

SPITFIRE EP



HIGH PERFORMANCE
KM0283010
Outrunner Motor Included!
 Max Speed 12000 rpm
 Operating Power 180 W
 Operating Voltage 6-12 V
 Operating Current 15 A
 Peak Current 20 A (max 15 s)
 Shaft diameter 3 mm
 Diameter 28 mm
 Length 30 mm
 Weight 60 g



Outrunner Motor

**Requires :4-channel radio w/ 4 micro servos,
 20A brushless ESC, 3 cells 11.1V
 2100 mAh Li-Po battery & charger**

Specifications

Wing Span	39.5 in / 1000mm
Wing Area	257 sq in / 16.6 sq dm
Flying Weight	26 oz / 740g
Fuselage Length	32.6 in / 830mm

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.

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SPITFIRE EP

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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.

C.A

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



Apply thread locker



Ensure smooth non-binding
movement while assembling.

L/R

Assemble left and right
sides the same way.



Cut off shaded portion.



Peel off shaded portion
covering film.

N.I.

Must be purchased separately !



Drill holes with the specified
diameter (here: 3mm) .



Pierce the shaded portion
covering film.

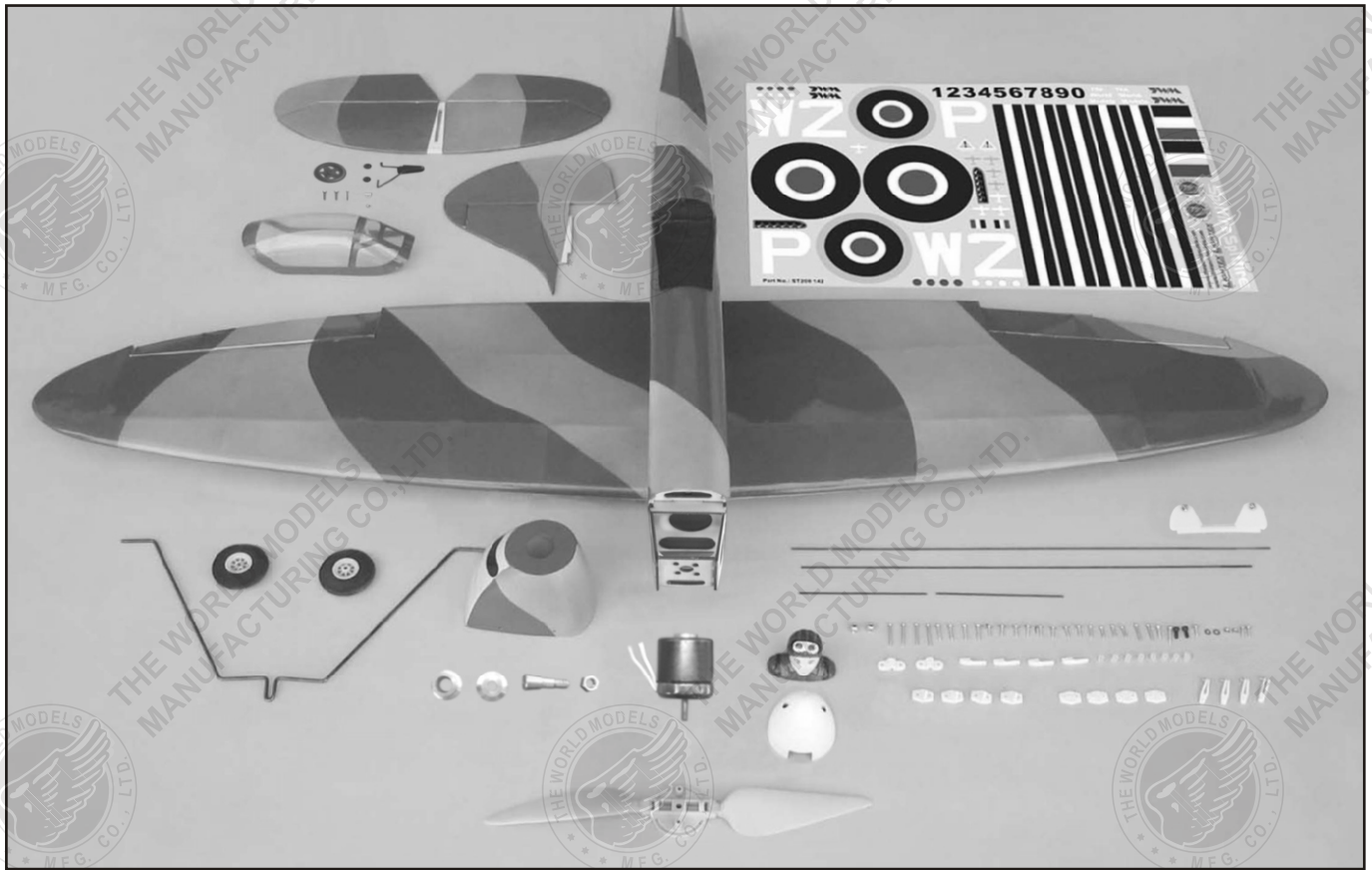


Pay close attention here!



