

1/4 SUPER CUB (A036)



**Requires : 2-stroke 0.91 or 4-stroke 1.20-1.60 engine,
5-channel radio w/ 6 standard servos**

Specifications

Wing Span	104in / 2640mm
Wing Area	1586sq in / 102.3sq dm
Flying Weight	14 lbs / 6300g
Fuselage Length	68 in / 1725mm

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

1/4 SUPER CUB

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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).



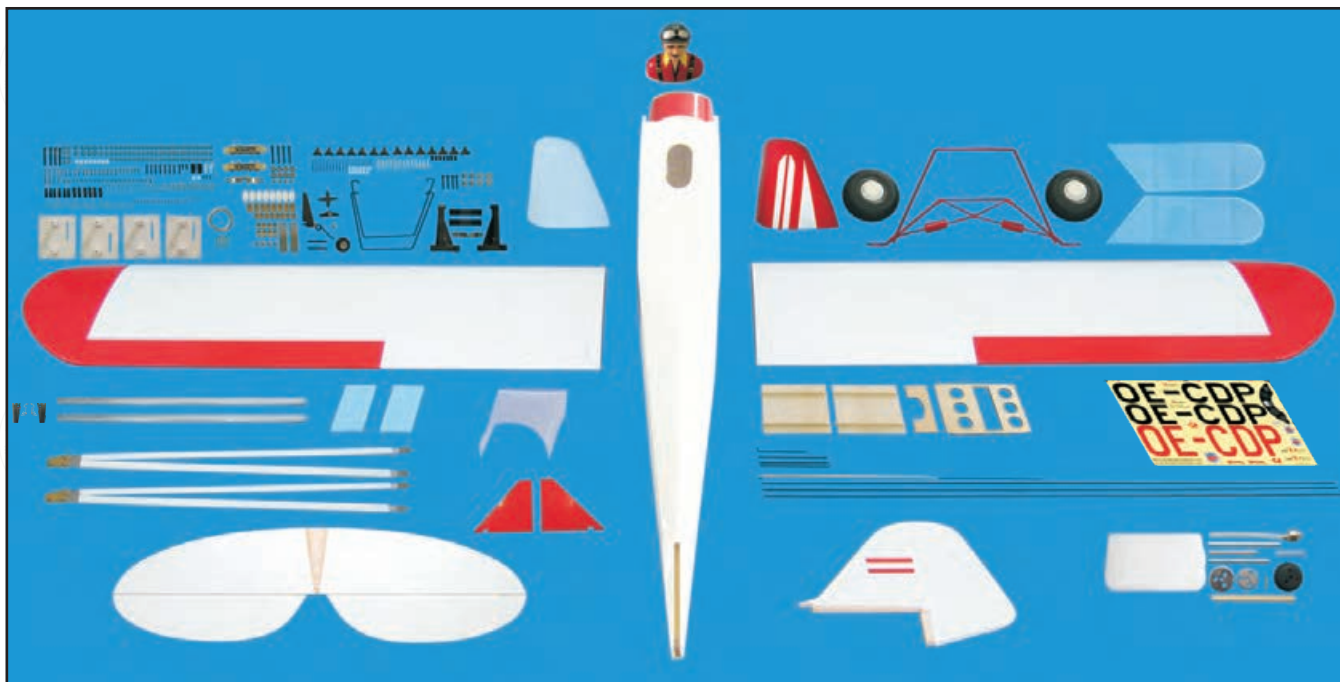
Pierce the shaded portion
covering film.



Pay close attention here!



Do not overlook this symbol!



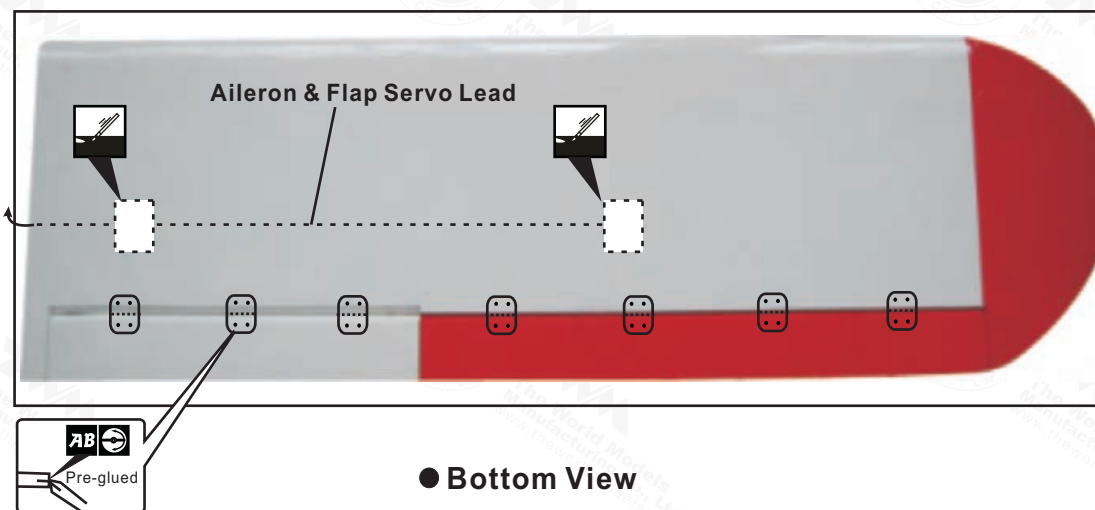
Parts List

1. MAIN WING -- 1 pair
2. PUSHROD Ø1.8x120mm
w/ Threads(For Aileron & Flap Servo)--4 pcs
FUEL TUBE Ø6x5mm--8 pcs
STRAPER PL4112102--4 pcs
SCREW PB2x30mm--12 pcs
SCREW PWA2x8mm--16 pcs
SERVO MOUNTING PANEL--4 pcs
CLEVIS PL4112103--4 pcs
TRI-HORN M3x22mm(L) PL4111251--4 sets
3. SCREW PM3x15mm--12 pcs
WASHER d3xD7mm--16 pcs
M3 NUT--4 pcs
MAIN WING STRUTS--1 set
WING STRUT WIRE Ø3x143x208mm--2 pcs
PLASTIC WIRE BRACKET PL5330030 --8 pcs
4. FUSELAGE -- 1 pc.
STABILIZER & ELEVATOR -- 1 set
5. VERTICAL FIN & RUDDER -- 1 set
6. TAIL GEAR ASSEMBLY 11-22LBS PL3410021 -- 1 set
PLATE(For Staying on Tail Fuselage Bottom) 1x10x40mm -- 1 pc
7. SCREW PM3x13mm--2 pcs
ALUMINUM PLATE 2mm--2 pcs
MAIN LANDING GEAR--1 set
SCREW PA3x12mm--14 pcs
WASHER d3xD7mm--2 pcs
MOUNTING PLATE 12x20mm--6 pcs
8. SCREW PA 1.7x8mm--6 pcs
SCREW PM3x13mm--8 pcs
WASHER d3xD7mm--16 pcs
M3 NUT--8 pcs
COLLAR Ø4.6mm w/ setscrew--4 sets
MAIN WHEEL (CUB) Ø107mm--2 sets
PLYWOOD 3x145x171mm(Main Landing Gear Cover)--2 pcs
PLASTIC WIRE BRACKET PL5330050 --8 pcs
9. ENGINE MOUNT PL5111080 -- 1 set
SOCKET HEAD SCREW M4x30mm--4 pcs
WASHER d4.2xD14.5mm--4 pcs
M4 BLIND NUT--4 pcs
10. ALUMINUM PLATE(For Engine Mount)--1 pc.
ANTI-VIBRATION MOUNT PL5214094--1 set
INCLUDE: SOCKET HEAD SCREW M4x35mm--4 pcs
SCREW KM3x20mm--8 pcs
WASHER d4xD12mm--8 pcs
NYLON INSERT LOCK NUT M3--8 pcs
NYLON INSERT LOCK NUT M4--4 pcs
THROTTLE PUSH WIRE Ø1.2x480mm--1 pc.
PLASTIC TUBE d2xD3x300mm--1 pc.
11. SCREW PWA2.6x12mm--4 pcs
SILICON GROMMET d1.5xD6.5mm(For Cowling)--4 pcs
COWLING--1 pc.
12. FUEL TANK 450cc--1 set
CABLE TIE 1.5x5x400mm--1 pc.
DOUBLE-SIDED TAPE 40x100mm--1 pc.
13. SCREW PB2x16mm--6 pcs
FUEL TUBE Ø6x5mm--2 pcs
CLEVIS PL4112103--2 pcs
TRI-HORN M3x22mm(L) PL4111251 -- 2 sets
PUSHROD Ø1.8x1000mm w/ Threads(For Elevator Servo)--2 pcs
14. SCREW PB2x16mm--3 pcs
FUEL TUBE Ø6x5mm--1 pc.
CLEVIS PL4112103--1 pc.
TRI-HORN M3x22mm(L) PL4111251--1 set
PUSHROD Ø1.8x1065mm w/ Threads(For Rudder Servo)--1 pc.
15. FLYING WIRE Ø1x1300mm--1 pc.
FLYING WIRE BRACKET PL4112600--6 pcs
FLYING WIRE BRACKET CLEVIS--4 pcs
EYE SCREW M1.8x6x12mm--4 pcs
SCREW PM2x16mm--6 pcs
SCREW PM2x8mm--4 pcs
M2 NUT--6 pcs
WASHER d2xD5mm--6 pcs
COPPER TUBE d2.5xD3.2x8mm(For Rudder)--8 pcs
16. SIDE WINDOWS--1 pair
17. LINKAGE CONNECTOR Ø2.1mm--1 set
18. PLYWOOD 3x153x210mm (For Fuselage Servos) -- 1 pc.
FUEL TUBE Ø6x5mm--2 pcs
STRAPER PL4112102--2 pcs
PUSHROD Ø1.8x85mm(For Elevator)--1 pc.
PUSHROD CONNECTOR 4x9x20mm PL4410010 -- 1 set
SPONGE 10x80x200mm--2 pcs
19. SCREW PWA2x12mm--4 pcs
PILOT PC001102A--1 set
COCKPIT BASE PANEL 3x145x165mm--2 pcs
20. SCREW PWA2.3x12mm--4 pcs
SCREW PM2x14mm--2 pcs
WASHER d2xD5mm--4 pcs
SILICON GROMMET d1.5xD6.5mm(For Wind Shield)--4 pcs
M2 NYLON INSERT LOCK NUT--2 pcs
WIND SHIELD--1 pc.
MOUNTING PLATE 5x15mm--2 pcs
21. WING TUBE Ø16x661mm--2 pcs
SELF-TIGHTENING LATCHING PIN PL9120010--4 pcs
WIRE Ø0.8mm--2 pair
M3x8mm SET SCREW--4 pcs
22. SOCKET HEAD SCREW M3x8mm--2 pcs
WASHER d3xD7mm--4 pcs
M3 NYLON INSERT LOCK NUT--2 pcs
23. DECALS: A036DEC--1 set

