

MIDGET MUSTANG



0.61 cu.in. displacement 2-cycle

0.91 cu.in. displacement 4-cycle

Radio required : 4- channels radio w/ 5 standard servos

Specifications

Wing Span	59.5 in / 1510 mm
Wing Area	667 sq in / 43.0 sq dm
Flying Weight	7.5 lbs / 3400 g
Fuselage Length	51.0 in / 1290 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

MIDGET MUSTANG

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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.)



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).



Must be purchased separately!



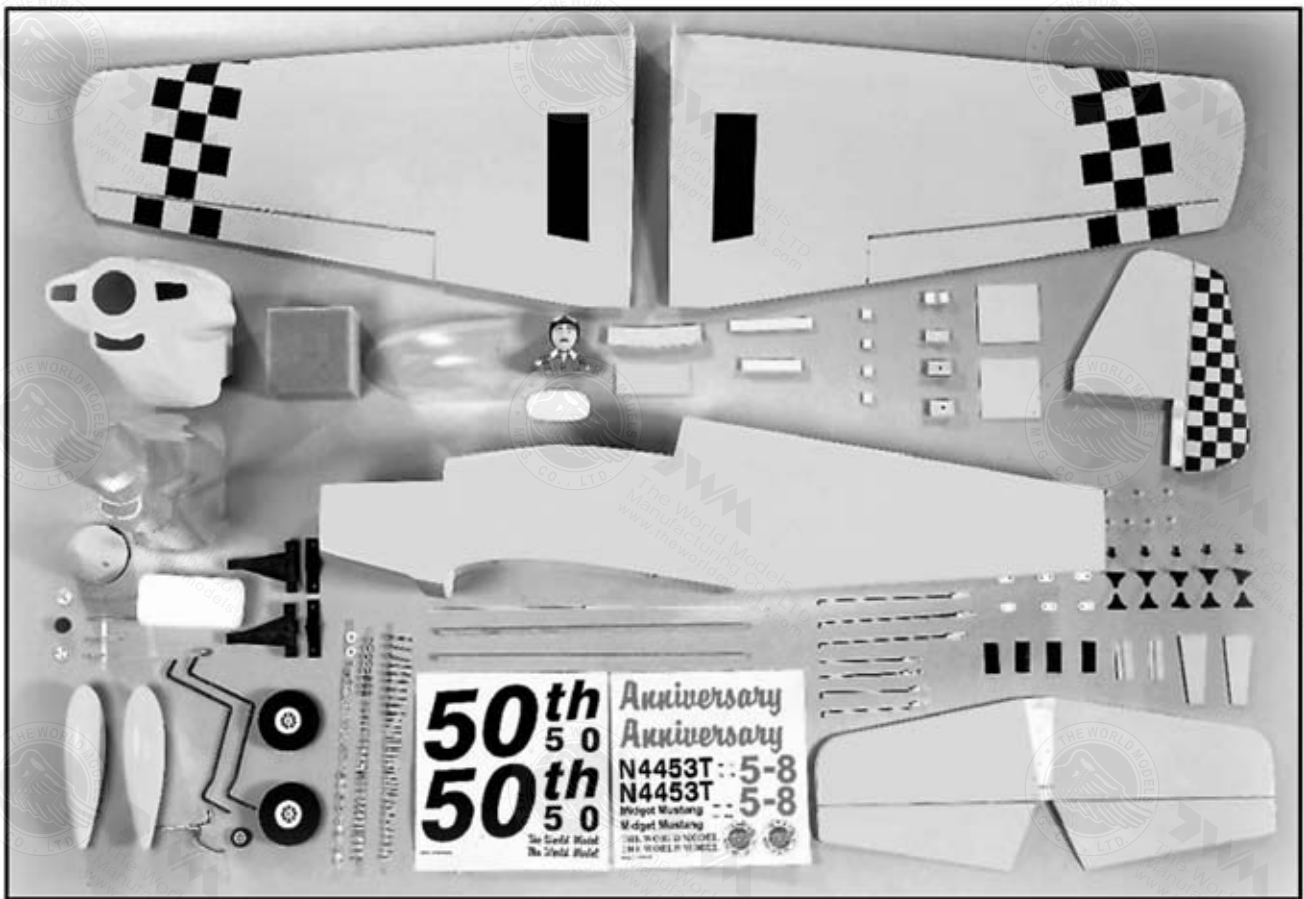
Pay close attention here!



Do not overlook this symbol!



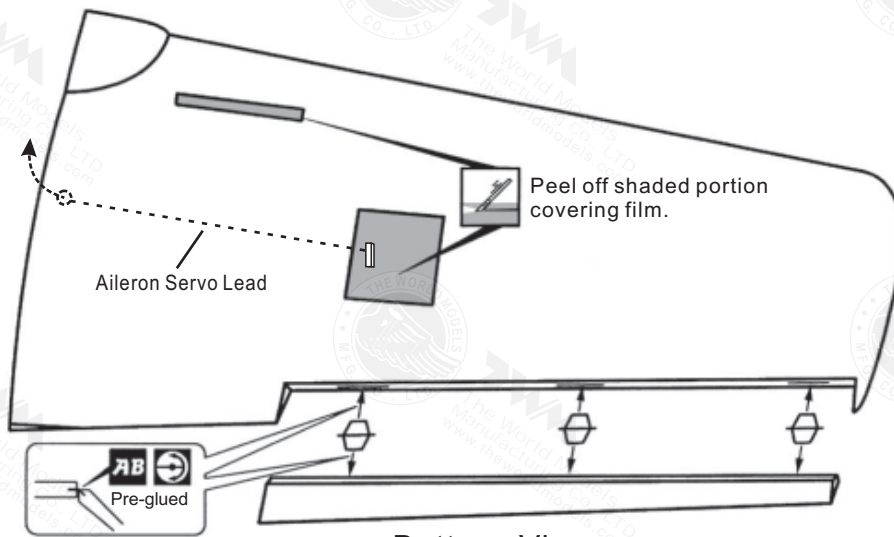
Pierce the shaded portion
covering film.



