

# UNI Jet



**Requires : 4-channel radio w/ 4 micro servos,  
Ducted Fan Propulsion Unit PL6800010  
and Outrunner Motor KM0283110,  
30A (burst 35A) brushless ESC,  
3 cells 11.1V 15C discharge 2100 mAh  
Li - Po battery & charger.**

## Specifications

<b>Wing Span</b>	<b>36 in / 920 mm</b>
<b>Wing Area</b>	<b>225 sq in / 14.5 sq dm</b>
<b>Flying Weight</b>	<b>28 oz / 790 g</b>
<b>Fuselage Length</b>	<b>32.5 in / 830 mm</b>

\*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 electric 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.



**TWM**  
**The World Models**  
**Manufacturing Co., LTD.**  
www.theworldmodels.com

FACTORY PRE-FABRICATED  
ALMOST-READY-TO-FLY (ARF) SERIES  
MADE IN CHINA



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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 find to be defective after the gluing process may be difficult to remove for warranty replacement. The manufacturer will replace any defective parts, but will not extend to the parts that are good before gluing to defective parts during assembly. Warranty will not cover any parts modified by customer.
- 3 Symbols used throughout this instruction manual comprise of the following : -



Apply epoxy glue.



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



Apply thread locker



Must be purchased separately !



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: 3mm).



Pierce the shaded portion  
covering film.



Pay close attention here!



Do not overlook this symbol !

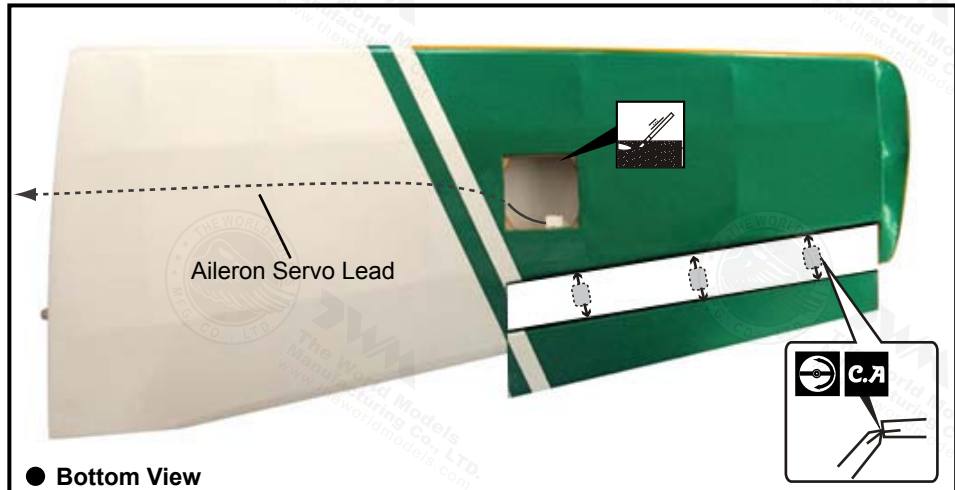


## Parts List

1. MAIN WING -- 1 pair
2. SERVO MOUNTING PANEL -- 1 pair  
 PUSHROD Ø1.4x42mm w/ Threads (For Aileron Servo) -- 2 pcs  
 STRAPER -- 2 pcs  
 FUEL TUBE d2xD4x4mm -- 4 pcs  
 CLEVIS -- 2 pcs  
 HORN -- 2 sets  
 SCREW PB2x14mm -- 4 pcs  
 SCREW PA1.7x8mm -- 8 pcs
3. PLYWOOD 3x67.8x217.8mm -- 1 pair  
 CABLE TIE -- 4 pcs  
 SCREW PM3x12mm -- 4 pcs  
 SCREW PWA2.3x8mm -- 4 pcs  
 WASHER d3xD7mm -- 4 pcs  
 M3 NUT -- 4 pcs
4. RUDDER -- 1 pc.  
 FUSELAGE -- 1 pc.
5. STABILIZER & ELEVATOR -- 1 set
6. MAIN LANDING GEAR -- 1 set  
 LANDING WIRE STRAPS (PL4114030) -- 2 pcs  
 MAIN WHEEL PL3116040 Ø40mm -- 2 pcs  
 COLLAR Ø2.6mm w/ set screw -- 4 sets  
 SCREW PA2x8mm -- 4 pcs
7. FRONT LANDING GEAR -- 1 set  
 PLASTIC COLLAR d1.1xD5x2mm -- 2 pcs  
 FRONT WHEEL PL3111250 Ø23mm -- 1 pc.  
 SCREW PA2x8mm -- 2 pcs
8. PUSHROD Ø1.2x440mm w/ Threads (For Rudder Servo) -- 1 pc.  
 HORN -- 1 set.  
 SCREW PB2x12mm -- 2 pcs
9. PUSHROD Ø1.2x533mm w/ Threads (For Elevator Servo) -- 1 pc.  
 HORN -- 1 set  
 SCREW PB2x8mm -- 2 pcs  
 SCREW PA2x5mm -- 3 pcs  
 PVC COVER 0.5mm -- 1 pc.
10. PUSHROD Ø0.8x206mm (For Front Landing Gear) -- 1 pc.  
 PLASTIC TUBE d2xD3x140mm -- 1 pc.  
 CLEVIS (d1.2mm) -- 2 pcs  
 FUEL TUBE d2xD4x4mm -- 2 pcs  
 PLYWOOD 2x9.4x15mm -- 1 pc.  
 BATTERY TIE 200mm -- 1 pc.  
 SPONGE 10x50x150mm -- 1 pc.
11. EYE SCREW PA2.5x10x23mm -- 2 pcs  
 WING TUBE d9.6x284mm -- 1 pc.  
 RUBBER BAND D30x1mm -- 2 pcs
12. CANOPY W/ COCKPIT ASSEMBLY -- 1 pc.  
 PILOT (PC101042A) -- 2 pcs
13. DECAL:E272XMDEC-- 1 set
  - COVERING:--  
 LIGHTEX SGX 540 PEARL GREEN  
 LIGHTEX SGX 331 CUB YELLOW  
 LIGHTEX SGX 100 WHITE