Warning!

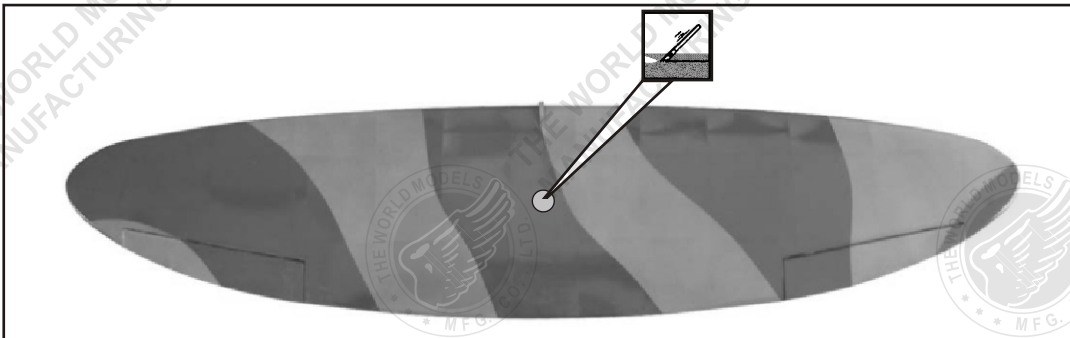
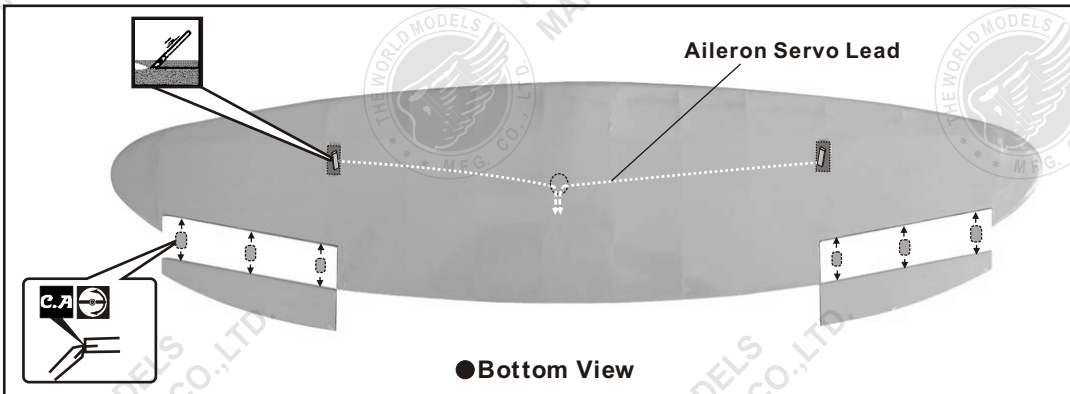
Do not overlook this symbol !



Parts List

1. MIAN WING--1 pair
 2. CLEVIS--2 pcs
STRAPER--2 pcs
FUEL TUBE d2xD4x4mm--4 pcs
HORN(S)--2 sets
SCREW PM2x16mm--4 pcs
PUSHROD Ø1. 4x95mm w/Threads (For Aileron)--2 pcs
 3. FUSELAGE--1 pc.
STABILIZER & ELEVATOR--1 set
ELEVATOR LINK PL4510010--1 pc.
SCREW PM2x8mm--2 pcs
 4. VERTICAL FIN & RUDDER--1 set
 5. TAIL LANDING GEAR--1 set
TAIL WHEEL Ø23mm--1 pc.
SCREW PA2x8mm--2 pcs
ALUMINUM PLATE 0.3mm--1 pc.
SCREW PM2x6mm--1 pc.
M2 NUT--1 pc.
 6. HORN(S)--1 set
FUEL TUBE d2xD4x4mm--1 pc.
CLEVIS--1 pc.
SCREW PM2x8mm--2 pcs
PUSHROD Ø1. 4x430mm w/Threads (For Rudder)--1 pc.
 7. FUEL TUBE d2xD4x4mm--1 pc.
CLEVIS--1 pc.
PUSHROD Ø1. 4x423mm w/Threads (For Elevator)--1 pc.
 8. DIRECT DRIVE BRUSHLESS MOTOR KM0283010--1 set
PROPELLER ADAPTOR HW2340100 --1 set
FOLDING PROPELLER PL6314020 --1 set
COWLING--1 pc.
SPINNER Ø45mm--1 pc.
 9. STRAPER--2 pcs
FUEL TUBE d2xD4x4mm--2 pcs
SPONGE 10x50x150mm--1 pc.
BATTERY TIE--1 pc.
DOUBLE-SIDED TAPE--1 pc.
 10. PLYWOOD 2x20x55mm--1 pc.
NYLON BOLT M2. 5x20mm--2 pcs
NYLON WASHER d2. 6xD9mm--2 pcs
 11. MAIN LANDING GEAR--1 pc.
MAIN WHEEL Ø40mm--2 pcs
MOUNTING PLATE PL4114030 (For Main Landing Gear)--2 pcs
SCREW PA2. 3x12mm--4 pcs
COLLAR Ø2. 6mm w/ Set Screw--2 sets
 12. CANPOY--1 pc.
SCREW PWA2x8mm--4 pcs
PILOT--1 pc.
 13. DECALS--1 set
- COVERING:
- LIGHTEX SGX203 LIGHT GRAY**
LIGHTEX SGX340 OLIVE DRAB

