

Before commencing assembly, please read these instructions thoroughly.

FlyBoy 50

(GA014)



ARF  **Almost
Ready to Fly**

Specifications

Wing Span: 63.0 in / 1600 mm

Wing Area: 660 sq in / 42.6 sq dm

Flying Weight: 6.0 lbs / 2700 g

Fuselage Length: 51 in / 1290 mm

Required : 2-stroke 0.40-0.46 or 4-stroke 0.70
engine, 5-channel radio/ 6 servos



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.

*** Specifications are subject to change without notice.***



THE WINGS MAKER
FACTORY PRE-FABRICATED
ALMOST-READY-TO-FLY (ARF) SERIES
MADE IN CHINA
www.thewingsmaker.com

Flyboy 50

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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.



Apply thread locker



Parts List

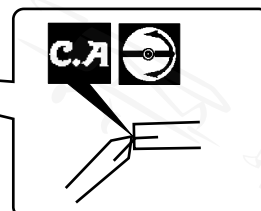
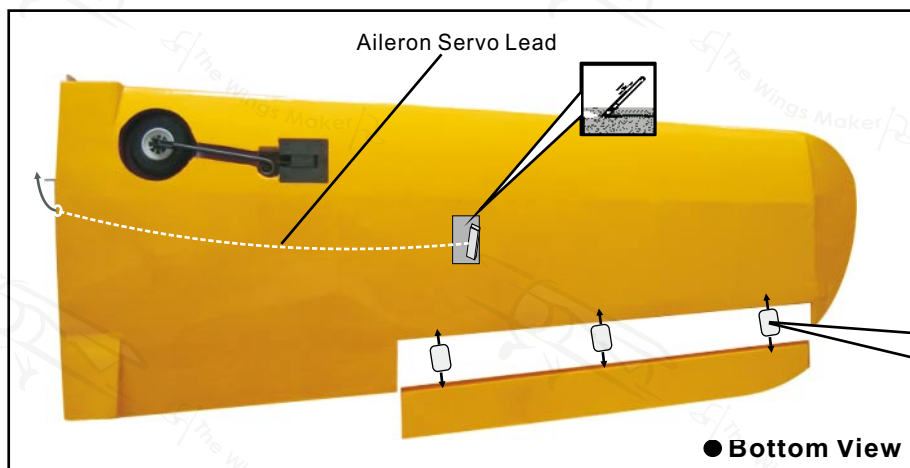
1. MAIN WING -- 1 pair
2. SCREW PB2x25mm -- 6 pcs
FUEL TUBE Ø6x5mm -- 4 pcs
CLEVIS PL4112103 -- 2 pcs
STRAPER PL4112102 -- 2 pcs
TRI-HORN M3x14mm (For Aileron) PL4111185 -- 2 sets
PUSHROD Ø1.8x115mm w/ Threads (For Aileron) -- 2 pcs
3. WING JOINER 5x29x108mm -- 1 pc.
4. RETRACTABLE LANDING GEAR--1 pair
MAIN WHEEL Ø56mm -- 2 pcs
COLLAR Ø4.1mm w/ set screw -- 2 sets
5. LINKAGE CONNECTOR Ø2.1mm w/ set screw -- 2 sets
6. STABILIZER & ELEVATOR -- 1 set
FUSELAGE -- 1 pc.
7. VERTICAL FIN & RUDDER -- 1 set
8. TAIL LANDING GEAR -- 1 set
TAIL WHEEL Ø23mm -- 1 pc.
COLLAR Ø2.1mm w/ screw -- 1 set
SCREW PA3x12mm -- 2 pcs
9. ENGINE MOUNT PL5111050 -- 1 set
SOCKET HEAD SCREW M4x25mm -- 4 pcs
WASHER d4xD9mm -- 4 pcs
10. FUEL TANK 320cc -- 1 set
DOUBLE-SIDED TAPE 40x100mm -- 1 pc.
CABLE TIE 1.5x5x400mm -- 1 pc.
11. SCREW HM3.5x30mm -- 4 pcs
WASHER d3.5xD8mm -- 8 pcs
M3.5 NUT -- 8 pcs
THROTTLE PUSHWIRE Ø1.2x320mm -- 1 pc.
w/ Plastic Tube d2xD3x125mm -- 1 pc.
12. SCREW PB2x16mm -- 6 pcs
TRI-HORN M3x14mm (For Elevator) PL4111185 -- 2 sets
FUEL TUBE Ø6x5mm -- 2 pcs
CLEVIS PL4112103 --2 pcs
PUSHROD Ø1.8x605mm w/ Threads (For Elevator) -- 2 pcs
13. SCREW PB2x16mm -- 3 pcs
CLEVIS PL4112103 -- 1 pc.
FUEL TUBE Ø6x5mm -- 1 pc.
TRI-HORN M3x14mm (For Rudder) PL4111185 -- 1 set
PUSHROD Ø1.8x720mm w/ Threads (For Rudder) -- 1 pc.
14. LINKAGE CONNECTOR Ø2.1mm w/ set screw -- 1 set
15. SPONGE 10x80x200mm (For Radio Equipment) -- 2 pcs
STRAPER PL4112102 -- 2 pcs
FUEL TUBE Ø6x5mm -- 2 pcs
PUSHROD CONNECTOR 4x9x20mm (For Elevator) -- 1 set
PUSHROD Ø1.8x90mm (For Elevator) -- 1 pc.
PLYWOOD 3x49x113mm (For Throttle Servo) -- 1 pc.
BALSA 6x6x46mm (For Throttle Servo Stand) -- 2 pcs
16. COWLING -- 1 pc.
TRANSPARENT DUMMY COWLING -- 1 pc.
SILICON GROMMET d1.5xD6.5mm -- 4 pcs
SPINNER Ø62mm PL2111062 -- 1 pc.
SCREW PWA2.6x12mm -- 4 pcs
17. CANOPY -- 1 pc.
SILICON GROMMET d1.5xD6.5mm -- 4 pcs
SCREW PWA2.3x12mm -- 4 pcs
PILOT PC001063A -- 1 pc.
18. SCREW HM4x40mm -- 2 pcs
WASHER d4xD15mm -- 2 pcs
19. DECALS: GA014DEC --1 set