Parts List

1. MAIN WING -- 1 pair
2. PLYWOOD 3x76x68mm (Aileron Servo Cover) -- 1 pair
BALSA 8x18x21mm (For Aileron Servo Stand) -- 4 pcs
SCREW PWA2x12mm -- 8 pcs
3. SCREW PM2 x 20mm -- 6 pcs
TRI-HORN M3 x 14mm (L) -- 2 sets
CLEVIS -- 2 pcs
STRAPER -- 2 pcs
FUEL TUBE $\Phi 6 \times 5$ mm -- 4 pcs
PUSHROD $\Phi 1.8 \times 110$ mm w/ Threads (For Aileron Servo) -- 2 pcs
4. MAIN LANDING GEAR -- 1 pair
MAIN LANDING GEAR COVER -- 1 pair
MOUNTING PLATE PL4114020 -- 4 pcs
SCREW PA2. 6x10mm -- 8 pcs
SCREW PM2 x 8mm -- 8 pcs
WASHER d2xD5mm -- 16 pcs
M2 NUT -- 8 pcs
5. SCREW PA2. 6 x 10mm -- 4 pcs
COLLAR $\Phi 4.1$ mm w/ set screw -- 4 sets
WHEEL PANTS -- 1 pair
MAIN WHEEL $\Phi 80$ mm -- 2 pcs
MOUNTING PLATE PL4114020 -- 2 pcs
6. WOODEN 9x25.2x124. 5mm (Wing Joiner) -- 1 pc.
7. STABILIZER & ELEVATOR -- 1 set
FUSELAGE -- 1 pc.
8. VERTICAL FIN & RUDDER -- 1 set
TAIL LANDING GEAR -- 1 set
TAIL WHEEL $\Phi 25$ mm -- 1 pc.
SCREW PA3x12mm -- 2 pcs
COLLAR $\Phi 2.1$ mm w/ set screw -- 1 set
9. FUEL TANK 380cc -- 1 set
PLYWOOD 3x15x105mm (For Fixing Fuel Tank) -- 1 pc.
BALSA 6x15x78mm (For Fixing Fuel Tank) -- 1 pc.
10. ENGINE MOUNT PL5111070 -- 1 set
SOCKET HEAD SCREW M4x25mm -- 4 pcs
WASHER d4xD15mm -- 4 pcs
11. SCREW PM4x30mm -- 4 pcs
SPINNER $\Phi 82$ mm -- 1 pc.
THROTTLE PUSHWIRE $\Phi 1.2 \times 460$ mm
w/ Plastic Tube d2xD3x240mm -- 1 set
- WASHER d4xD9mm -- 8 pcs
M4 NUT -- 8 pcs
12. COWLING -- 1 pc.
TRANSPARENT DUMMY COWLING -- 1 pc.
SILICON GROMMET d1.5xD6.5mm -- 5 pcs
SCREW PWA2. 6 x 12mm -- 5 pcs
13. LINKAGE CONNECTOR $\Phi 2.1$ mm -- 1 set
14. SCREW PM2x16mm -- 3 pcs
TRI-HORN M3x14mm (L) -- 1 set
CLEVIS -- 1 pc.
FUEL TUBE $\Phi 6 \times 5$ mm -- 1 pc.
PUSHROD $\Phi 1.8 \times 615$ mm w/ Threads (For Rudder) -- 1 pc.
15. SCREW PM2x16mm -- 6 pcs
TRI-HORN M3x14mm (L) -- 2 sets
CLEVIS -- 2 pcs
FUEL TUBE $\Phi 6 \times 5$ mm -- 2 pcs
PUSHROD $\Phi 1.8 \times 525$ mm w/ Threads (For Elevator) -- 2 pcs
16. BALSA 6x6x143mm (For Servos Stand) -- 2 pcs
PLYWOOD 3x116x172.5mm (Servos Stand) -- 1 pc.
FUEL TUBE $\Phi 6 \times 5$ mm -- 1 pc.
PUSHROD CONNECTOR -- 1 set
PUSHROD $\Phi 1.8 \times 90$ mm w/ Threads (For Elevator) -- 1 pc.
SPONGE 60x70x110mm -- 1 pc.
17. CANOPY -- 1 set
SCREW PWA2. 3X8mm -- 5 pcs
SILICON GROMMET d1.5xD6.5mm -- 5 pcs
PILOT (#PC001085 A / B) -- 1 pc.
18. SCREW PM4x35mm -- 2 pcs
WASHER d4xD15mm -- 2 pcs
PLYWOOD 2x40x110mm (Wing Protection) -- 1 pc.
19. DECALS -- 1 set
- COVERING:--
LIGHTEX STL 100 WHITE
LIGHTEX STL 201 BLACK
LIGHTEX STL 330 CADMIUM YELLOW
LIGHTEX STL 331 CUB YELLOW
LIGHTEX STL 350 CORSAIR BLUE
LIGHTEX STL 432 CHECKER (BLACK/YELLOW)

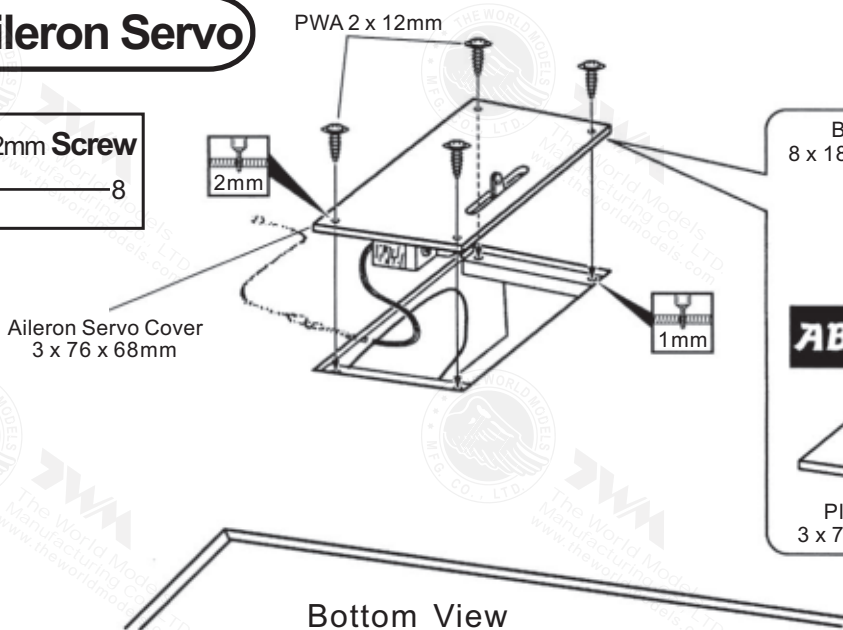
1 Main Wing



Bottom View

L/R

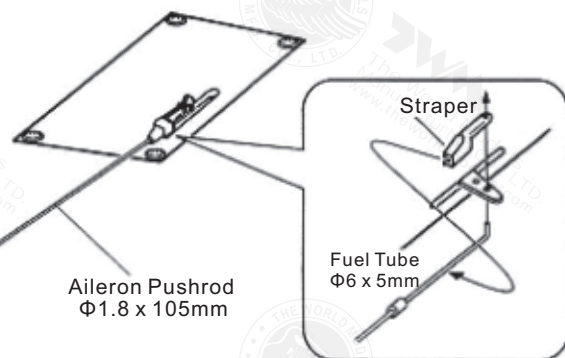
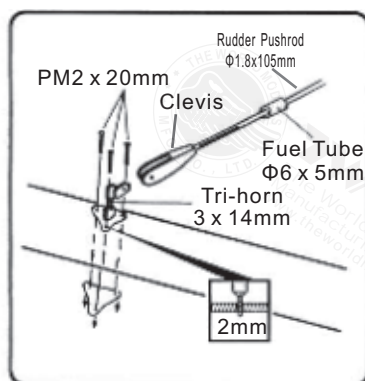
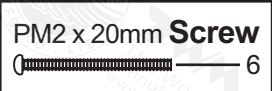
2 Aileron Servo