● COVERING:--

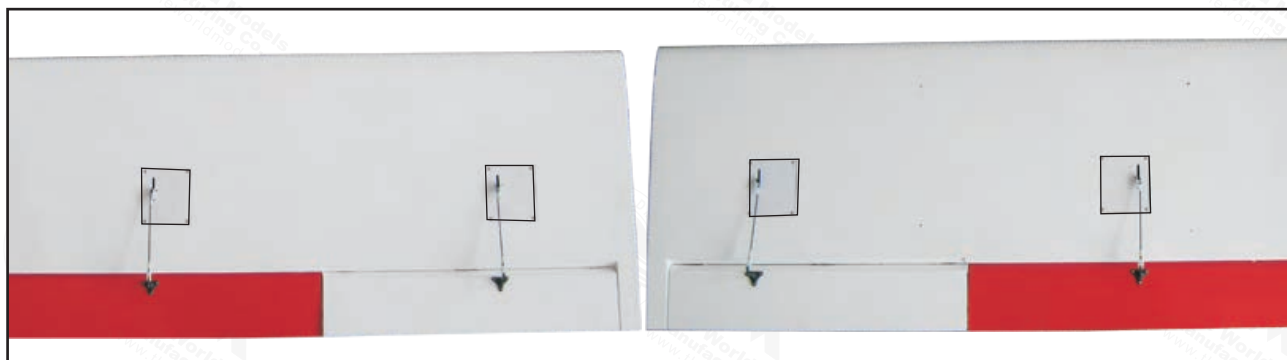
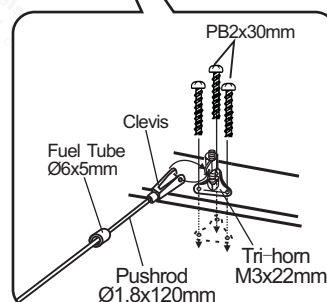
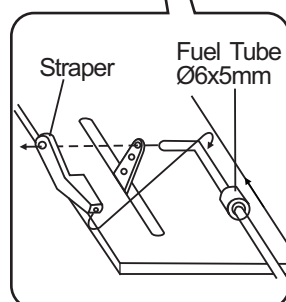
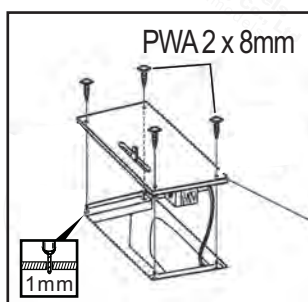
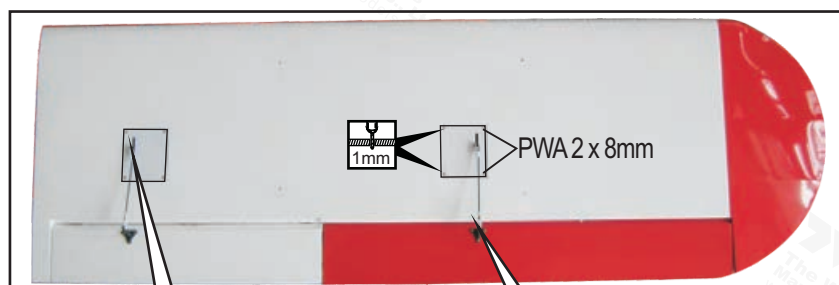
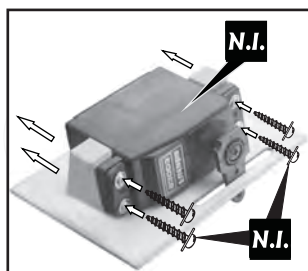
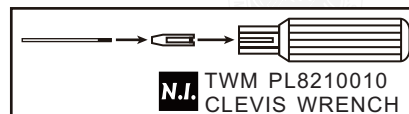
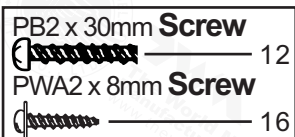
TOUGHLON STL 100 WHITE
TOUGHLON STL 312 BRIGHT RED

1 Main Wing



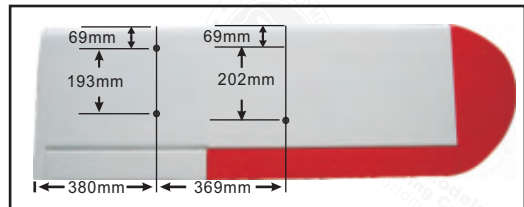
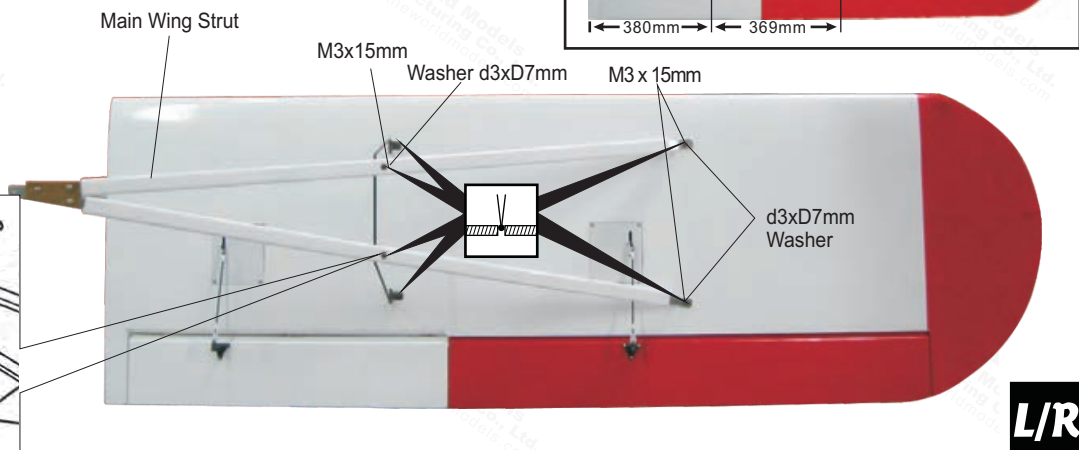
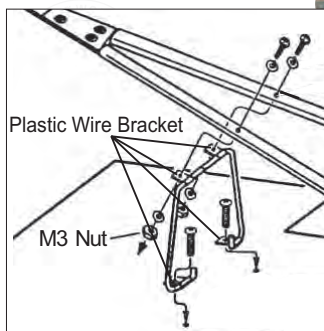
2 Aileron & Flap Servo