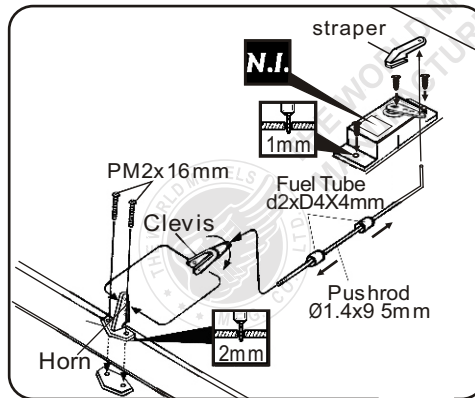
1 Main Wing



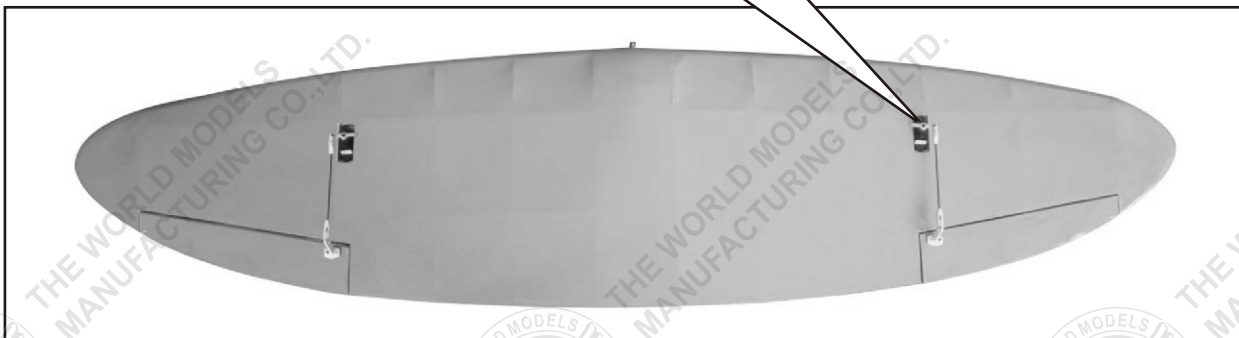
● Apply instant type CA glue to both sides of each hinge.

2 Aileron Servos

PM2x16mm Screw



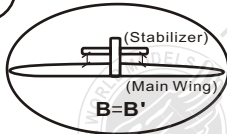
● Ø1mm pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.



● Bottom View

3 Stabilizer & Elevator

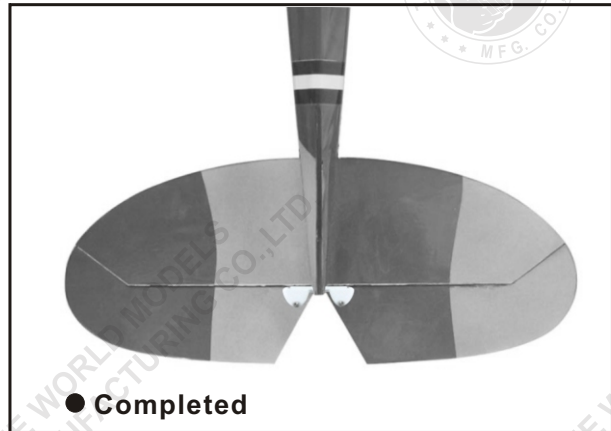
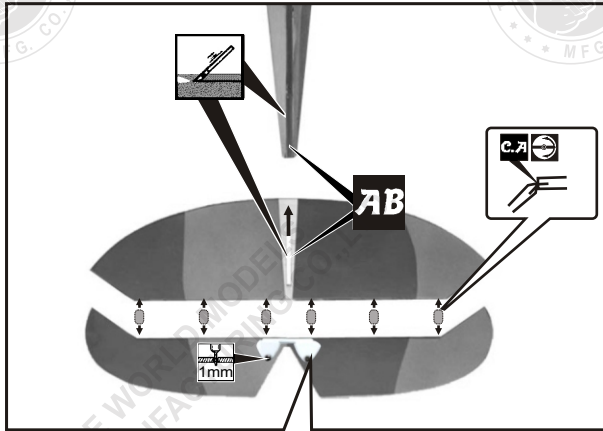
PM2x8mm Screw 2



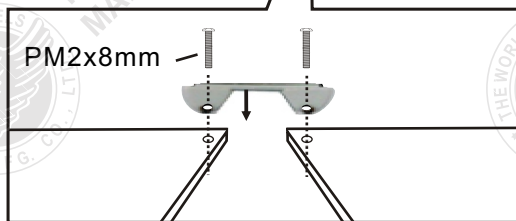
Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.