Bottom View

L/R

3 Aileron Servo



- Φ1mm pilot holes for The World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

Bottom View

L/R

4 Landing Gear

PA2.6 x 10mm Screw



8

PM2 x 8mm Screw



8

d2xD5mm Washer

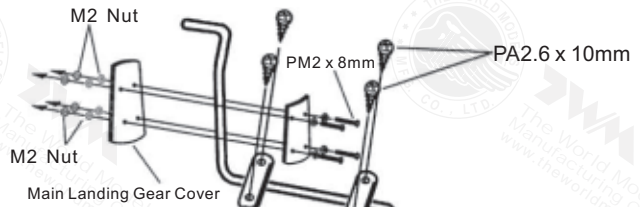


16

M2 Nut



8



Bottom View

L/R

5 Main Landing Gear

PA2.6 x 10mm Screw



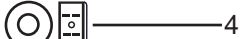
4

3mm Set Screw



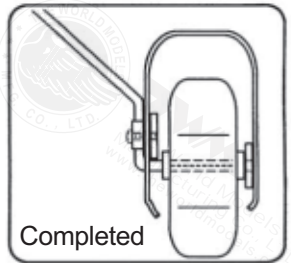
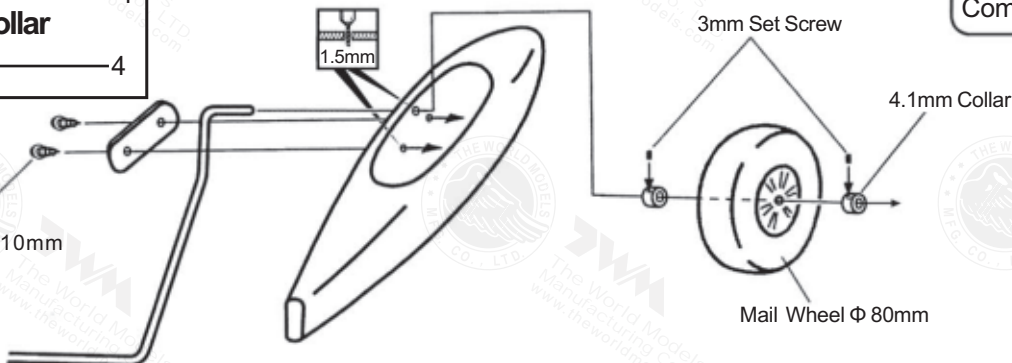
4

4.1mm Collar



4

PA2.6 x 10mm



Completed

L/R

6 Main Wing

Peel off shaded portion covering film for lead to another aileron servo.



AB

AB

Wing Joiner
9x25. 2x124. 5mm

Peel off shaded portion covering film.

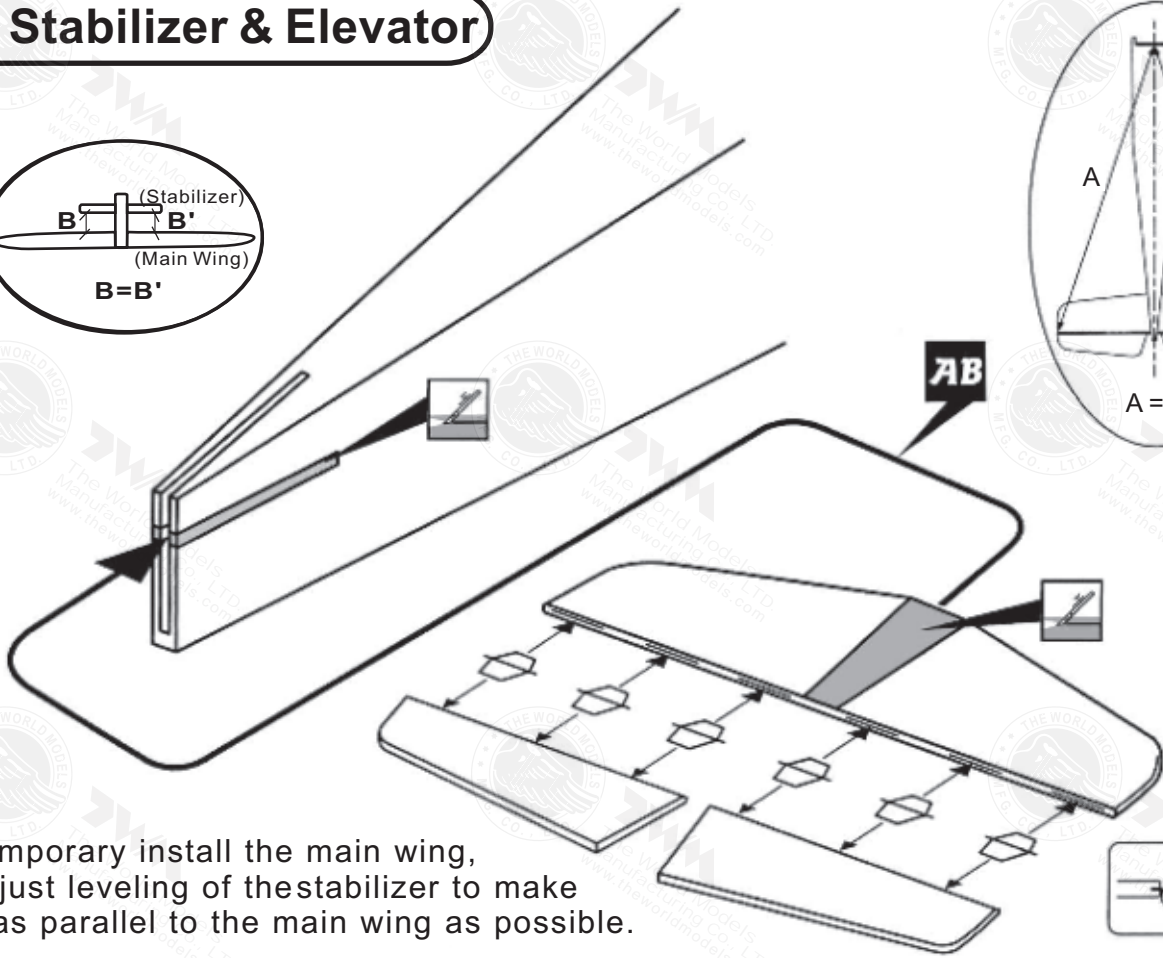
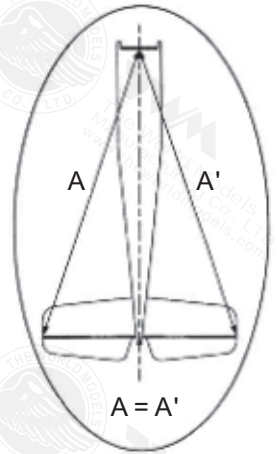
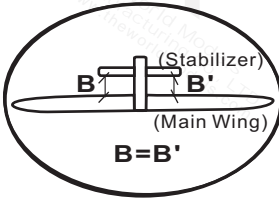


Lead to aileron Servo.

