

SIKY RAIDER

Mach-II



0.40-0.46 Cubic inch displacement 2- stroke
Requires: 4- channel radio w/ 4 standard servos

Specifications

Wing Span	54.0 in / 1370 mm
Wing Area	556 sq in / 35.9 sq dm
Flying Weight	5 lb / 2200 g
Fuselage Length	47.5 in / 1210 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.



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

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



SIKKY RAIDER

Mach-II



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BEFORE YOU BEGIN

- 1 Read through the manual before you begin, so that you can 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!



Warning!

Do not overlook this symbol!



Parts List

1. MAIN WING --1 pair
2. WING JOINER 6x26x145mm--1 pc.
3. PLYWOOD 3x8x22mm(For Aileron Servo)--1 pc.
RING D2.3mm--2 pcs
4. STRAPER--2 pcs
CLEVIS--2 pcs
FUEL TUBE D6x5mm--4 pcs
PUSHROD D1.8X135mm w/ Threads(For Aileron)--2 pcs
5. FUSELAGE--1 pc.
STABILIZER & ELEVATOR --1 set
6. VERTICAL FIN & RUDDER--1 set
SCREW PM3x65mm--2 pcs
WASHER d3xD7mm--2 pcs
7. MAIN LANDING GEAR--1 set
COLLAR D4.1mm w/ set screw--4 sets
MAIN WHEEL 62mm--2 pcs
SCREW PA3x10mm--4 pcs
MOUNTING PLATE 10x20mm(For Main Landing Gear)--2 pcs
8. TAIL LANDING GEAR--1 set
COLLAR D2.1mm w/ set screw--1 set
TAIL WHEEL 25mm--1 pc.
ALUMINUM REINFORCEMENT PLATE--1 pc.
SCREW PA3x12mm--2 pcs
SCREW PM2x12mm--1 pc.
M2 NUT --1 pc.
9. ENGINE MOUNT PL5111030--1 set
SOCKET HEAD SCREW M3x20mm--4 pcs
WASHER d3xD7mm--4 pcs
10. FUEL TANK 260cc--1 set
BALSA 9x9x88mm(For Fuel Tank Position Fixing)--1 pc.
11. LINKAGE CONNECTOR 2.1mm w/ set screw--1 set
12. PUSHROD D1.8x685mm w/ Threads(For Elevator)--1 pc.
13. PUSHROD D1.8x685mm w/ Threads(For Rudder)--1 pc.
SCREW PB2x12mm--3 pcs
TRI-HORN M3x14mm(S)--1 set
FUEL TUBE D6x5mm--1 pc.
CLEVIS--1 pc.
14. ALUMINUM PLATE 1mm --1 pc.
WASHER d2xD5mm -- 4 pcs
SCREW PM2x8mm -- 4 pcs
SCREW PM3x25mm--4 pcs
WASHER d3xD7mm--8 pcs
M2 NUT--4 pcs
M3 NUT--8 pcs
SPINNER 52mm--1 set
15. THROTTLE PUSHWIRE D1.2x330mm--1 pc.
PLASTIC TUBE d2xD3x240mm--1 pc.
STRAPER--2 pcs
FUEL TUBE D6x5mm--2 pcs
SPONGE 60x70x89mm--1 pc.
16. SCREW PM4x30mm--2 pcs
WASHER d4x12mm--2 pcs
17. CANOPY--1 pc.
DOUBLE-SIDED TAPE-- 1 pc.
SCREW PWA2.3x8mm--4 pcs
SILICON GROMMET d1.5xD6.5mm--4 pcs
18. DECALS A178NDEC--1 set
- COVERING:--
GREEN COLOR SCHEME
TOUGHLON STLA178NGWIG
TOUGHLON STLA178NGFUS
TOUGHLON STL100 WHITE
TOUGHLON STL204 CREAM
TOUGHLON STL240 GREEN
TOUGHLON STL571 RICH GOLD
RED COLOR SCHEME
TOUGHLON STLA178NRWIG
TOUGHLON STLA178NRFUS
TOUGHLON STL100 WHITE
TOUGHLON STL201 BLACK
TOUGHLON STL311 FERRARI RED
TOUGHLON STL314 FUCHSIA

1 Main Wing



● Left Wing

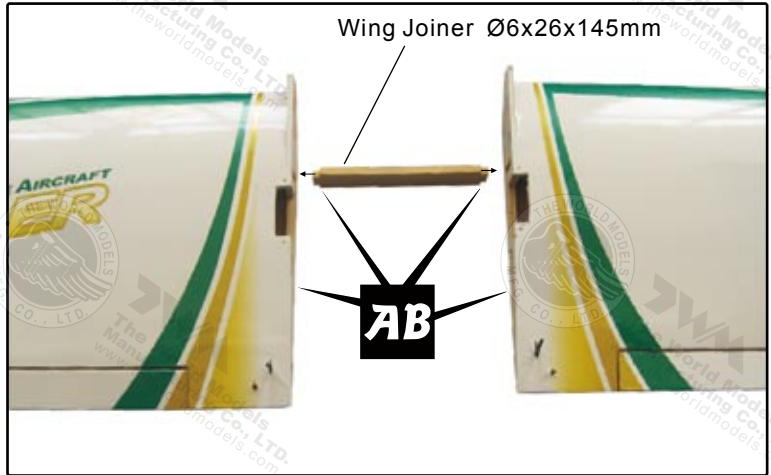
2 Main Wing

● Please dry fit wing joiner into left and right wing to make sure they fit with the proper dihedral angle, mark the wing joiner if necessary. Apply epoxy glue to both sides of all surfaces in contact. Use a stick to apply the glue to inner side of wing joiner sleeve, and apply the glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

