

PILATUS PC-6 PORTER 40

(A340)



Requires: "Glow Power" requires 4-channel radio w/5 standard servos, 2-stroke 0.40-0.46 engine, or "Electric Power" requires 4-channel radio w/ 4 standard servos, Outrunner Motor KM37490750 w/Radial Mount Adaptor HW2340300, 40A Brushless ESC, 4 cells 14.8V 3200mAh Lipo battery and charger

Specifications

Wing Span	64 in / 1625 mm
Wing Area	592 sq in / 38.2 sq dm
Flying Weight	5.5 lb / 2500 g
Fuselage Length	45.5 in / 1155 mm

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.
www.theworldmodels.com

**FACTORY PRE-FABRICATED
ALMOST-READY-TO-FLY (ARF) SERIES
MADE IN CHINA**

PILATUS PC-6 PORTER 40

INDEX

BEFORE YOU BEGIN.....	P.1
PARTS LIST.....	P.2
ASSEMBLY.....	P.3-P.13
SAFETY PRECAUTIONS.....	P.14

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 :-



Apply epoxy glue.



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



Apply thread locker



Must be purchased separately !



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).



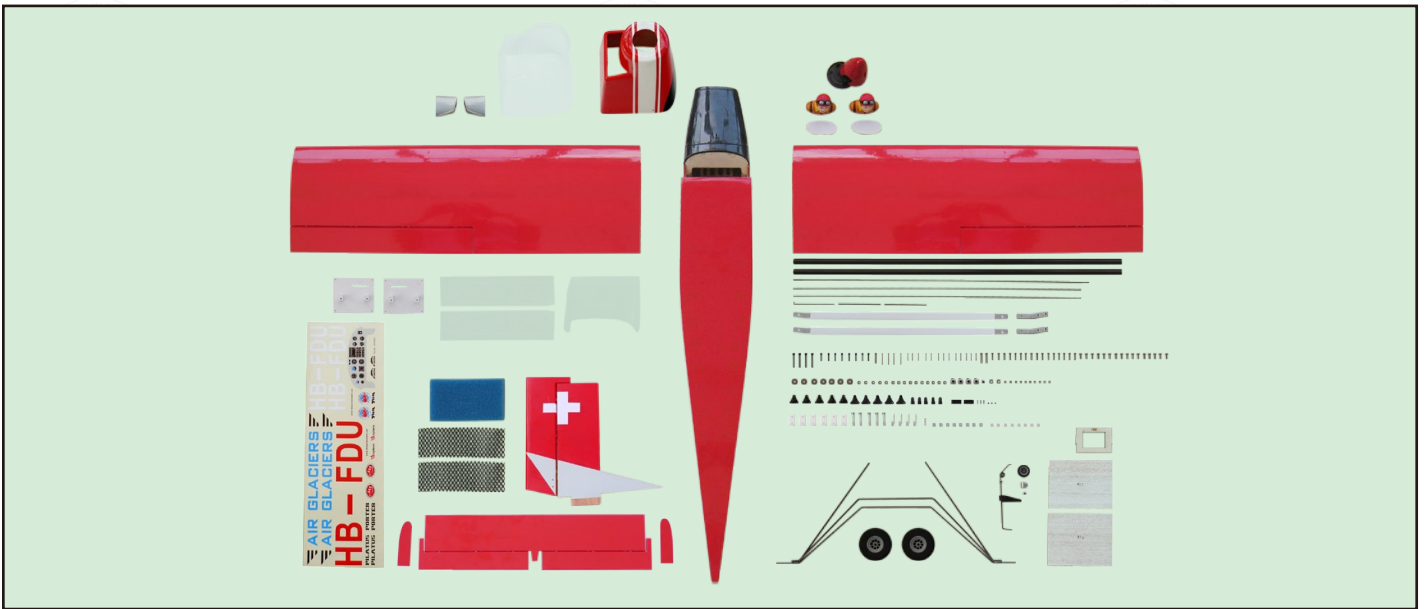
Pierce the shaded portion
covering film.