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



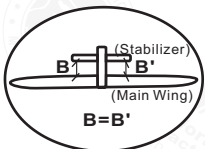
3 Wing Struts

M3 x 15mm	Screw	12
d3xD7mm	Washer	16
M3	Nut	4

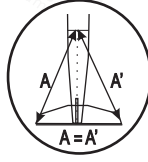
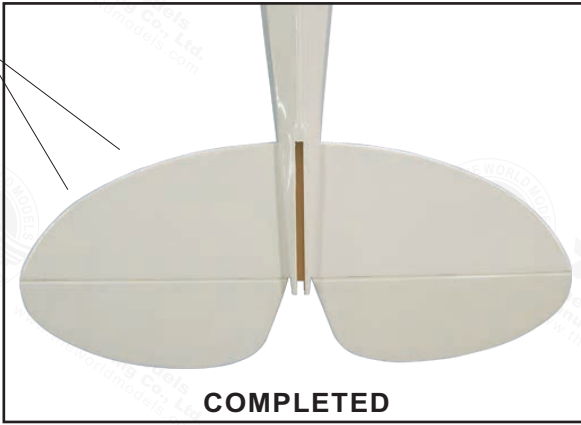
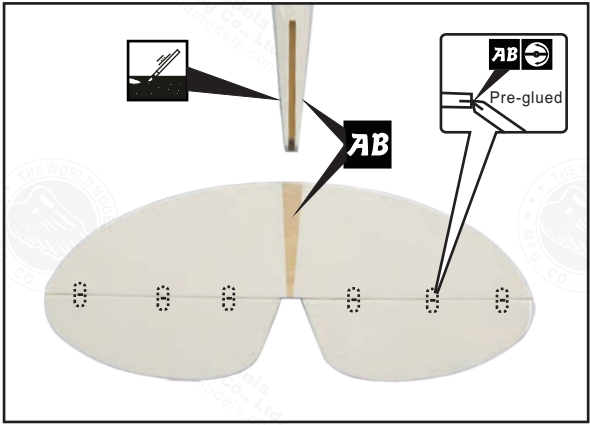


● Bottom View

4 Stabilizer & Elevator

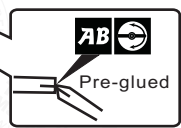
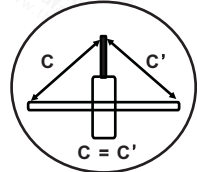
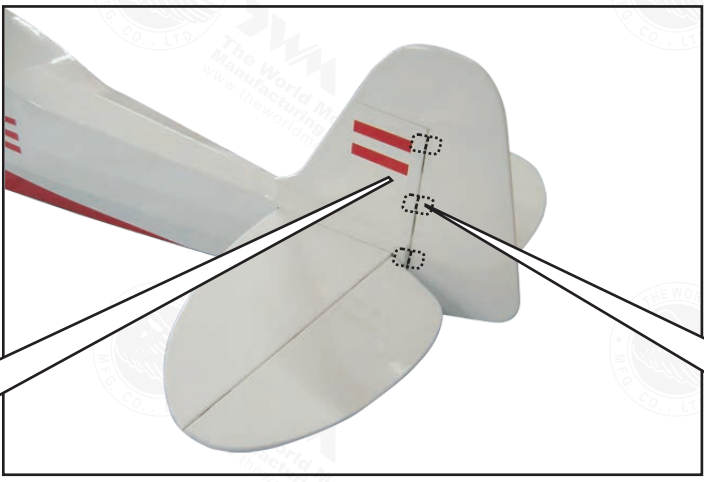
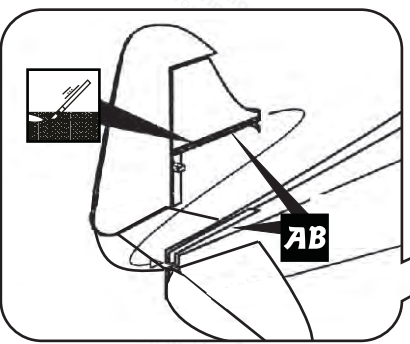


Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.