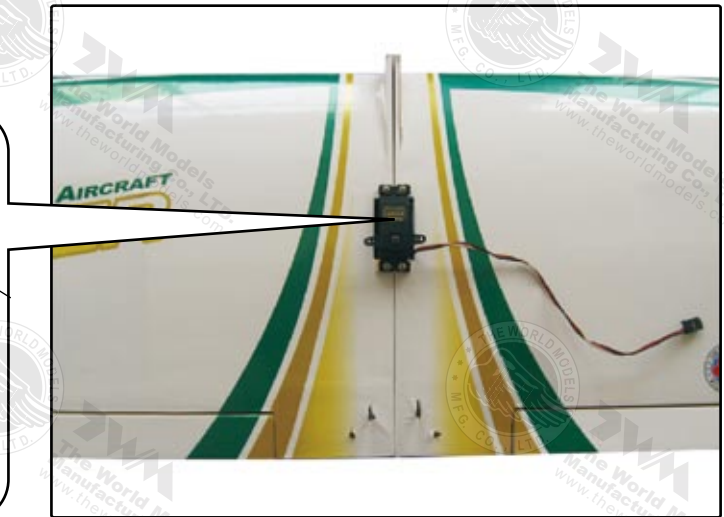
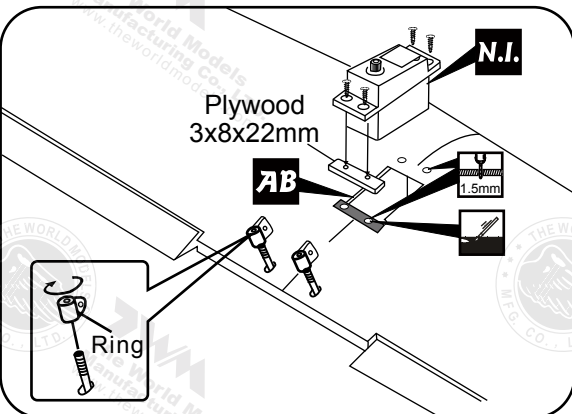


Completed

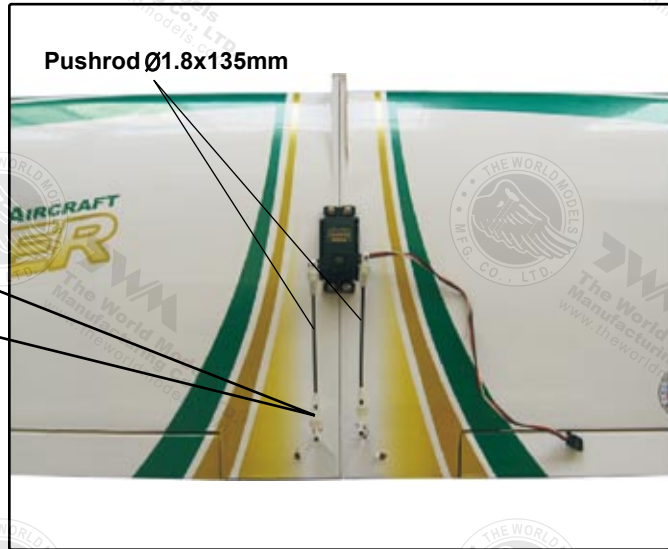
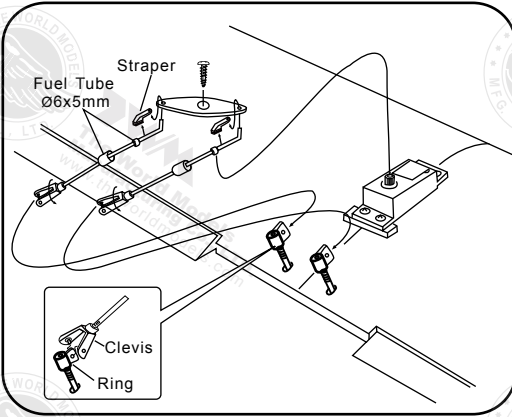
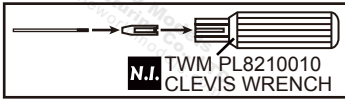
● Make sure to glue securely. If not properly glued, a failure in flight may occur.