*Also refer to step 13 Wing Setting

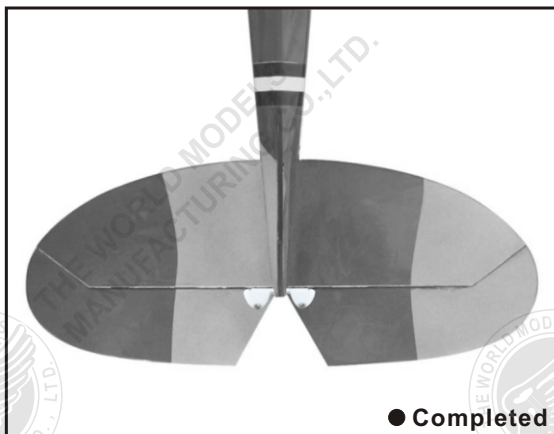
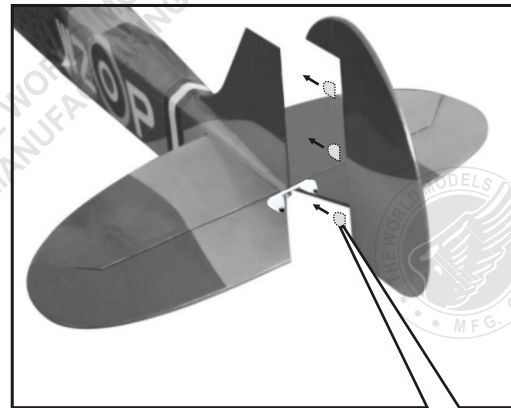
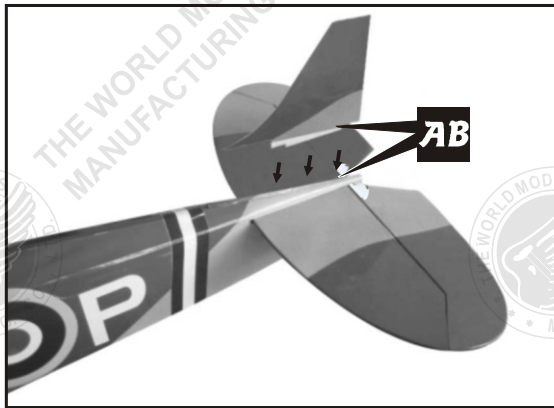


● Completed

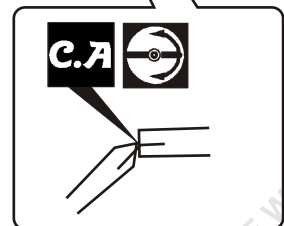
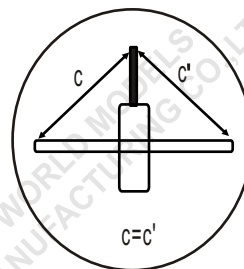


- $\varnothing 1\text{mm}$ pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.
- Apply instant type CA glue to both sides of each hinge.

4 Vertical Fin & Rudder



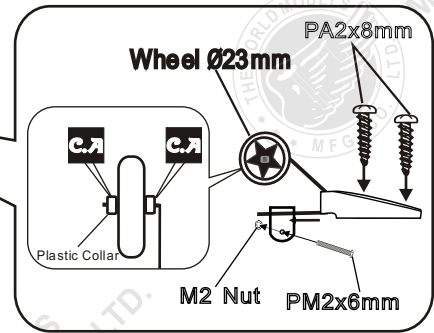
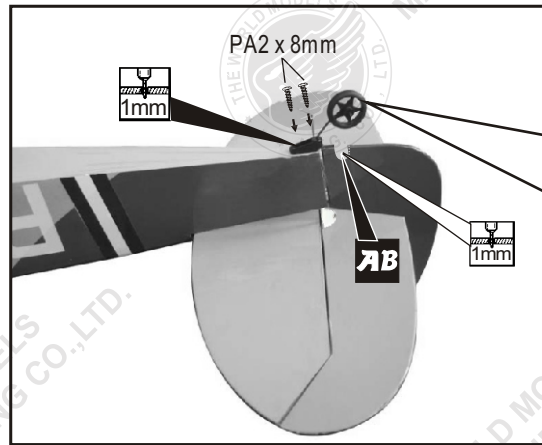
● Completed