L/R

5 Vertical Fin & Rudder



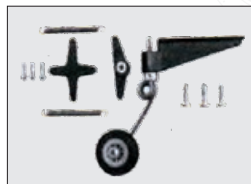
6 Tail Landing Gear

PA3x14mm **Screw**

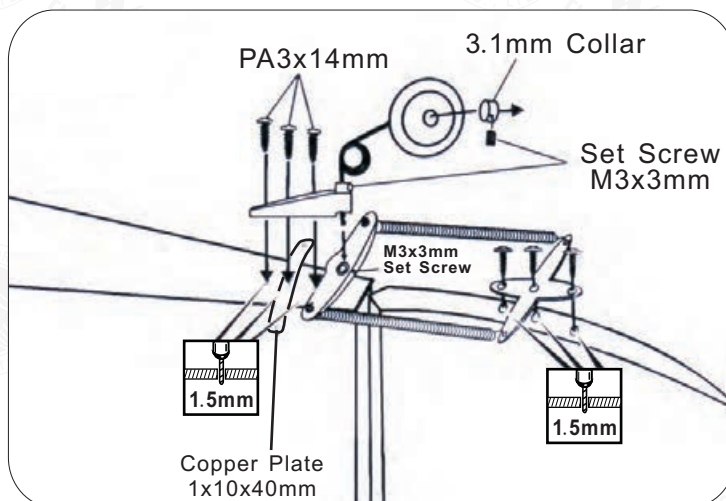
3

PWA2x12mm **Screw**

3



● Bottom View



7 Main Landing Gear

PA3 x12mm **Screw**

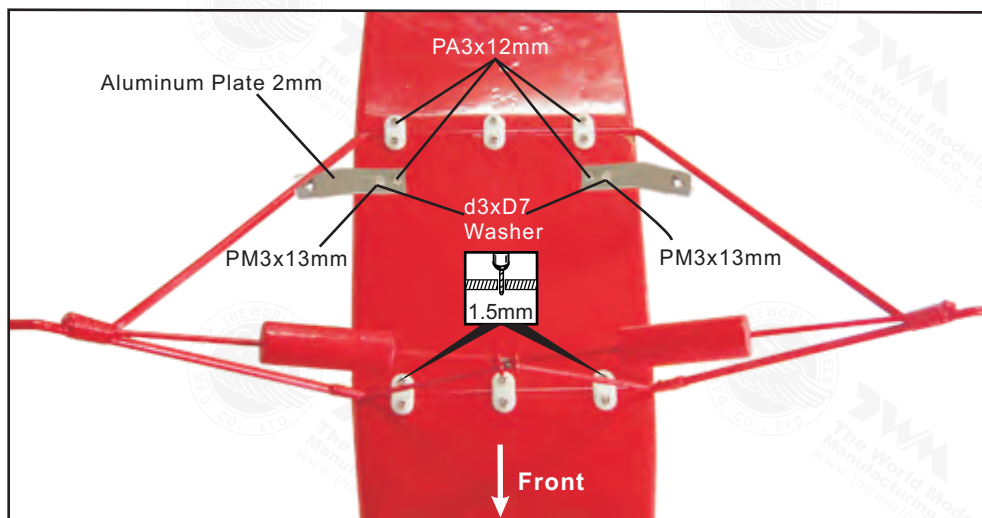
14

PM3 x 13mm **Screw**

2

d3xD7mm **Washer**

2



● Bottom View

8 Main Landing Gear

PA1.7 x 8mm **Screw**

6

PM3 x 13mm **Screw**

8

d3xD7mm **Washer**

16

M3 **Nut**

8

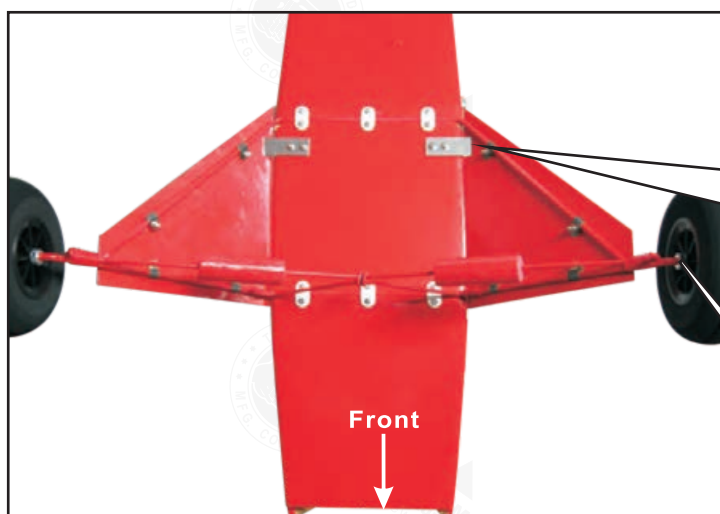
3mm **Set Screw**

4

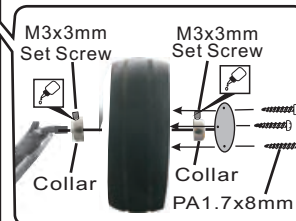
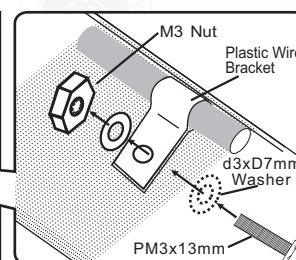
4.6mm **Wheel Collar**

4

L/R



● Bottom View



9 Engine Mount

M4x30mm
Socket Head Screw



D4.2xD14.5mm Washer



M4 Blind Nut



Socket Head Screw
M4 x 30mm

Engine Mount
PL 5111080

Washer
d4.2xD14.5mm



AB



10 Engine

M4x35mm
Socket Head Screw



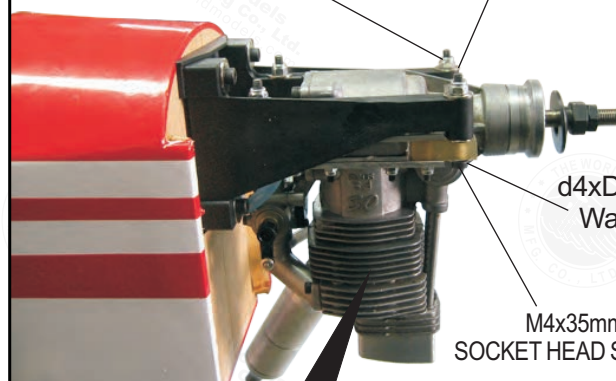
d4xD12mm Washer



M4 NYLON INSERT LOCK Nut



M4 NYLON INSERT LOCK NUT D4xD12mm Washer



d4xD12mm
Washer

M4x35mm
SOCKET HEAD SCREW

N.I.

ANTI-VIBRATION MOUNT INSTALLATION

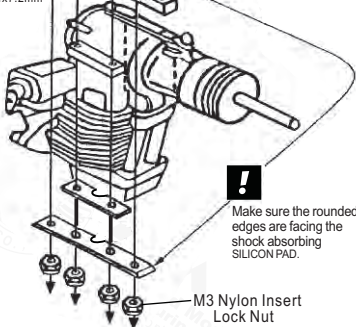
1

Copper Tube d4.1xD5x67.2mm



L/R

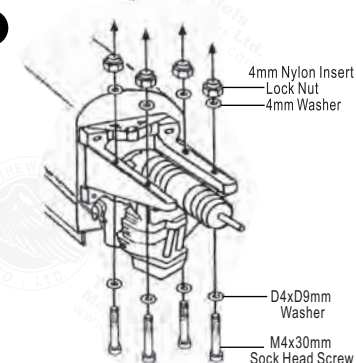
Copper Tube
d3.1xD4x7.2mm



! Make sure the rounded
edges are facing the
shock absorbing
SILICON PAD.

M3 Nylon Insert
Lock Nut

2



4mm Nylon Insert
Lock Nut
4mm Washer

D4xD9mm
Washer
M4x30mm
Socket Head Screw

● Installed Engine Position

147mm

5.79 in.

Throttle Pushwire
Ø1.2x480mm
Plastic Tube d2xD3x300mm

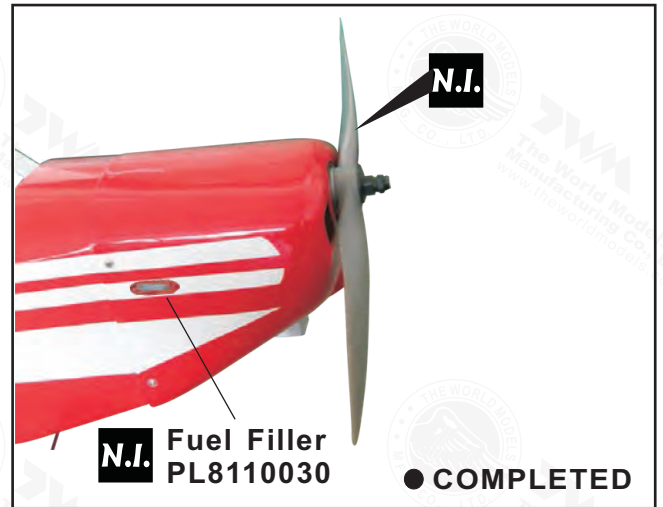
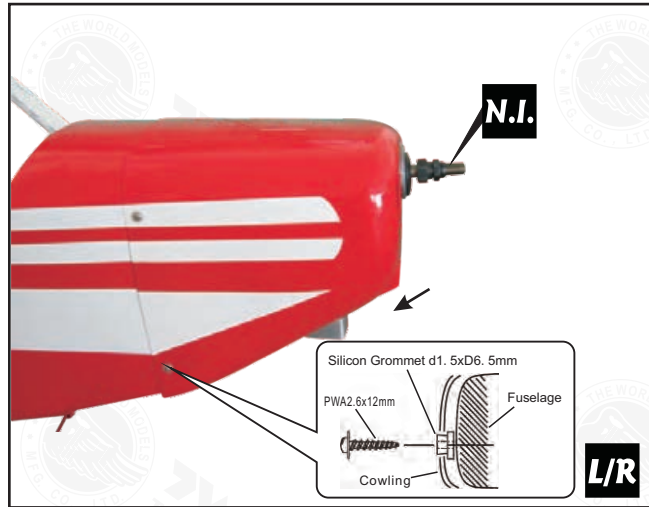
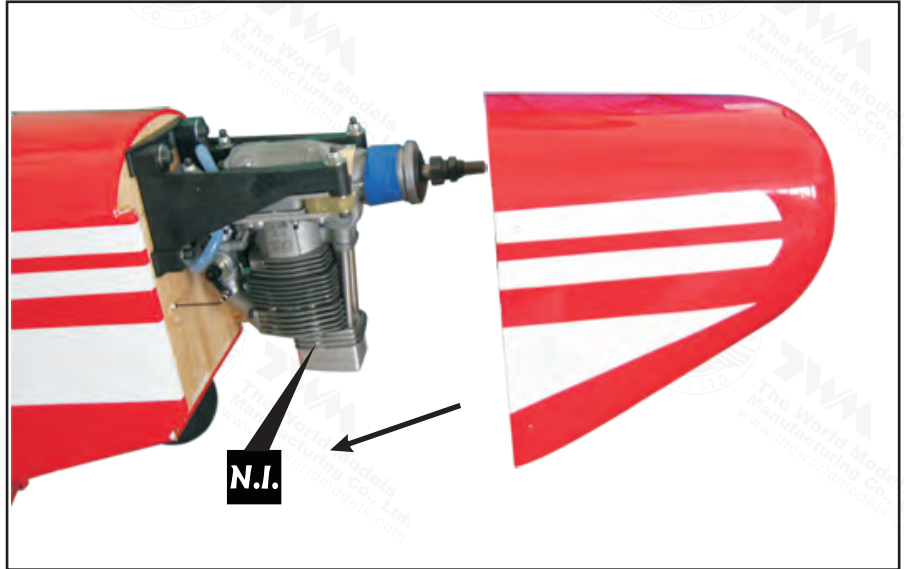
AB

