Requires: 0.40-0.46 cu. in. displacement 2-stroke 4-channel radio w/ 4 standard servos

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>64 in / 1630 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>657 sq in / 42.4 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>5.1 lb / 2300 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>50 in / 1270 mm</td>
</tr>
</tbody>
</table>

* 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.
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:

- **AB** Apply epoxy glue.
- **CA** Apply instant glue (C.A.glue, super glue.)
- **NI** Must be purchased separately!
- **L/R** Assemble left and right sides the same way.
- **3mm** Drill holes with the specified diameter (here: 3mm).
- **Cut off shaded portion.
- **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 8x25x201mm -- 1 pc.
3. PLYWOOD 3x10x20mm -- 2 pcs
   RING Ø2.3mm -- 2 pcs
4. PUSHROD Ø1.8x100mm w/ Threads(For Aileron) -- 2 pcs
   FUEL TUBE Ø6x5mm -- 4 pcs
   STRAPER -- 2 pcs
   CLEVIS -- 2 pcs
5. STABILZER & ELEVATOR -- 1 set
   FUSELAGE -- 1 pc.
   SCREW PMx316mm -- 2 pcs
   WASHER d3xD7mm -- 2 pcs
6. VETICAL FIN & RUDDER -- 1 set
7. ENGINE MOUNT PL511030 -- 1 set
   SOCKET HEAD SCREW M3x20mm -- 4 pcs
   WASHER d3xD7mm -- 4 pcs
8. FUEL TANK 320cc -- 1 set
   CABLE TIE 1.5x5x40mm -- 1 pc.
   DOUBLE-SIDED TAPE 40x100mm -- 1 pc.
   BATTERY COVER -- 1 pc.
9. MAIN LANDING GEAR -- 1 set
   SOCKET HEAD SCREW M3x14mm -- 3 pcs
   WASHER d3xD12mm -- 3 pcs
   COLLAR Ø4.1mm w/ set screw -- 4 sets
   SCREW PM4x38mm -- 2 pcs
   WASHER d4xD9mm -- 4 pcs
   M4 NUT -- 2 pcs
   QUICK RELEASE NYLON RIVET PL1208042 -- 4 pcs
   MAIN WHEEL Ø62mm -- 2 pcs
   ALUMINUM PLATE 1mm -- 2 pcs
   WHEEL PANTS -- 1 pair
10. TAIL LANDING GEAR -- 1 set
    SCREW PA3x12mm -- 2 pcs
    COLLAR Ø2.1mm w/ set screw -- 1 set
    TAIL WHEEL Ø25mm -- 1 pc.
    ALUMINUM PLATE 0.3mm -- 1 pc.
    SCREW PM2x10mm -- 1 pc.
    M2 NUT -- 1 pc.
11. SCREW PB2x12mm -- 2 pcs
    FUEL TUBE Ø6x5mm -- 1 pc.
    CLEVIS -- 1 pc.
    HORN -- 1 set
    PUSHROD Ø1.8x720mm w/ Threads(For elevator) -- 1 pc.
12. SCREW PB2x12mm -- 2 pcs
    FUEL TUBE Ø6x5mm -- 1 pc.
    CLEVIS -- 1 pc.
    HORN -- 1 set
    PUSHROD Ø1.8x720mm w/ Threads(For Rudder) -- 1 pc.
13. SOCKET HEAD SCREW M3x25mm -- 4 pcs
    WASHER d3xD7mm -- 8 pcs
    M3 NUT -- 8 pcs
14. LINKAGE CONNECTOR Ø2.1mm -- 1 set
15. SPONGE 60x70x80mm -- 1 pc.
    FUEL TUBE Ø6x5mm -- 2 pcs
    STRAPER -- 2 pcs
    THROTTLE PUSH WIRE Ø1.2x400mm -- 1 pc.
    w/ Plastic Tube d2xD3x190mm -- 1 pc.
16. CANOPY -- 1 pc.
    PVC PLATE 1x14.3x78mm (Wing Protection) -- 1 pc.
    SCREW HM4x33mm -- 2 pcs
    WASHER d4xD12mm -- 2 pcs
17. COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
    SPINNER Ø57mm -- 1 set
    SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
18. DECALS: A234DEC -- 1 set

COVERING:

BLACK COLOR SCHEME:
TOUGHLON STL 100 WHITE
TOUGHLON STL 201 BLACK
TOUGHLON STL 311 FERRARI RED
TOUGHLON STL 402 CHECKER(BLACK/WHITE)
TOUGHLON STL 412 CHECKER(FERRARI/WHITE)
ORANGE COLOR SCHEME:
TOUGHLON STL 100 WHITE
TOUGHLON STL 311 FERRARI RED
TOUGHLON STL 320 ORANGE
TOUGHLON STL 412 CHECKER(FERRARI/WHITE)
TOUGHLON STL 422 CHECKER(ORANGE/WHITE)
GREEN COLOR SCHEME:
TOUGHLON STL 100 WHITE
TOUGHLON STL 311 FERRARI RED
TOUGHLON STL 412 CHECKER(FERRARI/WHITE)
TOUGHLON STL 442 CHECKER(GREEN/WHITE)
BLUE COLOR SCHEME:
TOUGHLON STL 100 WHITE
TOUGHLON STL 311 FERRARI RED
TOUGHLON STL 250 BLUE
TOUGHLON STL 412 CHECKER(FERRARI/WHITE)
TOUGHLON STL 452 CHECKER(BLUE/WHITE)
1 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.

2 Main Wing

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

3 Aileron Servo

- Bottom View
4 Aileron Servo

5 Stabilizer & Elevator

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

Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.
6 Vertical Fin / Rudder

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

7 Engine Mount

- Apply thread locker to screws.
- Blind nuts are off-centered to keep the spinner at the fuselage axis.

8 Fuel Tank

- Cable Tie 1.5x5x400mm
- Double-sided Tape 40x100mm
- Fuel Tank 320cc
9 Main Landing Gear

Ø1mm pilot holes are pre-drilled. Please look for pin-hole marks at under side of fuselage.

10 Tail Landing Gear
### 11 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.

![Elevator Pushrod Diagram](image1)

- Bottom View

### 12 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.

![Rudder Pushrod Diagram](image2)
13 Engine

M3x25mm Socket Head Screw ——— 4
D3xD7mm Washer ——— 8
M3 Nut ——— 8

100mm
3.93 in

N.I.

Installed Engine Position

14 Servo Set

LINKAGE CONNECTOR

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

M3x25mm

Throttle Pushwire w/plastic tube

3mm Washer

3mm Nut

3mm

N.I. Included with the radio Set.

Throttle pushwire

2mm

M2 Nut

N.I. Throttle Servo.

Please refer to attached sheet for linkage connector installation.
15 Servos

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

* Front
  - Switch Harness
  - Throttle Pushwire Ø1.2x400mm
  - Elevator Servo
  - Elevator Pushrod
  - Sponge
  - Straper
  - Rudder Pushrod
  - Charge Receptacles KP0041300
  - Battery
  - Receiver
  - Throttle Servo
  - Fuel Tube Ø6x5mm
  - Rudder Servo

16 Main Wing & Canopy

- HM4x35mm Screw
- d4xD12mm Washer

- Wing Protection 1x14.3x78mm
- Washer d4xD12mm

17 Cowling

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

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

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

- Spinner Ø97mm
- 1mm
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.

- Elevator: 15 mm up and down
- Rudder: 20 mm left and right
- Aileron: 6 mm left and right

20 C.G.

The ideal C.G. position is 81mm (3.19 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.

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.


! 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.

# **LA-Flyer-40** is specially designed to be powered by 2-stroke 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.
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.

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.

A234PO28901305
Usage of the transparent 3D template

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

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

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW0011800</td>
<td>180mm</td>
<td>1 set</td>
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</table>

180mm Y-Cord

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW0021800</td>
<td>180mm</td>
<td>1 pc</td>
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</tbody>
</table>

Charge Receptacles

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP0041300</td>
<td>600 x 240 x 350mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

Field Stand

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS9111450</td>
<td>600 x 240 x 350mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

Fuel Filler

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL8110030</td>
<td>15 x 22 x 49mm</td>
<td>1 x 1 pc</td>
</tr>
</tbody>
</table>

Clevis Wrench

<table>
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<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL8210010</td>
<td>1 set</td>
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</tr>
</tbody>
</table>

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

Standard Servo

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8V4031</td>
<td>0.17 sec / 60° @4.8V, 0.14 sec / 60° @6.0V</td>
<td>39.4 g / 1.39 oz</td>
</tr>
<tr>
<td></td>
<td>Torque : 3.2kg cm / 44.8 oz - in @4.8V, 4.1kg cm / 57.4 oz - in @6.0V</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Size : 40.6 x 20 x 37mm / 1.60 x 0.79 x 1.46 in</td>
<td></td>
</tr>
</tbody>
</table>
Ducted Fan  Pattern

Warbirds  Funfly

Scale  Electric

Sports  Glider

Trainer  Boat

Accessories

Covering
(Lightex / Toughlon)