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

5 Tail Landing Gear

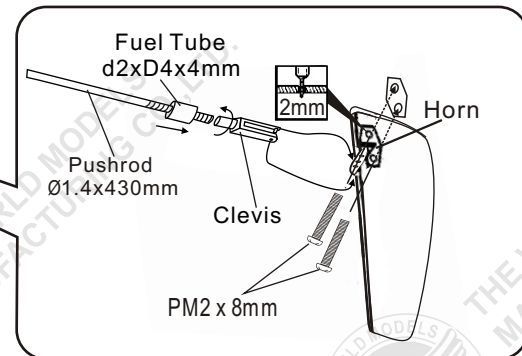
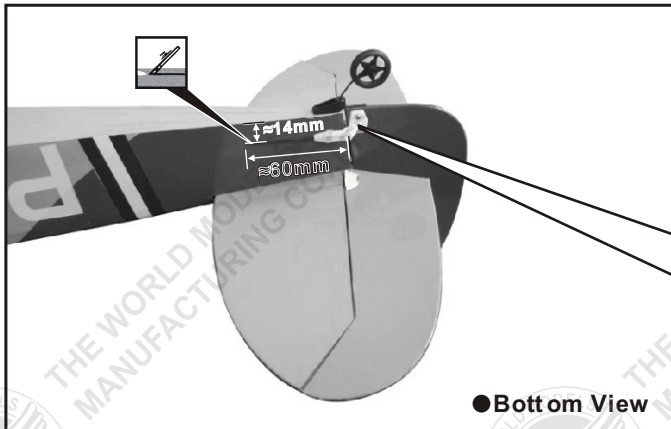
PA2x8mm Screw	2
PM2x6mm Screw	1
2.6mm Collar	2
M2mm Nut	1



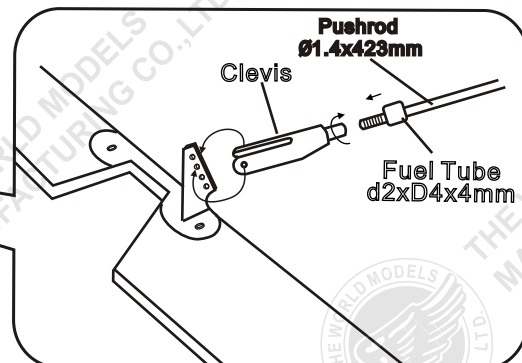
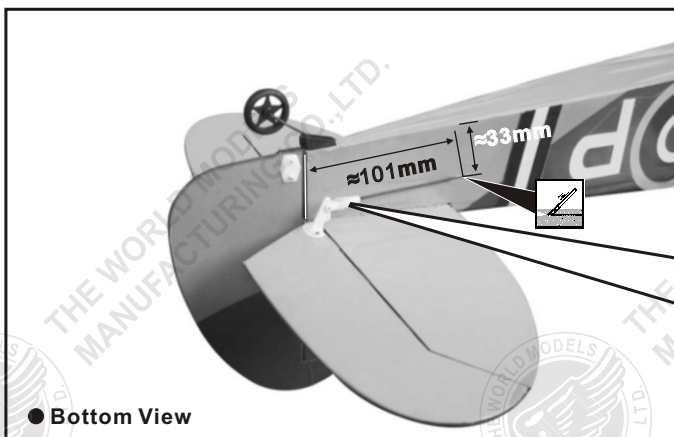
6 Rudder Pushrod

PM2 x 8mm Screw	2
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- $\varnothing 1\text{mm}$ pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at side of control surfaces.