3 Aileron Servo

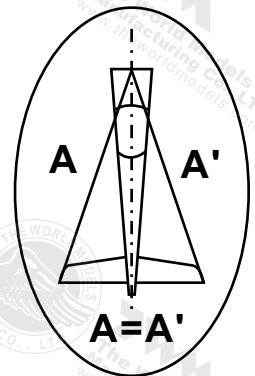
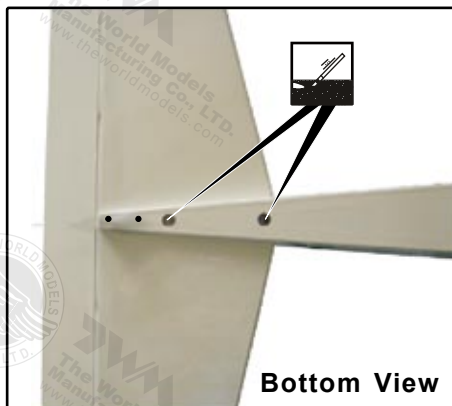
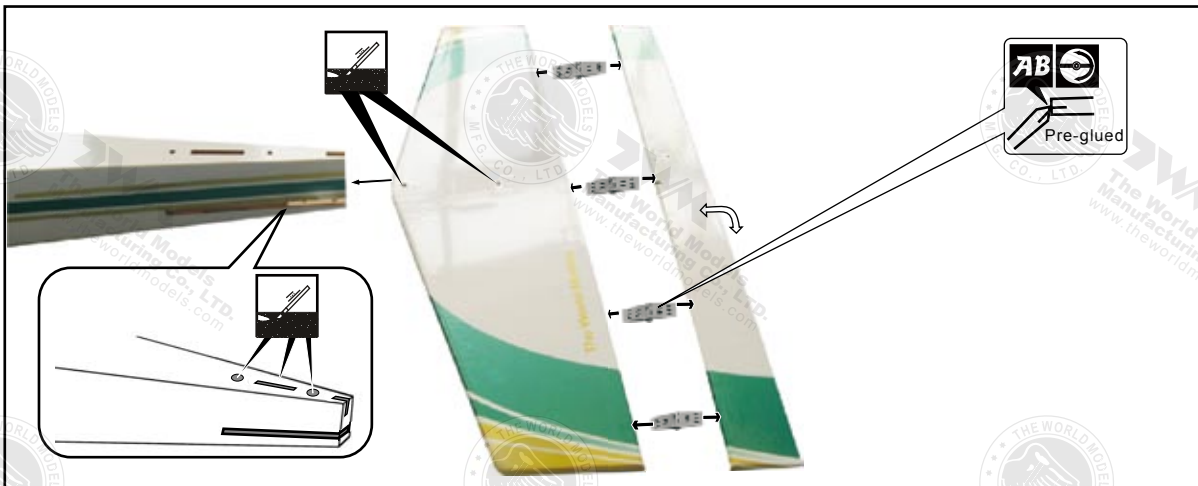


4 Aileron Servo



Completed

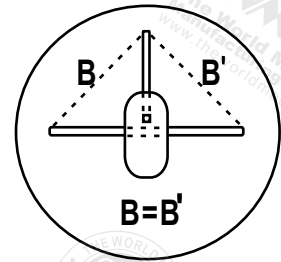
5 Stabilizer & Elevator



6 Vertical Fin / Rudder

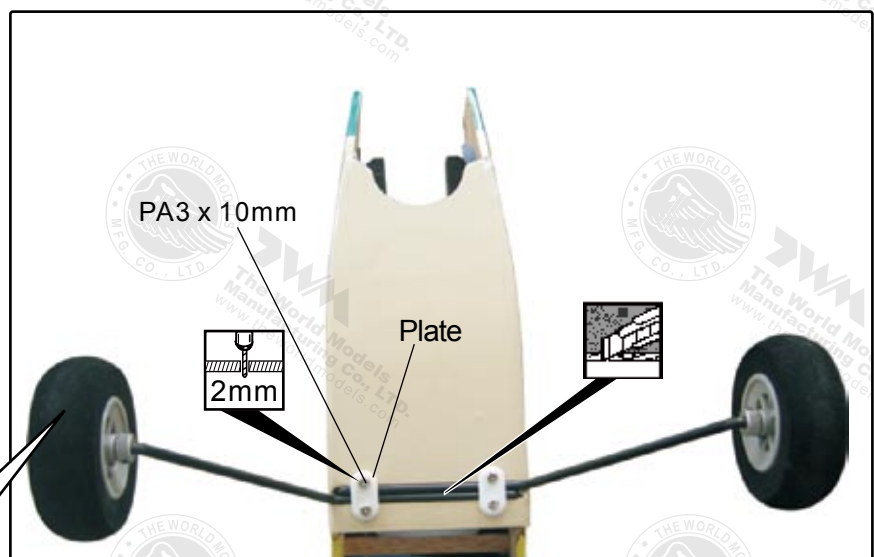
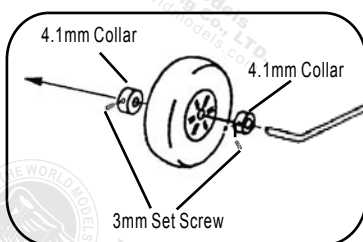
PM3 x 65mm **Screw** — 2
 d3 x D7mm **Washer** — 2

Use thread locker when tightening screw. Don't use excessive force as you are dealing with balsa.



