

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/ 7 standard servos

Specifications

Wing Span	64.5 in / 1640mm
Wing Area	755 sq in / 48.7 sq dm
Flying Weight	8.4 lb / 3700g
Fuselage Length	56.0 in / 1430mm

* 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.

**THE WORLD MODELS
 MANUFACTURING CO., LTD.**
 FACTORY PRE-FABRICATED
 ALMOST-READY-TO-FLY(ARF)SERIES
 MADE IN CHINA
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P-51 MUSTANG 60

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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 : -

AB

Apply epoxy glue.



Apply thread locker

C.A

Apply instant glue
(C.A.glue, super glue.)

N.I.

Must be purchased separately!

L/R

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).



Pierce the shaded portion
covering film.

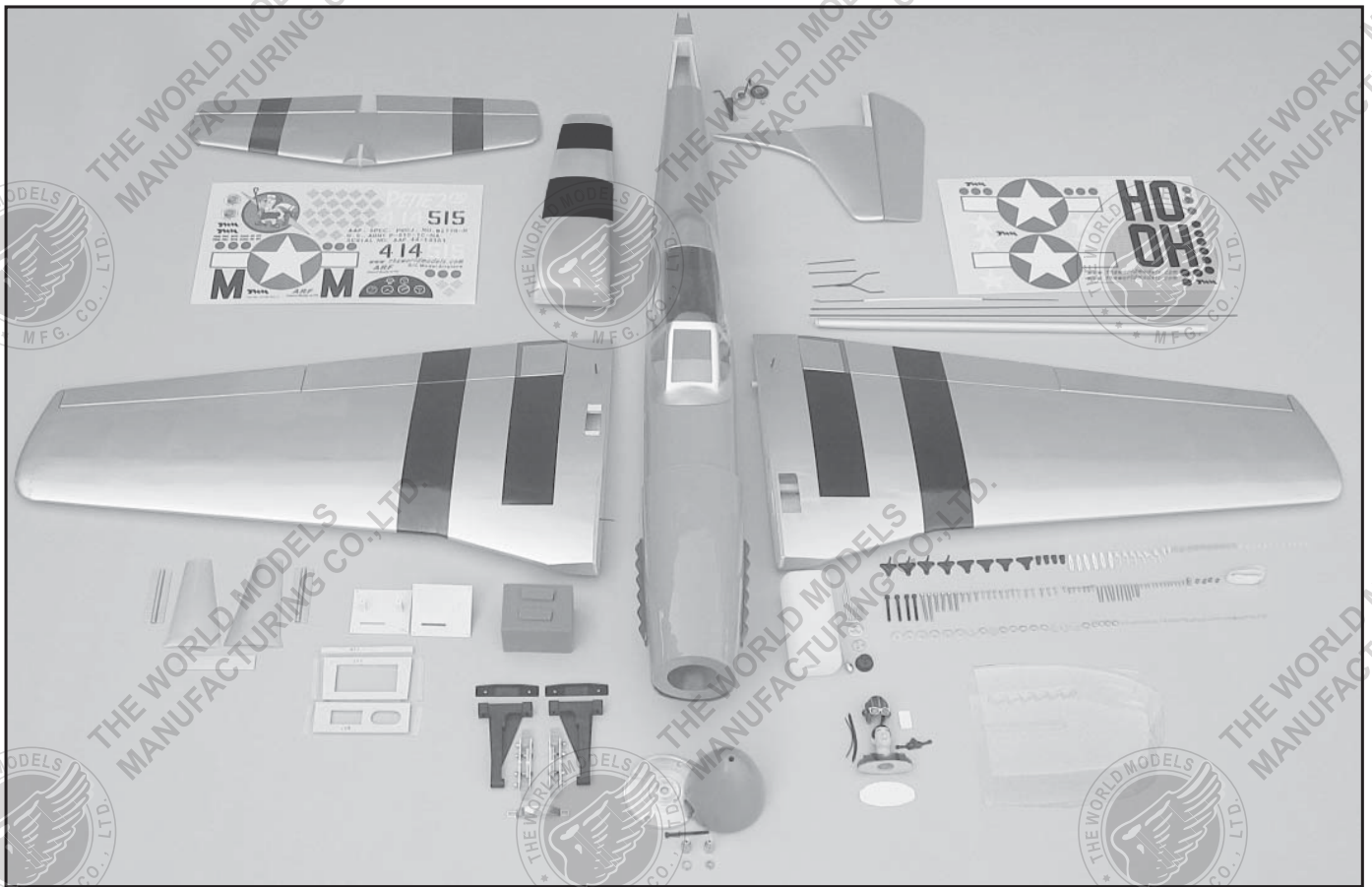


Pay close attention here!



Warning!

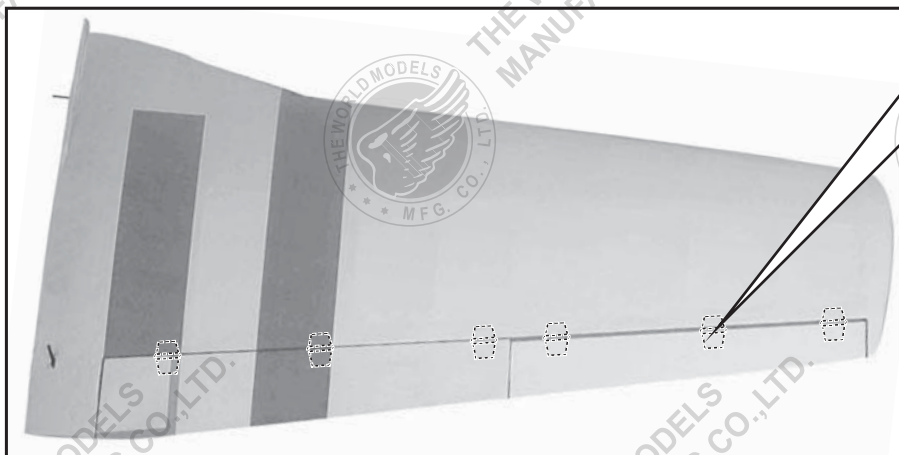
Do not overlook this symbol!



