**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>57.5 in / 1460 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>585 sq in / 37.4 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>6 lbs / 2.7 kg</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>49.6 in / 1260 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.
- **C.A.** Apply instant glue (C.A. glue, super glue.)
- **L/R** Assemble left and right sides the same way.
- **N.I.** Must be purchased separately!
- **3mm** Drill holes with the specified diameter (here: 3mm).
- **Pay close attention here!**
- **Warning!** Do not overlook this symbol!
Parts List

1. MAIN WING -- 1 pair

2. MEDIUM ELECTRIC RETRACT LG4400002 -- 1 pair
   180mm Y-CORD KW0021800 -- 1 pc.

3. MAIN LANDING GEAR COVER -- 1 set

4. WING JOINER 9x32.8x95mm -- 1 pc.

5. SCREW PWA2.3x8mm -- 8 pcs
   BALSA 8x18x21mm (For Aileron Servo) -- 4 pcs
   PLYWOOD 2x55x85mm (For Aileron Servo) -- 1 pc.

6. SCREW PB2x14mm -- 4 pcs
   SCREW PB2x10mm -- 2 pcs
   FUEL TUBE Ø6x5mm -- 4 pcs
   TRI-HORN M3x14mm (S) PL4112102 -- 2 pcs
   STRAPER PL4112102 -- 2 pcs
   CLEVIS PL4112103 -- 2 pcs
   PUSHROD Ø1.8x90mm w/ Threads (For Aileron Servo) -- 2 pcs

7. STABILIZER & ELEVATOR -- 1 set

8. VERTICAL FIN & RUDDER -- 1 set

9. TAIL LANDING GEAR PL7100001 -- 1 set
   WHEEL Ø25mm -- 1 pc.
   COLLAR Ø2.1mm w/ set screw -- 1 set
   SCREW PA3x12mm -- 2 pcs
   SCREW PM2x10mm -- 1 pc.
   ALUMINUM PLATE 0.5mm -- 1 pc.
   M2 NUT -- 1 pc.

10. FUEL TANK 320cc PL1111320 -- 1 set

11. ENGINE MOUNT PL5111050 -- 1 set
   DOUBLE-SIDED TAPE 40x100mm - 1pc.
   CABLE TIE (FOR FUEL TANK) 1.5x5x400mm - 1 pc.

12. SCREW PM3.5x30mm -- 4 pcs
    WASHER d3.5xD8mm -- 8 pcs
    M3.5 NUT -- 8 pcs
    SPINNER Ø82mm -- 1 set

13. COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
    SCREW PWA2.8x12mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs

14. LINKAGE CONNECTOR Ø2.1mm w/ set screw -- 1 set

15. FUEL TUBE Ø6x5mm -- 1 pc.
    STRAPER PL4112102 -- 1 pc.
    THROTTLE PUSHWIRE Ø1.2x430mm -- 1 pc.
    PLASTIC TUBE d2xD3x300mm -- 1 pc.

16. SPONGE 60x70x97mm -- 1 pc.
    PUSHROD CONNECTOR 4x9x20mm (For Elevator) -- 1 set

17. SCREW PB2x14mm -- 4 pcs
    SCREW PB2x12mm -- 5 pcs
    FUEL TUBE Ø6x5mm -- 3 pcs
    CLEVIS PL4112103 -- 3 pcs
    TRI-HORN M3x14mm (L) PL4111185 -- 3 sets
    PUSHROD Ø1.8x505mm w/ Threads (For Elevator Servo) -- 2 pcs
    PUSHROD Ø1.8x657mm w/ Threads (For Rudder Servo) -- 1 pc.
    PUSHROD Ø1.8x100mm (For Elevator) -- 1 pc.

18. CANOPY -- 1 pc.
    SCREW PWA2.3x8mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
    PILOT (PC001063A/ PC001063B) -- 1 pc.
    DOUBLE-SIDED TAPE 8x800mm -- 1 pc.