11 Cowling

- PWA2.6x12mm Screw 4
- d1.5xD6.5mm Silicon Grommet 4

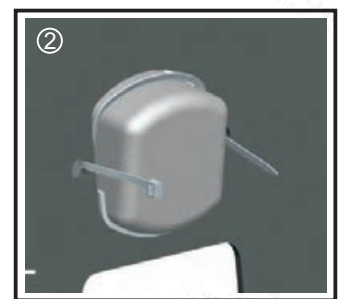
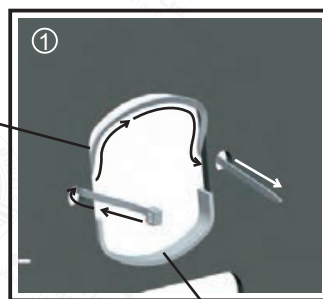
● Please refer to the attached sheet for usage of the transparent 3D template.

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

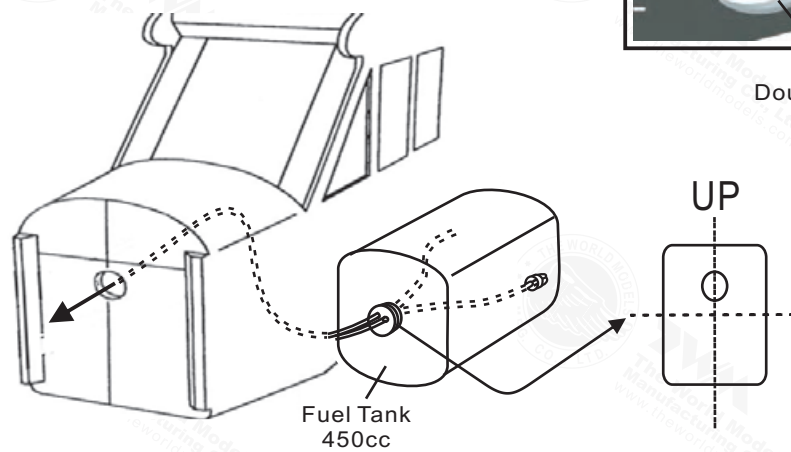
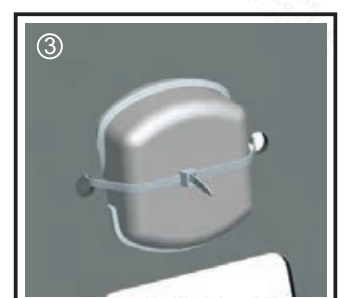


12 Fuel Tank

Cable Tie 1.5x5x400mm



Double-sided Tape 40x100mm

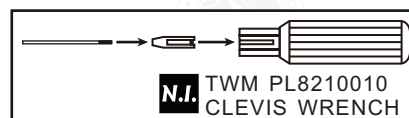
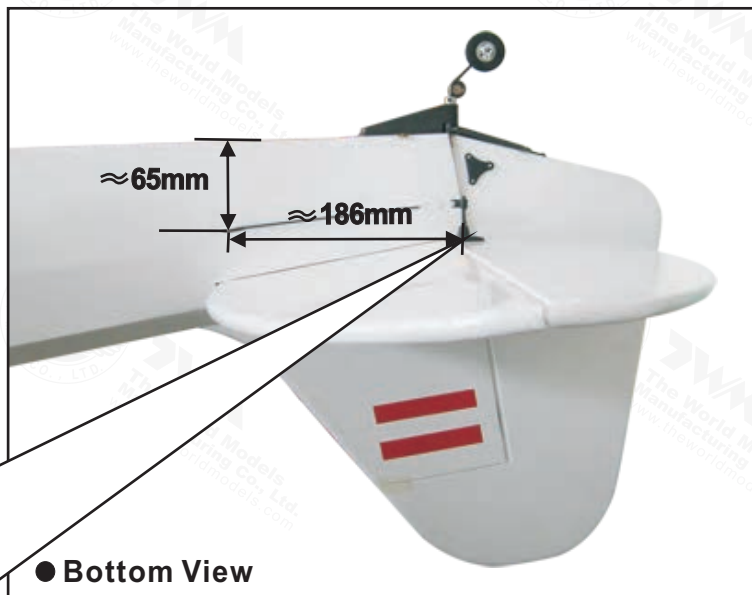
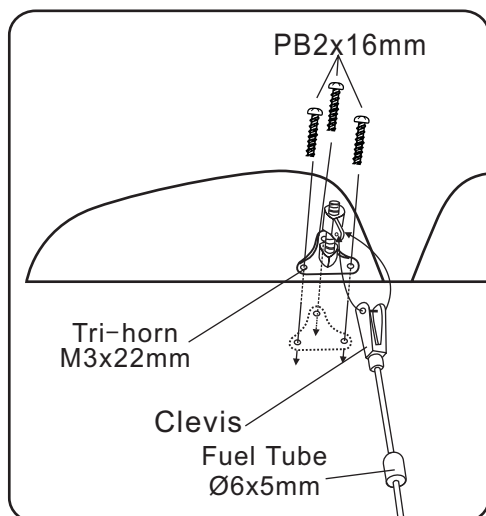


● COMPLETED

13 Elevator Pushrod

PB2x16mm Screw 6

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

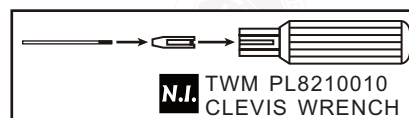
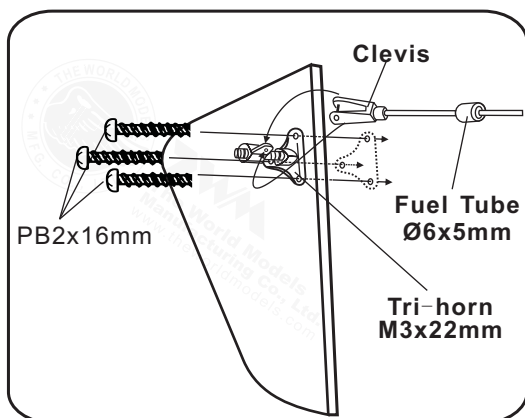


L/R

14 Rudder Pushrod

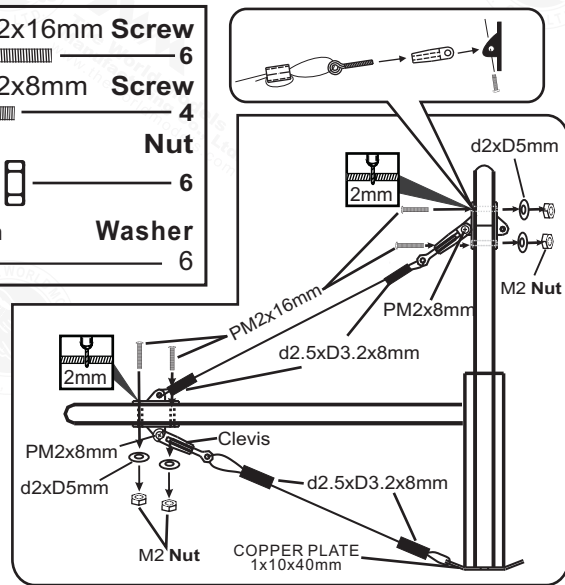
PB2x16mm Screw 3

- Ø1mm pilot holes for The Wings Maker tri-horn are pre-drilled.