# 1 Main Wing

- Apply instant type CA glue to both sides of each hinge.



L/R

## 2 Aileron Servo

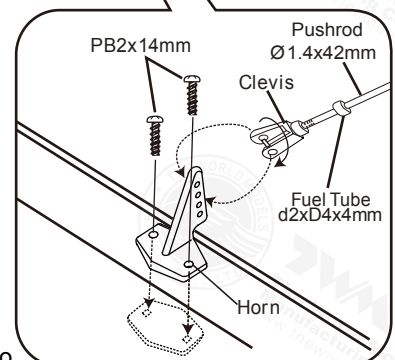
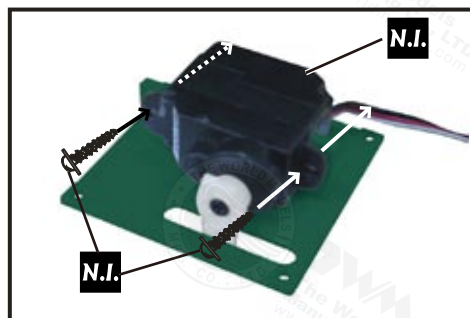
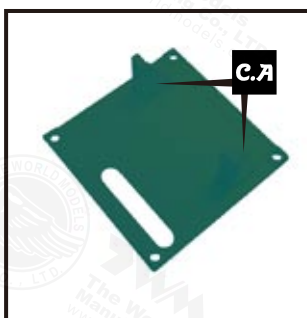
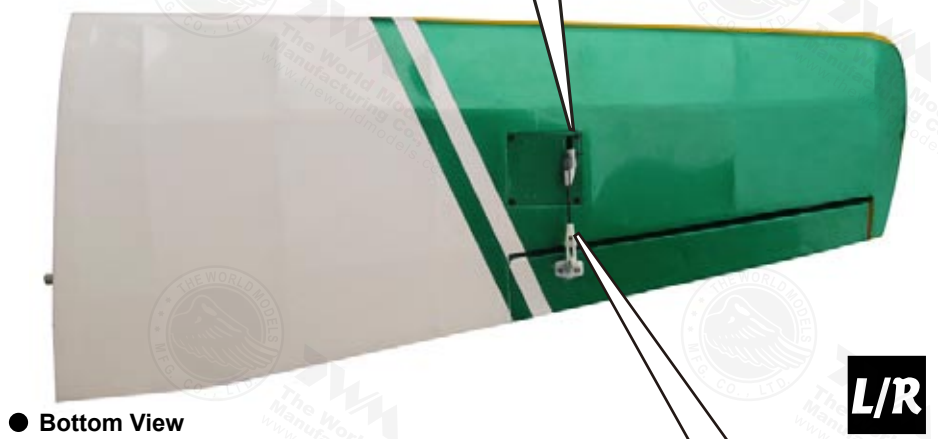
PB2x14mm Screw — 4  
PA1.7x8mm Screw — 8

- Ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

Micro Servo  
Code No SV2031



N.I. TWM PL8210010  
CLEVIS WRENCH



- Please choose either 02L & 02R or 03L & 03R or 04L & 04R that suits your servo.



### 3 Ducted Fan Propulsion Unit with 28/31 Motor

PM3x12mm **Screw**



4

d3xD7mm **Washer**



4

M3 **Nut**



4

PWA2.3x8mm **Screw**



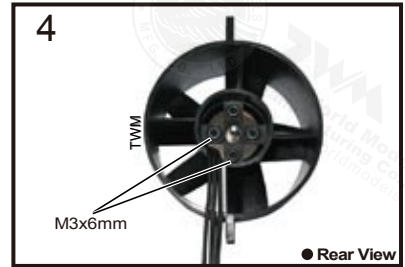
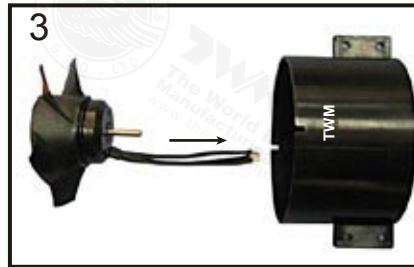
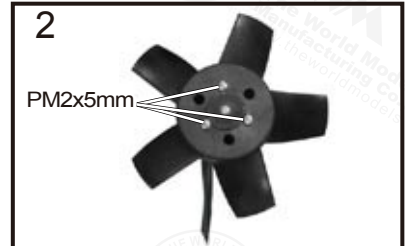
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#### N.I. Optional Parts

