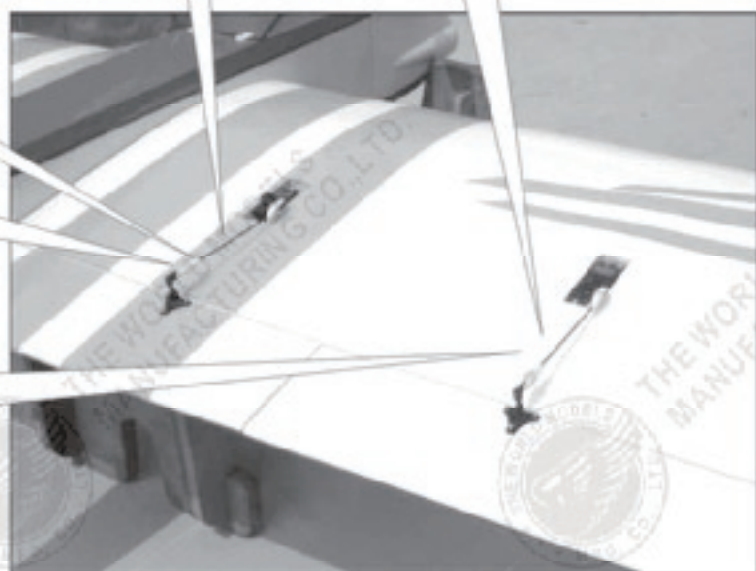
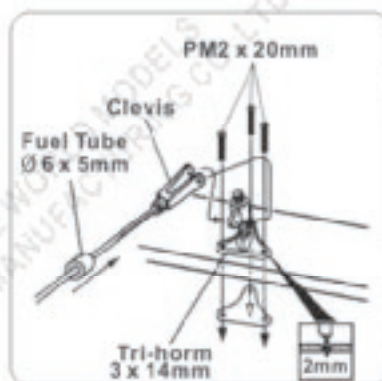
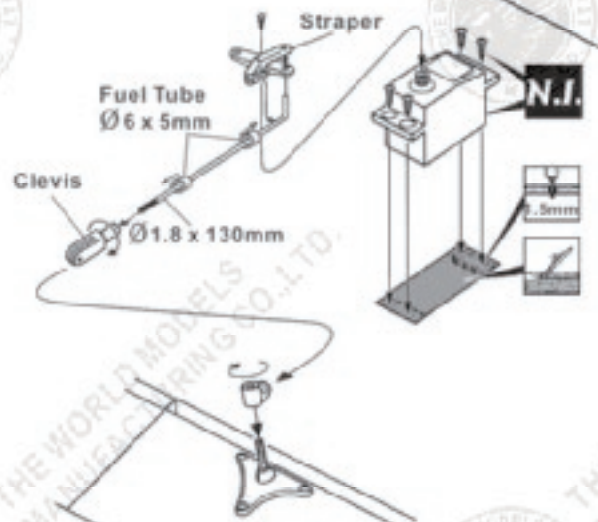