Parts List

1. MAIN WING -- 1 pair
 2. WING TUBE Ø16x595mm -- 1 pc.
 3. SCREW PM2x6mm -- 12 pcs
M2 NUT -- 12 pcs
WASHER d2xD5mm -- 24 pcs
MAIN LANDING GEAR COVER -- 1 pair
RETRACTABLE LANDING GEAR COVER -- 1 pair
MAIN WHEEL Ø90mm -- 2 pcs
 4. SCREW PM2x20mm -- 6 pcs
SCREW PWA2x8mm -- 8 pcs
TRI-HORN M3x14mm(L)(For Aileron) -- 2 set
PUSHROD Ø1.8x87mm w/ Threads(For Aileron Servos) -- 2 pcs
SERVO MOUNTING PANEL 2mm(For Aileron Servos) -- 1 pair
FUEL TUBE Ø6x5mm -- 4 pcs
STRAPER -- 2 pcs
CLEVIS -- 2 pcs
 5. FUEL TUBE Ø6x5mm -- 3 pcs
Y ROD Ø1.8x110mm(For Aileron Servo) -- 1 set
RING Ø2.6mm -- 2 pcs
CLEVIS -- 2 pcs
STRAPER -- 1 pc.
 6. STABILIZER & ELEVATOR -- 1 set
FUSELAGE -- 1 pc.
 7. VERTICAL FIN & RUDDER -- 1 set
 8. TAIL LANDING GEAR -- 1 set
SCREW PA3x12mm -- 2 pcs
COLLAR Ø2.6mm w/ set screw -- 1 set
TAIL WHEEL Ø30mm -- 1 pc.
 9. SCREW PM2x20mm -- 6 pcs
TRI-HORN M3x21mm(L)(For Elevator) -- 2 sets
PUSHROD Ø1.8x560mm w/ Threads(For Rudder Servo) -- 2 pcs
FUEL TUBE Ø6x5mm -- 2 pcs
CLEVIS -- 2 pcs
 10. SCREW PM2x25mm -- 3 pcs
TRI-HORN M3x14mm(L)(For Rudder) -- 1 set
PUSH ROD Ø1.8x710mm w/ Threads(For Rudder Servo) -- 1 pc.
FUEL TUBE Ø6x5mm -- 1 pc.
CLEVIS -- 1 pc.
 12. SOCKET HEAD SCREW M4x25mm -- 4 pcs
WASHER d4xD15mm -- 4 pcs
ENGINE MOUNT PL5111080 -- 1 set
 13. FUEL TANK 380cc -- 1 set
BALSA 8x8x118mm(For Fuel Tank Position Fixing) -- 1 pc.
 14. THROTTLE PUSHWIRE Ø1.2x450mm -- 1 pc.
PLASTIC TUBE d2xD3x180mm -- 1 pc.
ANTI-VIBRATION MOUNT 4C-91 -- 1 set
INCLUDE: SOCKET HEAD SCREW M4x35mm -- 4 pcs
SCREW KM3x20mm -- 8 pcs
WASHER d4xD12mm -- 8 pcs
NLON INSERT LOCK NUT M3 -- 8 pcs
NYLON INSERT LOCK NUT M4 -- 4 pcs
ENGINE MOUNT ALUMINUM PLATE -- 1 set
 15. LINKAGE CONNECTOR Ø2.1mm -- 3 sets
 16. PLYWOOD 6x41x120mm(For Throttle Servo) -- 1 pc.
BALSA 7x7x41mm(For Throttle Servo Stand) -- 2 pcs
PLYWOOD 6x61x118mm(For Fuselage Servo) -- 1 pc.
BALSA 7x7x61mm(For Fuselage Servo Stand) -- 2 pcs
PUSHROD Ø1.8x100mm(For Elevator) -- 1 pc.
PUSHROD CONNECTOR 4x9x20mm(For Elevator) -- 1 set
SPONGE 60x70x118mm -- 1 pc.
FUEL TUBE Ø6x5mm -- 2 pcs
STRAPER -- 2 pcs
 17. SCREW PM4x40mm -- 2 pcs
WASHER d4xD15mm -- 2 pcs
PLYWOOD 2x20x95mm (Wing Protection) -- 1 pc.
AIR SCOOP -- 1 pc.
SCREW PWM2.5x12mm -- 3 pcs
 18. SCREW PWA2.3x12mm -- 8 pcs
SILICON GROMMET d1.5xD6.5mm -- 8 pcs
DOUBLE-SIDED TAPE 8x1000 -- 1 pc.
CANOPY -- 1 pc.
PILOT PC13057B2 -- 1 set
 19. SCREW PWA2.6x12mm -- 4 pcs
SILICON GROMMET d1.5xD6.5mm -- 4 pcs
SPINNER(blue/ alu.back plate) Ø102mm -- 1 set
COWLING -- 1 pc.
TRANSPARENT 3D TEMPLATE -- 1 pc.
 20. DECALS -- 1 set
- **COVERING:--**
TOUGHLON STL 370 SILVER
TOUGHLON STL 251 SKY BLUE
TOUGHLON STL 201 BLACK
TOUGHLON STL 311 FERRARI RED

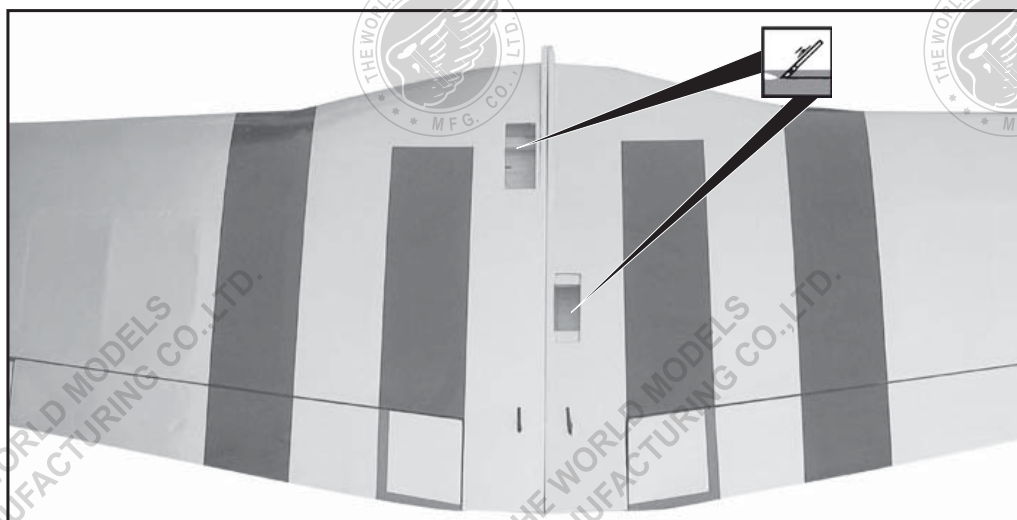
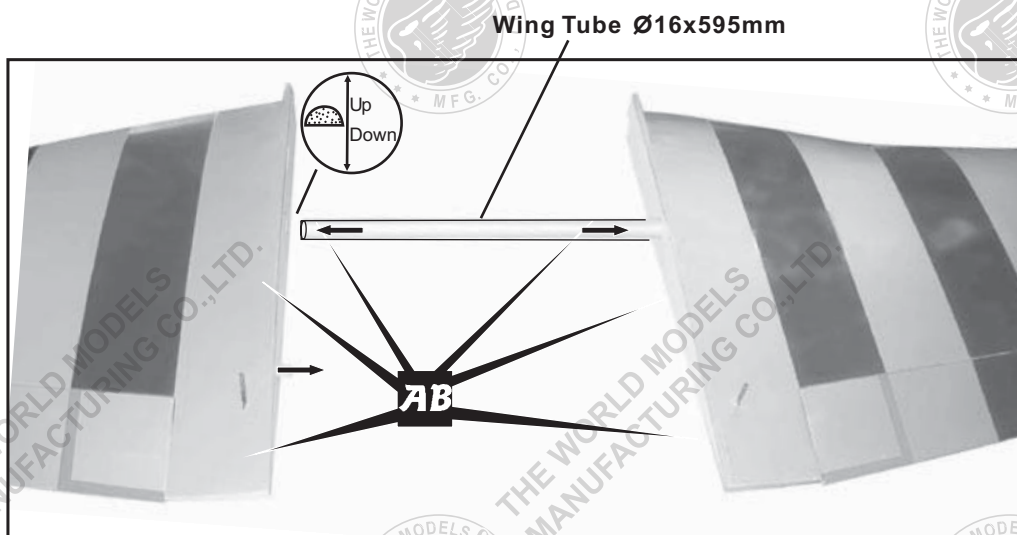
1 Main Wing