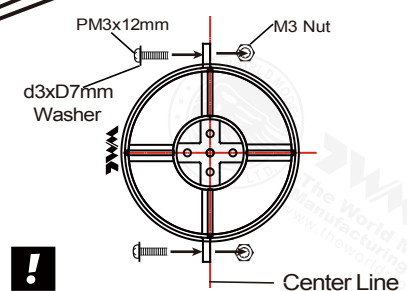
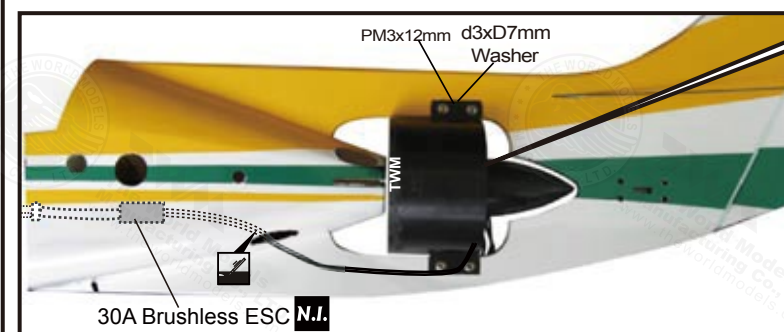
PL6800010



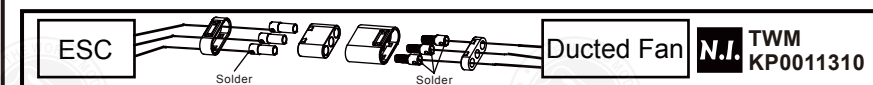
Outrunner Motor 28/ 31  
KM0283110



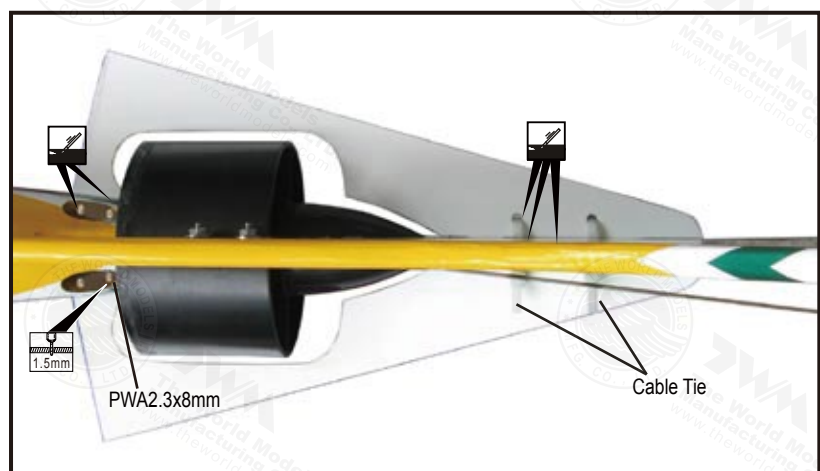
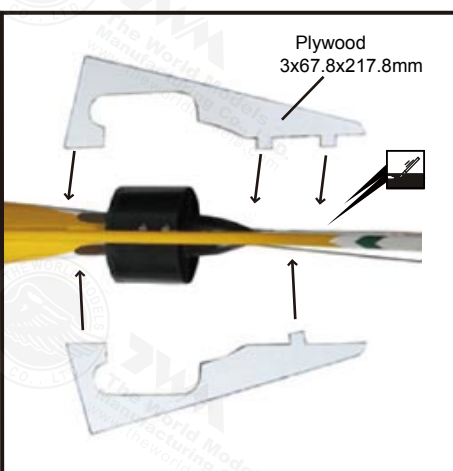
**!** Make sure rotating motor casing is not in contact with wiring or anything.



**!** Make sure TWM logo on ducted fan stay on left side of fuselage.

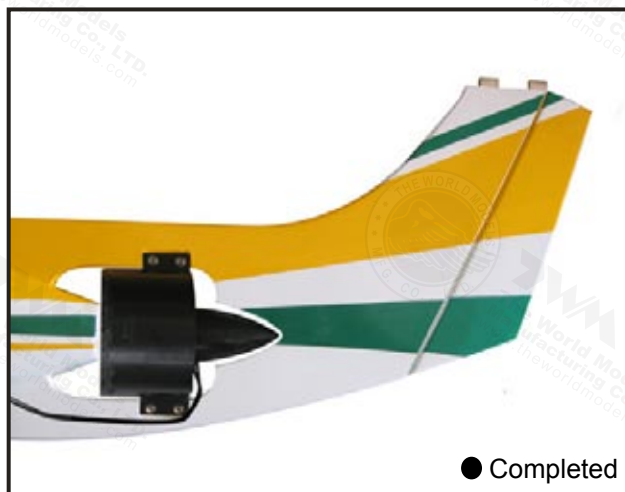
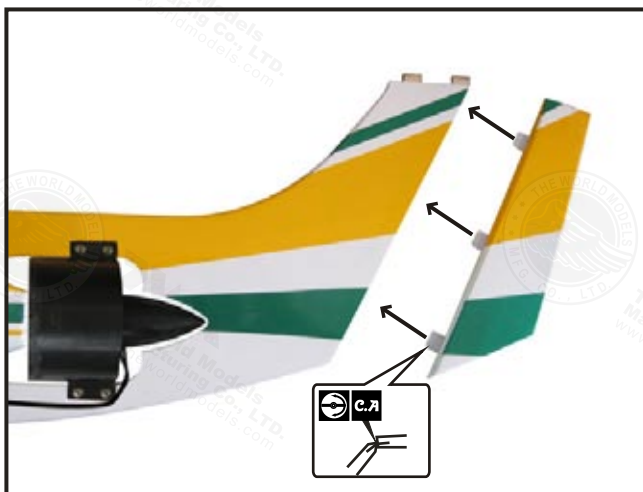


30A Brushless ESC  
KC2030A02



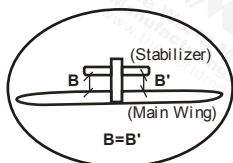
## 4 Rudder

- Apply instant type CA glue to both sides of each hinge.