L/R

2 Aileron Servos

PM2 x 20mm Screw

12



L/R

3 Landing Gear

PA3 x 12 mm Screw

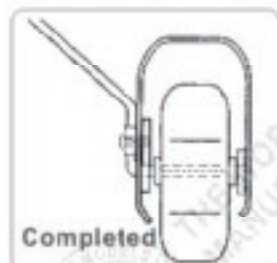
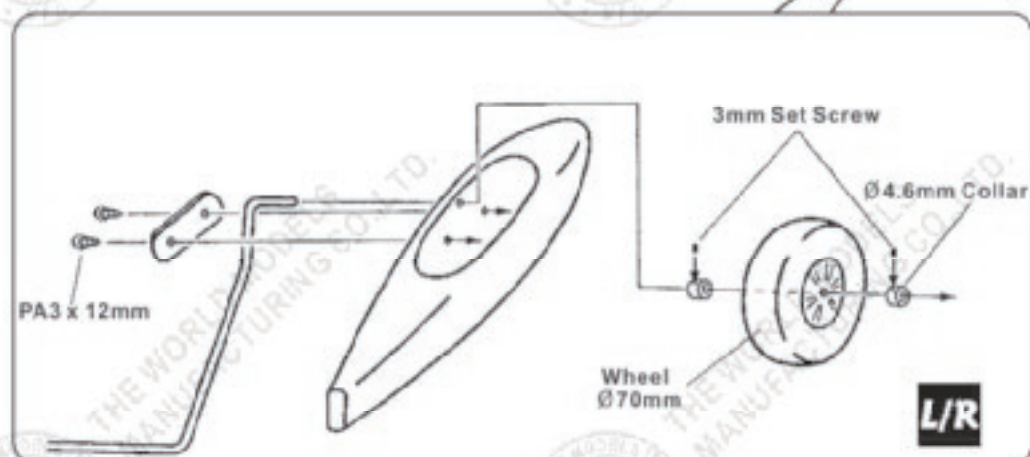
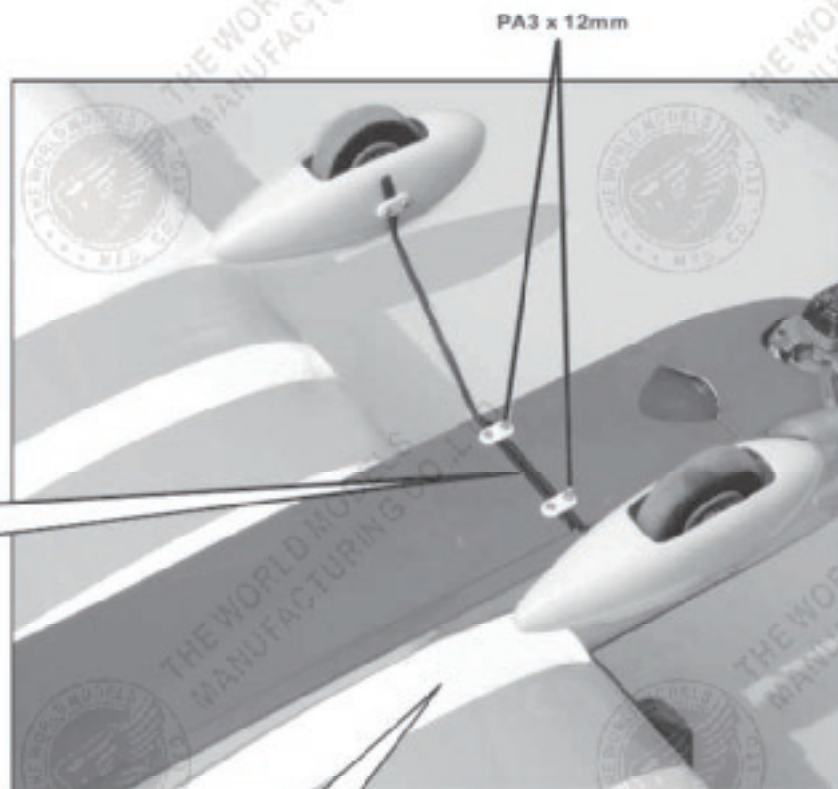
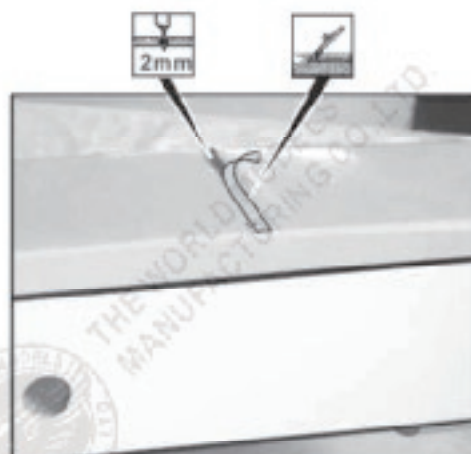
8

3mm Set Screw

4

4.6mm Collar

4



Completed

4 Engine Mount

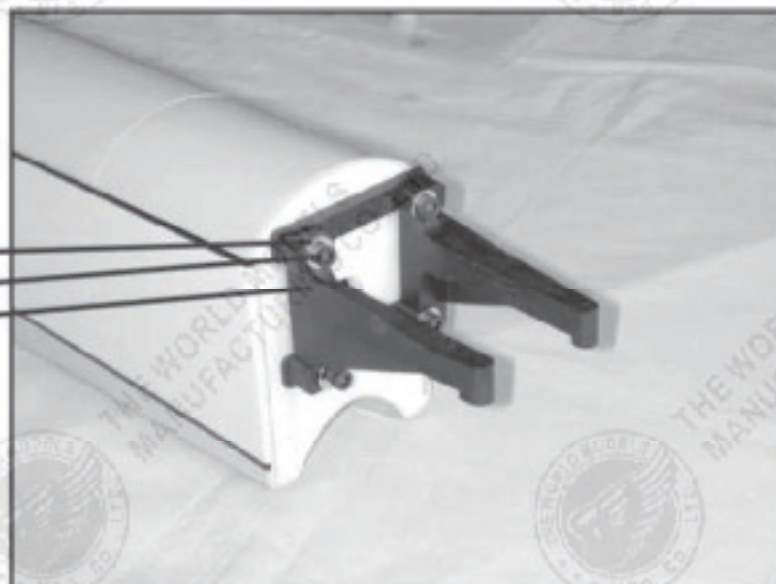
M6 x 30mm Screw

4

d6 x D12mm Washer

4

d6 x D12mm
M6 x 30mm
Engine Mount
PL5911120



● Apply thread locker to screws.