! Warning!

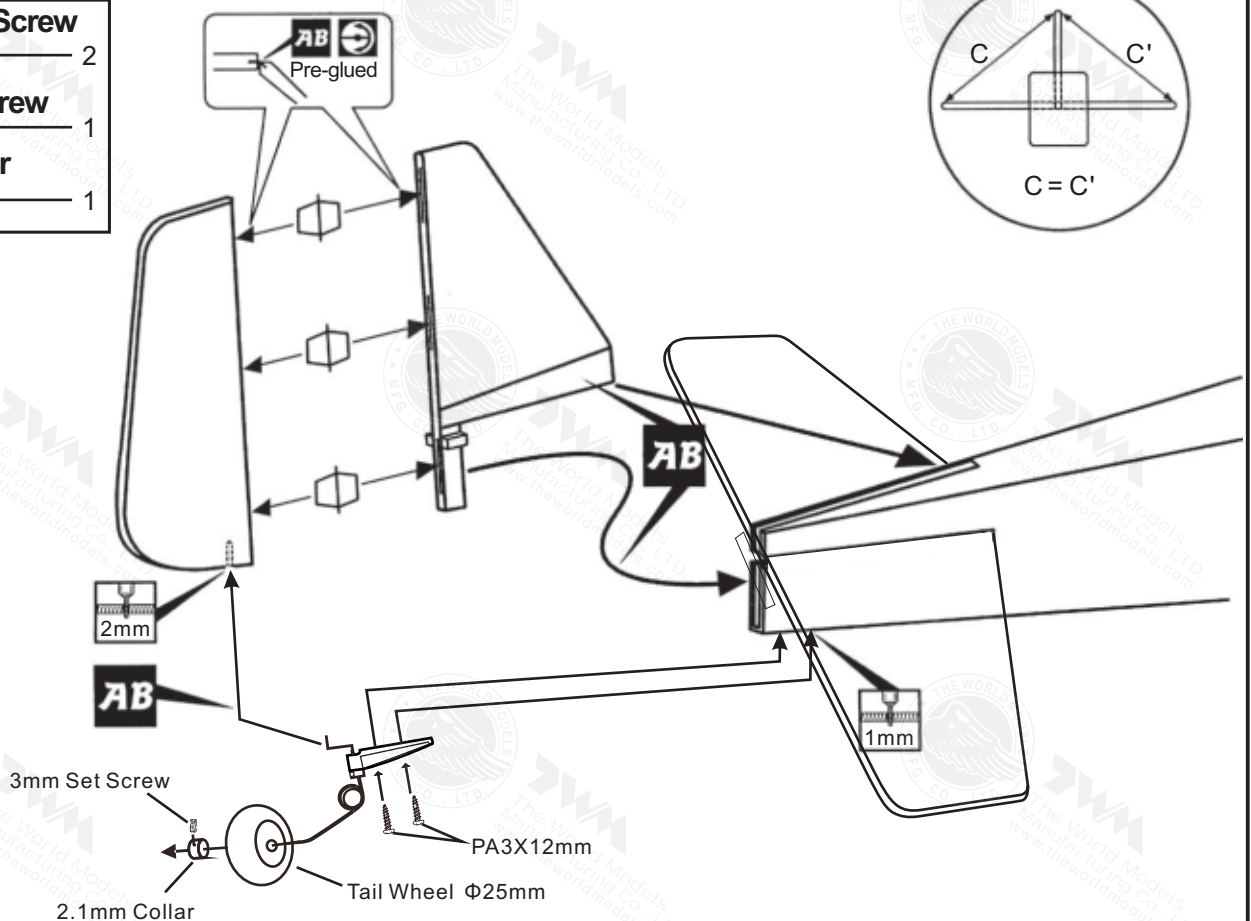
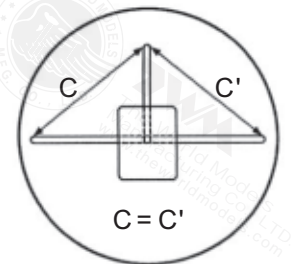
Apply glue to both sides of all surfaces in contact. Use a stick to apply glue to inner side of wing joiner sleeve, and apply glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

7 Stabilizer & Elevator



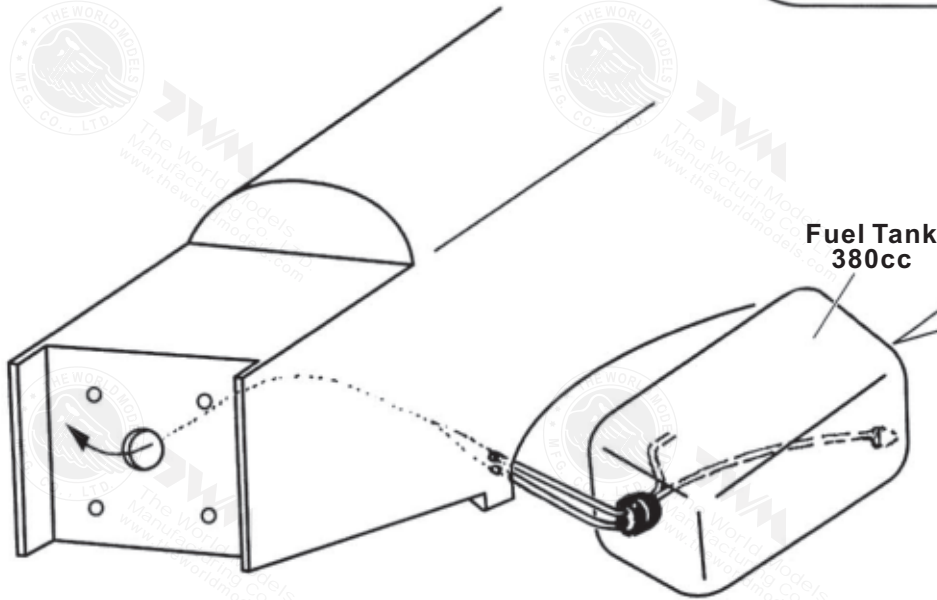
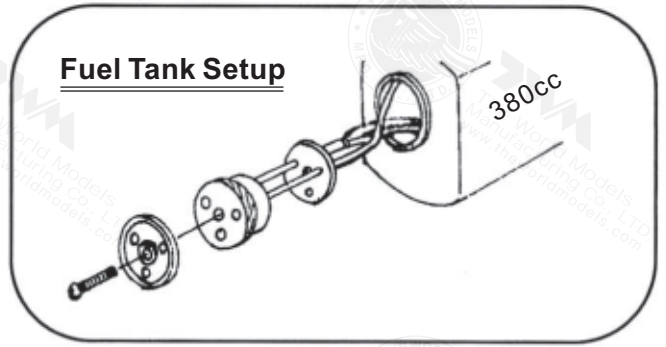
8 Vertical Fin & Rudder

