Before commencing assembly, please read these instructions thoroughly.

**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.*

---

**FLYBOY 50**

(WA014)

---

**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.*
BEFORE YOU BEGIN

Read through the manual before you begin, so you will have an overall idea of what to do.

1. 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.

2. Symbols used throughout this instruction manual comprise of the following:

- Apply epoxy glue.
- Assemble left and right sides the same way.
- Peel off shaded portion covering film.
- Drill holes with the specified diameter (here: 3mm).
- Pay close attention here!
- Pierce the shaded portion covering film.
- Apply instant glue (C.A.glue, super glue.)
- Ensure smooth non-binding movement while assembling.
- Cut off shaded portion.
- Must be purchased separately!
- Do not overlook this symbol!
- Apply thread locker
**Parts List**

1. MAIN WING -- 1 pair
2. SCREW PB2x25mm -- 6 pcs
   - FUEL TUBE Ø6x5mm -- 4 pcs
   - CLEVIS PL4111203 -- 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 PL4111203 -- 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:**
- TOUGHSLN STL 100 WHITE
- TOUGHSLN STL 331 CUB YELLOW
- LIGHTEX SGX 310 RED
- LIGHTEX SGX 360 VIOLET

GA014PO28971303

P.2
1 Aileron

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

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.

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

- 3mm Set Screw
- 4.1mm collar

5 Retract Servo

- 3 x 3mm Set Screw: 2
- Linkage Connector: 2
- 2mm Nut: 2
- 2mm Washer: 2

- 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

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

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

8 Tail Landing Gear
PA 3 x 12mm Screw —— 2
3mm Set Screw —— 1
2.1mm Collar —— 1

9 Engine Mount
M4x25mm Socket Head Screw —— 4
d4 x D9mm Washer —— 4

Blind nuts are off-centered to keep the spinner at the fuselage axis.
10 Fuel Tank

- Cable Tie 1.5x5x400 mm
- Double-sided Tape 40 x 100 mm
- Plywood 2x59.5x102.4 mm

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

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.

GA014PO28971303 P.6
12 Elevator Pushrod

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

13 Rudder Pushrod

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

14 Servo Set

- Included with the radio Set.

Use the attached sheet for linkage connector installation.
15 Radio Equipment

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

16 Cowling

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

17 Canopy

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

Elevator

- 18mm
- 18mm

Rudder

- 30mm
- 30mm

Ailerons

- 9mm
- 9mm

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.


! 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

Drill 2mm hole at servo horn.

Insert linkage connector into servo horn.

Make sure shoulder of screw is cleared from servo horn.
Add washer to reduce play if necessary.

Tighten up the round nut against the shoulder. Apply CA or permanent thread locker.

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

THE WINGS MAKER