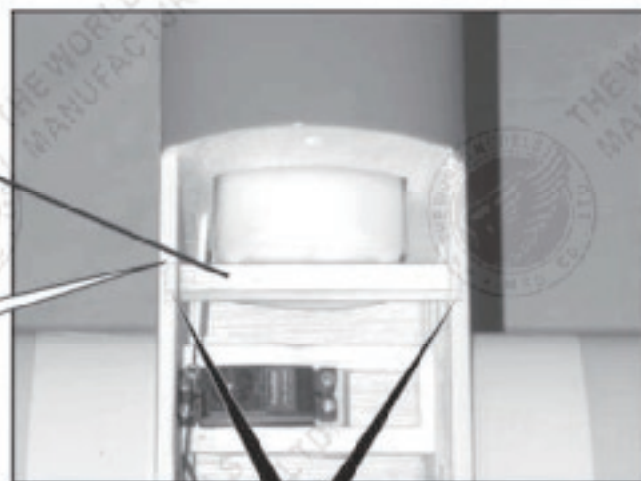


Blind nuts are off-centered to keep the spinner at the fuselage axis.

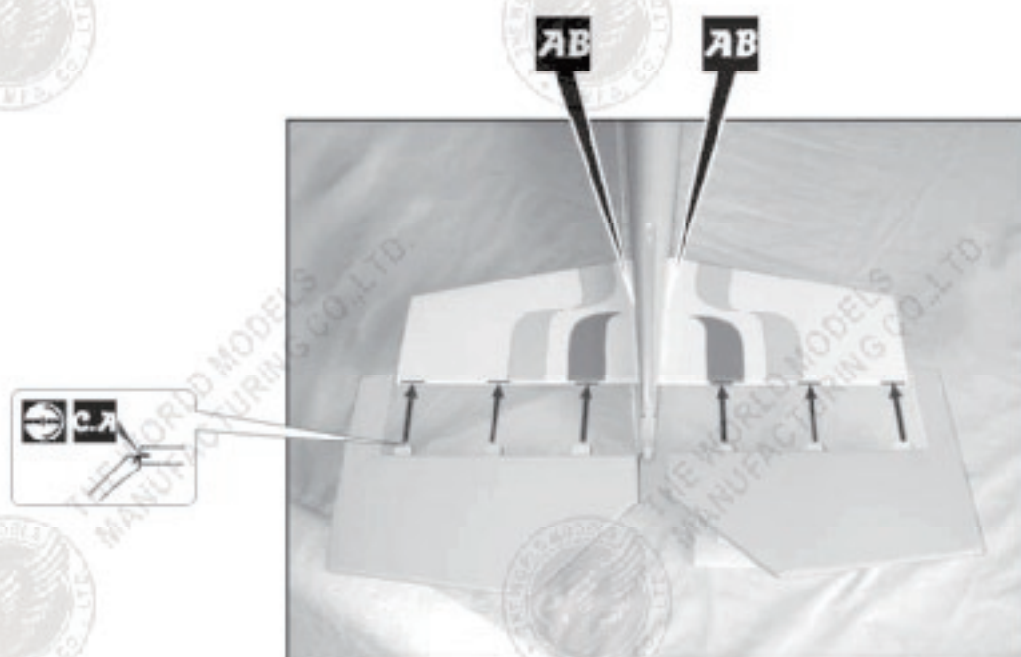
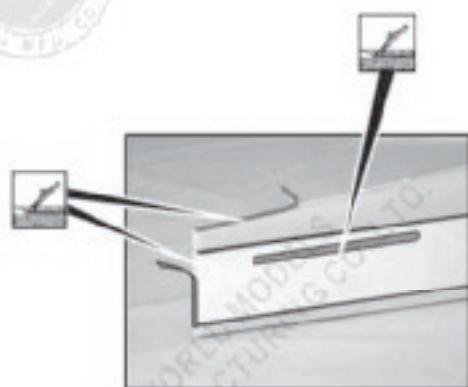
5 Fuel Tank