- | | |
|------------------|---|
| PA3 x 12mm Screw | 2 |
| 3mm Set Screw | 1 |
| 2.1mm Collar | 1 |



9 Fuel Tank

Fuel Tank Setup



Install Plywood & Balsa
(For fixing fuel tank)

Plywood 3 x 15 x 110mm

Fuel Tank

Balsa 6 x 15 x 78mm

● Bottom View

10 Engine Mount

M4 x 25mm Socket Head Screw



4

d4xD15mm Washer



4

Engine Mount
PL 5111070

4mm

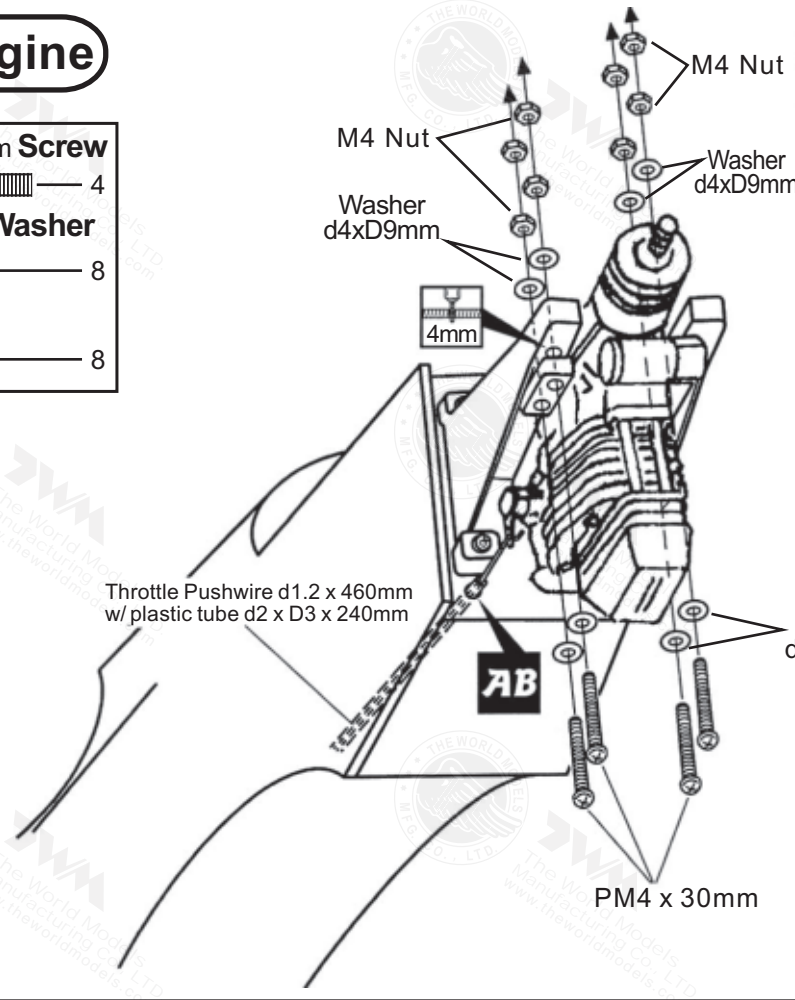
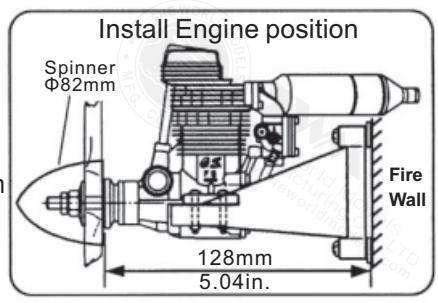
M4 x 25mm

● Bottom View

Illustration is for inverted mount.
You can mount your engine upright
or sideways simply by rotating the
engine mount, thrust angles will
not be affected.

11 Engine

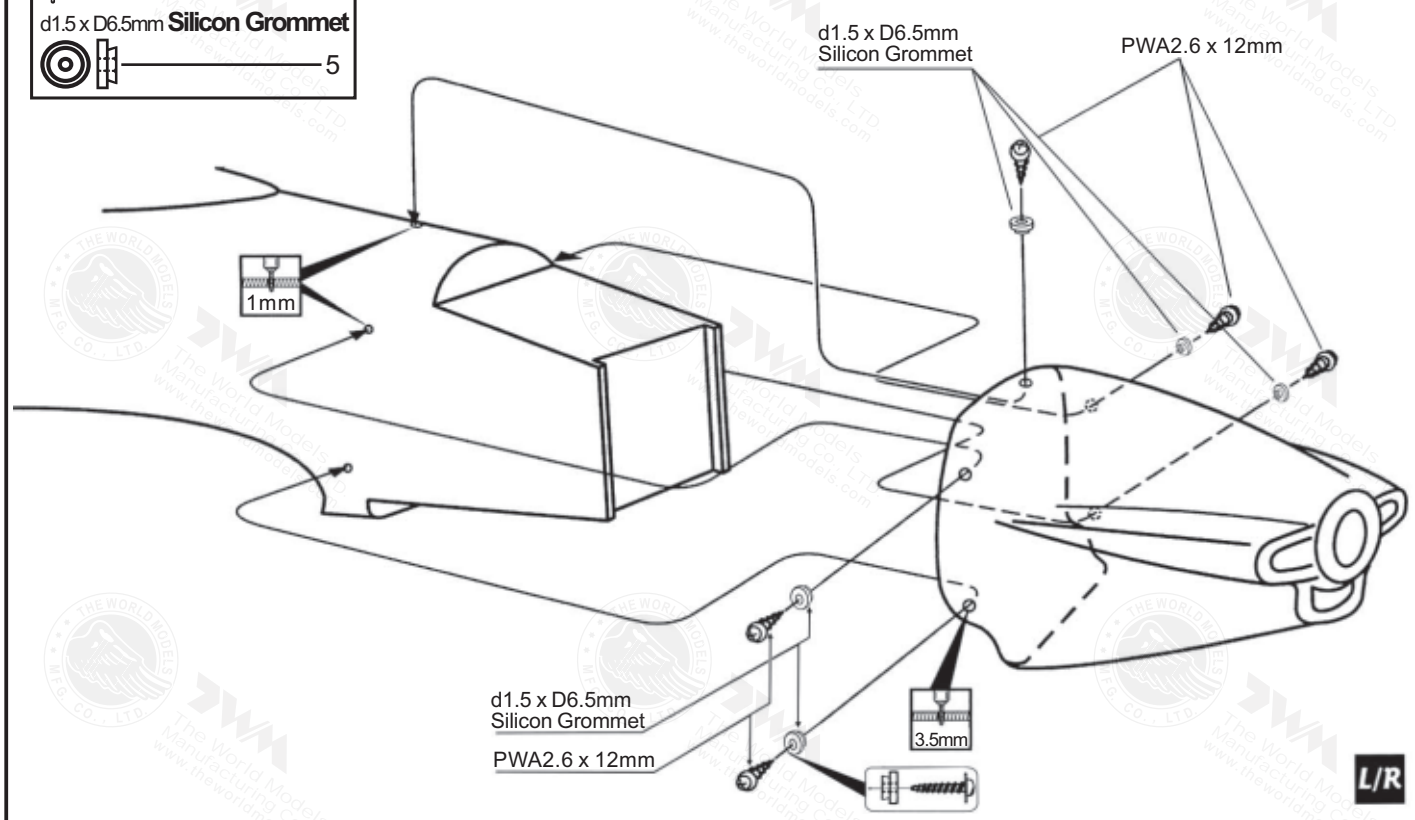
- PM4 x 30mm **Screw** — 4
- d4xD9mm **Washer** — 8
- M4 Nut** — 8