Pay close attention here!



Do not overlook this symbol !

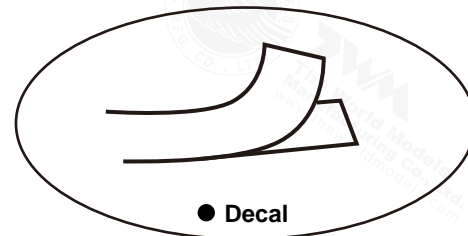


Parts List

1. DECALS: A340 DEC -- set
 MAIN WING -- 1 pair
 FUSELAGE -- 1 pc.
 2. STABILIZER & ELEVATOR -- 1 set
 SCREW PM3x20mm -- 1 pc.
 WASHER d3.2xD7mm -- 1 pc.
 3. VERTICAL FIN & RUDDER -- 1 set
 4. PUSHROD Ø1.8x613mm w/ Threads (For Rudder) -- 1 pc.
 CLEVIS PL4112103 -- 1 pc.
 SCREW PB2x14mm -- 3 pcs
 TRI-HORN PL4111221 -- 1 set
 FUEL TUBE D6x5mm -- 1 pc.
 5. PUSHROD Ø1.8x590mm w/ Threads (For Elevator) -- 1 pc.
 SCREW PB2x14mm -- 6 pcs
 CLEVIS PL4112103 -- 2 pcs
 TRI-HORN PL4111221 -- 2 sets
 FUEL TUBE D6x5mm -- 2 pcs
 6. TAIL LANDING GEAR -- 1 pc.
 TAIL WHEEL Ø23mm -- 1 pc.
 COLLAR Ø2.1mm w/ Set Screw -- 2 sets
 SCREW PA3x12mm -- 2 pcs
 SCREW PM2x12mm -- 1 pc.
 PLATE 0.3mm -- 1 pc.
 M2 NUT -- 1 pc.
 7. MAIN LANDING GEAR -- 1 pc.
 COLLAR Ø3.6mm w/ Set Screw -- 4 sets
 MAIN WHEEL Ø58mm -- 2 pcs
 SCREW PA3x12mm -- 12 pcs
 MOUNTING PLATE PL4114020 -- 6 pcs
 8. COWLING --1 pc.
 DUMMY ENGINE -- 1 set
 TRANSPARENT 3D TEMPLATE -- 1 pc.
 SCREW PWA2.6x12mm -- 4 pcs
 SILICON GROMMETS PL1265035 d1.5xD6.5mm -- 4 pcs
 SPINNER Ø57mm PL2111057N -- 1 set
 SCREW PA3x10mm -- 2 pcs
 PLYWOOD 5x50x72.5mm -- 1 pc.
 9. STRAPER PL4112102 -- 2 pcs
 FUEL TUBE D6x5mm -- 2 pcs
 PUSHROD CONNECTOR PL4410010 -- 1 set
 PUSHROD Ø1.8x85mm (For Elevator) -- 1 pc.
 10. SIDE WINDOWS -- 1 set
 WIND SHIELD -- 1 pc.
 SCREW PWA2.3x8mm -- 4 pcs
 SILICON GROMMETS PL1265035 d1.5xD6.5mm -- 4 pcs
 11. PILOT PC001050A -- 2 sets
 PLYWOOD 4x97.5x125mm -- 1 pc.
 PLYWOOD 4x93x125mm -- 1 pc.
 MOUNTING PLATE PL4114015 -- 1 pc.
 SCREW PM2x12mm -- 1 pc.
 WASHER d2xD5mm -- 1 pc.
 M2 NYLON INSERT LOCK NUT -- 1 pc.
 12. SCREW PWA2x8mm -- 8 pcs
 SERVO MOUNTING PANEL PL5310000 -- 1 pair
 13. PUSHROD Ø1.8x86mm w/ Threads (For Aileron) -- 2 pcs
 TRI-HORN PL4111221 -- 2 sets
 SCREW PB2x20mm -- 4 pcs
 SCREW PB2x18mm -- 2 pcs
 CLEVIS PL4112103 -- 2 pcs
 FUEL TUBE D6x5mm -- 4 pcs
 STRAPER PL4112102 -- 2 pcs
 14. WING TUBE Ø10x663mm -- 2 pcs
 SCREW PA3x20mm -- 4 pcs
 WASHER d3.2xD12mm -- 4 pcs
 15. WING STRUTS -- 2 pcs
 SOCKET HEAD SCREW M3x12mm -- 6 pcs
 SCREW PA3x12mm -- 2 pcs
 WASHER d3xD7mm -- 6 pcs
 WASHER d3.2xD12mm -- 4 pcs
 M3 NYLON INSERT LOCK NUT -- 2 pcs
 PLATE 2mm -- 2 pcs
 16. SPONGE -- 10x50x150mm -- 1 pc.
 17. BATTERY COVER -- 1 pc.
- COVERING:--
 TOUGHLON STL 311 FERRARI RED
 TOUGHLON STL 100 WHITE
 LIGHTEX SGX 201 BLACK