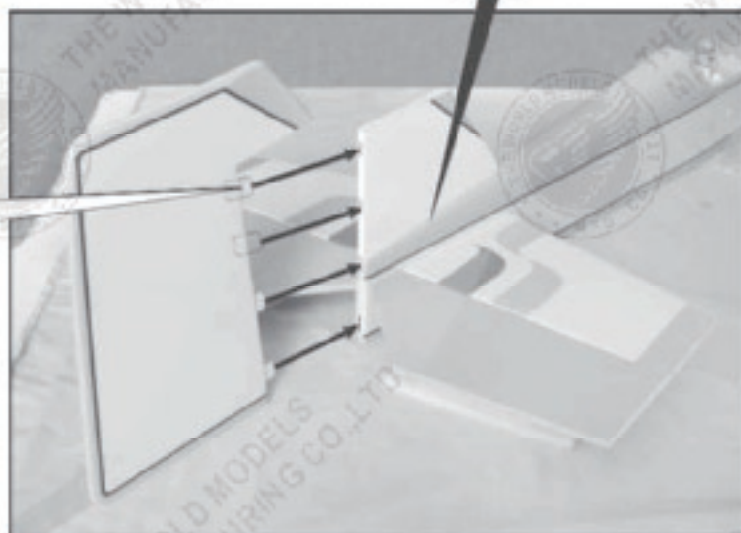
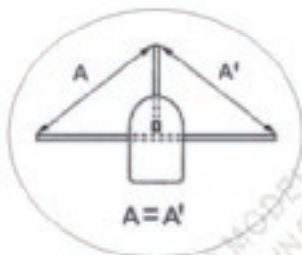
Balsa 10 x 10 x 100mm