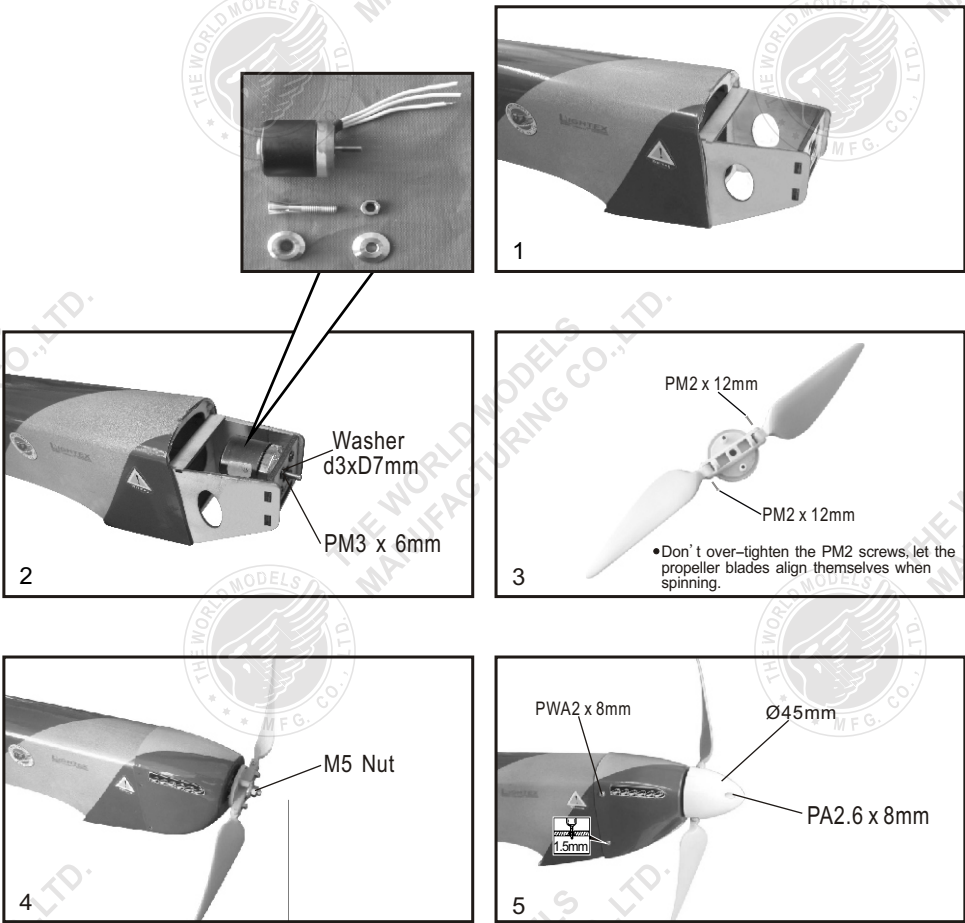
7 Elevator Pushrod



8 Brushless Motor / Cowling

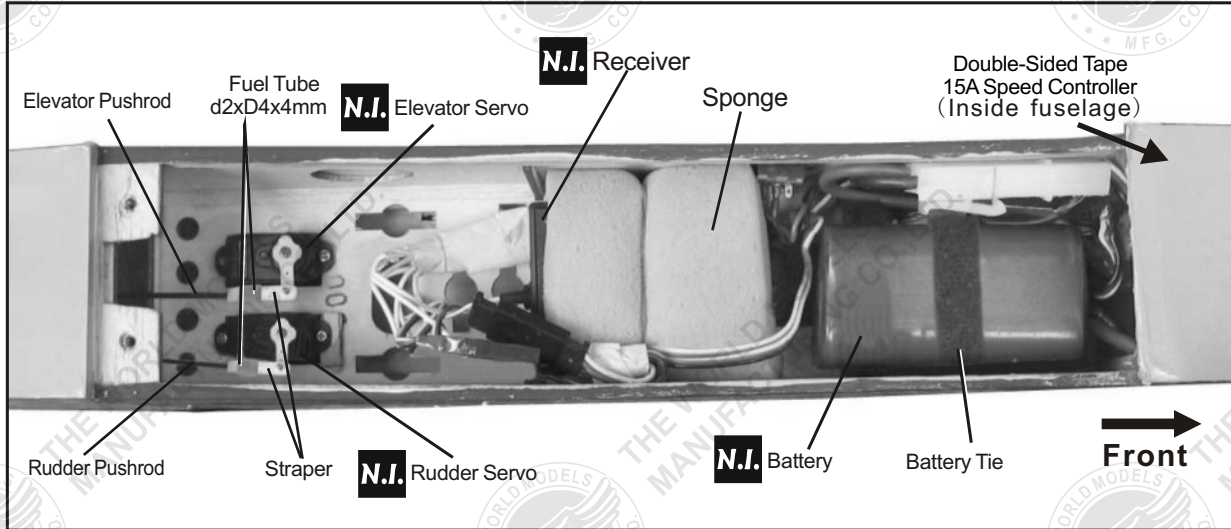
- PM3 x 6mm **Screw** 4
- d3xD7mm **Washer** 4
- PM2 x 12mm **Screw** 4
- PWA2 x 8mm **Screw** 2
- PA2.6 x 8mm **Screw** 4
- PA2.6 x 8mm **Screw** 2

• Make sure rotating motor casing is not in contact with wirings or anything.



9 Radio Equipment

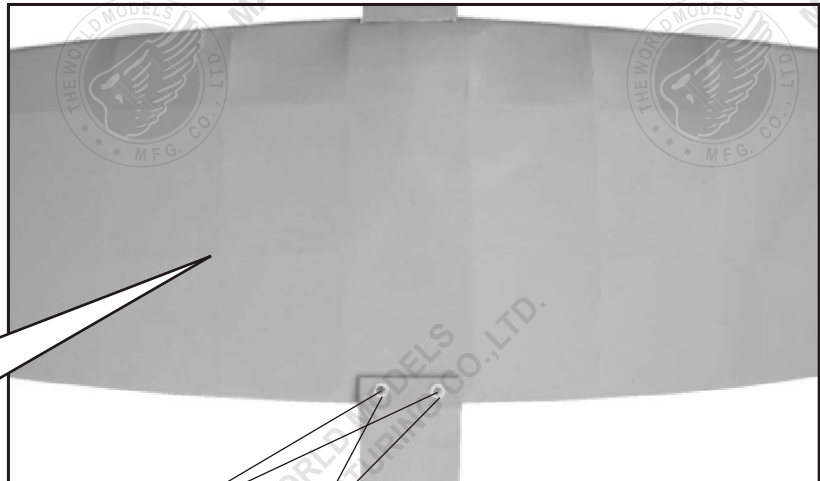
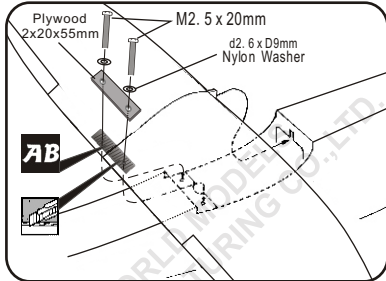
- 15A ESC for 8 cells (9.6V) Ni-MH battery.
- 20A ESC for 3 cells (12V) Li-Po battery.