7 Main Landing Gear

3mm **Set Screw** — 4
 4.1mm **Collar** — 4
 PA3 x 10mm **Screw** — 4



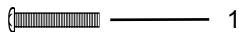
L/R

8 Tail Landing Gear

PA3 X12mm Screw



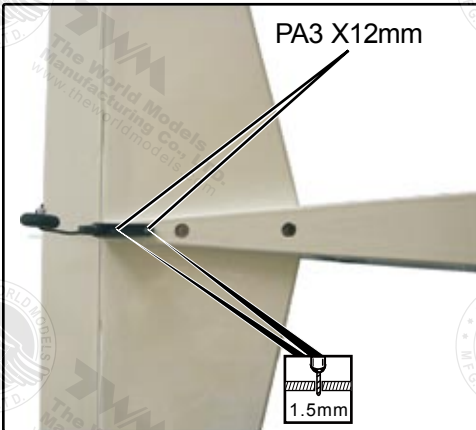
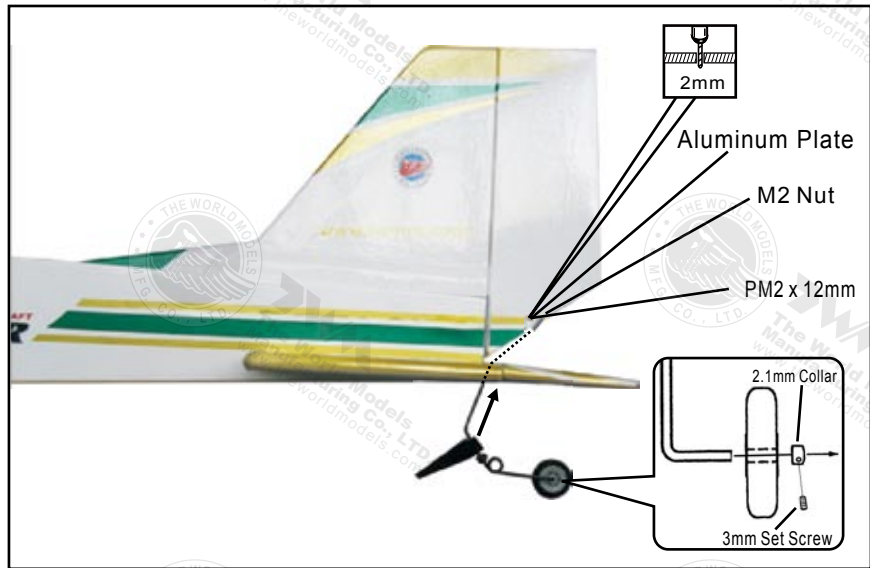
PM2 x 12mm Screw