6 Stabilizer & Elevator



7 Vertical Fin & Rudder



8 Tail landing Gear

PA3 x 12 mm Screw



2

3mm Set Screw



1

2.6mm Wheel Collar

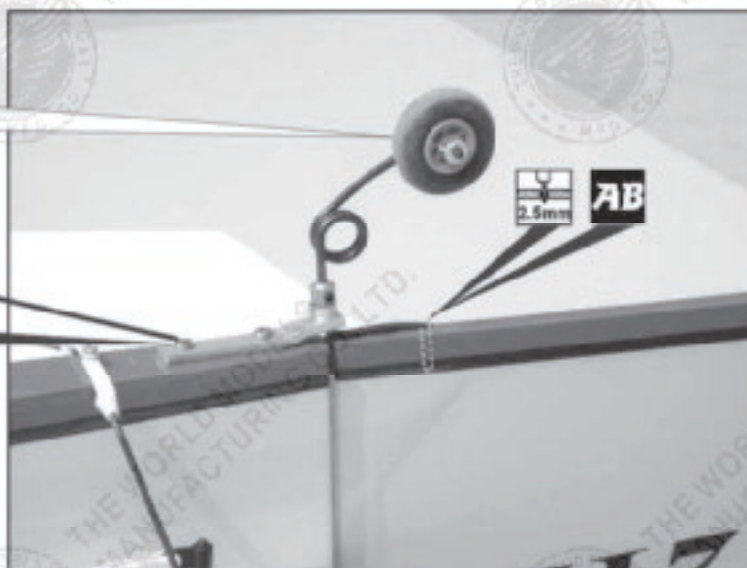


1

Ø 30mm



PA3 x 12 mm



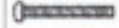
9 Rudder Pullwire

PM2 x 20mm Screw



3

PM2 x 25mm Screw



3

2mm Nut



4

Metal Rod
Ø1.8 x 240mm



Wire Ø 0.8 x 850mm



PM2 x 25mm



22120

148mm

Copper Tube

Clevis

Fuel Tube
Ø6 x 5mm

Rigging Coupler
Ø1.8 x 27mm
w/Threads

PM 2 x 20mm

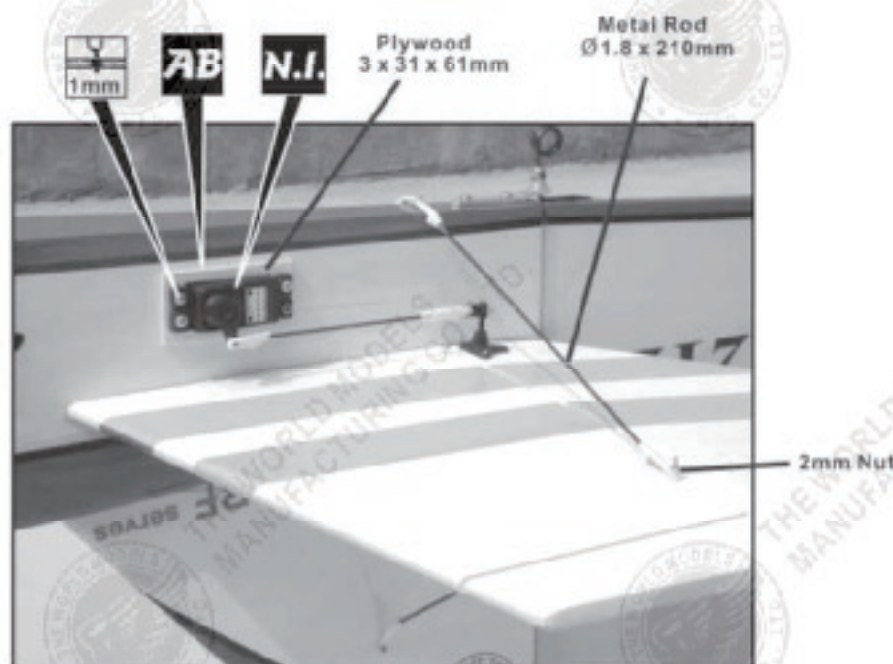
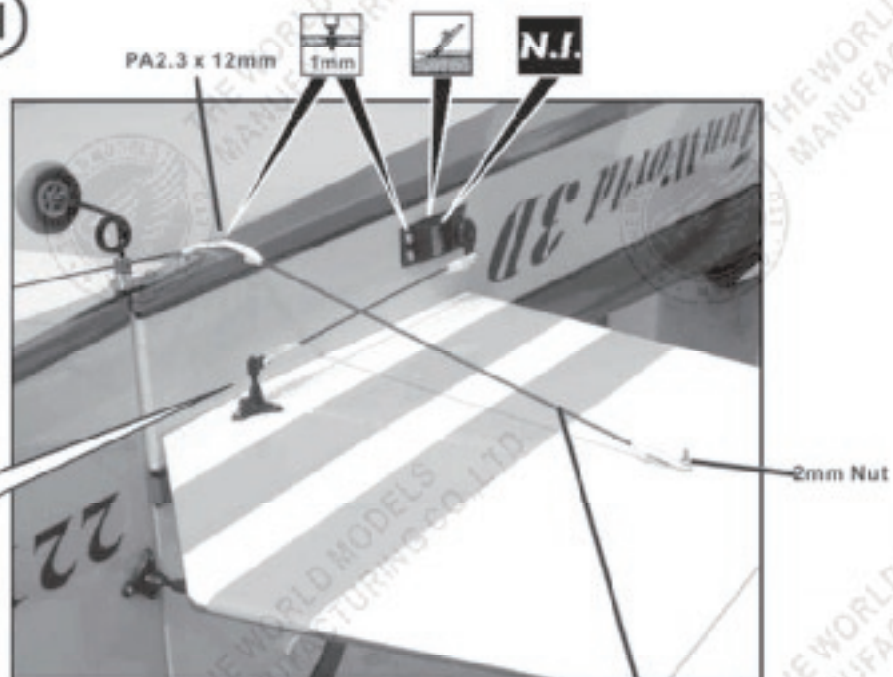
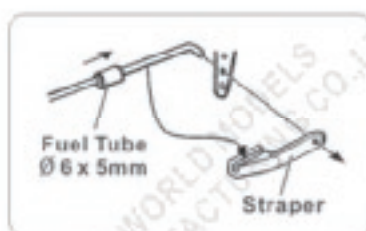
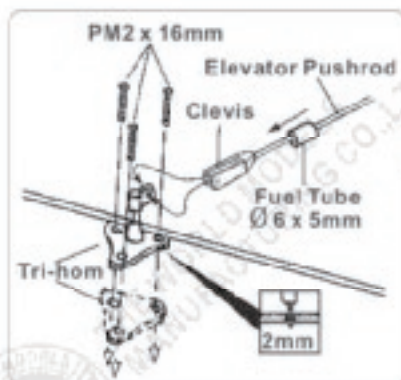
2mm Nut