L/R

● Bottom View

2 Main Wing



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**

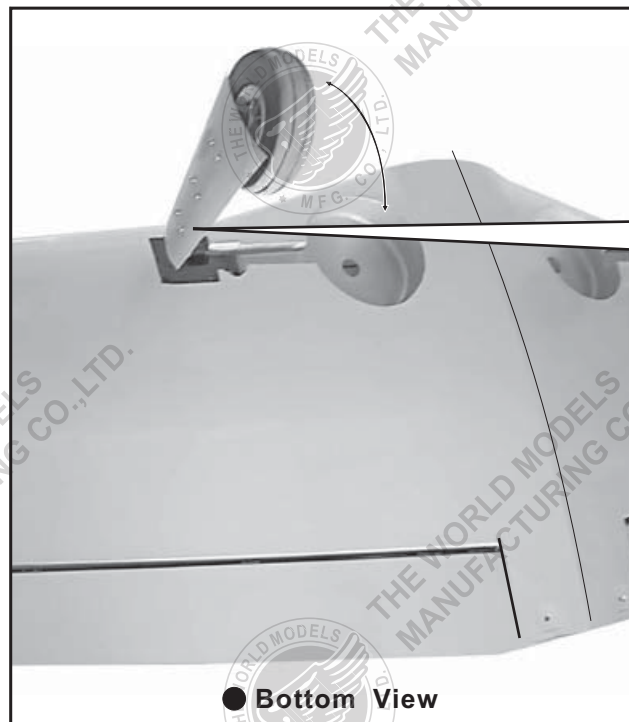
12

M2 Nut

12

d2 x D5mm **Washer**

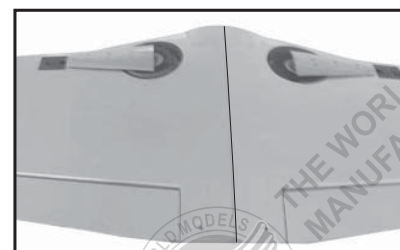
24



PM 2 x 6mm

M2 Nut

Washer
d2 x D 5mm



Completed

L/R

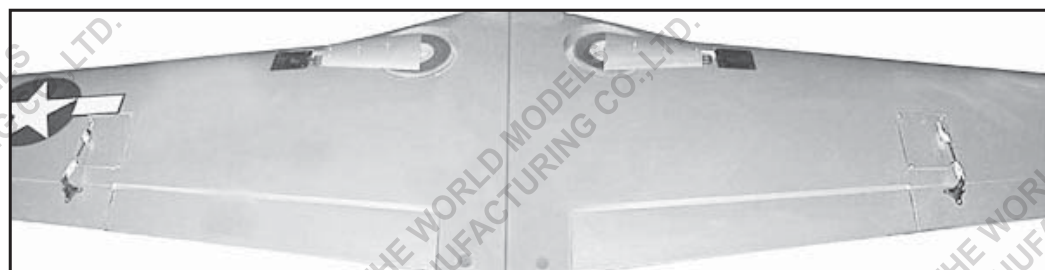
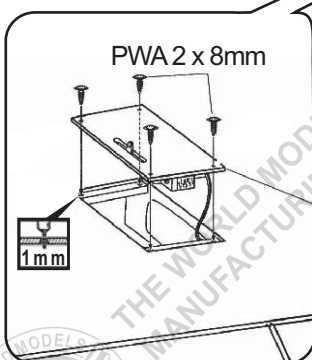
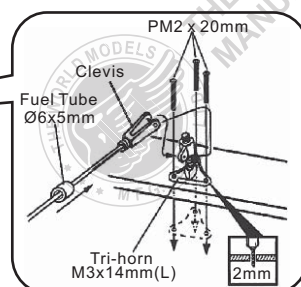
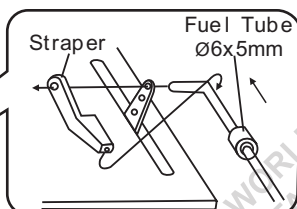
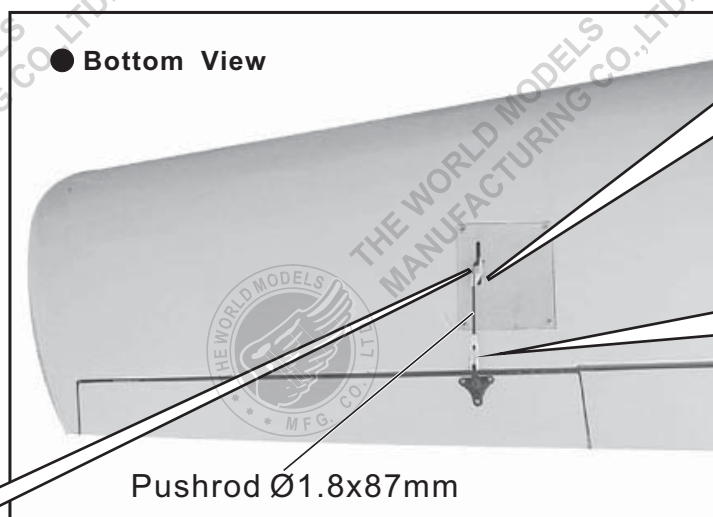
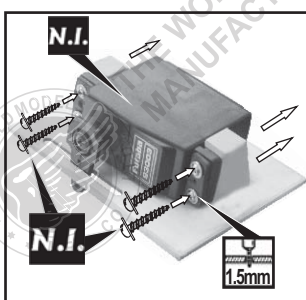
4 Aileron Servo