M2 Nut



2.1mm Collar



● Bottom View



Completed

9 Engine Mount

M3 x 20mm Socket Head Screw



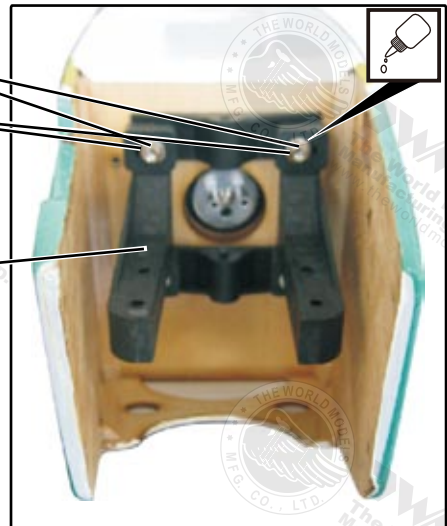
d3 x D7mm Washer



Socket Head Screw
M 3 x 20mm

Washer
d3xD7mm

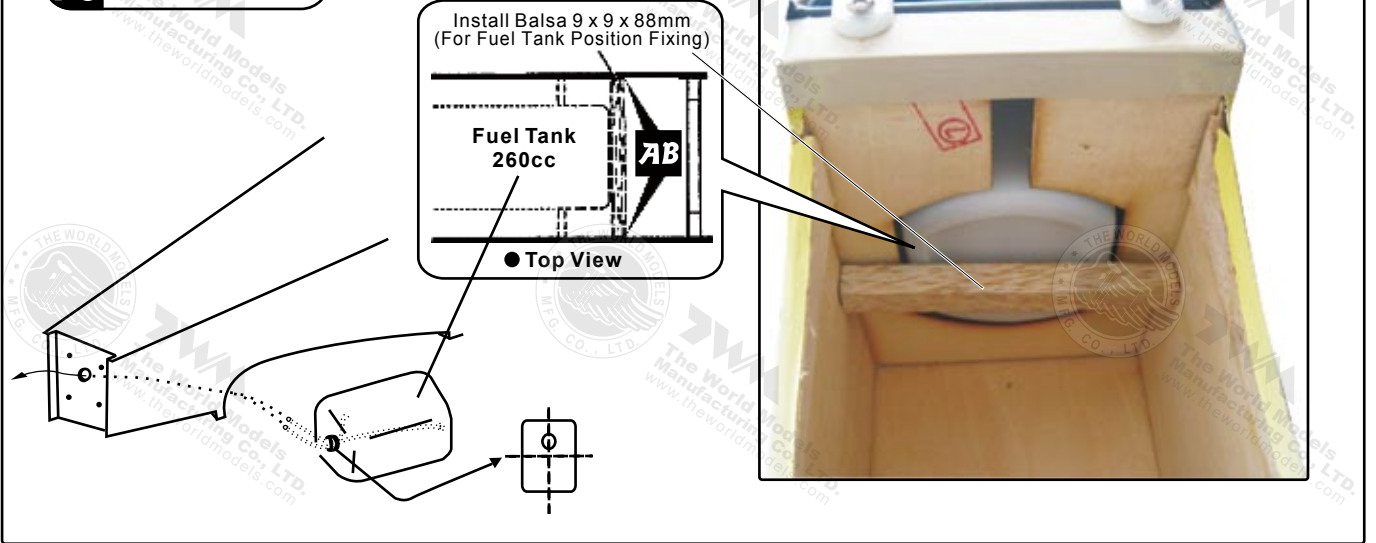
Engine Mount
PL5111030



- Apply thread locker to screws.

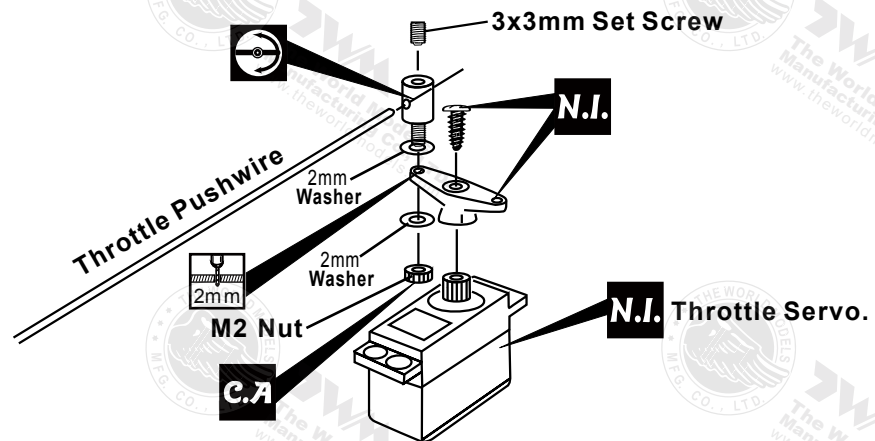
! Blind nuts are off-centered to keep the spinner at the fuselage axis.

10 Fuel Tank



11 Servo Set

3 X 3mm Set Screw	1
Linkage Connector	1
2mm Nut	1
2mm Washer	2



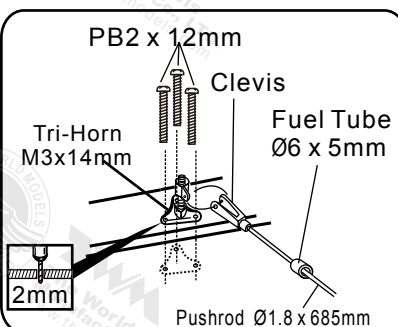
! Please refer to attached sheet for linkage connector installation.

12 Elevator Pushrod

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

PB2 x 12mm Screw 3

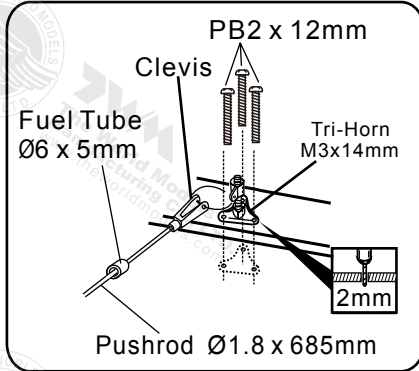
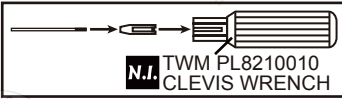
N.I. TW8210010
CLEVIS WRENCH