• Bottom View

10 Main Wing

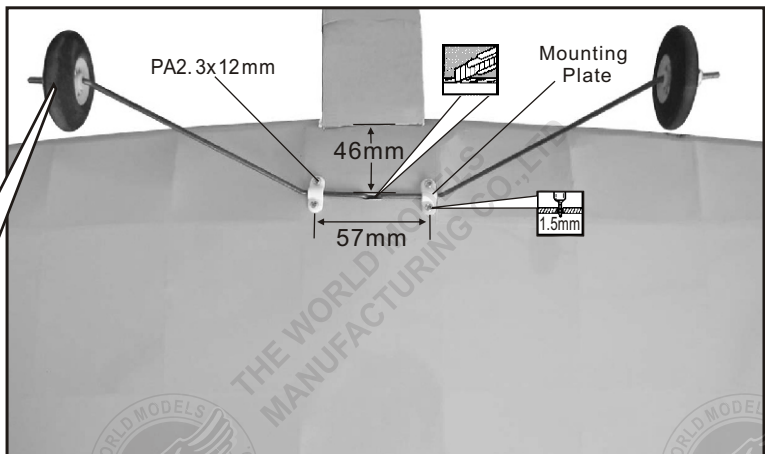
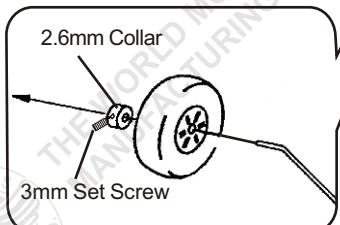
- M2.5x20mm Nylon Bolt — 2
- d2.6x D9mm Nylon Washer — 2



M2.5x20mm d2.5x D8mm Nylon Washer

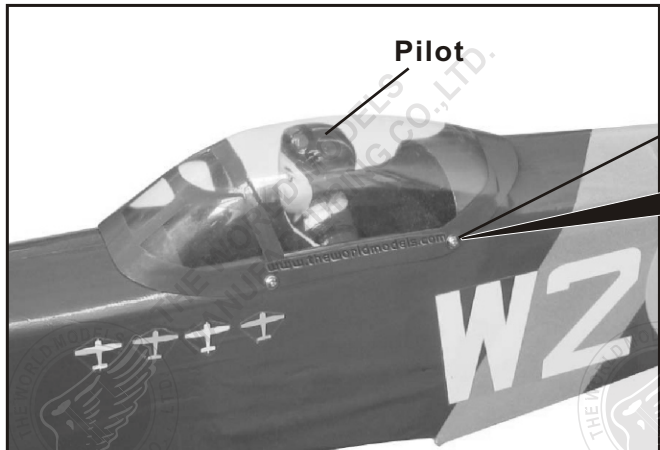
11 Main Landing Gear

- PA2.3x12mm Screw — 4
- 2.6mm Collar — 2



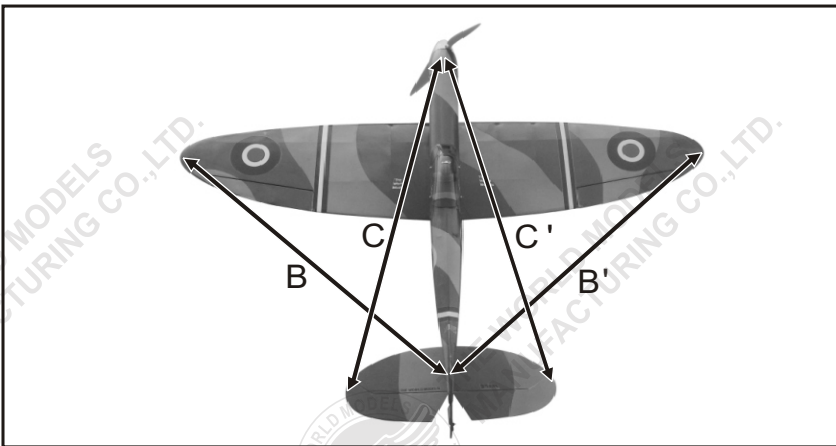
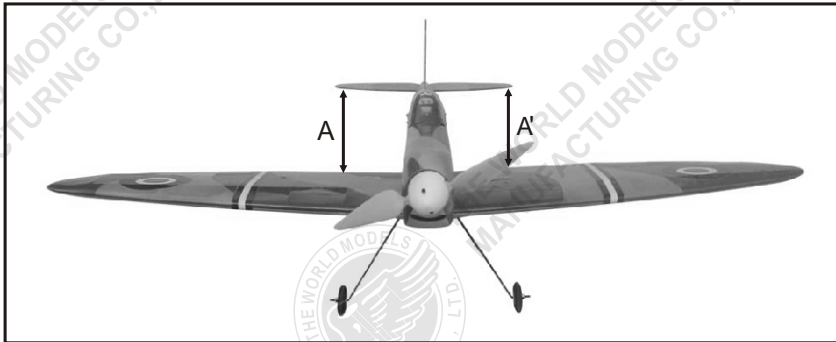
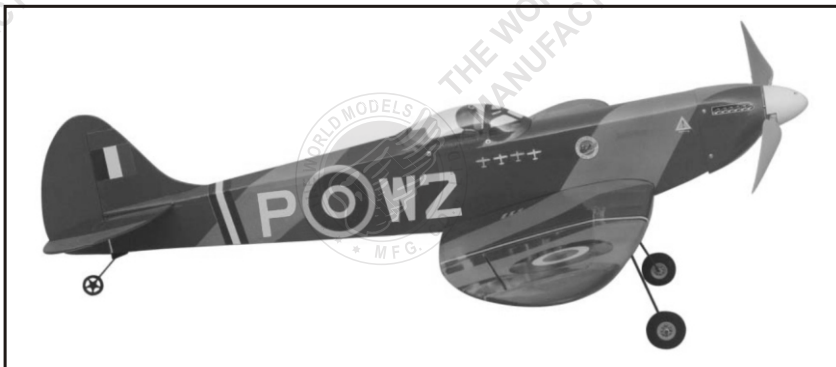
12 Canopy