19. ARI SCOOP -- 1 pc.
    SCREW PM3x13mm -- 1 pc.
    WASHER d3xD7mm -- 1 pc.

20. DECALS: A055DEC -- 1 set
1 Aileron

Bottom View

2 Landing Gear

KA 3x14mm Screw 8

Medium Electric Retract(L) (LG4400002)

Factroy Installed

3 Landing Gear

3mm Set Screw 2
4.1mm Wheel Collar 2

Retract(L) Retract(R)

4.8V - 6.0V operation only, higher voltage will burn out the retract motor.

180mm Y-Cord Setting

To Receiver Landing Gear Channel

3mm Set Screw
4 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.

5 Aileron Servo

- Peel off shaded portion covering film.
- Aileron Servo Cover 2x55x85mm
- Balsa Wood 8x18x21mm
- PWA2.3x8mm Screw (8)

- Wing Joiner 9x32.8x95mm
6 Aileron Linkage

- Ø 1mm pilot holes for World Models tri-horn are pre-drilled.
- Please look for pin-hole marks at under side of control surfaces.

7 Stabilizer & Elevator

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

8 Vertical Fin & Rudder

Pre-glued
9 Tail Landing Gear

- PA 3x12mm Screw: 2
- PM 2x10mm Screw: 1
- 2mm Nut: 1
- 2.1mm Collar: 4

3mm set screw
PA 3x12mm
2.1mm Collar
PM 2x10mm
M2mm NUT

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

Apply thread locker to screws.

10 Fuel Tank

1. Cable Tie 1.5x5x400mm
2. Double-sided Tape 4x100mm
3. Up

Fuel Tank 320cc

11 Engine Mount

- M4x25mm Socket Head Screw: 4
- d4xD9mm Washer: 4

Engine Mount PL511050

Apply thread locker to screws.

Blind nuts are off-centered to keep the spinner at the fuselage axis.
**12 Engine**

- PM 3.5x30mm Screw: 4
- 3.5mm Washer: 8
- 3.5mm Nut: 8

Install Engine position:

- Spinner Ø82mm
- 118mm = 4.65in.

Illustration is for upright mounting of engine. Side or inverted mounting is possible by rotating the engine mount. Thrust angle will not be affected.

**13 Cowling**

- PWA2.6x12mm Screw: 4
- d1.5xD6.5mm Silicon Grommet: 4

First insert the grommet to the cowling then apply screw.

- Trim the cowling so it will match your engine.

**14 Servo Set**

- 3x3mm Set Screw: 1
- Linkage Connector: 1
- M2 Nut: 1
- 2mm Washer: 2

Throttle Pushwire

N.I. Throttle Servo.

Please refer to the attached sheet for linkage connector installation.
15 Radio Equipment

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

- Install Sponge for inserting Battery and Receiver.

16 Radio Equipment

17 Radio Equipment
18 Linkage

- PB 2x12mm Screw (5)
- PB 2x14mm Screw (4)

19 Canopy

- PWA2.3x8mm Screw (4)
- d1.5xD6.5mm Silicon Grommet (4)

20 Main Wing

- HM 4x30mm Screw (2)
- d4xD15mm Washer (2)
21 Main Wing

PM 3x13 mm Screw

PM 3x13 mm Screw

Washer

Washer

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

22 Wing Setting

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

23 Control Throws

Adjust the control throws as shown in the diagram. Throws are good for general flying. You can adjust according to your personal preference.

Elevator

Rudder

Aileron
The ideal C.G. position is 128mm (5.04 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.

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.

# **P-51 MUSTANG 46** is specially designed to be powered by **2C 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.
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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</tbody>
</table>

180mm Y-Cord

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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</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>
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<td></td>
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</table>

Field Stand

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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</thead>
<tbody>
<tr>
<td>MS9111430</td>
<td>600 x 240 x 310mm</td>
<td>1 pc</td>
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</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>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL8210010</td>
<td></td>
<td>1 set</td>
</tr>
</tbody>
</table>

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)

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