● COVERING:

TOUGHLON STL 100 WHITE
TOUGHLON STL 331 CUB YELLOW
LIGHTEX SGX 310 RED
LIGHTEX SGX 360 VIOLET

1 Aileron

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

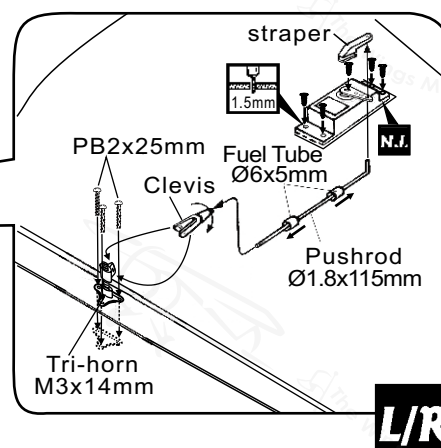
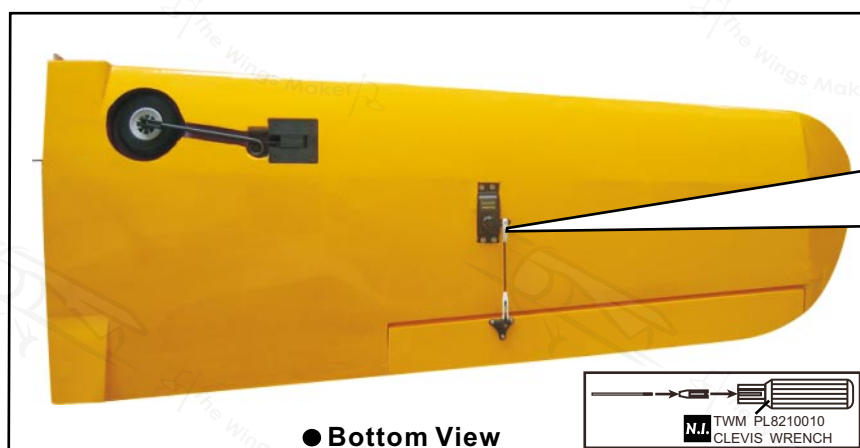


L/R

2 Aileron 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.

PB 2 x 25mm Screw
6

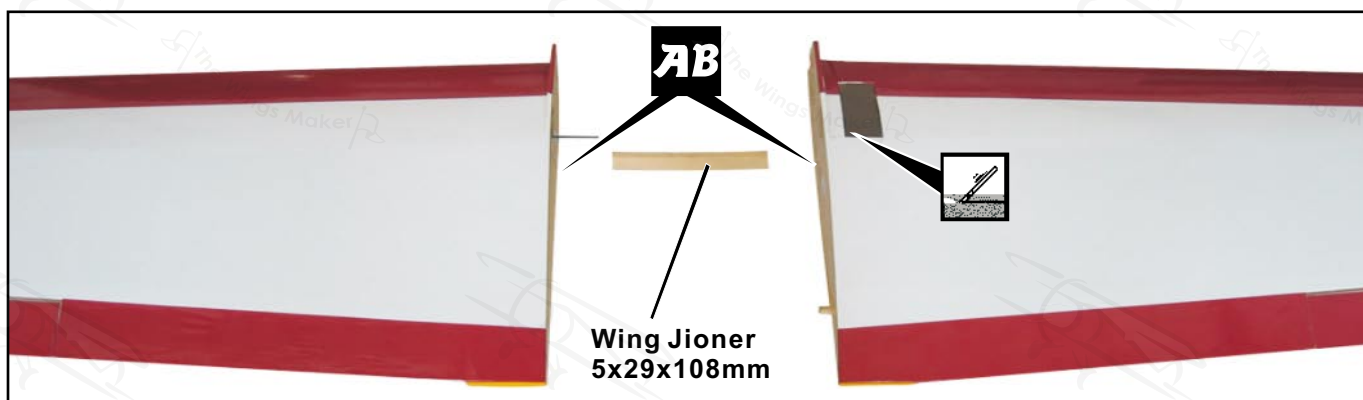


L/R

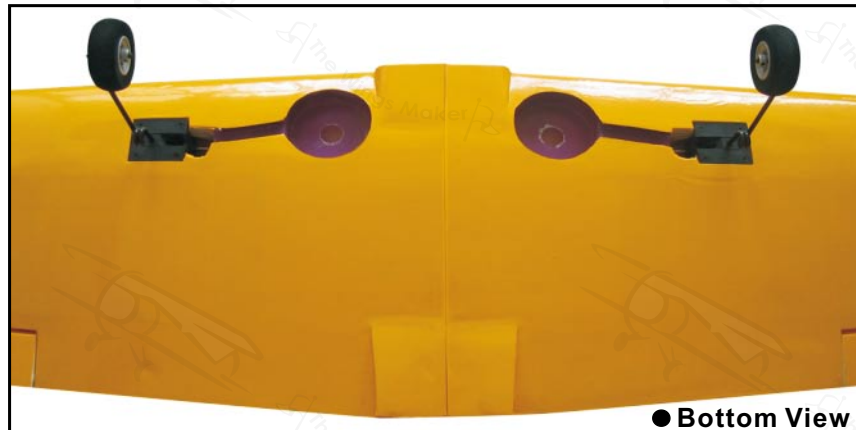
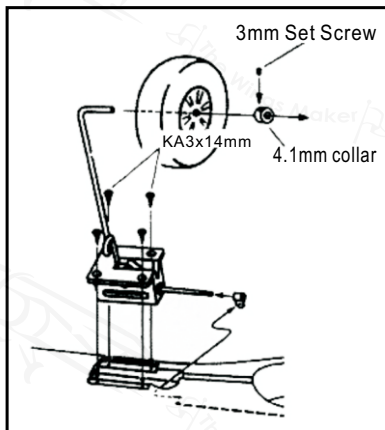
3 Main Wing



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.