PM2 x 25mm



10 Elevator Pushrod

PM2 x 16mm Screw	6
2mm Nut	2
PA2.3 x 12mm Screw	1



• Bottom View

11 Servo Set

LINKAGE CONNECTOR

3 x 3mm Set Screw

1

Linkage Connector

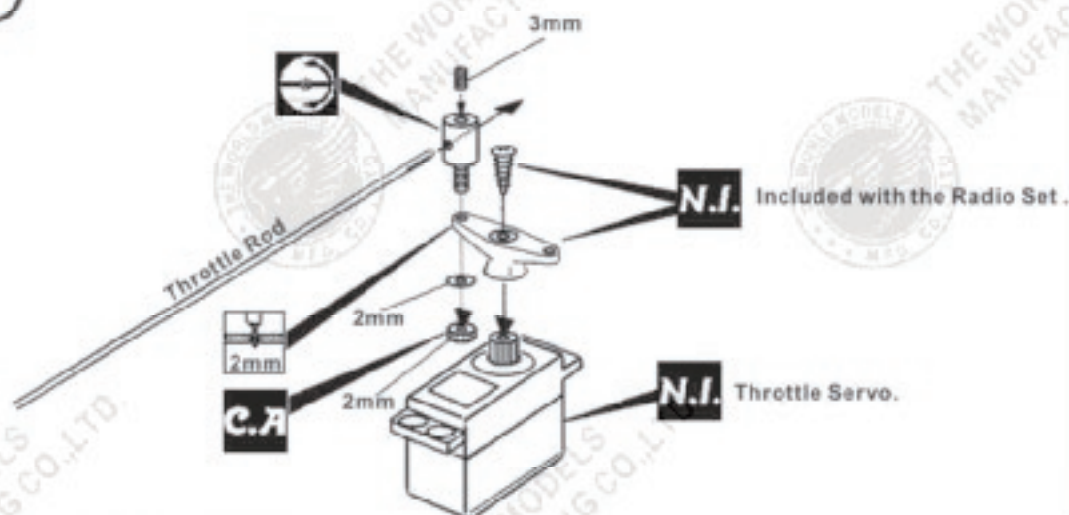
1

2mm Nut

1

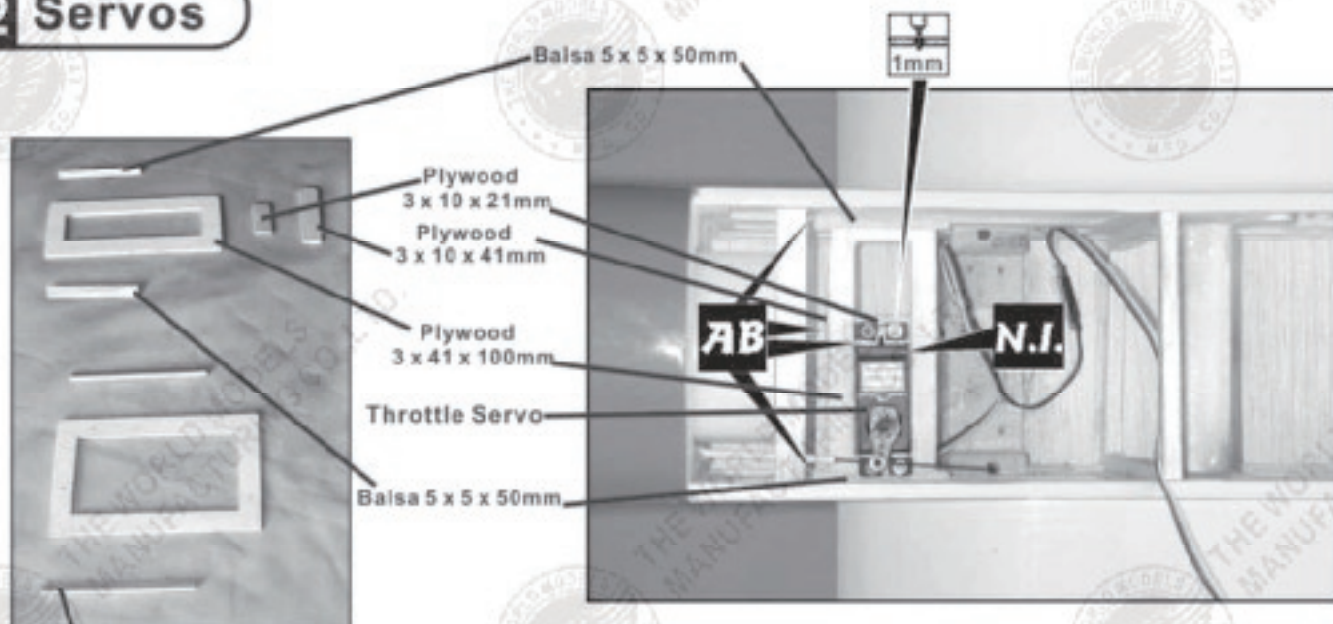
2mm Washer

1



Please refer to attached sheet for linkage connector installation.

12 Servos



• Install and arrange the servo as shown in the diagram.



13 Engine

M3 x 35mm Screw



4

d3 x D12mm Washer



8

3mm Nylon Insert Lock Nut



12

KM3 x 20mm Screw



8

M3 x 35mm

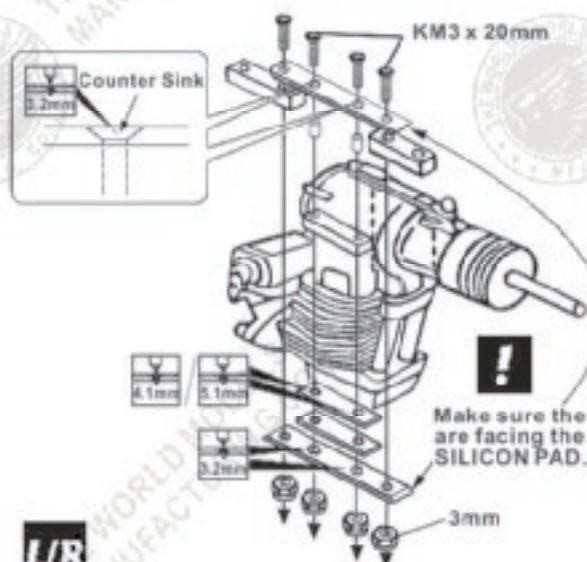
3mm

3mm Nylon Insert Lock Nut

3mm Washer

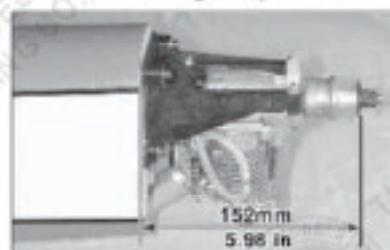
Plastic tube
d2 x D3 x 160mm
Throttle Pushwire
1.2 x 300mm