1 Decals

- Cut out decal sheet, peel off backing sheet and apply on fuselage and wings.



Main wings



● Bottom View

Fuselage



● Left View



● Right View

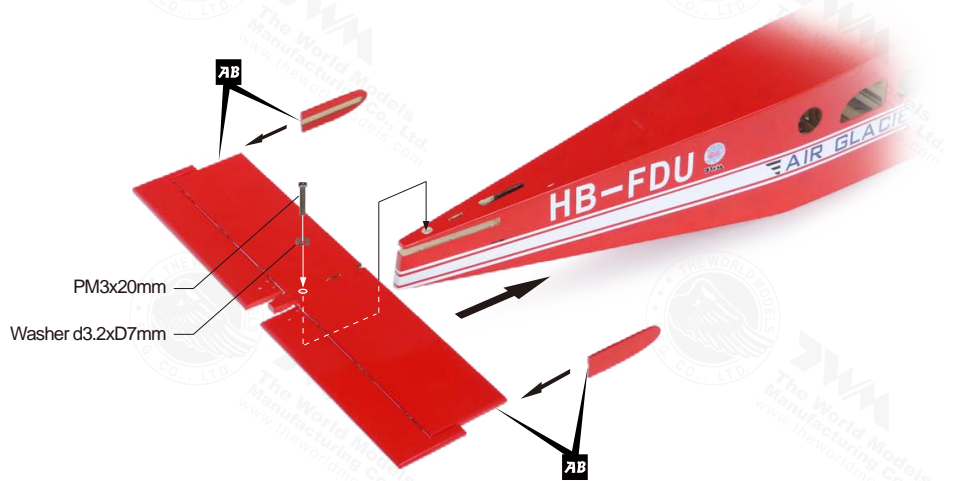
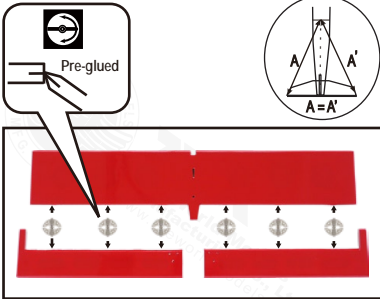
Instrument Panel