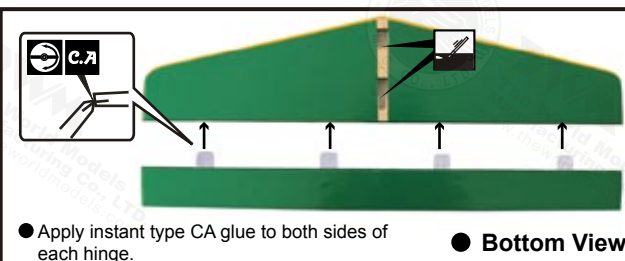
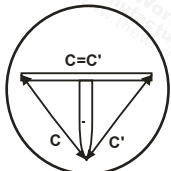


● Completed

## 5 Stabilizer & Elevator



Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.



- Apply instant type CA glue to both sides of each hinge.

● Bottom View



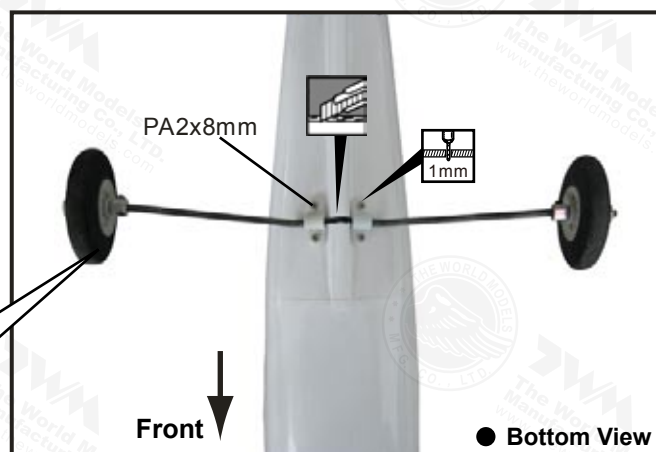
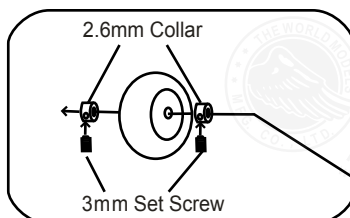
● Completed

## 6 Main Landing Gear

PA2x8mm Screw

2.6mm Collar

3mm Set Screw



Front

● Bottom View

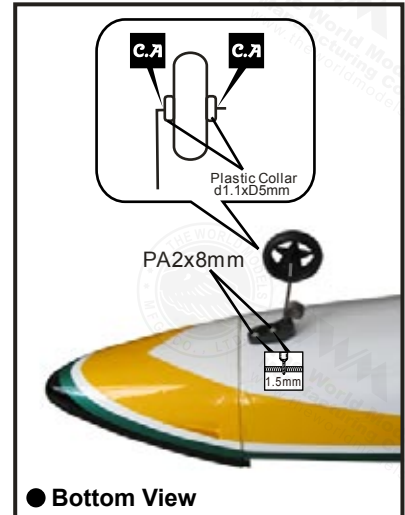
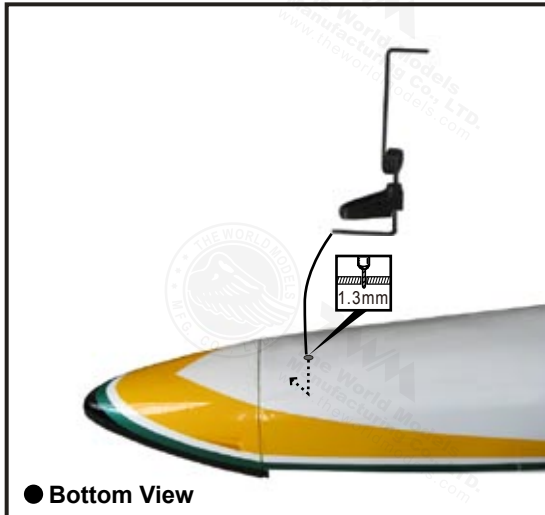
L/R

## 7 Front Landing Gear

- Ø1mm pilot hole is pre-drilled. Please look for pin-hole marks at under side of fuselage.