13 Rudder Pushrod

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

PB2 x 12mm Screw



14 Engine

PM2 x 8mm Screw



d2 x D5mm Washer



PM3 x 25mm Screw



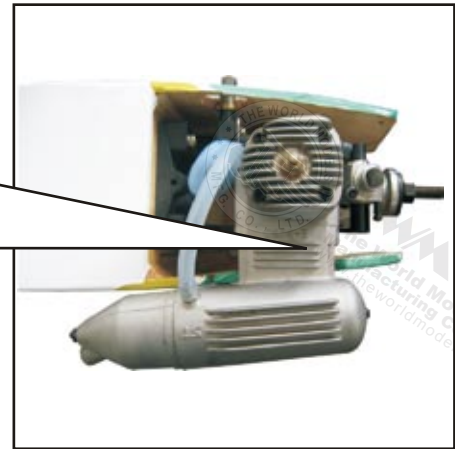
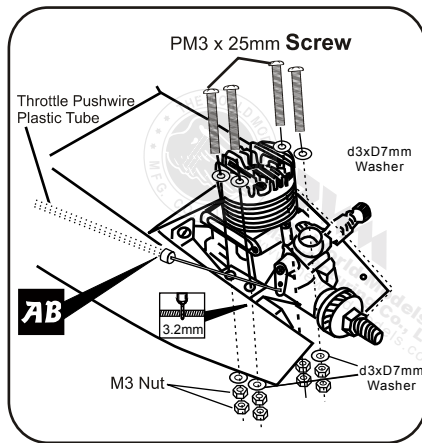
d3 x D7mm Washer



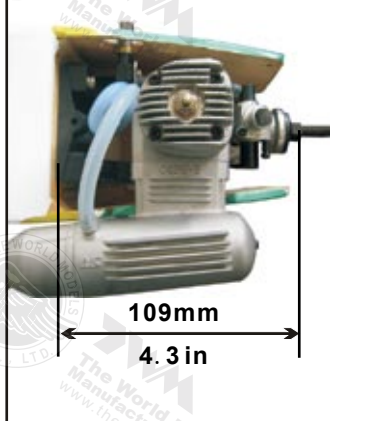
M2 Nut



M3 Nut



● Installed Engine Position

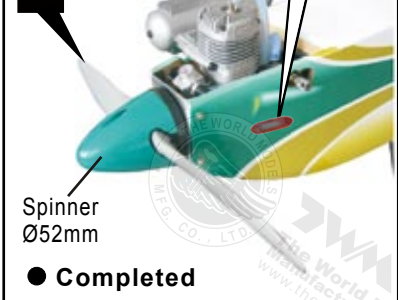


Aluminum Plate 1mm



N.I. Fuel Filler PL8110030

N.I. Propeller



● Completed

15 Radio Equipment

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

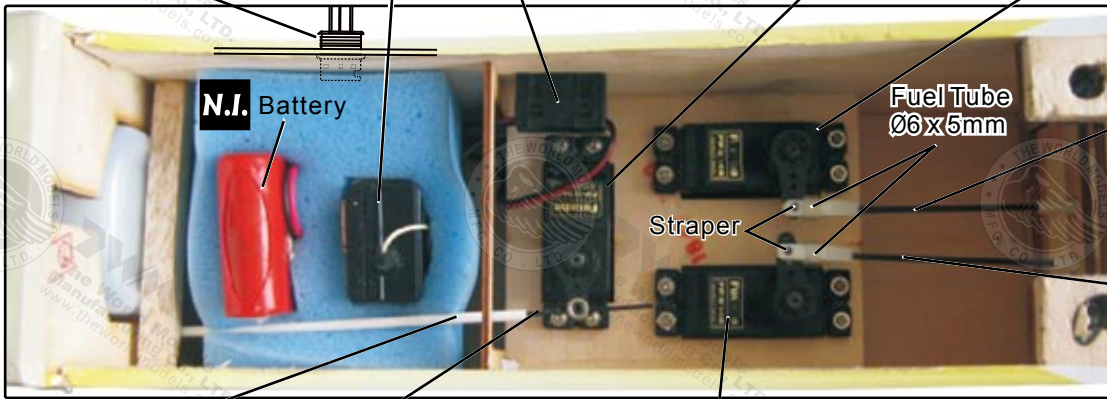
N.I. Charge Receptacles
KP0041300

N.I. Receiver

N.I. Switch Harness

N.I. Throttle Servo

N.I. Rudder Servo



N.I. Battery

Fuel Tube
Ø6x5mm

Rudder
Pushrod

Straper

Elevator
Pushrod

Plastic Tube
d2 x D3 x 240mm

Throttle Pushwire
Ø1.2 X 330mm

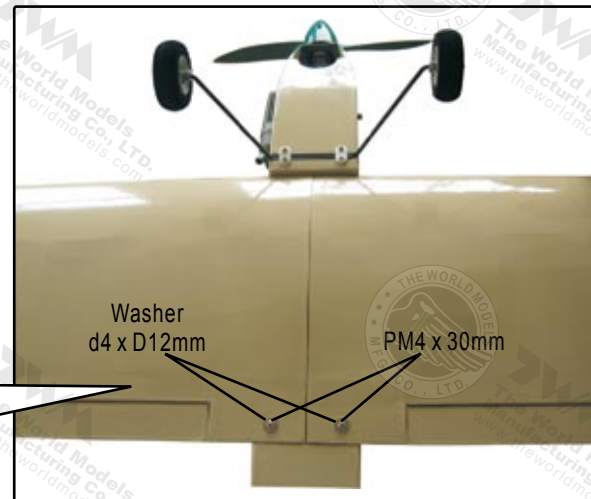
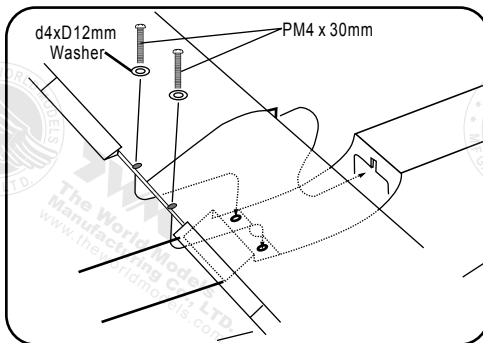
N.I. Elevator Servo