● Top View

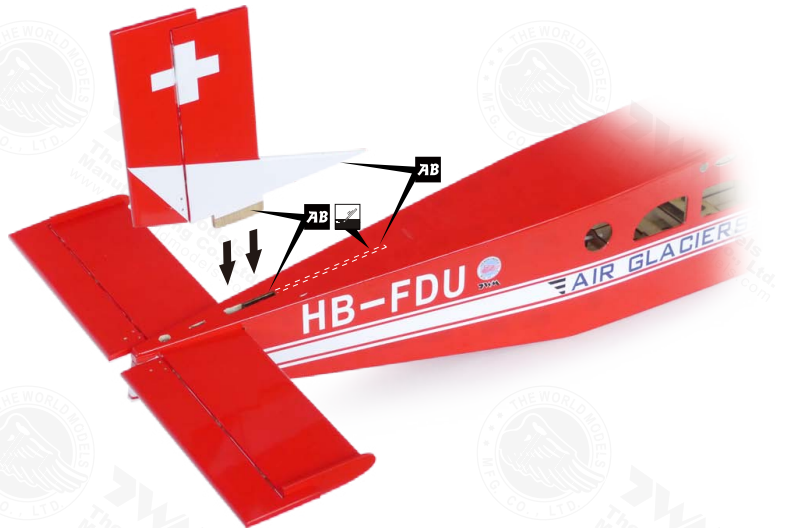
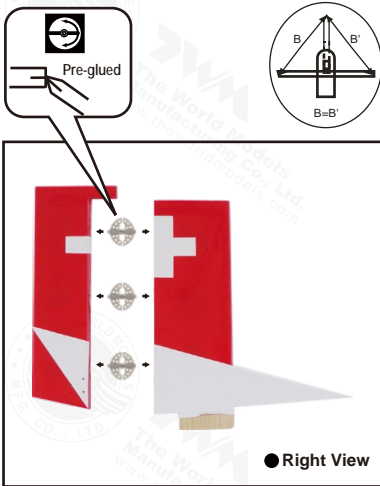
2 Stabilizer & Elevator

PM3x20mm Screw 1
 d3.2xD7mm Washer 1



● The hinges are factory glued.

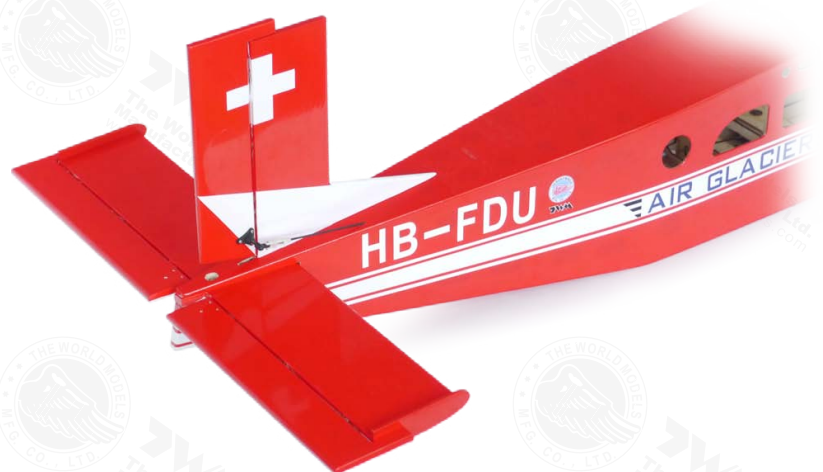
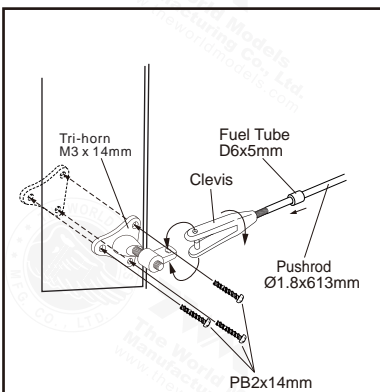
3 Vertical Fin & Rudder



● The hinges are factory glued.
 ● Remove coverings for all surfaces in contact before applying A/B epoxy glue.

