P-51 MUSTANG 60

0.60-0.75 cu.in. displacement 2-stroke
0.91 cu.in. displacement 4-stroke
Requires: 6-channel radio w/ 6 standard servos

Specifications

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Wing Span</td>
<td>64.5 in / 1640 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>755 sq in / 48.7 sq dm</td>
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<tr>
<td>Flying Weight</td>
<td>8.4 lb / 3700 g</td>
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<tr>
<td>Fuselage Length</td>
<td>56.0 in / 1430 mm</td>
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*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 electric 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.)
- **L/R**: Apply thread locker
- **Ensure smooth non-binding movement while assembling.**
- **Cut off shaded portion.**
- **Assemble left and right sides the same way.**
- **Peel off shaded portion covering film.**
- **3mm**: Drill holes with the specified diameter (here: 3mm).
- **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 TUBE Ø16x595mm -- 1 pc.
3. SCREW PM2x6mm -- 12 pcs
   M2 NUT -- 12 pcs
   WASHER d2x5mm -- 24 pcs
   MAIN LANDING GEAR COVER -- 1 pair
   PVC PLATE 0.5mm -- 2 pcs
   180mm Y-CORD KW0021800 -- 1 pc.
4. SCREW PB2x20mm -- 4 pcs
   SCREW PB2x16mm -- 2 pcs
   SCREW PWA2x8mm -- 8 pcs
   TR-HORN M3x14mm PL4111185 -- 2 set
   PUSHROD Ø1.8x87mm w/Threads(For Aileron Servos) -- 2 pcs
   SERVO MOUNTING PANEL 2mm PL5310000 -- 1 pair
   FUEL TUBE Ø6x5mm -- 4 pcs
   STRAPER PL4112102 -- 2 pcs
   CLEVIS PL4112103 -- 2 pcs
5. FUEL TUBE Ø6x5mm -- 3 pcs
   RING Ø2.3mm PL4112023 -- 2 pcs
   CLEVIS PL4112103 -- 2 pcs
   STRAPER PL4112102 -- 1 set
6. STABILIZER & ELEVATOR -- 1 set
   FUSELAGE -- 1 pc.
7. VERTICAL FIN & RUDDER -- 1 set
8. TALL LANDING GEAR PL7100002 -- 1 set
   SCREW PA3x12mm -- 2 pcs
   COLLAR Ø2.6mm w/setscrew -- 1 set
   TALL WHEEL Ø30mm -- 1 pcs.
9. SCREW PB2x16mm -- 4 pcs
   SCREW PB2x14mm -- 2 pcs
   TR-HORN M3x22mm(L) PL4111251 -- 2 set
   PUSHROD Ø1.8x560mm w/Threads(For Elevator Servo) -- 2 pcs
   FUEL TUBE Ø6x5mm -- 2 pcs
   CLEVIS PL4112103 -- 2 pcs
10. SCREW PB2x22mm -- 2 pcs
    SCREW PB2x20mm -- 1 pc.
    TR-HORN M3x14mm(L) PL4111185 -- 1 set
    PUSH ROD Ø1.8x710mm w/Threads(For Rudder Servo) -- 1 set
    FUEL TUBE Ø6x5mm -- 1 pc.
    CLEVIS PL4112103 -- 1 pc.
11. SOCKET HEAD SCREW M4x25mm -- 4 pcs
    WASHER d4.2x14.5mm -- 4 pcs
    ENGINE MOUNT PL5911080 -- 1 set
    FIRE BOX -- 1 set
    PLYWOOD 2x118x122.5mm(For Fire Box) -- 1 pc.
    PLYWOOD 2x50.6x122.5mm(For Fire Box) -- 1 pc.
    PLYWOOD 4x22x119mm(For Fire Box) -- 1 pc.
    PLYWOOD 4x13x86mm(For Fire Box) -- 1 pc.
    PLYWOOD 7x7x58mm(For Fire Box) -- 2 pcs
    BALS 11x31x123mm(For Fire Box) -- 1 pc.
12. SCREW HM4x40mm -- 2 pcs
    WASHER d4.2x14.5mm -- 2 pcs
    PLYWOOD 2x20x95mm(Wing Protection) -- 1 pc.
    AIR SCOOP -- 1 pc.
    SCREW PWM2.5x12mm -- 3 pcs
13. SCREW PWA2.5x12mm -- 8 pcs
    SILICON GROMMET d1.5x6.5mm PL1265035 -- 8 pcs
    DOUBLE-SIDED TAPE 8x1000 -- 1 pc.
    CANOPY -- 1 pc.
14. SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5x6.5mm -- 4 pcs
    SPINNER(blue/alu.back plate) Ø102mm PH22SB102 -- 1 set
    COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
15. SCREW HM4x40mm -- 2 pcs
    WASHER d4.2x14.5mm -- 2 pcs
16. SCREW PWA2.5x12mm -- 8 pcs
    SILICON GROMMET d1.5x6.5mm PL1265035 -- 8 pcs
    DOUBLE-SIDED TAPE 8x1000 -- 1 pc.
    CANOPY -- 1 pc.
17. SCREW PWA2.5x12mm -- 8 pcs
    SILICON GROMMET d1.5x6.5mm -- 4 pcs
    SPINNER(blue/alu.back plate) Ø102mm PH22SB102 -- 1 set
    COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
18. SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5x6.5mm -- 4 pcs
    SPINNER(blue/alu.back plate) Ø102mm PH22SB102 -- 1 set
    COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
19. SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5x6.5mm -- 4 pcs
    SPINNER(blue/alu.back plate) Ø102mm PH22SB102 -- 1 set
    COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
20. DECALS -- 1 set