16 Main Wing

PM4 x 30mm Screw



d4 x D12mm Washer



Washer
d4 x D12mm

PM4 x 30mm

● Bottom View

17 Canopy

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

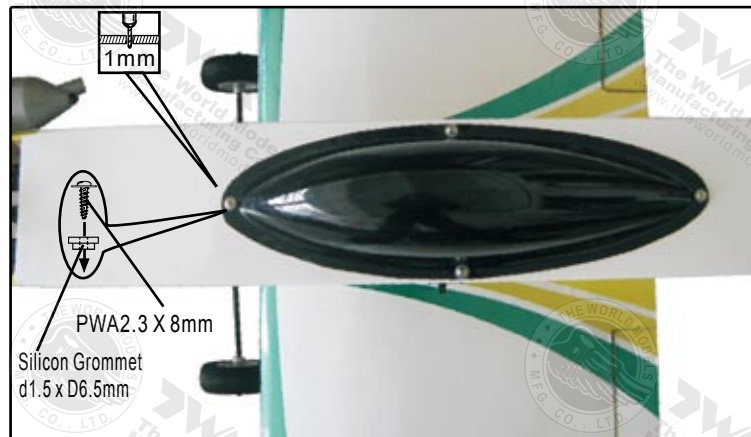
PWA2.3 X 8mm Screw



d1.5 x D6.5mm Silicon Grommet



Apply double-sided tape

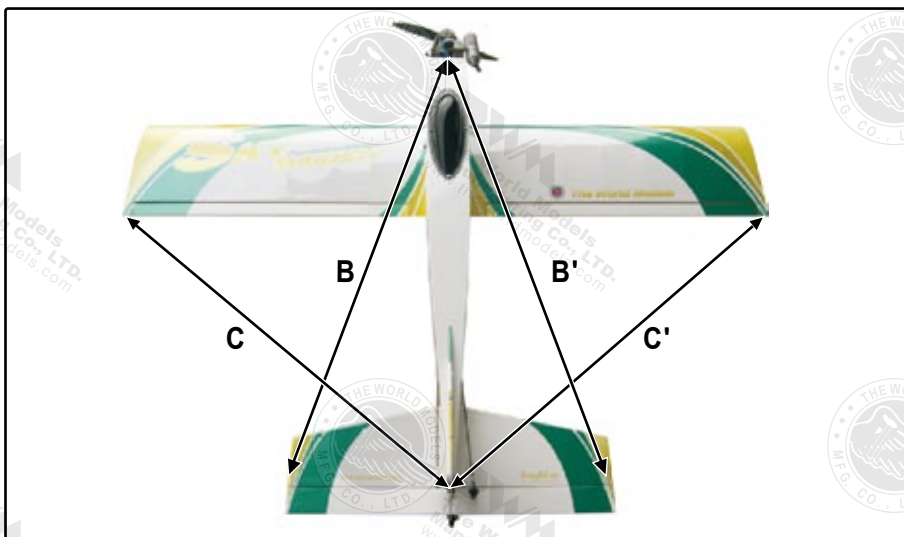


PWA2.3 X 8mm

Silicon Grommet
d1.5 x D6.5mm

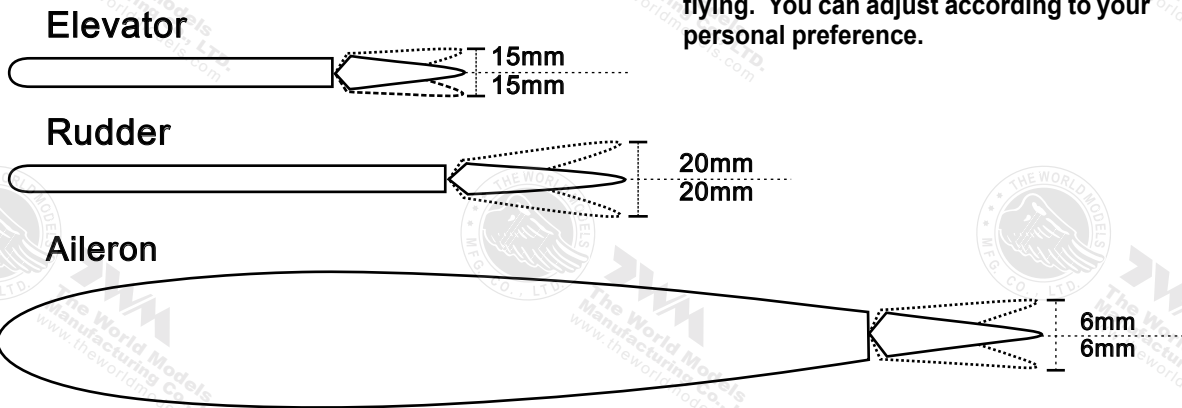
18 Wing Setting

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



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

19 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.