15 Flying Wire

PM2x16mm Screw	6
PM2x8mm Screw	4
M2 Nut	6
3mm Washer	6



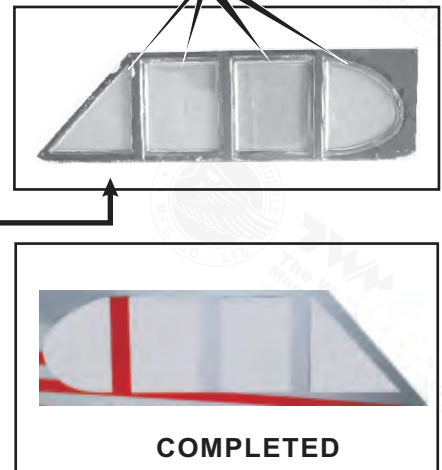
16 Windows

Window A



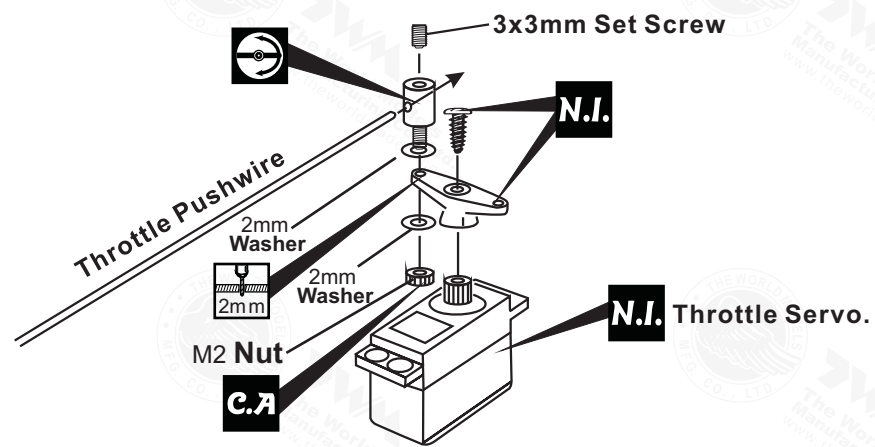
Securely glue the windows to the fuselage.

Window B



17 Servo Set

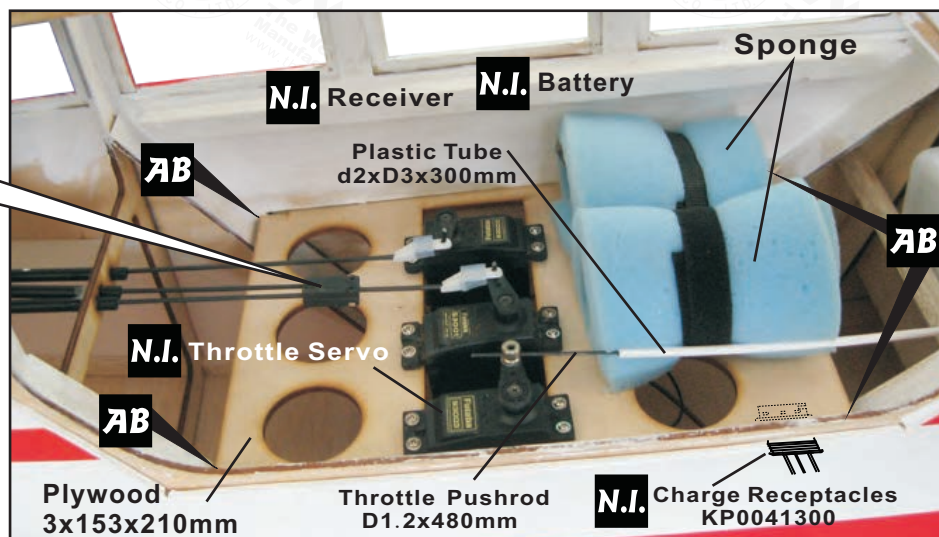
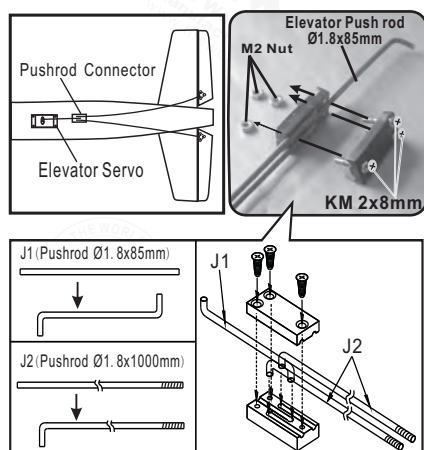
3x3mm Set Screw	1
Linkage Connector	1
M2 Nut	1
2mm Washer	2



! Please refer to the attached sheet for linkage connector installation.

18 Radio Equipment

● Install and arrange the servos as shown in the diagram.

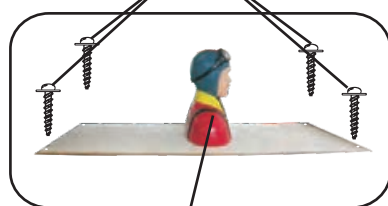


19 Pilot

PWA 2x12mm Screw



PWA 2x12mm Screw



PC001102A



20 Wind Shield

PWA2.3x12mm Screw



d1.5x6.5mm Silicon Grommet



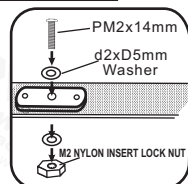
M2 NYLON INSERT LOCK NUT



PM2x14mm Screw



d2xD5mm Washer



d1.5xD6.5mm
silicon Grommet

PWA2.3x12mm

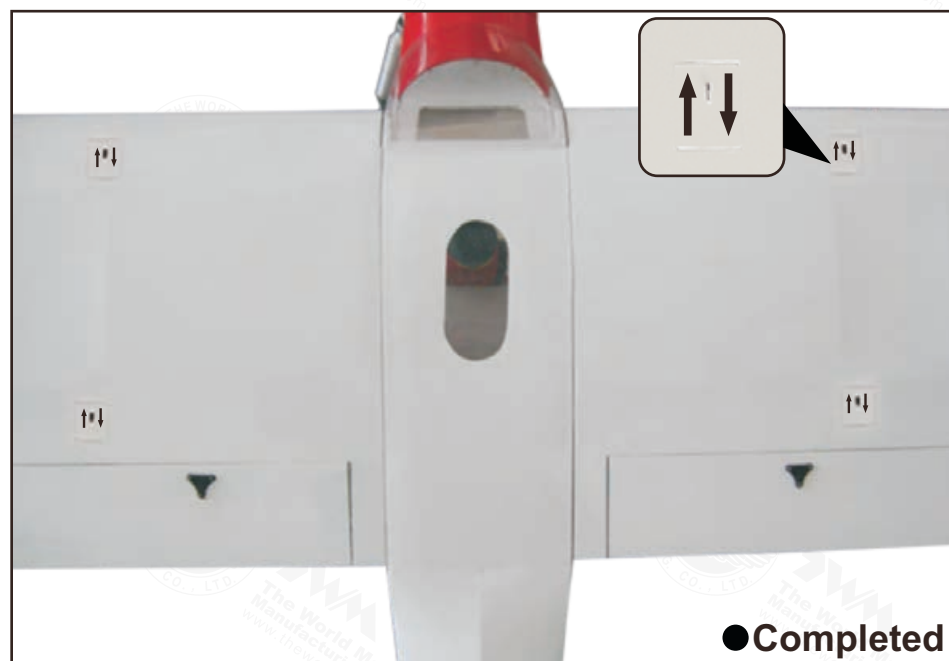
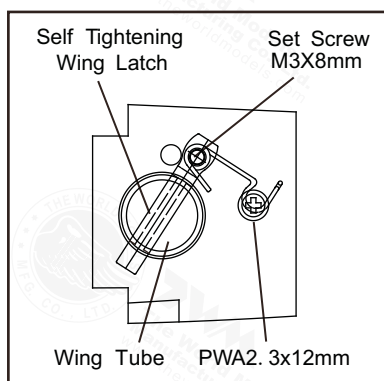
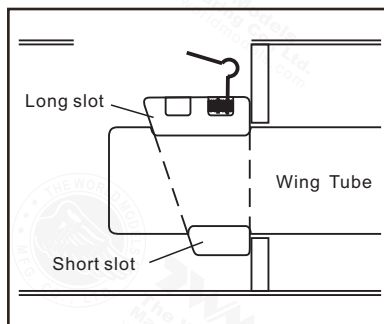
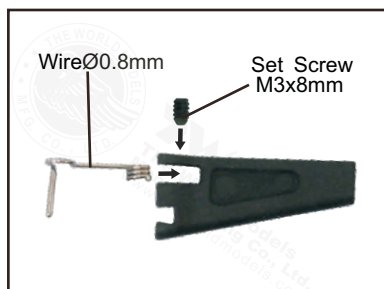
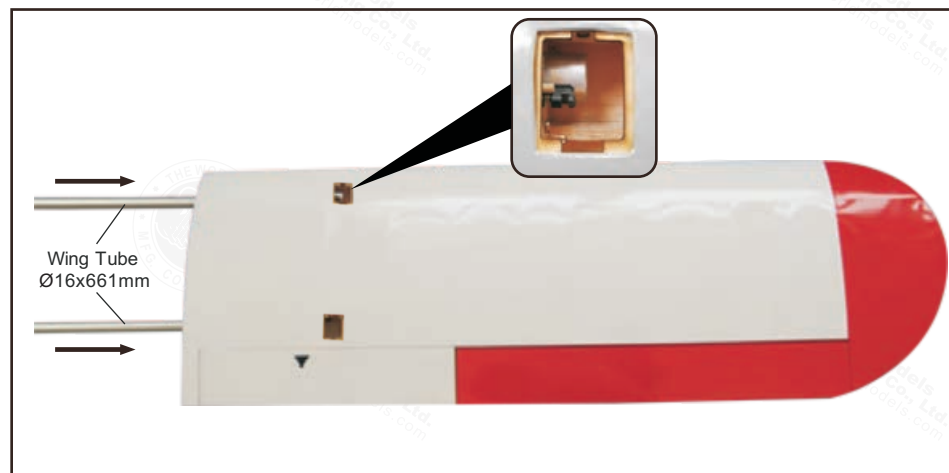
L/R