COVERING:

TOUGHON STL 370 SILVER
TOUGHON STL 251 SKY BLUE
TOUGHON STL 201 BLACK
TOUGHON STL 311 FERRARI RED
1 Main Wing

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

2 Main Wing

Please apply glue to all surfaces of wing joiner.

Wing Tube Ø16x595mm

Completed

Make sure to glue securely. If not properly glued, a failure in flight may occur.
3 Retractable Landing Gear

- PM 2 x 6 mm Screw: 12
- M2 Nut: 12
- d2 x D5 mm Washer: 24
- KA 3 x 14 mm Screw: 8

Factroy Installed

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

- Retract(L)
- Retract(R)

To Receiver Landing Gear Channel

- 180mm Y-Cord Setting

Bottom View

- PM 2 x 6 mm
- M2 Nut
- Washer d2 x D5 mm

4 Aileron Servo

- PB2 x 20 mm Screw: 4
- Pb2 x 16 mm Screw: 2
- PWA2 x 8 mm Screw: 8

Factroy Installed

- Pushrod Ø1.8 x 87 mm

Completed

- Ø1 mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.
5 Flap and Retract Servo

- Flaps up
- Flaps down
- Lead to retract servo
- Lead to Aileron servo
- Lead to Flap servo

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

6 Stabilizer & Elevator

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

Bottom View

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

7 Vertical Fin / Rudder

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

- PA3x12mm Screw 2
- 3mm Set Screw 1
- 2.6mm Collar 1

9 Elevator Pushrod

- PB 2 x 16 mm Screw 4
- PB 2 x 14 mm Screw 2

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

10 Rudder Pushrod

- PB 2 x 22 mm Screw 2
- PB 2 x 20 mm Screw 1

- Ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.
11 Elevator & Rudder Pushrod

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

12 Engine Mount

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

1. Layout the parts for engine box.

2. Apply epoxy glue to all surfaces in contact and insert engine box into fuselage. Glue F12 on to the engine box.

3. Turn over the fuselage and glue F13A and F14A in place.

4. Work inside fuselage, glue in F54, F55 and F56 to anchor the engine box.
13 Fuel Tank

Battery Cover

14 Engine

**ANTI-VIBRATION MOUNT INSTALLATION**

KM3 x 20mm

Make sure the rounded edges are facing the shock absorbing silicon PAD.

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

Installed Engine Position

P.8
Please refer to attached sheet for linkage connector installation.

Install and arrange the servo as shown in the diagram.
17 Main Wing
- Screw HM4 x 40mm
- Washer d4.2 x D14.5mm
- Screw PWM2.5 x 12mm
- Screw HW1.0 x 12mm
- Silicon Grommet d1.5 x D6.5mm

Wing Protection 2 x 20 x 95mm

18 Canopy
- Screw PWA2.3 x 12 mm
- Silicon Grommet d1.5 x D6.5mm

Apply double-sided tape

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

Please refer to the attached sheet for usage of the transparent 3D template. First insert the grommet to the cowling then apply screw.

20 Wing Setting

Adjust the wing and fuselage configuration as shown in the diagrams.
**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 60** is specially designed to be powered by 2C 0.61-0.75 or 4C 0.91 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. 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.

# When Flaps are lowered, nose of model will rise. The nose-up varies with the speed at which the models is flying when you lower the flaps and the extent to which they are lowered. Check effect of flaps at higher altitude to avoid surprises during landing. You may apply down trim of the elevator to compensate for the nose-up effect when lowering the flaps. Taking off with flaps lowered is not recommended, as the increased drag may require a longer runway and more engine power for the model to take off.

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

**Control Throws**

- **Elevator**
  - 25mm
  - 25mm

- **Rudder**
  - 45mm
  - 45mm

- **Flaps (near fuselage)**
  - 40mm

- **Ailerons (away from fuselage)**
  - 18mm
  - 18mm

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**C.G.**

The ideal C.G. position is 115mm (4.5in) 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.

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**Warning**

The ideal C.G. position is 115mm (4.5in) 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.

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Usage of the transparent 3D template

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

1. Simply cut the transparent 3D template to fit your engine and exhaust pipe,
2. then slide onto the actual cowling and use as template to mark the openings required for final cutting.
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.