ANTI - VIBRATION MOUNT INSTALLATION



! Illustration is for inverted mounting. You can mount the engine upright or sideways simply by rotation the engine mount. Thrust angles will not be affected.

• Install Engine position



14 Cowling

PWA2.6 x 12mm Screw



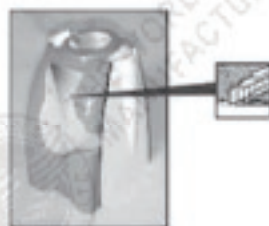
4

d1.5 x D6.5mm Silicon Grommet



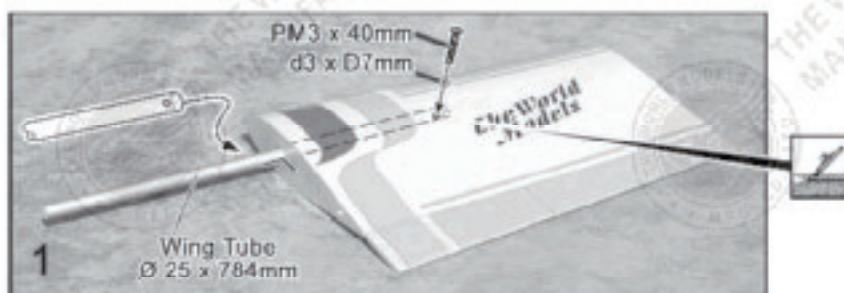
4

PWA2.6 x 12mm
Silicon Grommet
d1.5 x D6.5mm



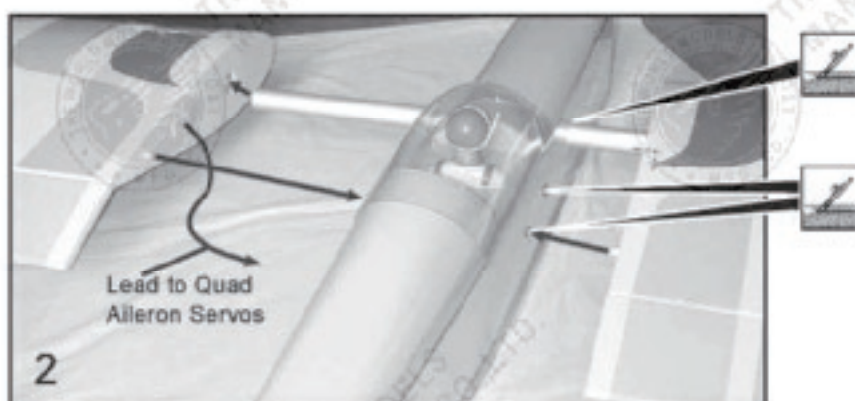
• First insert the grommet to the cowling then apply screw.

15 Main Wing



Step 1. Insert the aluminum wing tube with the pre-drilled hole end into the right wing. Align the lines marked at the wing root and wing tube and apply the PM3 x 40 machine screw through the pre-drilled hole on top of the wing. (please confirm the alignment of the hole by putting a 2.5mm diameter rod through the pre-drilled wing hole before applying the screw) The hole on the wing tube is pre-threaded, do not over tighten the PM3 screw, the set up is for future removal of the wing.

Step 2. Install the right wing to the fuselage by inserting the wing tube (now attached to the right wing) through the fuselage, then install the left wing.



Step 3. Make sure the wings are resting against the fuselage tightly. Locate the pre - drilled 2.5 mm hole at top of left wing, and drill along with 2.5mm drill bit until it passes through the wing tube. Apply the PA3 x 40 self - tapping screw.

Note: It is recommended that the wing tube stays with the left wing. Removal of the wings could be achieved by removing the right wing machine screw, the right wing then the left with wing tube. If removal of wing tube from left wing is also required, it is recommended that instead of applying self - tapping screw in step 3, you pre - tap with M3 thread cutter and apply M3 machine screw.