21 Main Wing

M3 x 8mm **Set Screw**

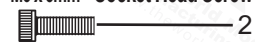
 4

L/R

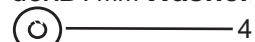


22 Wing Struts

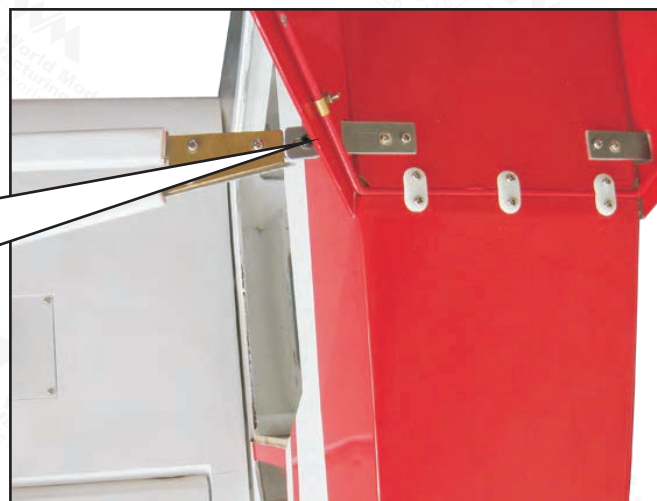
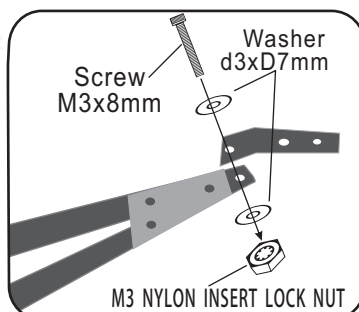
M3 x 8mm Socket Head Screw



d3xD7mm Washer



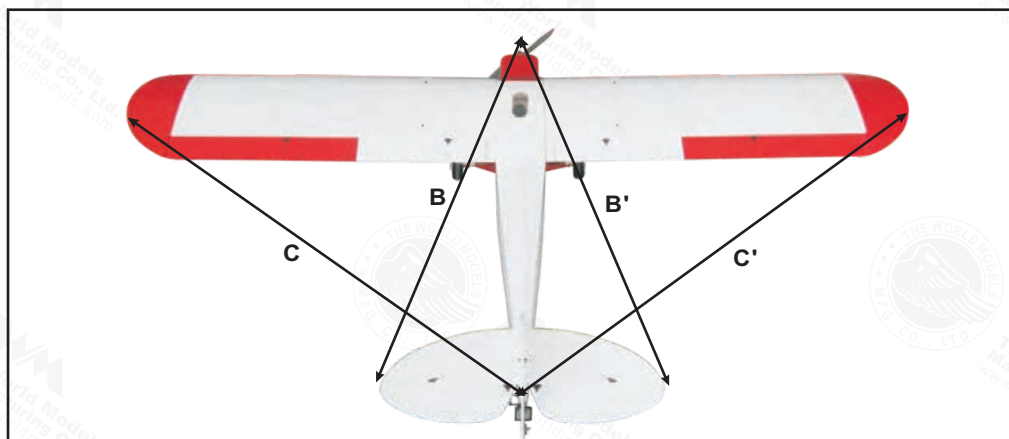
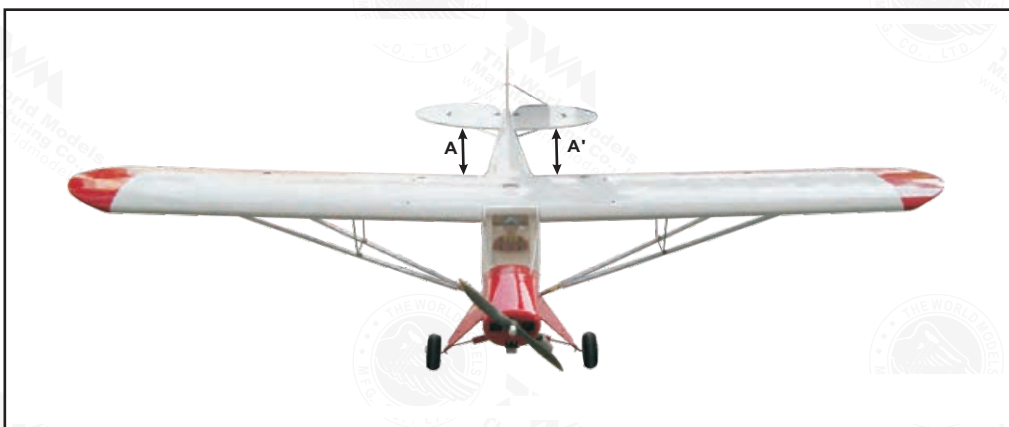
M3 Nylon Inert Lock Nut



L/R

23 Wing Setting

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



A = A'
B = B'
C = C'

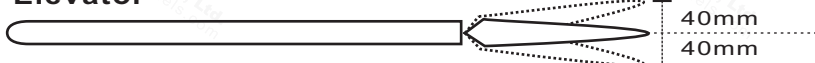
24 Control Throws

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

Rudder



Elevator



Flaps (near fuselage)



Ailerons (away from fuselage)



25 C.G.

The ideal **C.G.** position is **102mm (4.0 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.