12 Cowling

- PWA2.6 x 12mm **Screw** — 5
- d1.5 x D6.5mm **Silicon Grommet** — 5

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



13 Servo Set

LINKAGE CONNECTOR

3 x 3mm **Set Screw**

 1

Linkage Connector

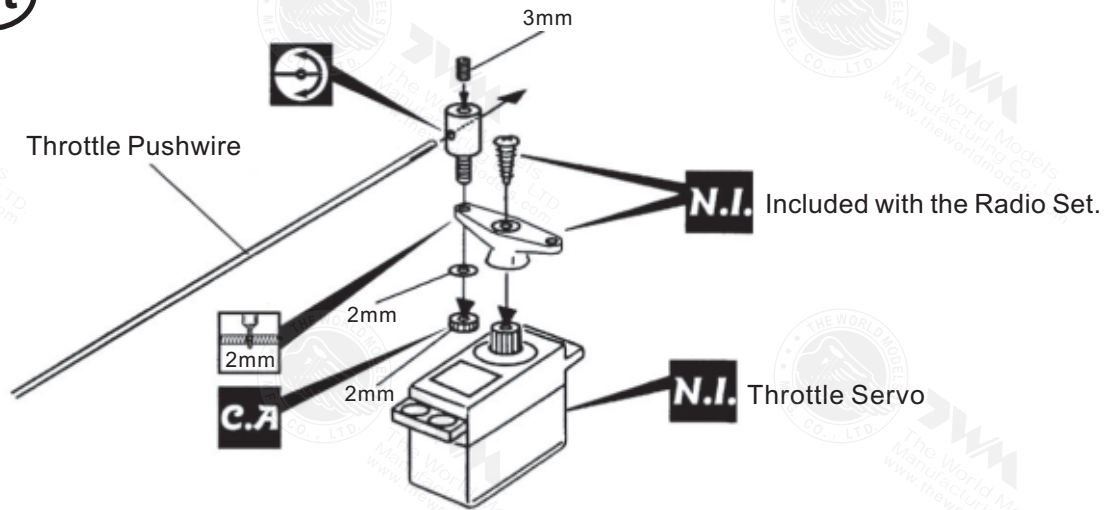
 1

M2 Nut

 1

d2xD5mm **Washer**

 2



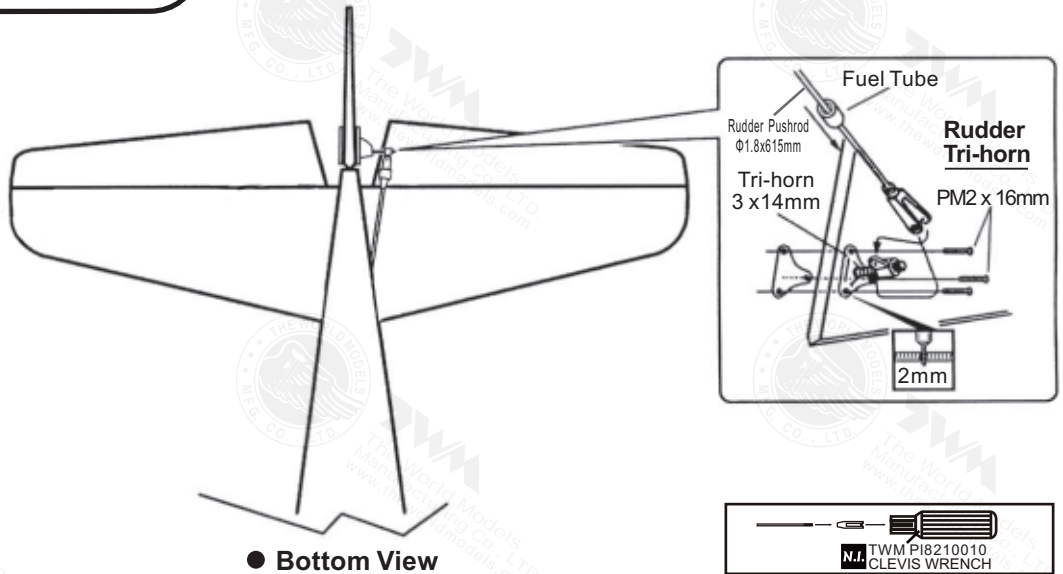
Please refer to attached sheet for linkage connector installation.

14 Rudder Pushrod

PM2 x 16mm **Screw**

 3

● $\Phi 1\text{mm}$ pilot holes for The World Models tri-horn are pre-drilled. Please look for pin-hole marks at side of control surfaces.