4 Retractable Landing Gear



L/R

5 Retract Servo

3 X 3mm Set Screw

Linkage Connector

2mm Nut

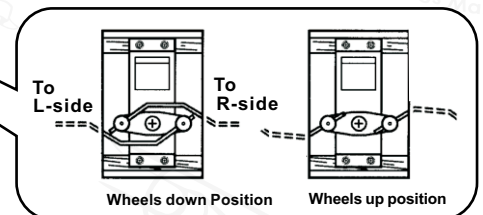
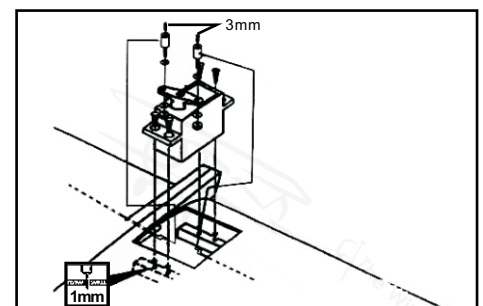
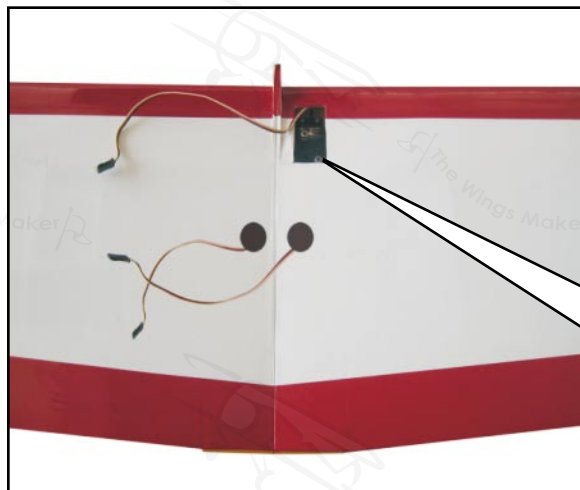
2mm Washer

2mm Washer

2mm Washer

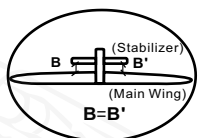
2mm Washer

2mm Washer



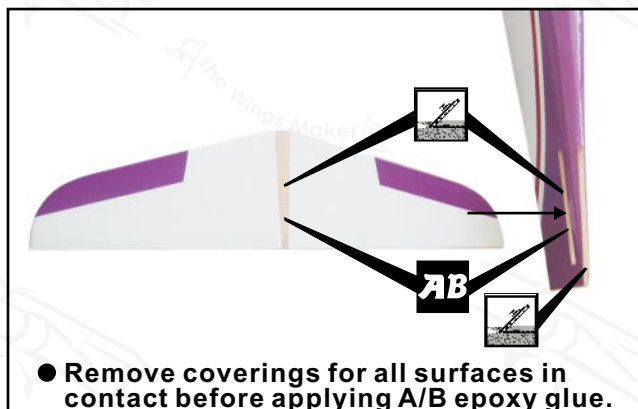
● Select the servo horn that will give 26mm travel when it rotates through 180°.

6 Stabilizer & Elevator

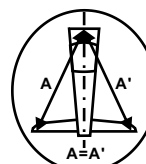


Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

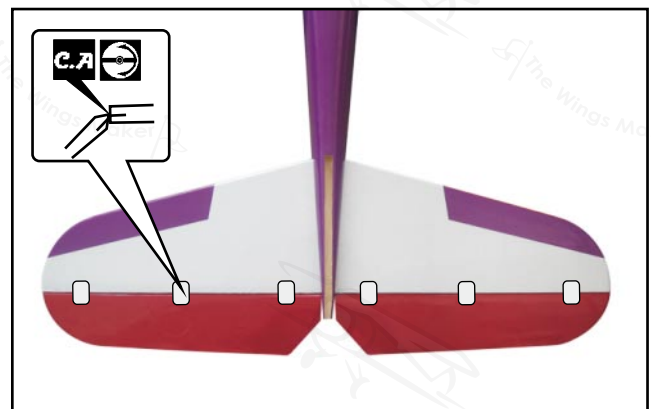
*Also refer to step 19 Wing Setting



● Remove coverings for all surfaces in contact before applying A/B epoxy glue.