PM 2 x 20mm **Screw**

6

PWA 2 x 8 mm **Screw**

8

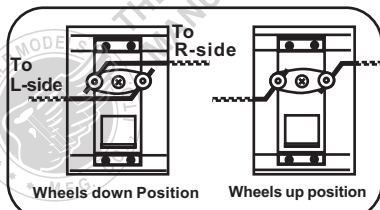


Completed

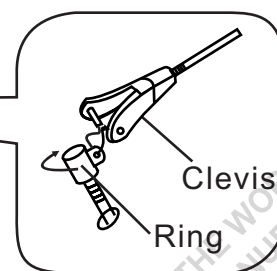
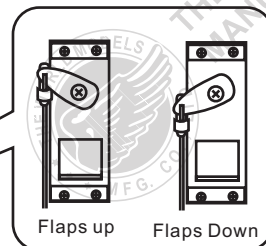
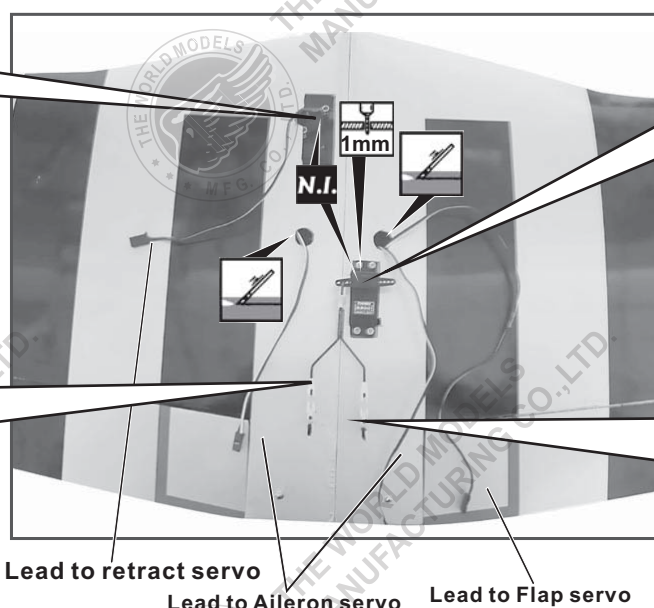
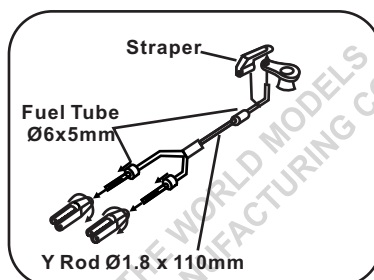
● $\varnothing 1 \text{mm}$ pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

L/R

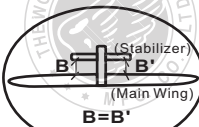
5 Flap and Retract Servo



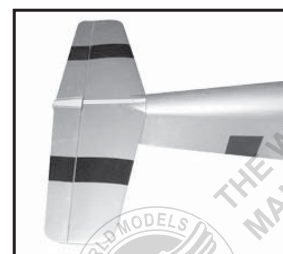
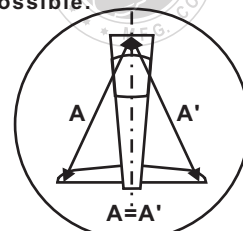
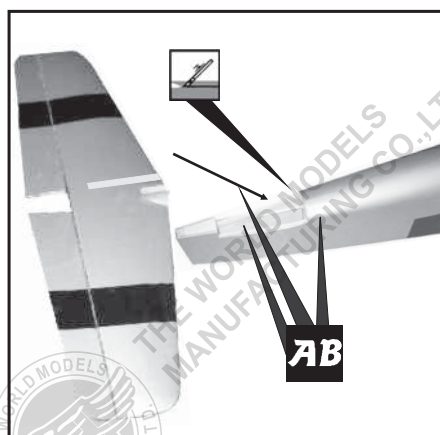
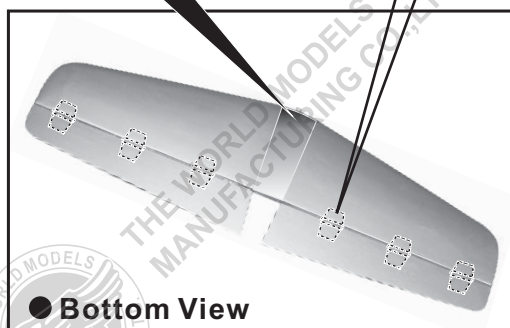
- Select the servo horn that will give 26mm travel when rotates through 180°.



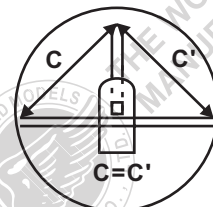
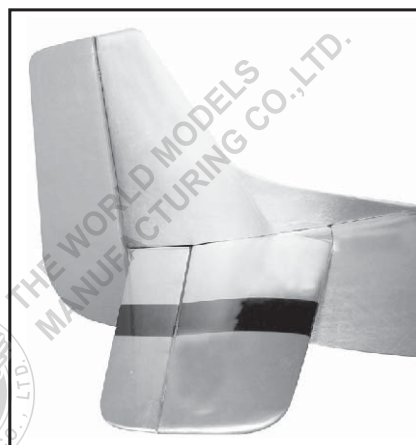
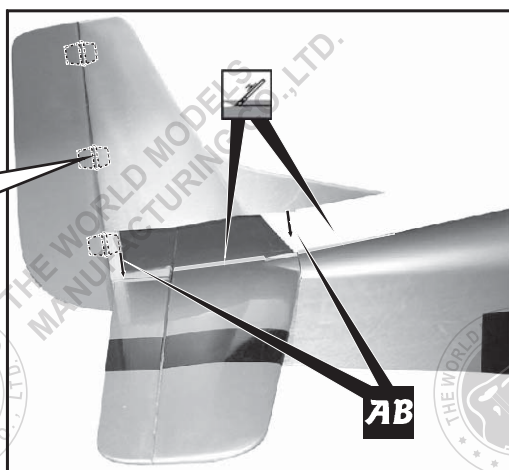
6 Stabilizer & Elevator



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



7 Vertical Fin / Rudder



8 Tail Landing Gear

PA3x12mm Screw

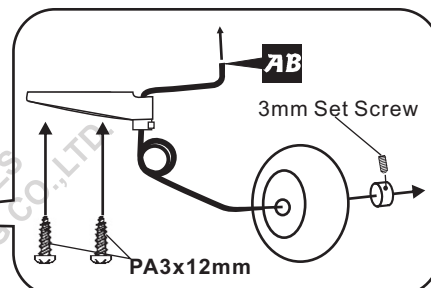
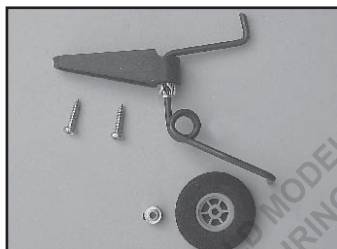
2

3mm Set Screw

1

2.6mm Collar

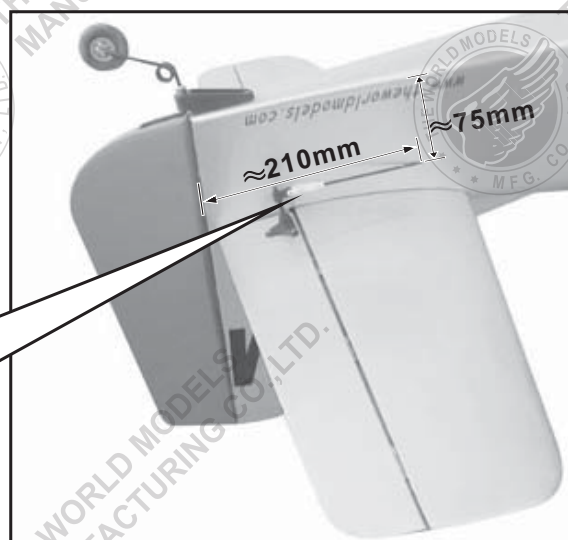
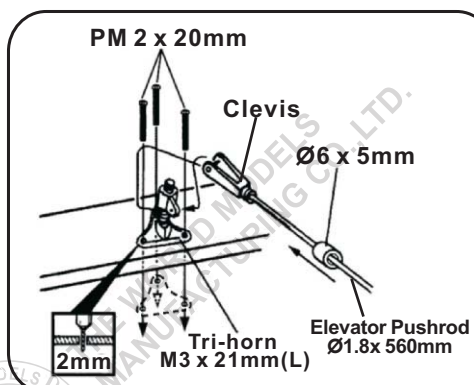
1