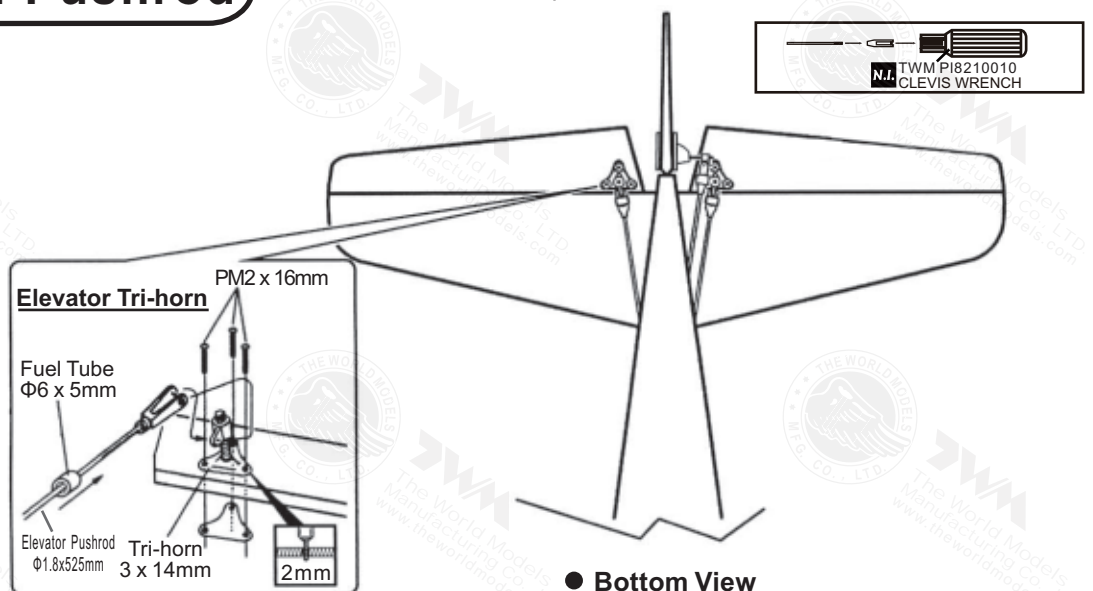


15 Elevator Pushrod

PM2 x 16mm **Screw**

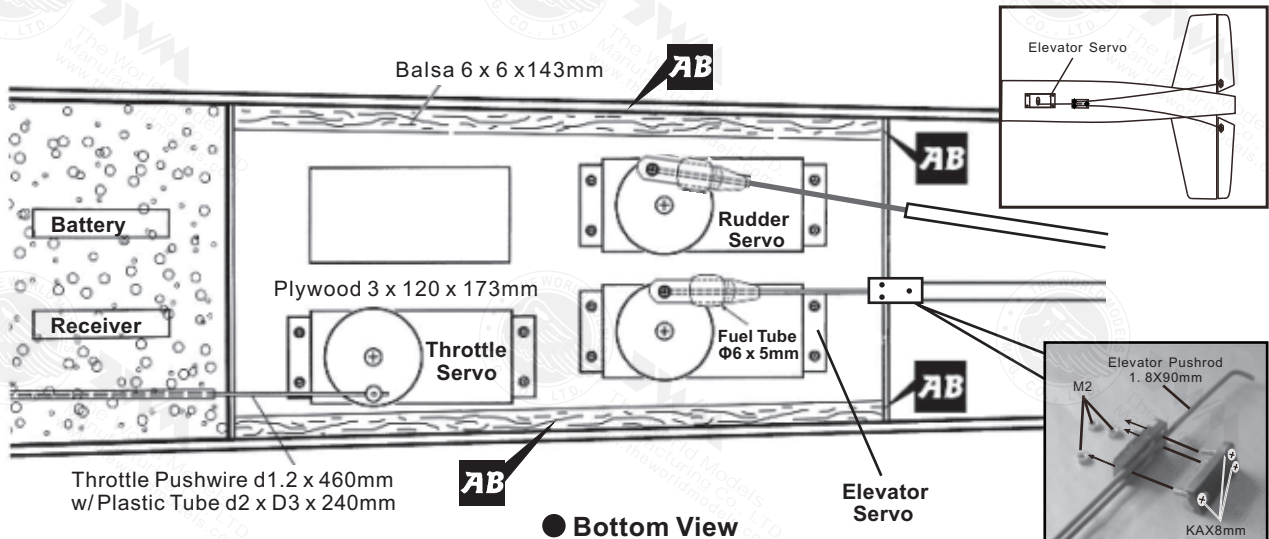
 6

● $\Phi 1\text{mm}$ pilot holes for The World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.