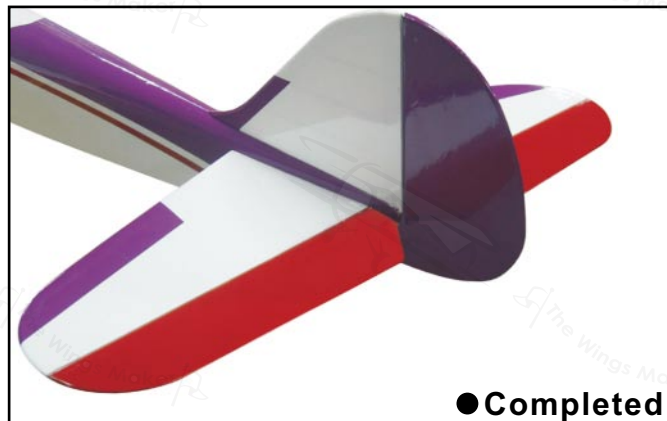
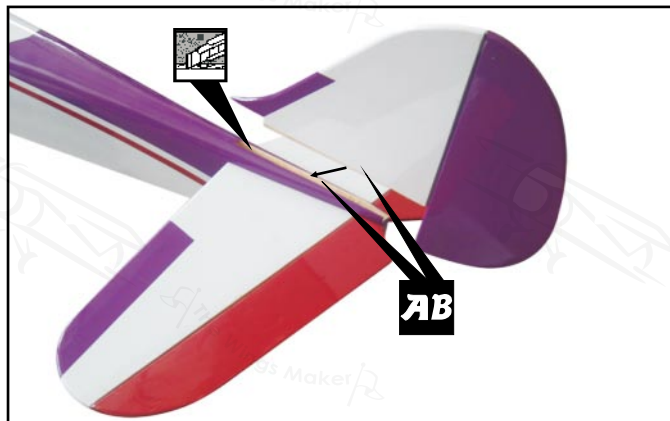
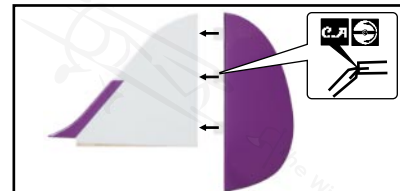
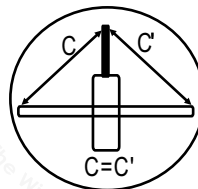


● Apply instant type CA glue to both sides of each hinge.



7 Vertical Fin & Rudder

- Apply instant type CA glue to both sides of each hinge.
- Remove coverings for all surfaces in contact before applying A/B epoxy glue.



● Completed

8 Tail Landing Gear

PA 3 x 12mm Screw

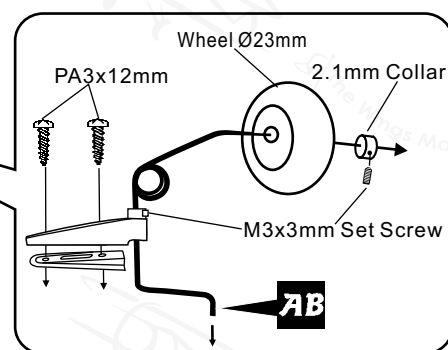
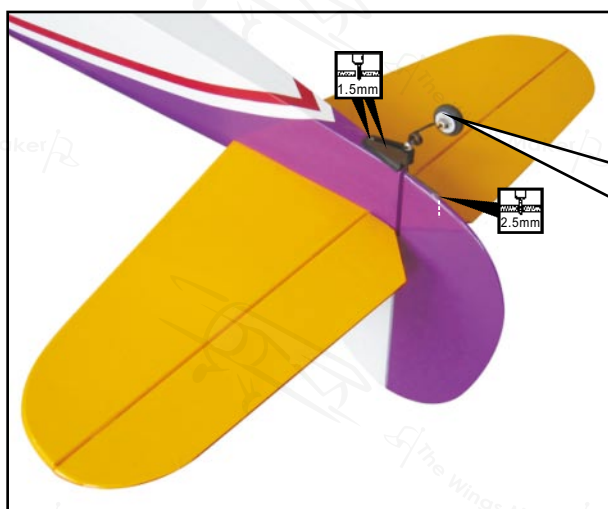
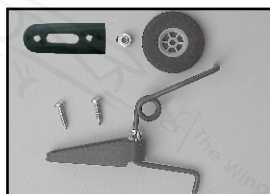
2

3mm Set Screw

1

2.1mm Collar

1



● Bottom View

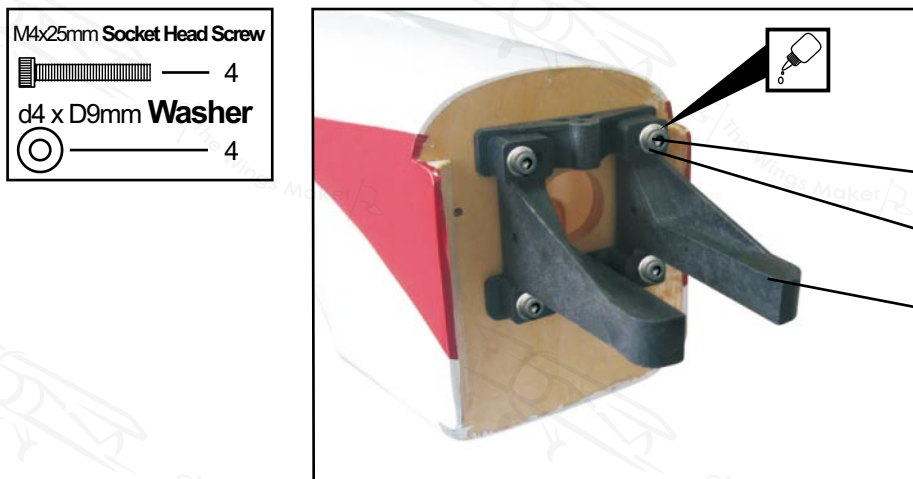
9 Engine Mount

M4x25mm Socket Head Screw

4

d4 x D9mm Washer

4



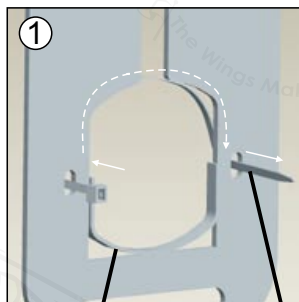
M 4 x 25mm

d4 x D9mm Washer

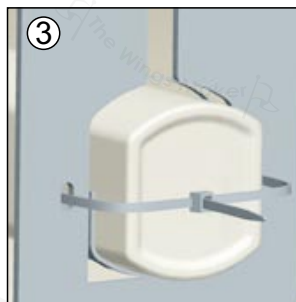
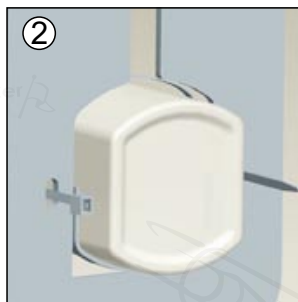
Engine Mount
PL5111050