9 Elevator Pushrod

PM 2 x 20 mm Screw

6



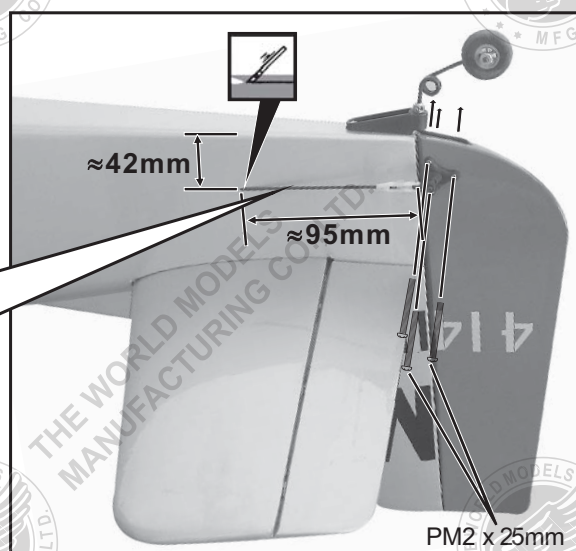
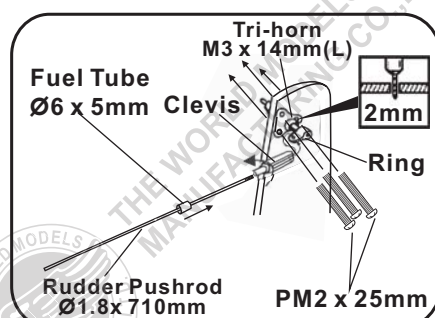
L/R

- 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

PM 2 x 25 mm Screw

3



- 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

Rudder Pushrod

Elevator Pushrod

● Bottom View

Completed

12 Engine Mount

M4 x 25mm Socket Head Screw

4

d4 x D15mm Washer

4

Socket Head Screw
M4 x 25mm

Washer
d4 x D15mm

Engine Mount
PL5111080

● Apply thread locker to screws

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

13 Fuel Tank

Fuel Tank
380cc

AB

Install Balsa 8 x 8 x 118 mm
(For Fuel Tank Position Fixing)

Fuel Tank
380cc

UP

AB

● Bottom View

14 Engine

M4x35mm **Socket Head Screw**

4

KM3x20mm **Screw**

8

M4 Nylon Insert **Lock Nut**

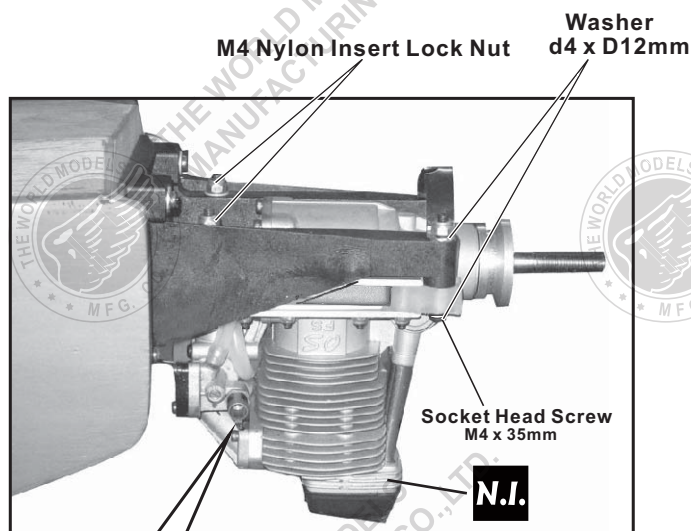
4

M3 Nylon Insert **Lock Nut**

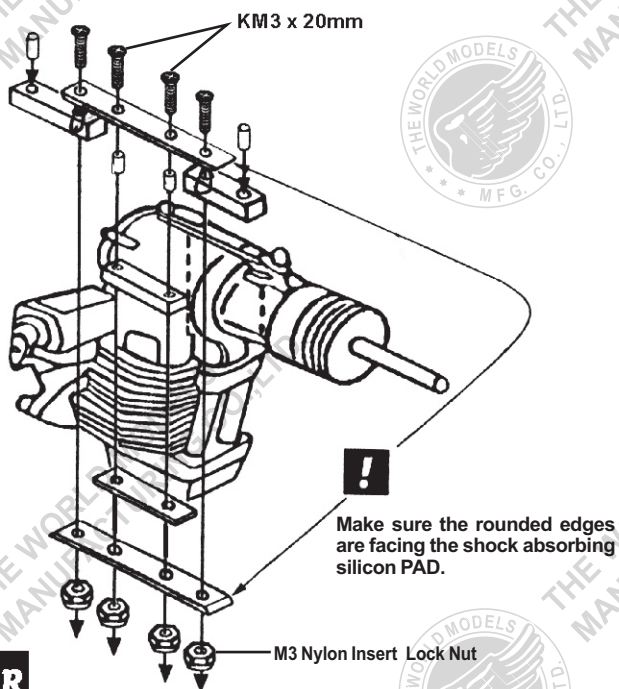
8

d4 x D12mm **Washer**

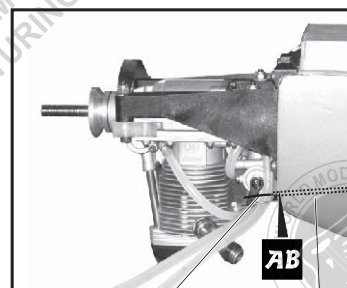
8



ANTI-VIBRATION MOUNT INSTALLATION

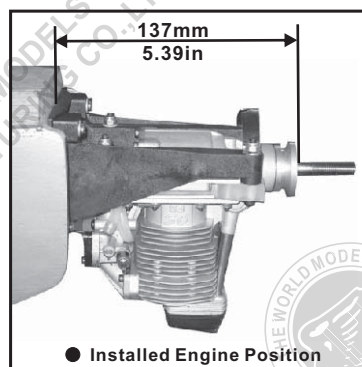


! Make sure the rounded edges are facing the shock absorbing silicon PAD.



AB

! 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.