<http://www.theworldmodels.com/para/instruction/instructionManuals.php>

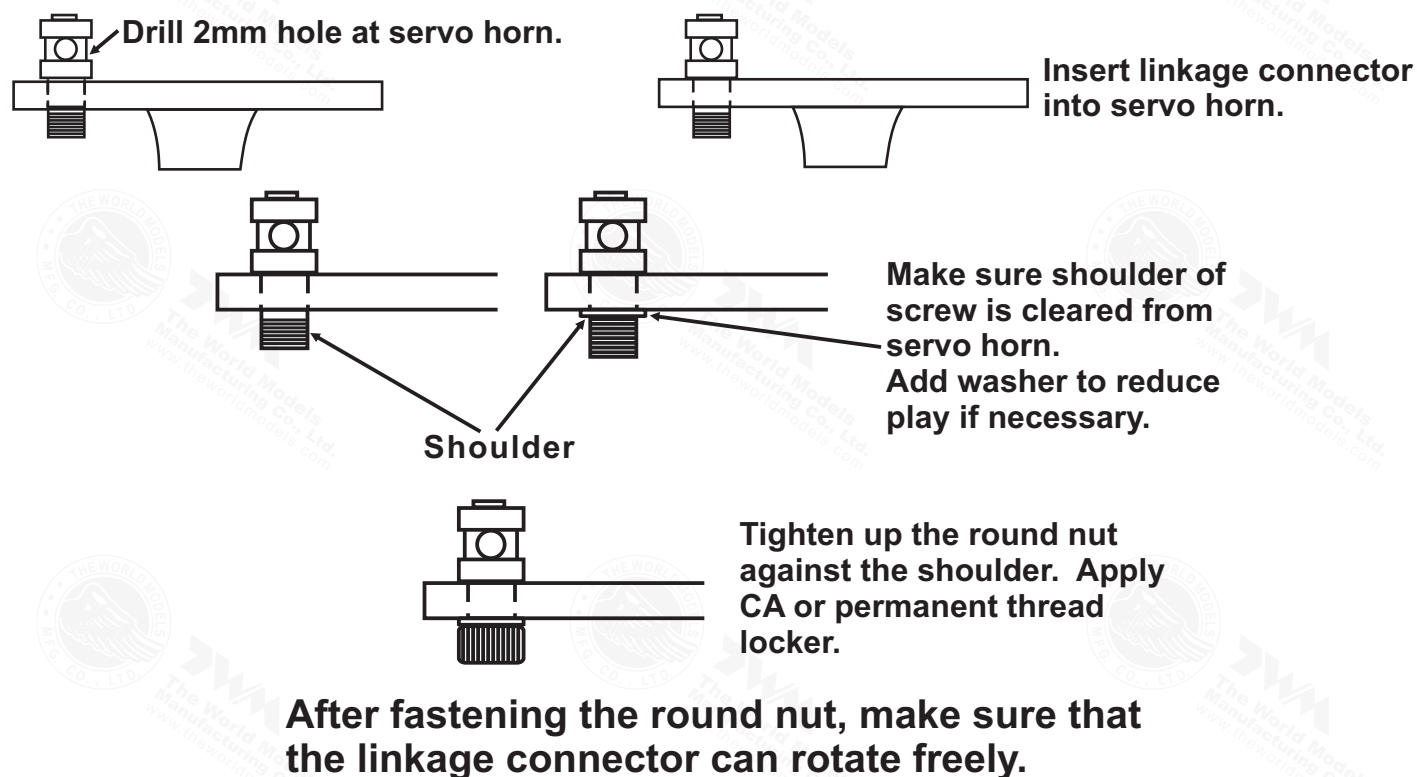
! Warning!

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.
- # **1/4 SUPER CUB** is specially designed to be powered by **2C 0.91** or **4C 1.20-1.60**, 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. 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.

LINKAGE CONNECTOR

HW7111050 & HW7111060



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: _____

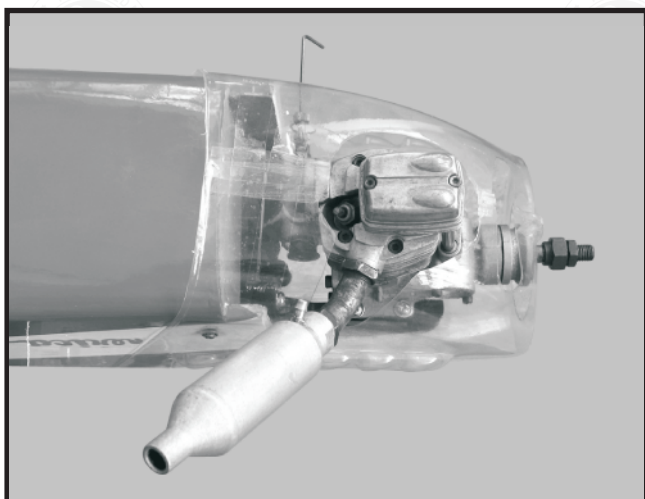
Please call AirBorne Models at 925 371 0922 for any assistance in filling this form.
Thank you very much for purchasing our product.

Usage of the transparent 3D template



This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

1



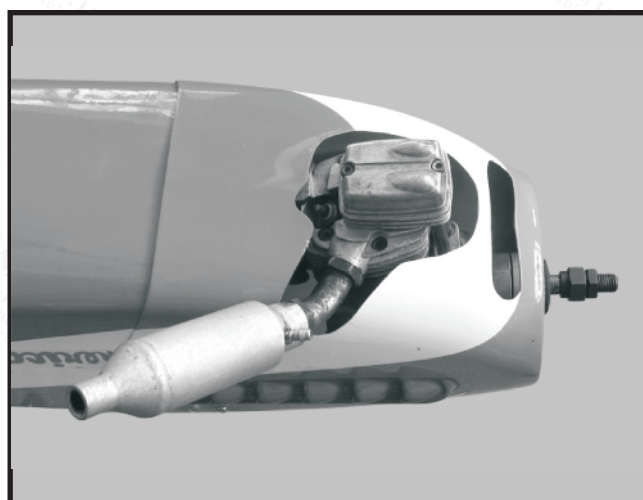
2



3



4



Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.

Optional Parts

(ACCESSORIES)

180mm Extension

Code No.	Size	Package
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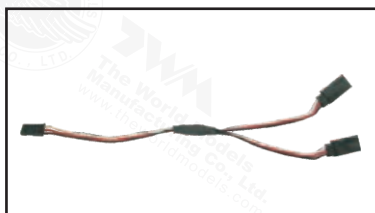
KW0011800 180mm 1 set



180mm Y-Cord

Code No.	Size	Package
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KW0021800 180mm 1 pc

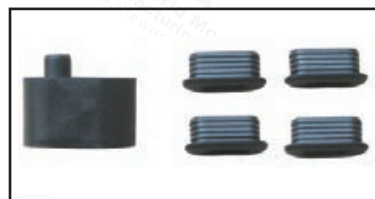


For park flyers of small electric models

Charge Receptacles

Code No.	Size	Package
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KP0041300



Field Stand

Code No.	Size	Package
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MS9111430 600 x 240 x 310mm 1 pc



Fuel Filler

Code No.	Size	Package
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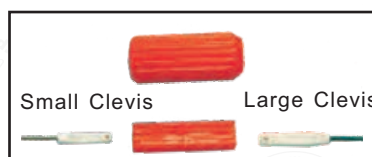
PL8110030 15 x 22 x 49mm 1 x 1 pc



Clevis Wrench

Code No.	Size	Package
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PL8210010 1 set



Small Clevis Large Clevis

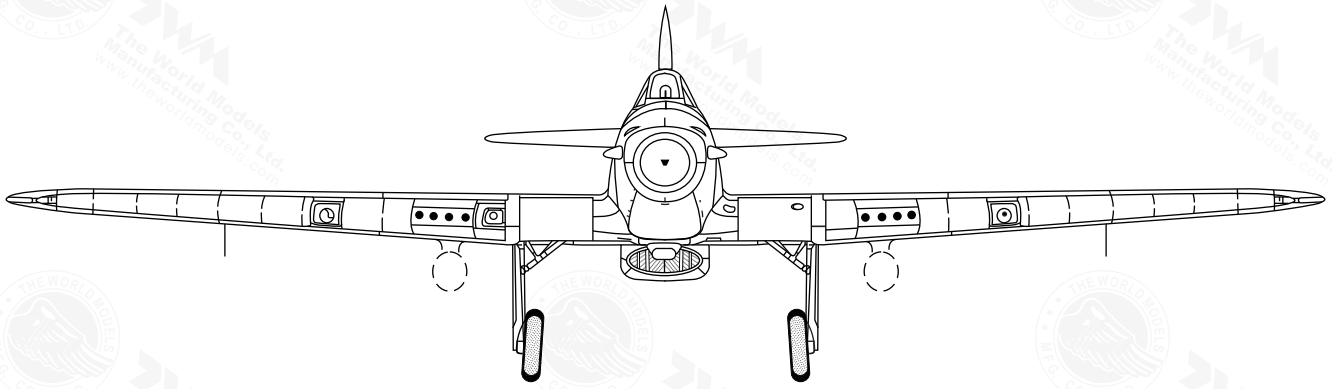
Special tool for clevis installation.
Suitable for standard and small (EP) clevis.

Standard Servo

Code No SV4031



Speed : 0.17 sec / 60° @4.8V
0.14 sec / 60° @6.0V
Torque : 3.2kg.cm / 44.8 oz - in @4.8V
4.1kg.cm / 57.4 oz - in @6.0V
Size : 40.6 x 20 x 37mm /
1.60 x 0.79 x 1.46 in
Weight : 39.4 g / 1.39 oz



Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer Boat

Accessories

Covering

(Lightex / Toughlon)



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