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

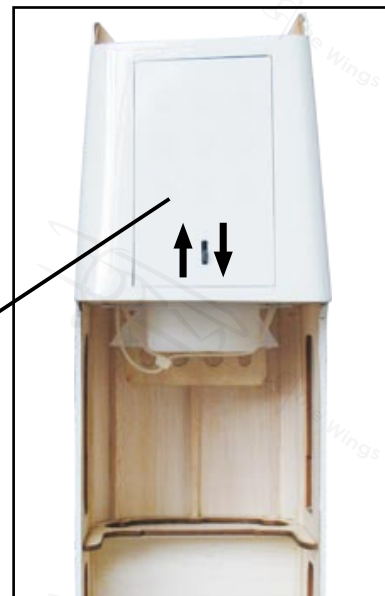
10 Fuel Tank



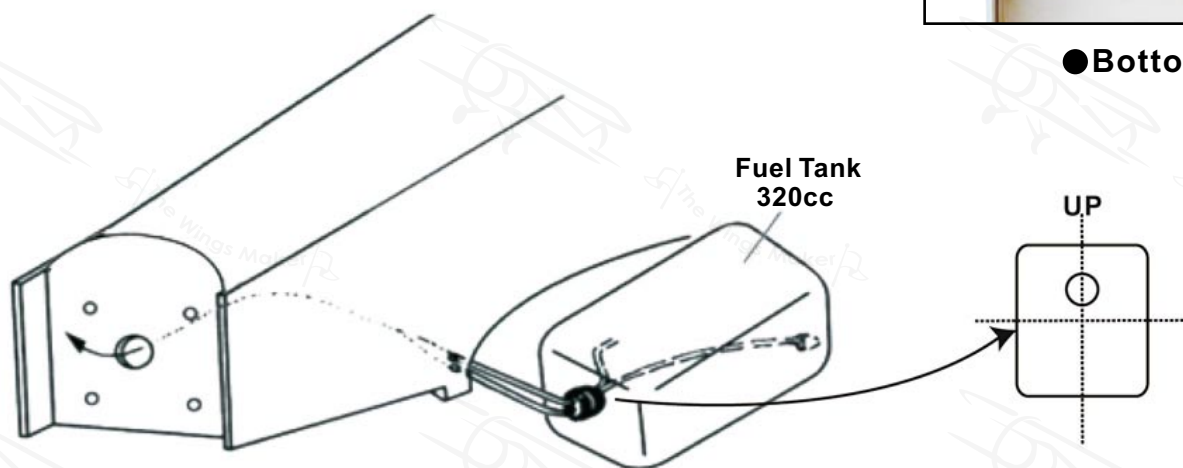
① Cable Tie 1.5x5x400 mm
Double-sided Tape 40 x 100 mm



③ Plywood 2x59.5x102.4 mm



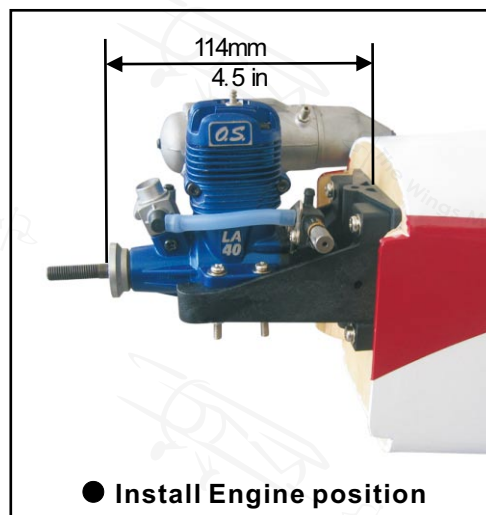
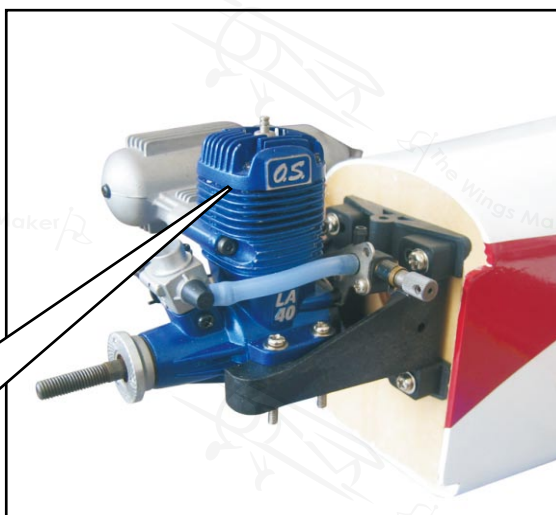
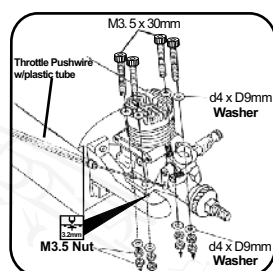
● Bottom View