PA2x8mm Screw

2

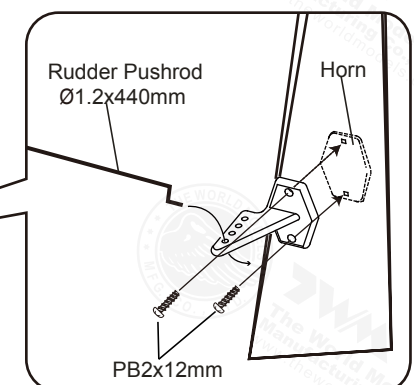
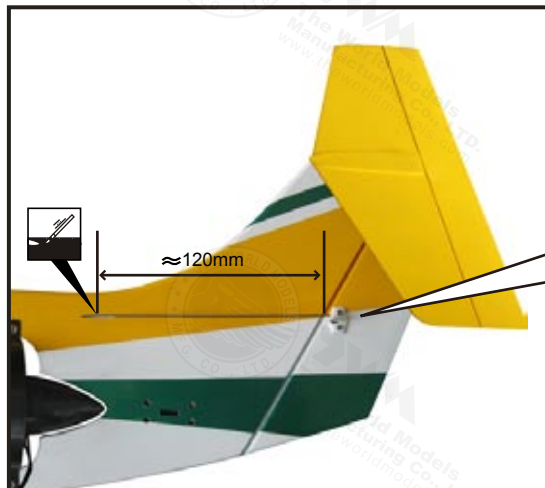


## 8 Rudder Pushrod

- Ø1mm pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

PB2x12mm Screw

2



## 9 Elevator Pushrod

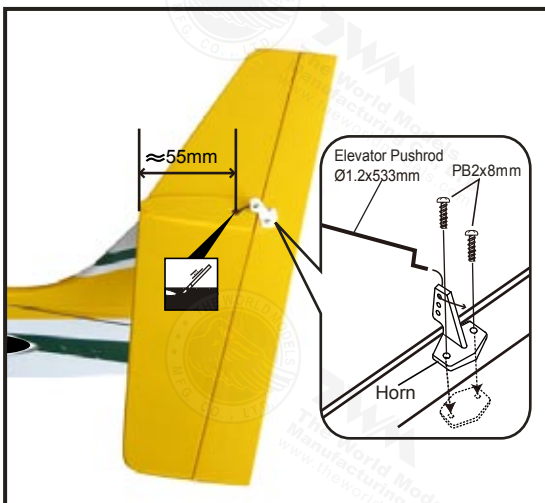
- Ø1mm pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

PB2x8mm Screw

2

PA2x5mm Screw

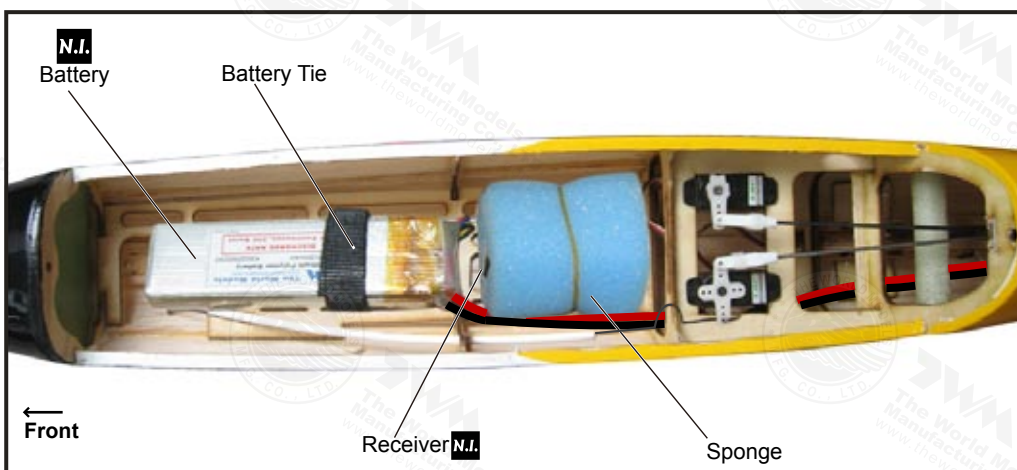
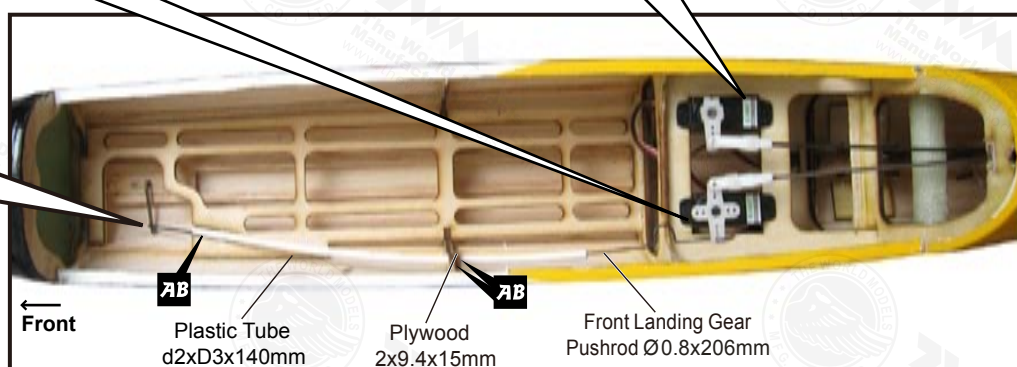
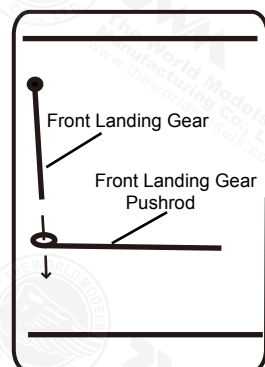
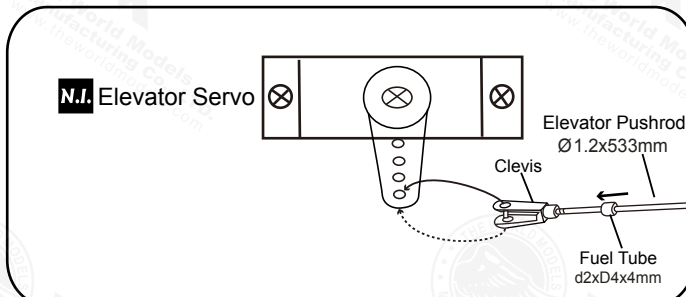
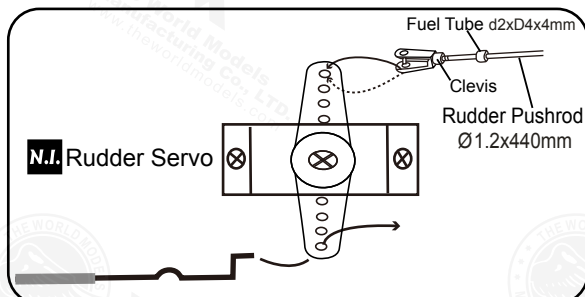
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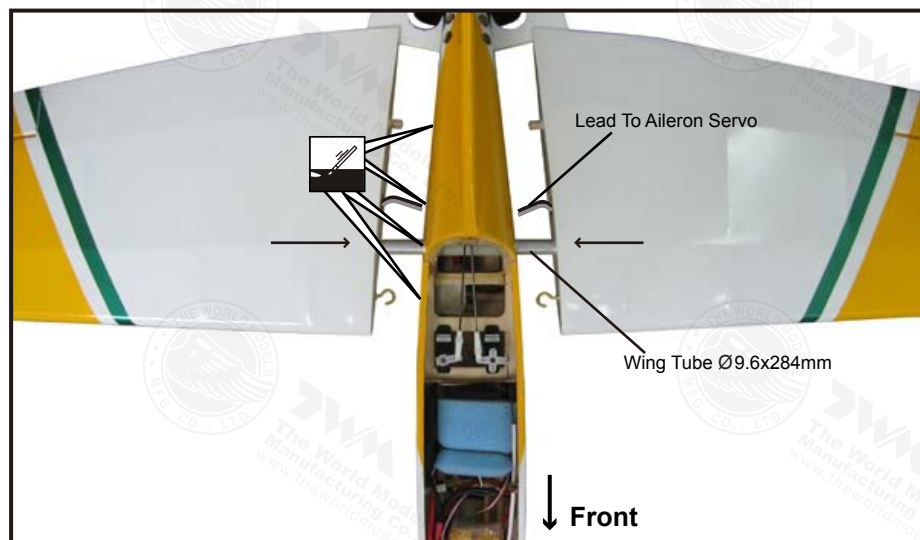
## 10 Radio Equipment