- PWA2 x 8mm Screw — 4



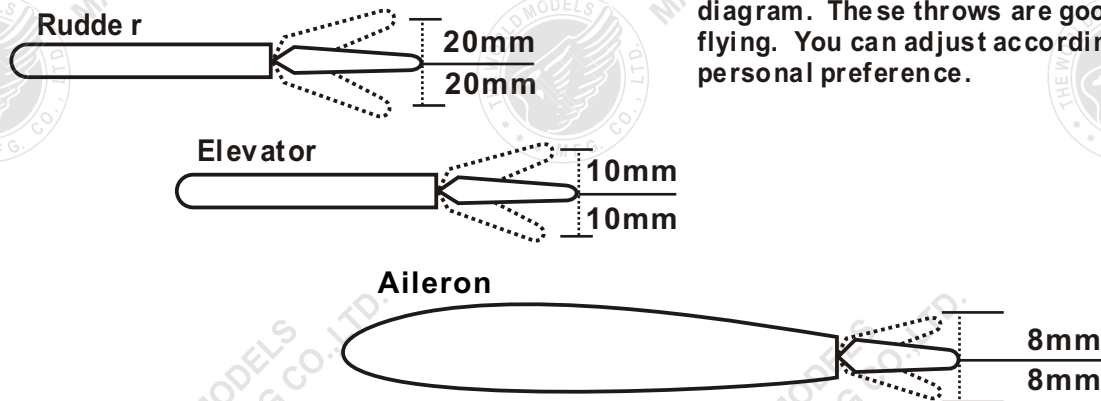
13 Wing Setting

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



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

14 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.

15 C.G.



The ideal C.G. position is 60mm (2.36 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.

! 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.
- # **SPITFIRE EP** is specially designed to be powered by **KM0283010** 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.

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. U.S.A .

1. Name: _____

2. Address: _____

3. Phone #: _____ e-mail: _____

4. Model: _____

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

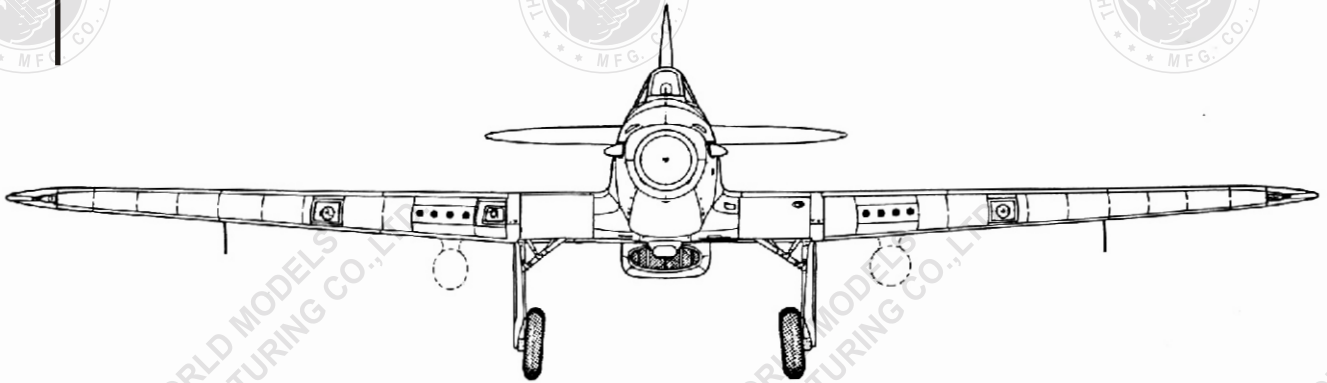
5. Date of Purchase: _____

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.



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