11 Engine

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

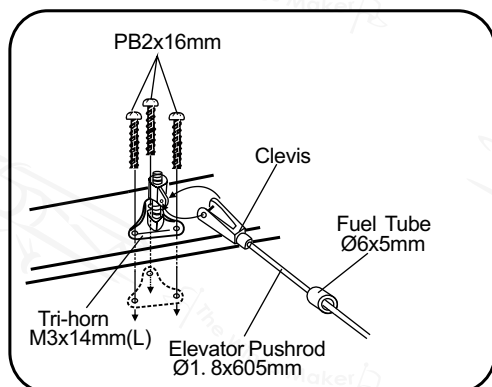
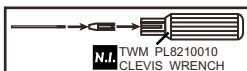
HM3.5x30mm Socket Head Screw	4
M3.5 Nut	8
d4 x D9mm Washer	8



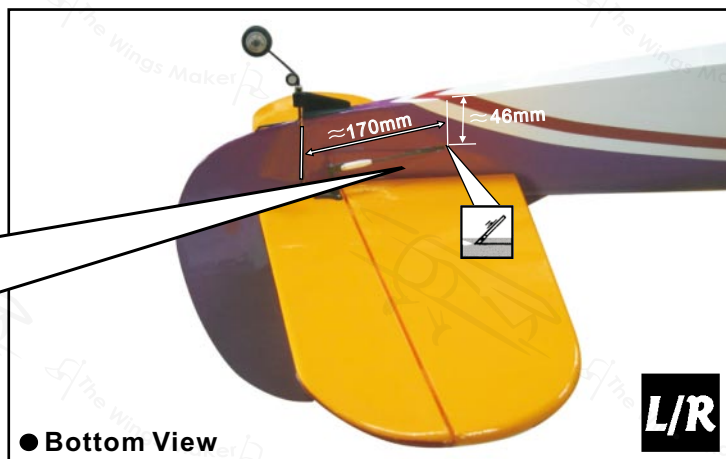
● Install Engine position

12 Elevator Pushrod

PB2 x 16mm Screw 6



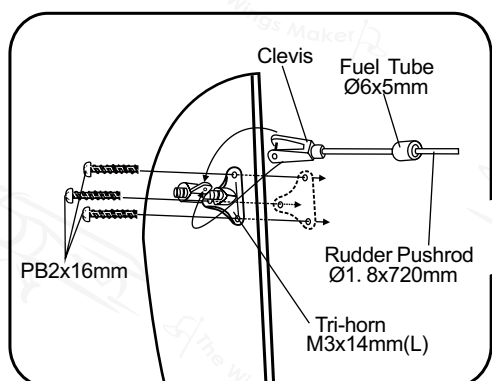
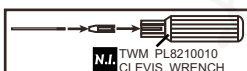
● Ø1mm pilot holes for The Wings Maker tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.



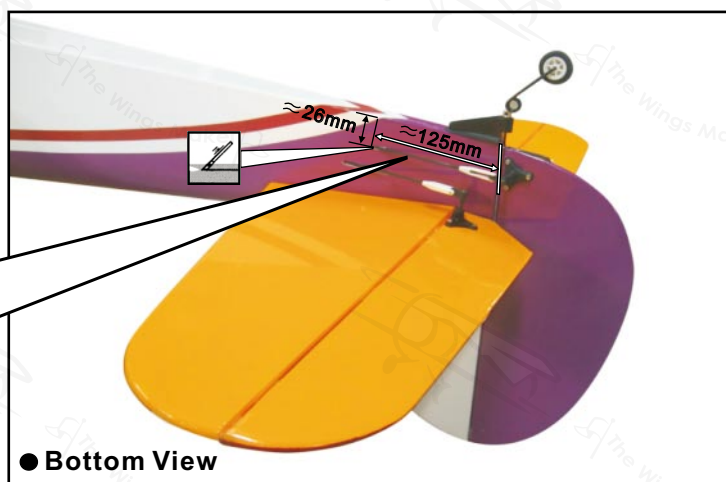
● Bottom View

13 Rudder Pushrod

PB2 x 16mm Screw 3



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



● Bottom View

14 Servo Set

3 x 3mm Set Screw 1

Linkage Connector 1

M2 Nut 1

2mm Washer 2

Throttle / Pushwire w/ plastic tube

N.I. Included with the radio Set.



M2

N.I. Throttle Servo.

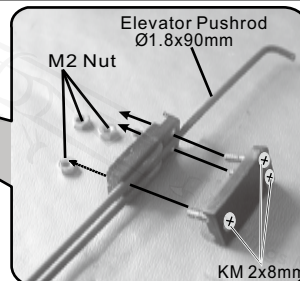
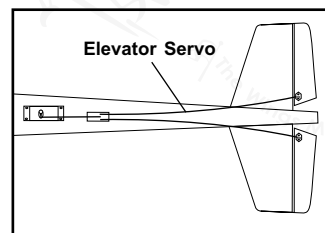
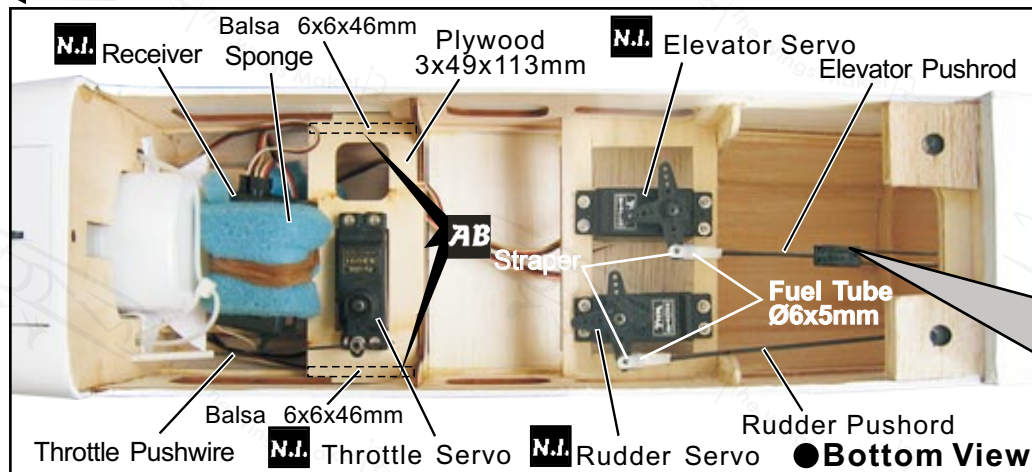
C.A

! Please refer to attached sheet for linkage connector installation.