16 Radio Equipment

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

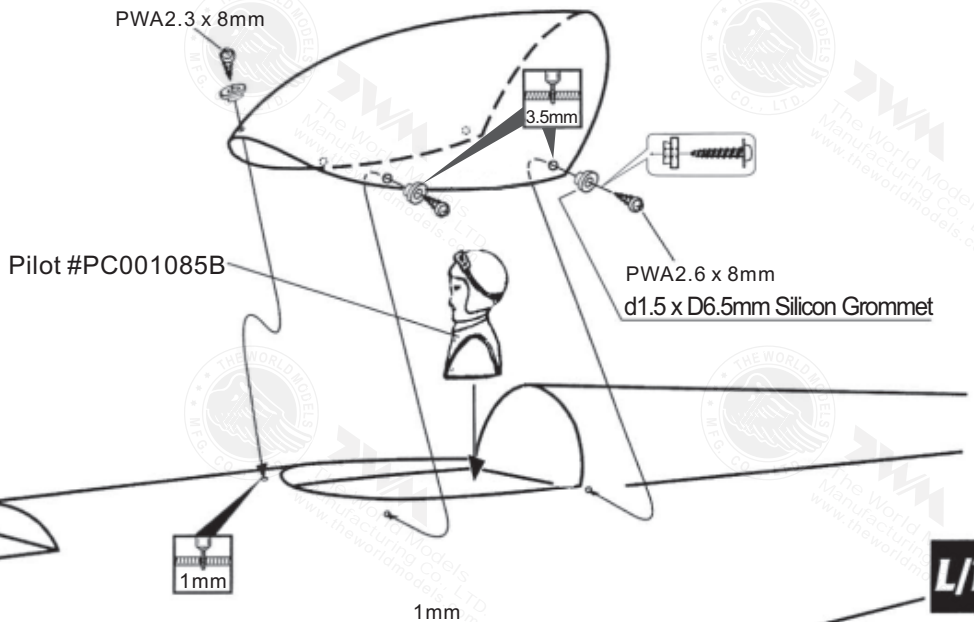


● Bottom View

17 Canopy

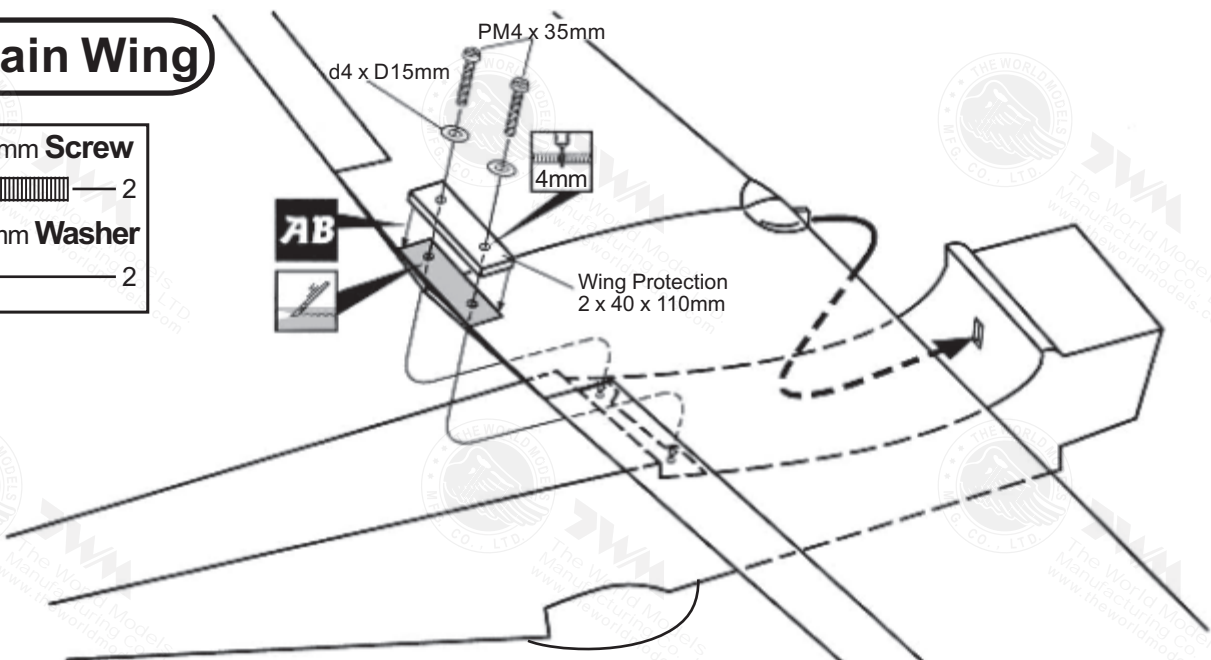
● First insert the grommet to the cowling then apply screw.

- PWA2.3 x 8mm Screw — 5
- d1.5 x D6.5mm Silicon Grommet — 5



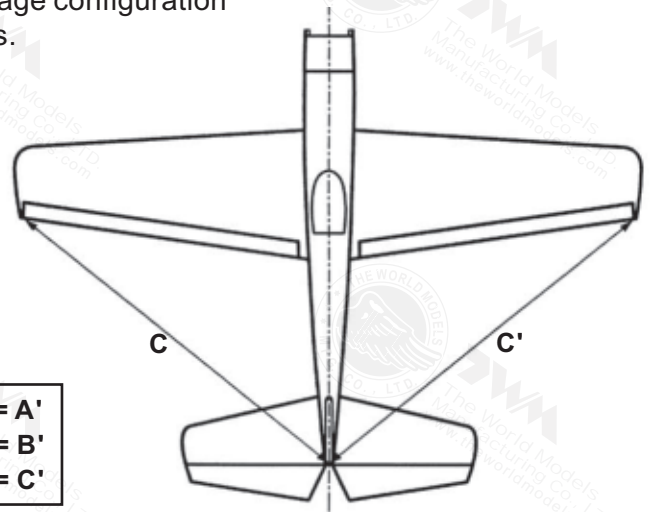
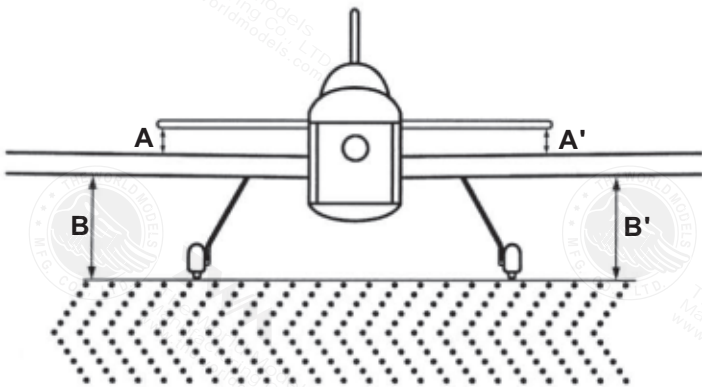
18 Main Wing

- PM4 x 35mm Screw — 2
- d4 x D15mm Washer — 2



19 Wing Setting

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



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

20 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.

Elevator



Rudder



Aileron



21 C.G.

The ideal C.G. position is **90mm (3.54 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.



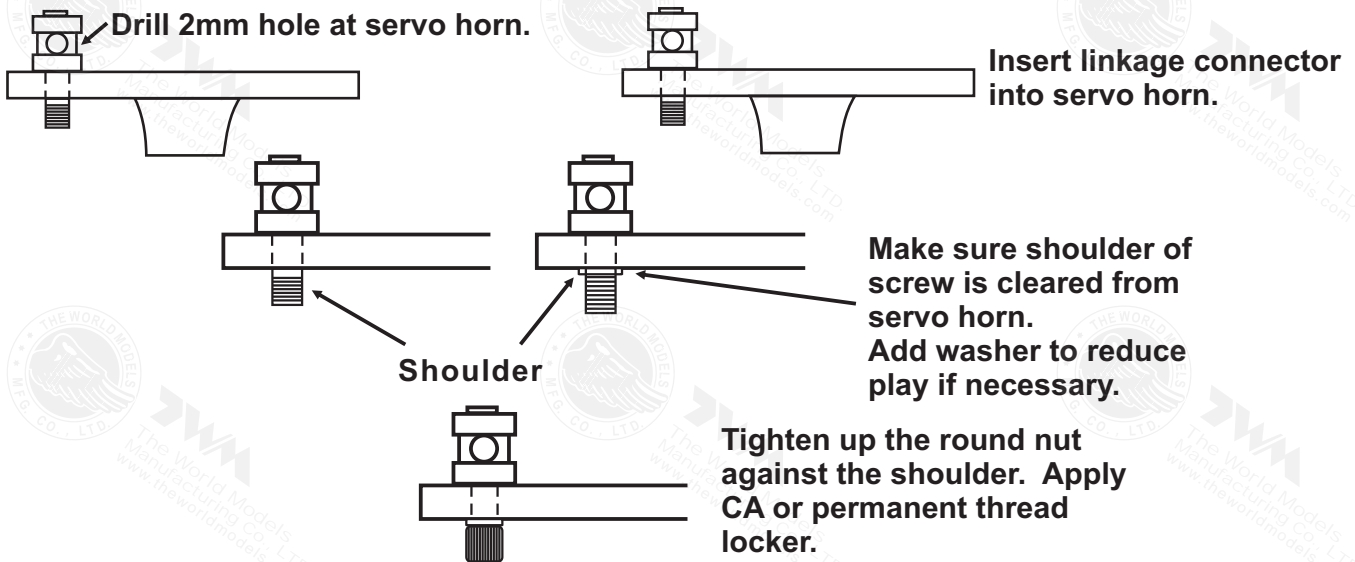
! Warning!

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.
- #**MIDGET MUSTANG** is specially designed to be powered by **2C 0.61** or **4C 0.91** 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.

A0720705

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, 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.