15 Servo Set

3 x 3mm **Set Screw**

3

Linkage Connector

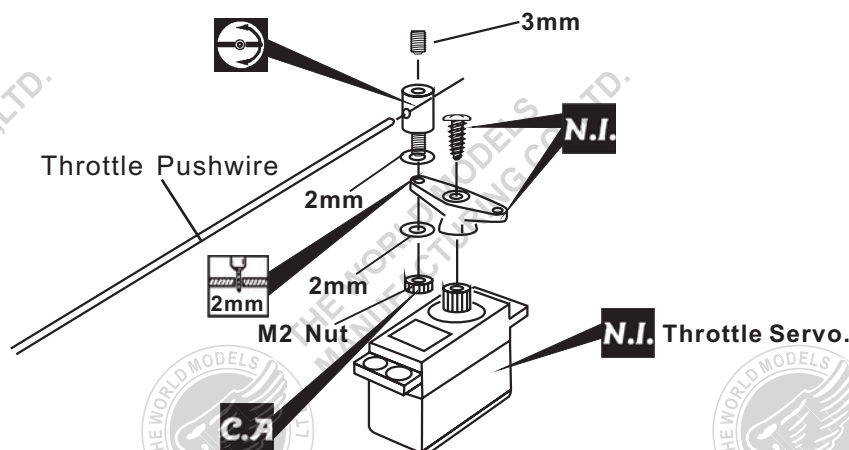
3

M2 **Nut**

3

2mm **Washer**

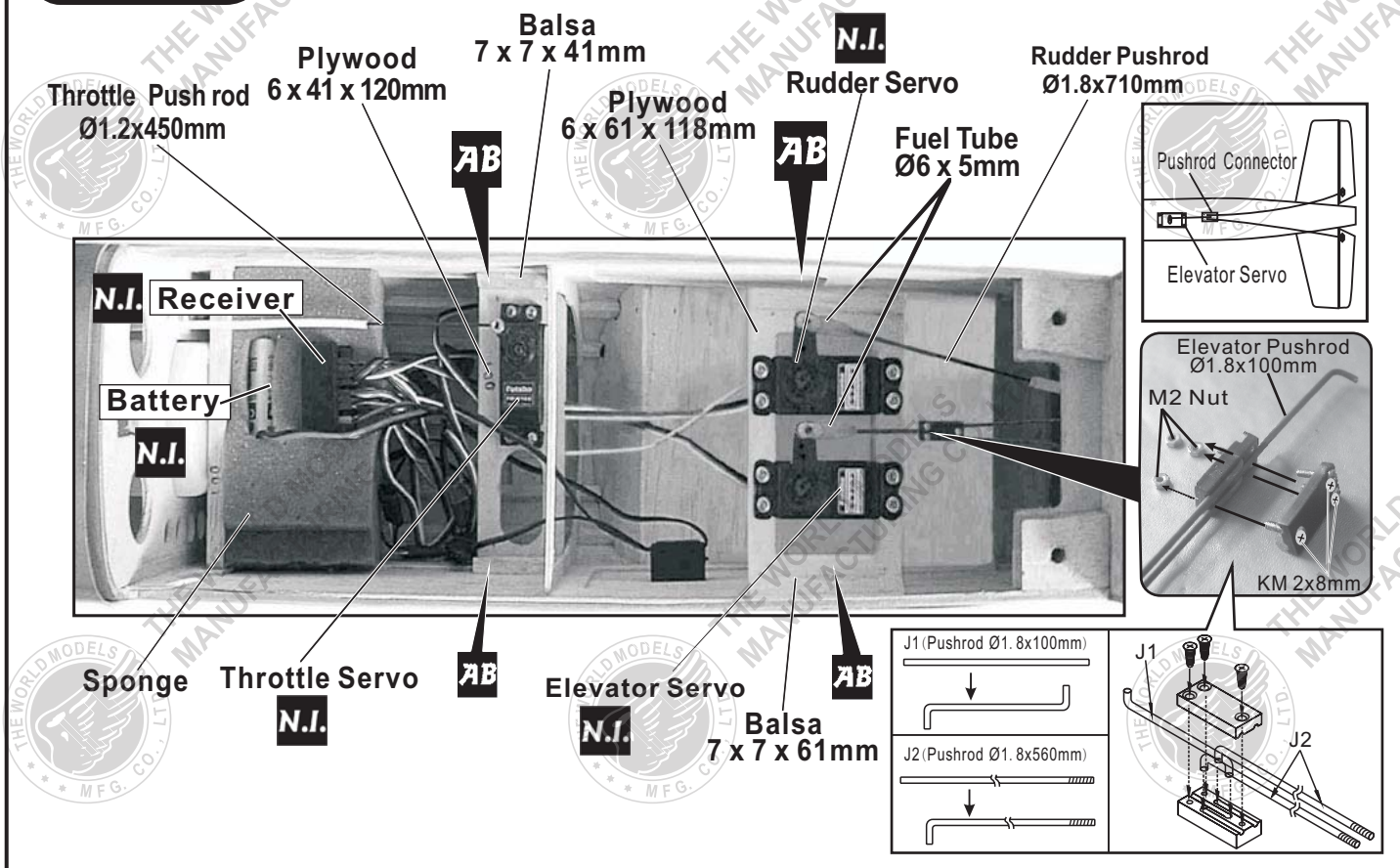
3



! Please refer to attached sheet for linkage connector installation.

16 Servos

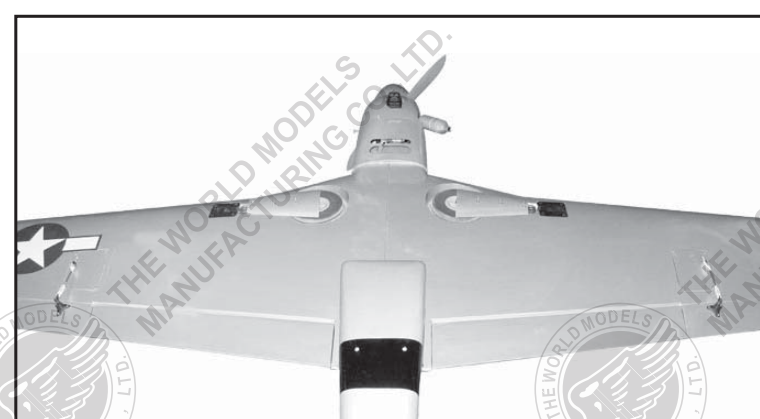
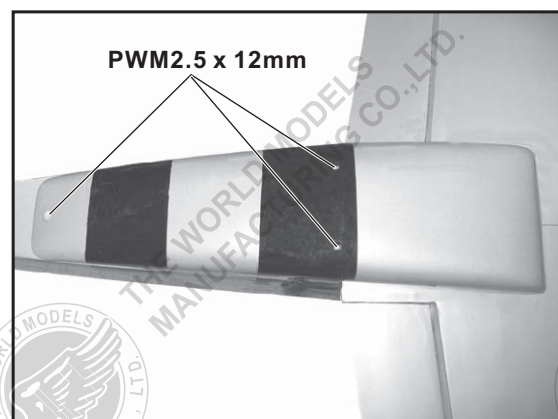
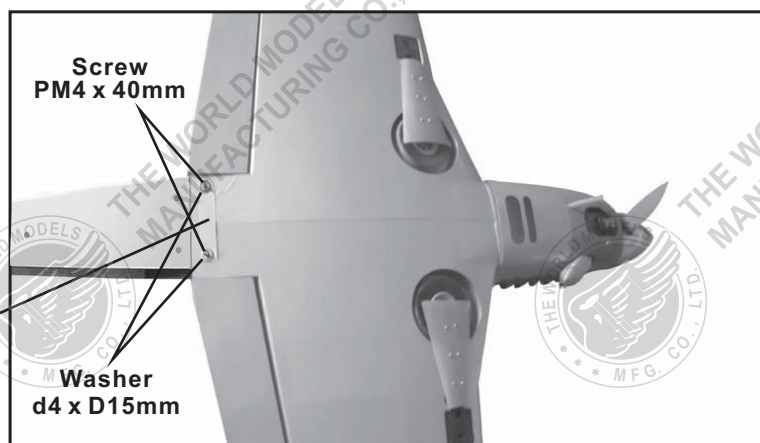
● Install and arrange the servo as shown in the diagram.