- Install and arrange the equipment as shown in the diagrams.

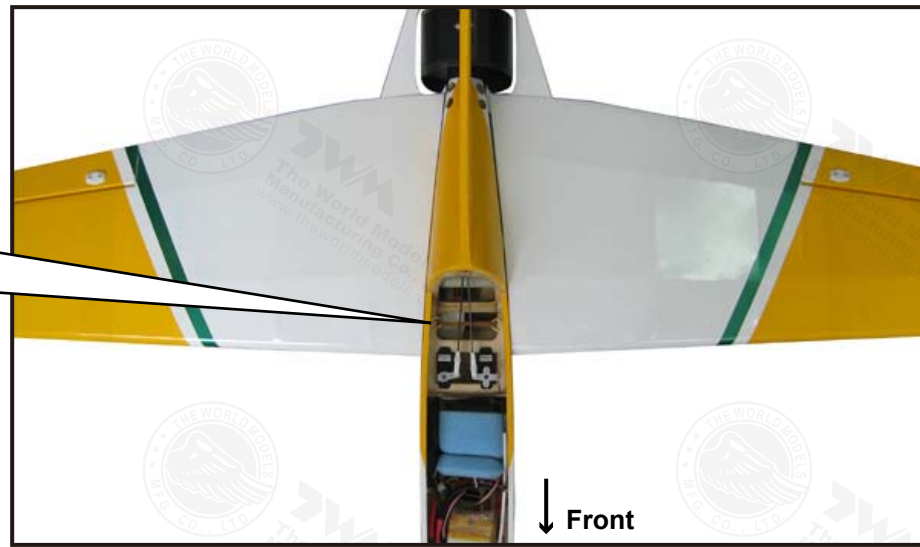
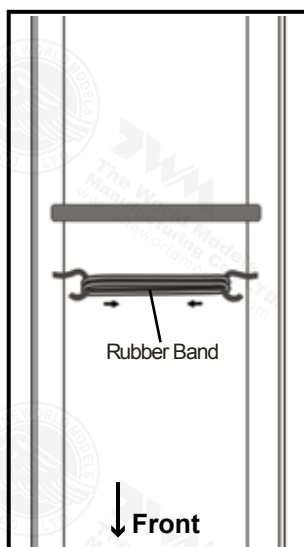