15 Radio Equipment

Front

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



16 Cowling

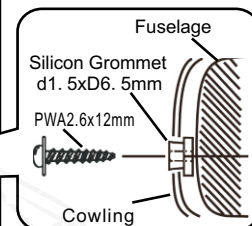
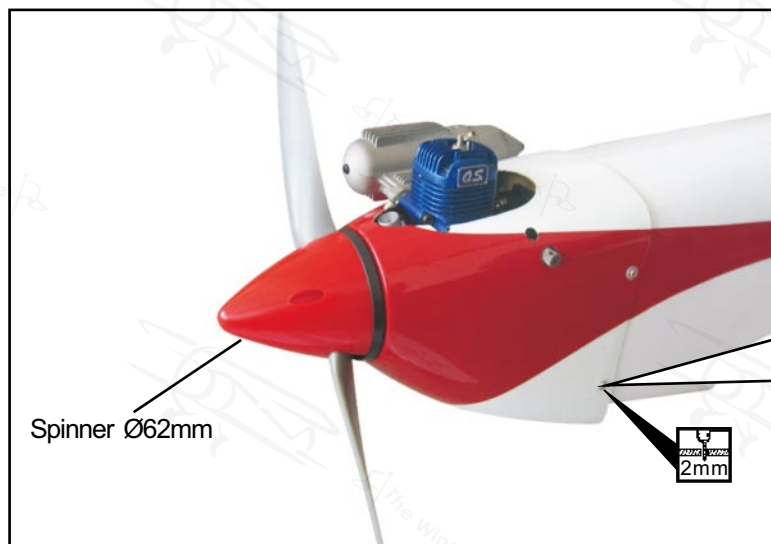
● First insert the grommet to the cowling then apply screw.

PWA2.6 x 12mm **Screw**

4

d1.5 x D6.5 mm **Silicon Grommet**

4



L/R

17 Canopy

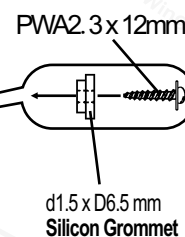
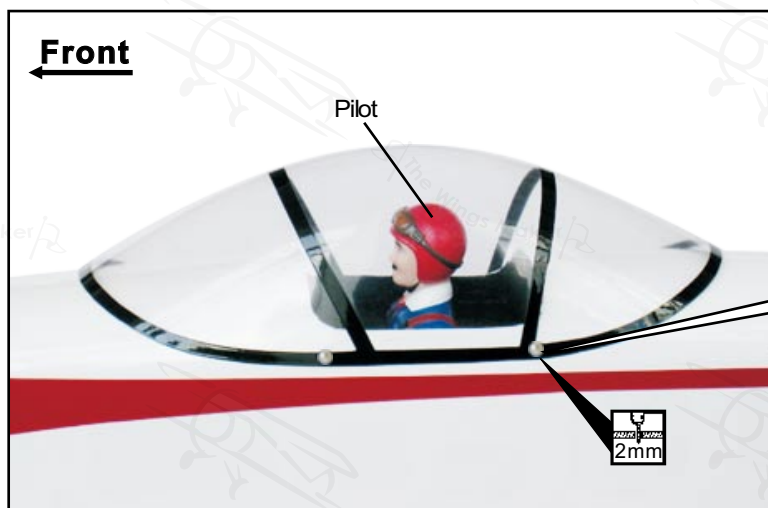
● First insert the grommet to the canopy then apply screw.

PWA2.3 x 12mm **Screw**

4

d1.5 x D6.5 mm **Silicon Grommet**

4




L/R

18 Main Wing

HM4 x 40mm **Screw**

 2

d4 x D15mm **Washer**

 2

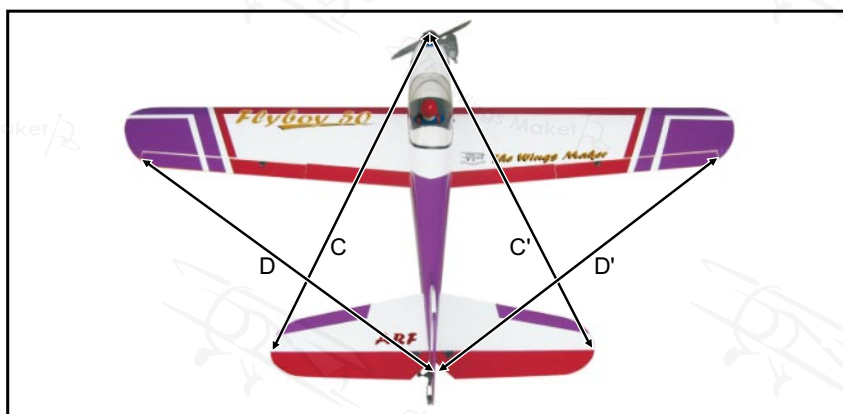
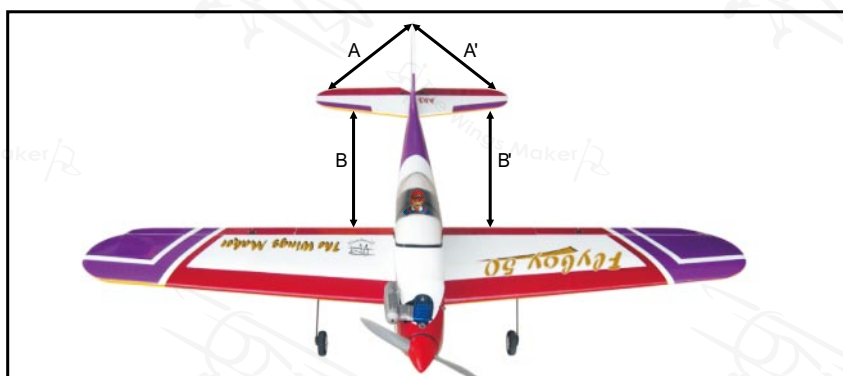
d4 x D15mm **Washer**