20 C.G.



The ideal C.G. position is 76mm (3in) 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.

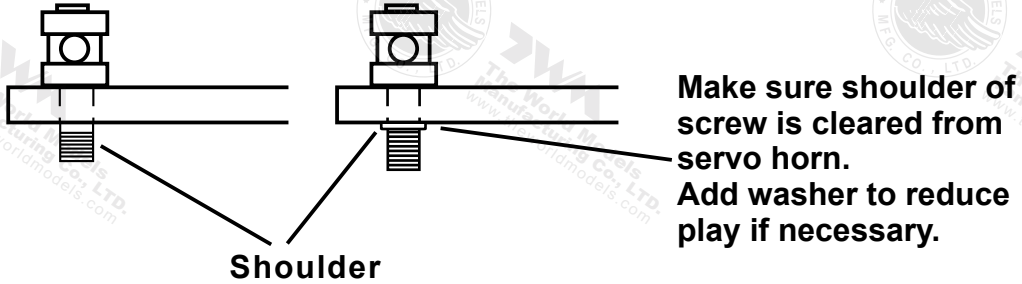
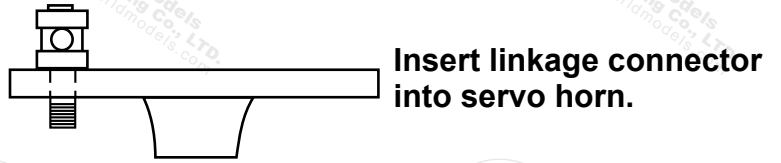
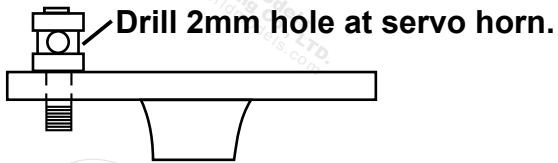
! Warning!

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.
- # **SKY RAIDER** is specially designed to be powered by **2C 0.40-0.46** 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. 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



After fastening the round nut, make sure that the linkage connector can rotate freely.

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, 2403 Research Drive, Livermore, CA 94550 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)

180mm Extension

Code No.	Size	Package
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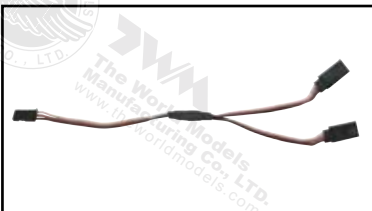
KW0011800 180mm 1 set



180mm Y-Cord

Code No.	Size	Package
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KW0021800 180mm 1 pc



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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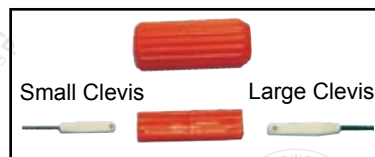
PL8110030 15 x 22 x 49mm 1 x 1 pc



Clevis Wrench

Code No.	Size	Package
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PL8210010 1 set



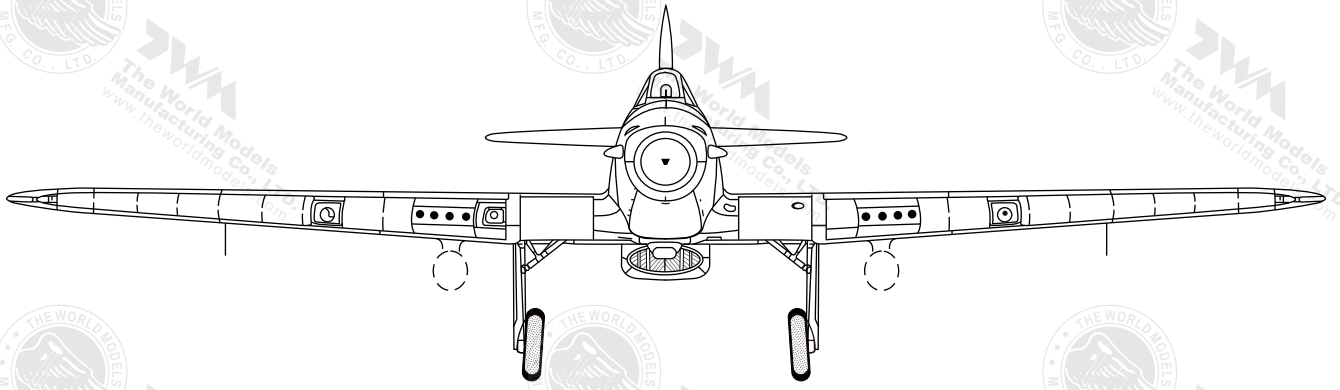
Special tool for clevis installation.
Suitable for standard and small (EP) clevis.

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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