16 Canopy

PM3 x 16mm Screw

2

d3 x D7mm Washer

2

PWA2.3 x 8mm Screw

5

d1.5 x D6.5mm Silicon Grommet

5



d3 x D7mm
PM3 x 16mm



• Apply double - sided tape



Silicon Grommet
d1.5 x D6.5mm

PWA2.3 x 8mm



L/R

• First insert the grommet to the canopy then apply screw.

17 Wing Setting

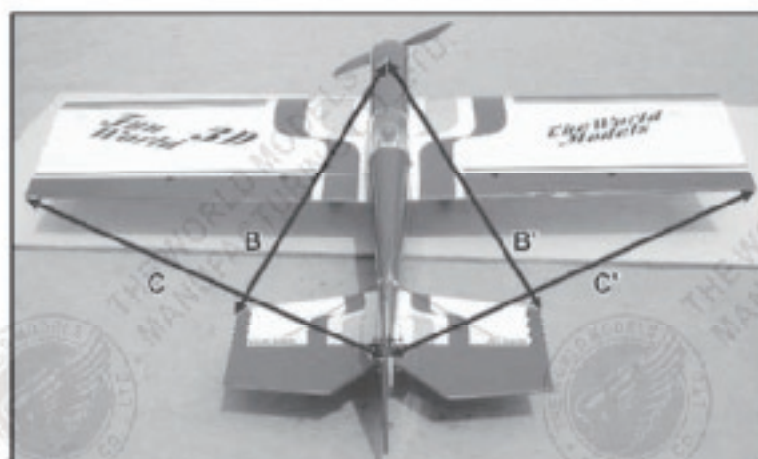
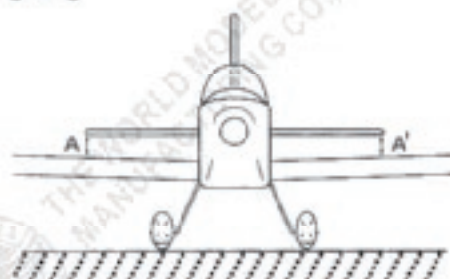
Adjust the wing and fuselage configuration as in the diagrams.



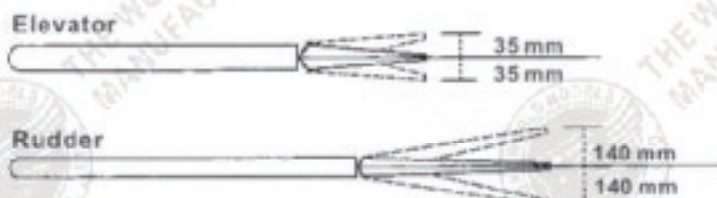
A = A'

B = B'

C = C'

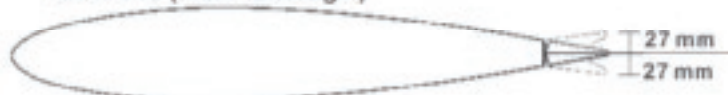


18 Control Throws

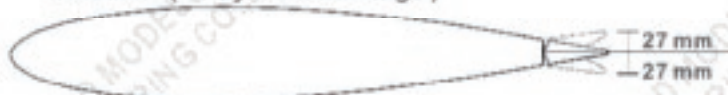


Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

Ailerons (near fuselage)

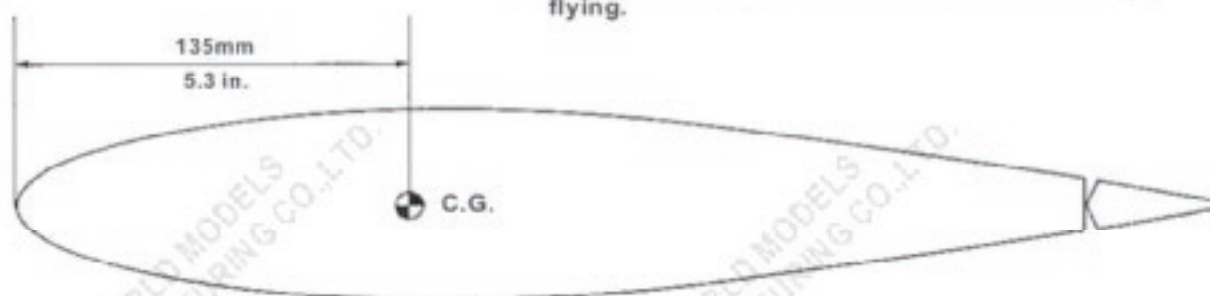


Ailerons (away from fuselage)



19 C.G.

The ideal C.G. Position is 135mm (5.3 in) behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.



! Warning!

Important Safety Precautions

- # First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.
- # Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.
- # **FUN WORLD 3D** is specially designed to be powered by 1.20 4 stroke glow engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause severe damage and injuries.
- # Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller.
- # If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering.
- # Check and re-tighten up all factory assembled screws, use thread locker if applicable.