17 Main Wing

- PM4 x 40mm Screw** — 2
- d4 x D15mm Washer** — 2
- PWM2.5 x 12mm Screw** — 3

Wing Protection
2 x 20 x 95mm



Completed

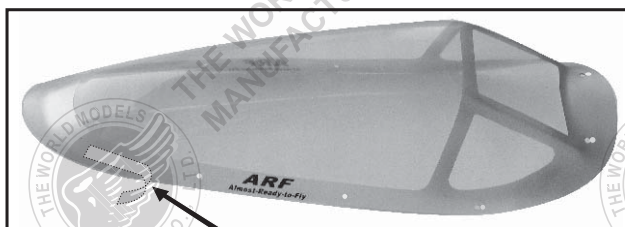
18 Canopy

PWA2.3 x 12 mm Screw

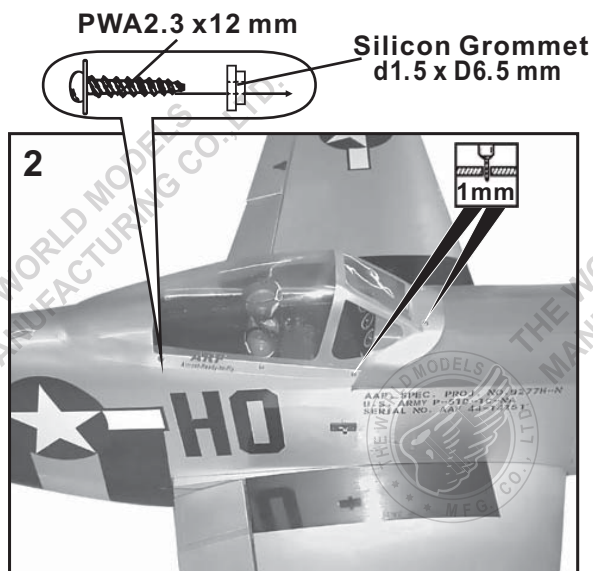
8

d1.5 x D6.5 mm Silicon Grommet

8



Apply double-sided tape



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

19 Cowling

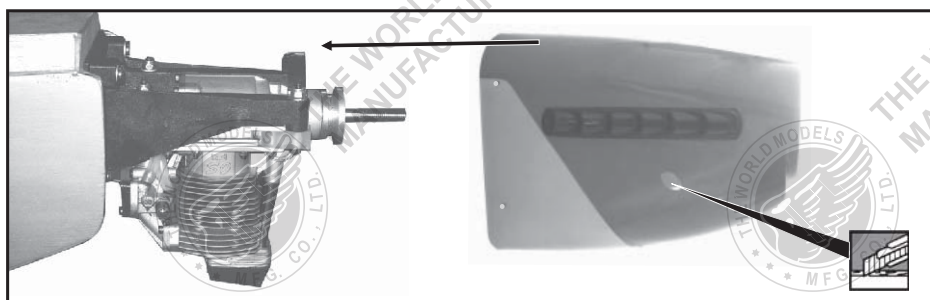
● Please refer to the attached sheet for usage of the transparent 3D template. First insert the grommet to the cowling then apply screw.

PWA2.6 x 12 mm Screw

4

d1.5 x D6.5 mm Silicon Grommet

4

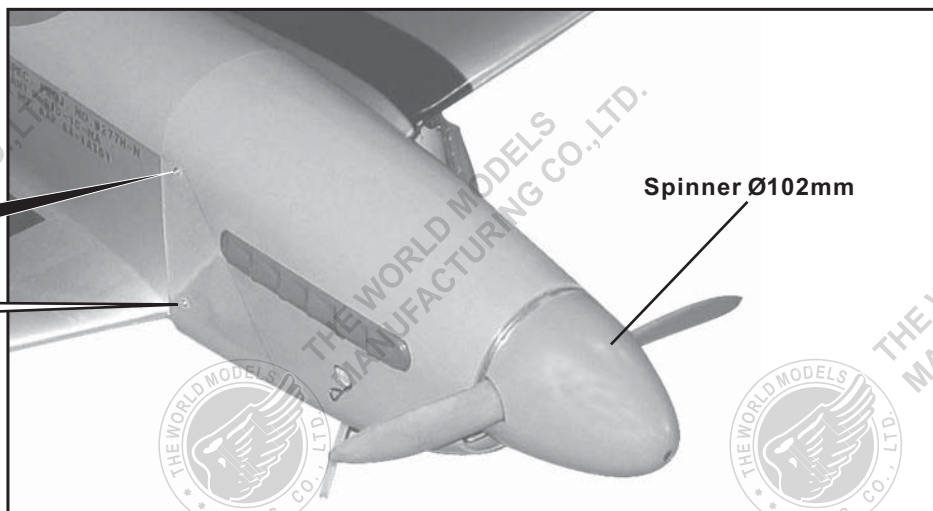


PWA2.6 x 12 mm

1.5mm

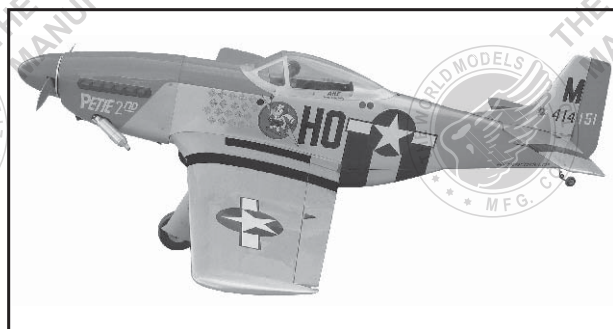
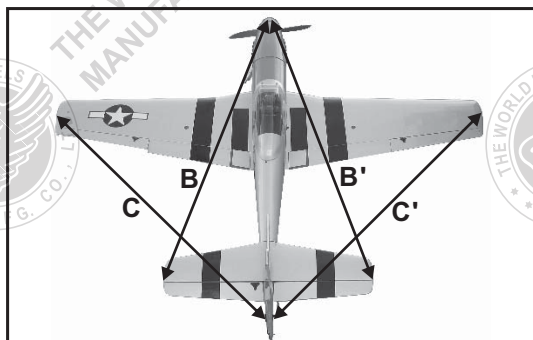
**Silicon Grommet
d1.5xD6.5mm**

Spinner Ø102mm

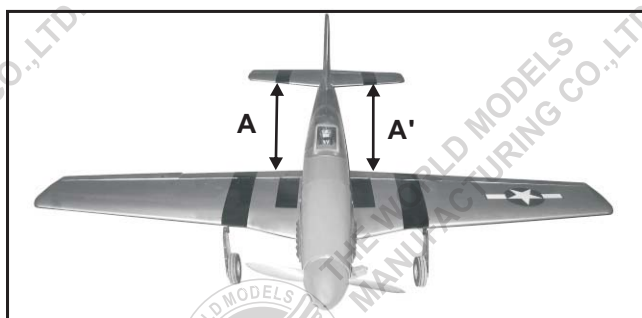


20 Wing Setting

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

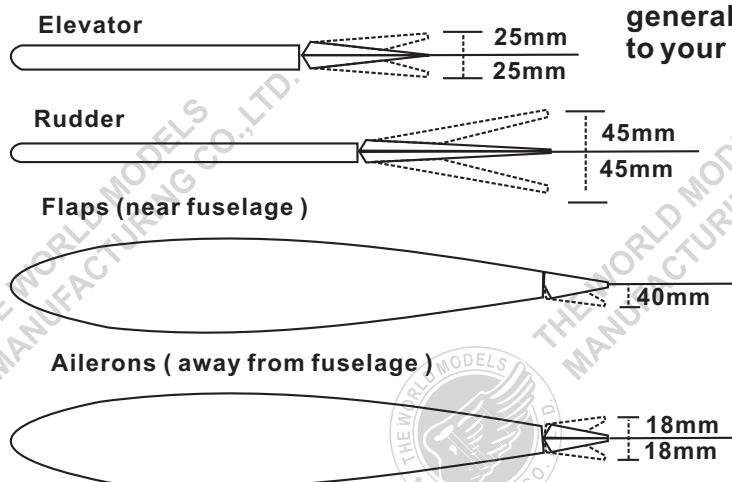


A = A'
B = B'
C = C'