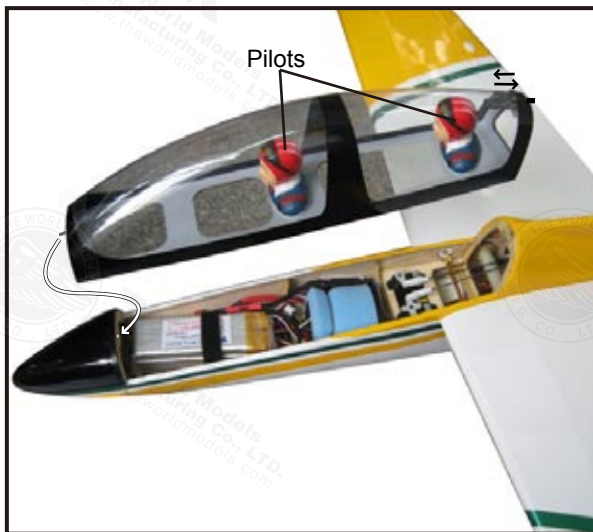
# 11 Main Wing



L/R

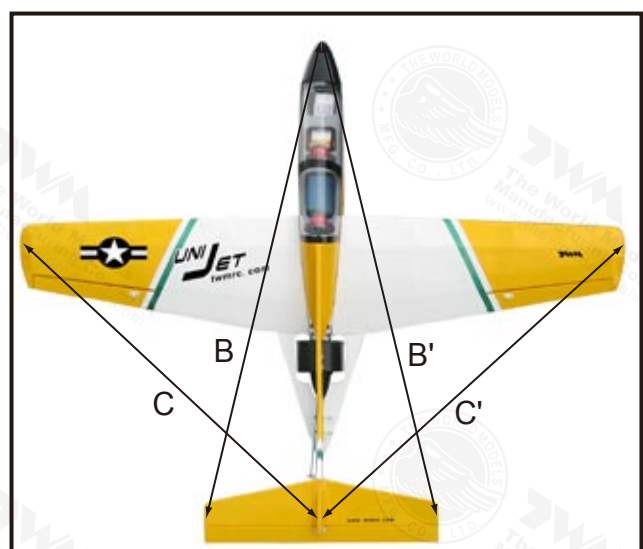
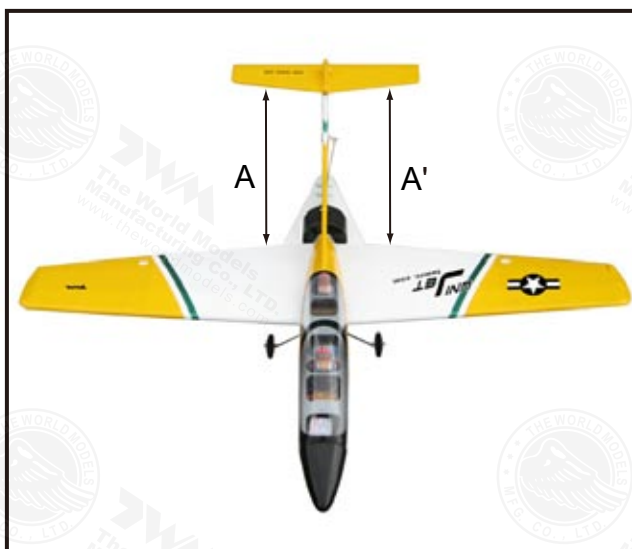


## 12 Canopy w/ Cockpit Assembly



## 13 Wing Setting

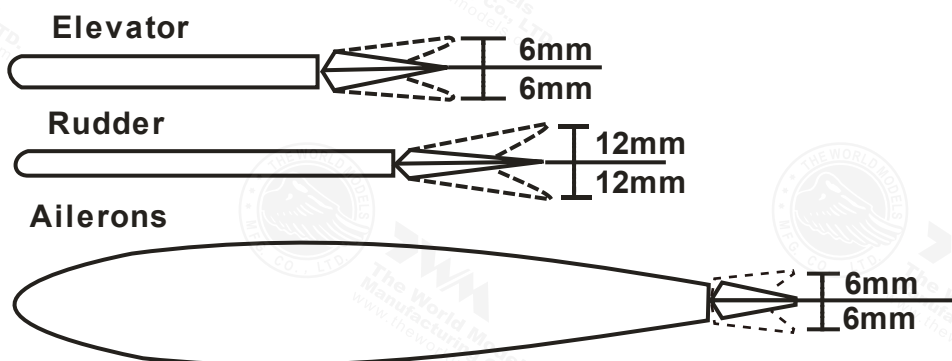
- Adjust the wing and fuselage configuration as shown in the diagrams.



$$A=A' \quad B=B' \quad C=C'$$

## 14 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.



## 15 C.G.

- The ideal C.G. position is **57mm ( 2.25in )** 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.
- # **UNIJET** is designed for high speed flying. Too low an air speed during take off or landing may cause tip stall. Point the **UniJet** towards the wind, use full throttle and let the **UniJet** gain enough ground speed before pulling the elevator gently for take off. For landing, approach against the wind, maintain power to the ducted fan to keep enough air speed before touch down.
- # 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. Don't use hot iron near the seams or edges, hot iron will melt the glue and shrink the covering at the same time, causing the seams to pull away.
- # Check and re-tighten up all factory assembled screws, use thread locker if necessary.