HM4 x 40mm

● **Bottom View**

19 Wing Setting

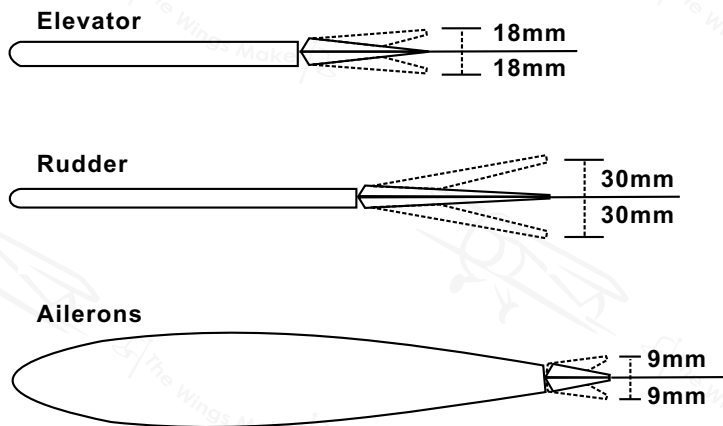
● Adjust the wing and fuselage configuration as shown in the diagrams.



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

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.



21 C.G.

The ideal C.G. position is 100mm (3.9in.) 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. If you are converting this model to electric, please move the C.G. forward 10% of current C.G. distance from leading edge to compensate for weight of fuel.



- Measure C.G. with the wheels in retracted position.

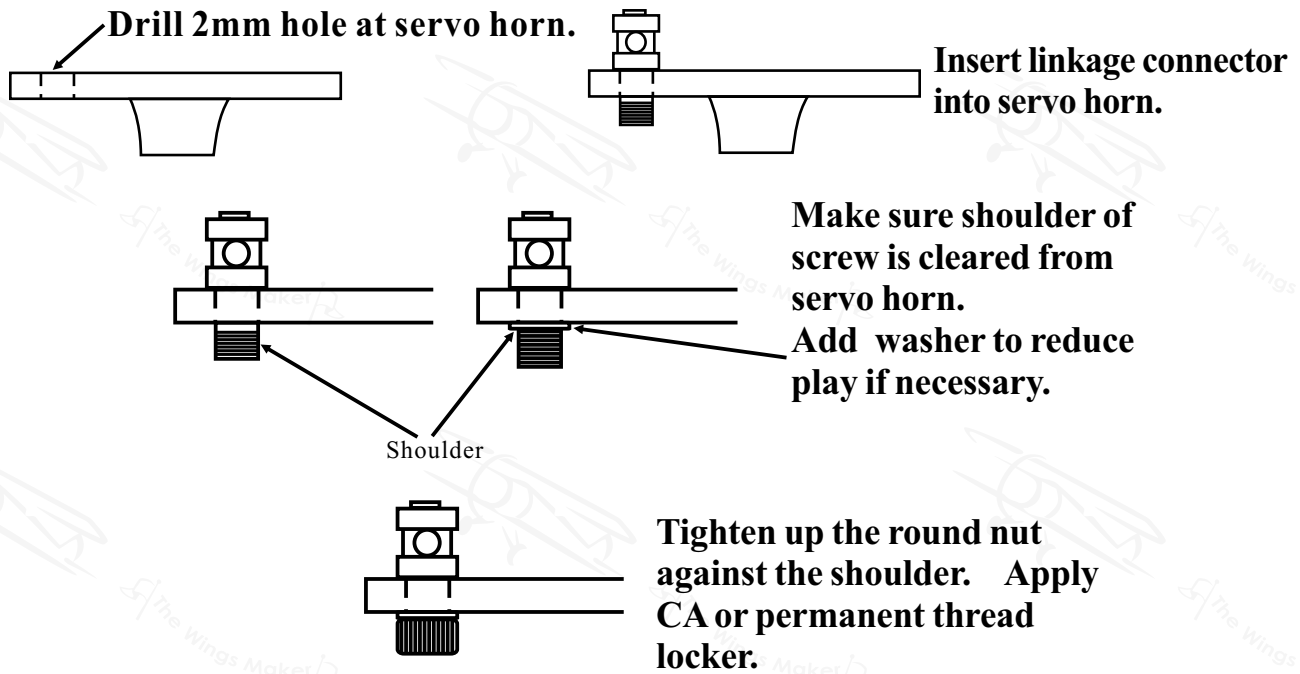
<http://www.thewingsmaker.com/instructionManuals.php>

! 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.
- # **Flyboy 50** is specially designed to be powered by 2C 0.40-0.46/ 4c 0.70 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.

LINKAGE CONNECTOR



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



THE WINGS MAKER