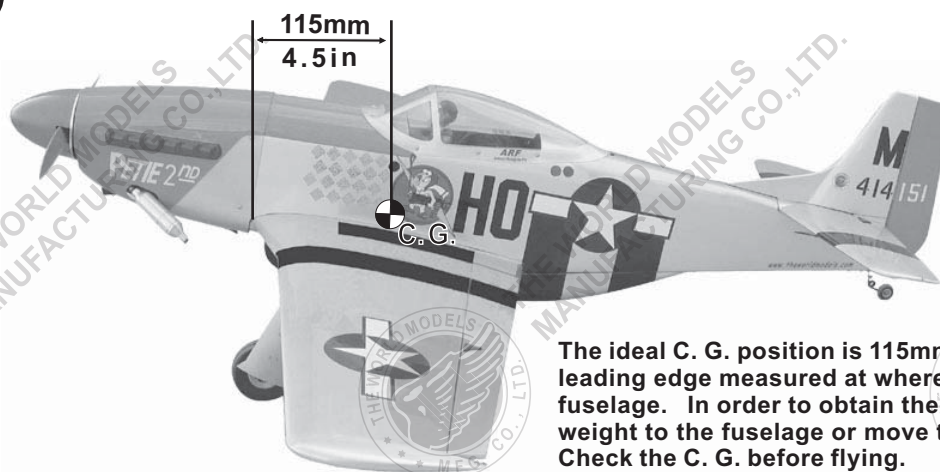
21 Control Throws

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



22 C. G.

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



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.

! Warning!

Important Safety Precautions

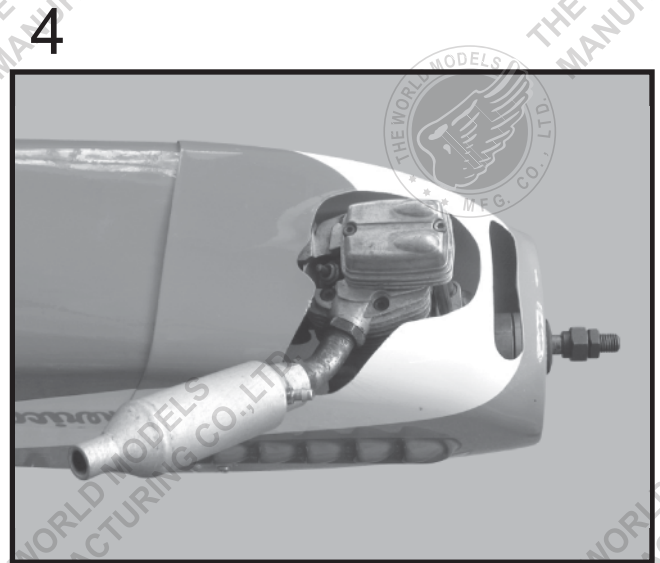
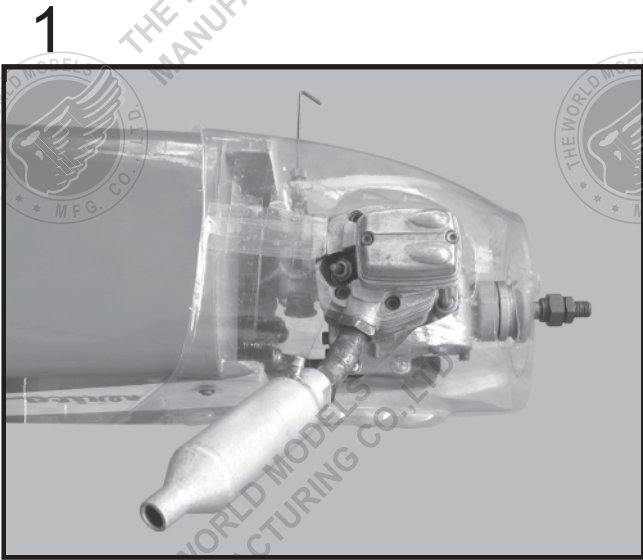
- # First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.
- # Pre - flight adjustment must be done before flying, it is very dangerous to fly a badly pre - adjusted aircraft.
- # **P-51 MUSTANG 60** is specially designed to be powered by **2C 0.61-0.75** or **4C 0.91** 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.

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.

LINKAGE CONNECTOR

HW7111050 & HW7111060

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.

Shoulder

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, 2403 Research Drive, Livermore, CA 94550 USA.

1. Name: _____

2. Address: _____

3. Phone #: _____ E-mail: _____

4. Model: _____

Wing QC# _____ Fuselage QC# _____
(QC numbers are stamped on wing and fuselage)

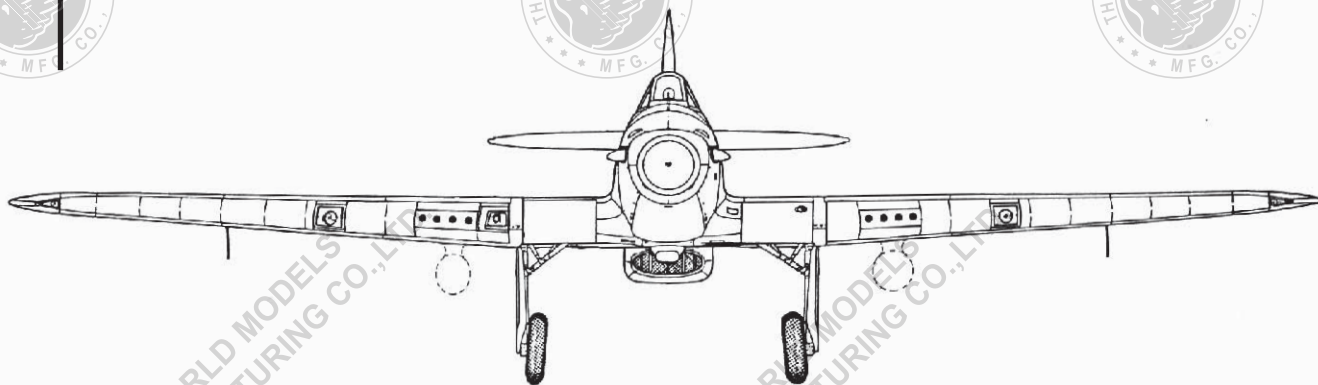
5. Date of Purchase: _____

6. Store Name: _____

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