## Product Registration Form (US Customers)

We would like to share with you any relevant information regarding your model, including product news and free upgrade parts when applicable. Please fill in the following and send to AirBorne Models, 4749-K, Bennett Drive, Livermore, CA 94551 USA.

1. Name: \_\_\_\_\_

2. Address: \_\_\_\_\_

3. Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

4. Model: \_\_\_\_\_

Wing QC# \_\_\_\_\_ Fuselage QC# \_\_\_\_\_  
(QC numbers are stamped on wing and fuselage)

5. Date of Purchase: \_\_\_\_\_

6. Store Name: \_\_\_\_\_

Please call AirBorne Models at 925 371 0922 for any assistance in filling this form.  
Thank you very much for purchasing our product.

# Optional Parts

## (ACCESSORIES)

### Ducted Fan Propulsion Unit without Motor

Code No.	Size	Package
PL6800010		1 set



- Operating Voltage / Current : 12V / 30A (35A Burst)
- Thrust : Approx. 560A
- Weight : 60g (without motor)
- Rotor diameter : 67 mm
- Outer casing diameter : 74 mm
- Color : Black

### Outrunner 28 / 31 (for ducted fan)

Code No.	Size	Package
KM0283110	D28 x 31 mm	1 set



- Kv (rpm / V): 3600
- Operating Power: 375W
- Operating Voltage: 6 - 15V
- Operating Current: 30A
- Peak Current: 35A (max. 15 sec.)
- Internal Resistance: 25 m ohms
- Diameter: 28 mm
- Length: 31 mm
- Weight: 58 g
- Shaft Diameter: 3 mm
- Shaft Length: 14.8 mm
- Mounting Screw: M3 (Front) and M2 (Back)
- Distance of Mounting Holes: 16 mm and 19 mm

### 30A Brushless ESC

Code No.	Size	Package
KC2030A02	24 x 45 x11mm	1 pc



- Current : 30A continuous
- Burst current ( < 10 seconds) : 40A
- Weight : 25g (with wires)
- BEC output : 2A
- Input : Li - ion / Li - poly 2 - 4 cells; Nimh / Nicd 5 - 12 cells

### Silicon Wire

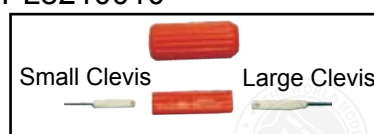
Code No.	Size	Package
HW2110101	D4.0mm	1 set



- 1 M black & 1 M red / pkg

### Clevis Wrench

Code No.	Size	Package
PL8210010		1 set



Special tool for clevis installation.  
Suitable for standard and small (EP) clevis.

### 2 - Pin EZ Connector

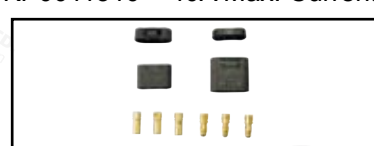
Code No.	Size	Package
KP0011210	40A Max. Current	1 set



-ideal for electric models

### 3 - Pin EZ Connector

Code No.	Size	Package
KP0011310	40A Max. Current	1 set



-ideal for electric models

### 180mm Extension For Park Flyer

Code No.	Size	Package
KW0011800	180mm	1 set



### Heat Shrink Tube

Code No.	Size	Package
PT1115050	D5mm x 10cm	2 pcs x 3 colors



-Three colors (Black, Red, Yellow)

### Micro Servo

Code No SV2031
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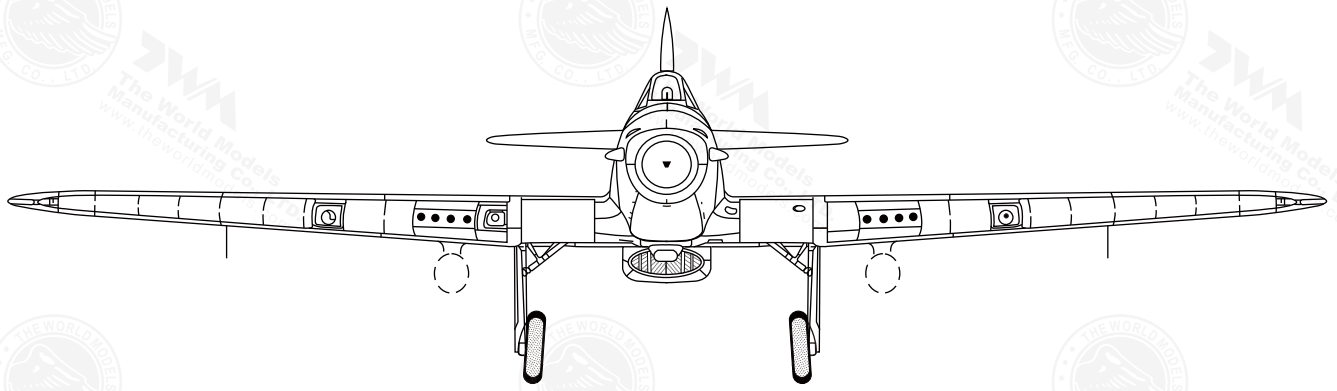


- Speed : 0.1 sec / 60° @4.8V
- Torque : 16kg.cm / 22.2 oz - in @4.8V
- Size : 22.4 x 11.4 x 20.0mm / 0.88x0.45 x 0.79in
- Weight : 7.8 g / 0.28 oz









Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer

Boat

Accessories

Covering

(Lightex / Toughlon)



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