4 Rudder Pushrod

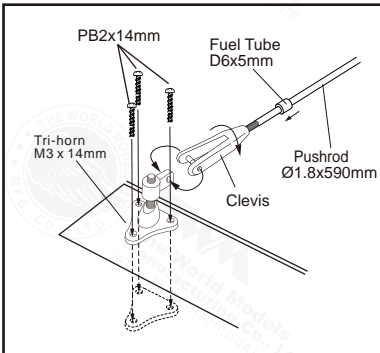
PB2x14mm Screw 3



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

5 Elevator Pushrod

PB2x14mm Screw 6



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



6 Tail Landing Gear

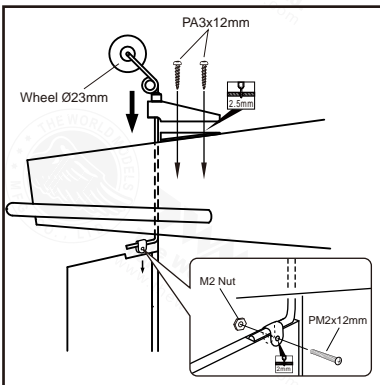
PA3x12mm Screw 2



PM2x12mm Screw 1

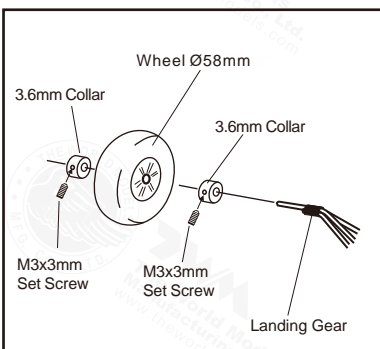


M2 Nut 1

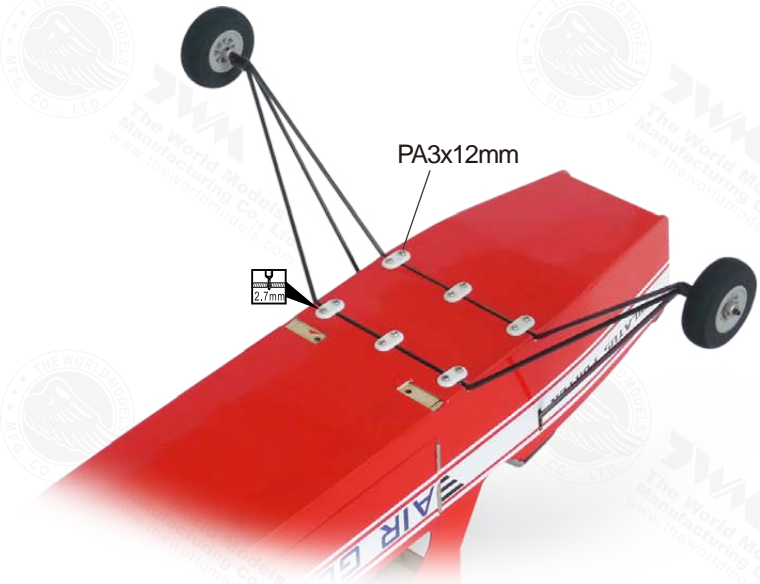


7 Main Landing Gear

PA3x12mm Screw 12



L/R



8A Electric

● This step is for electric powered. Please follow step 8B if your model is engine powered.

PWA2.6x12mm **Screw**



4

PA3x10mm **Screw**

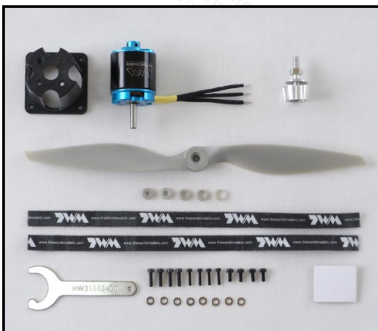


2

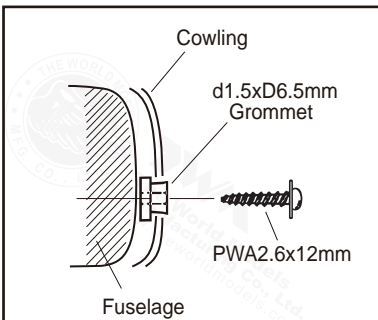
d1.5xD6.5mm **Silicon Grommet Screw**



4

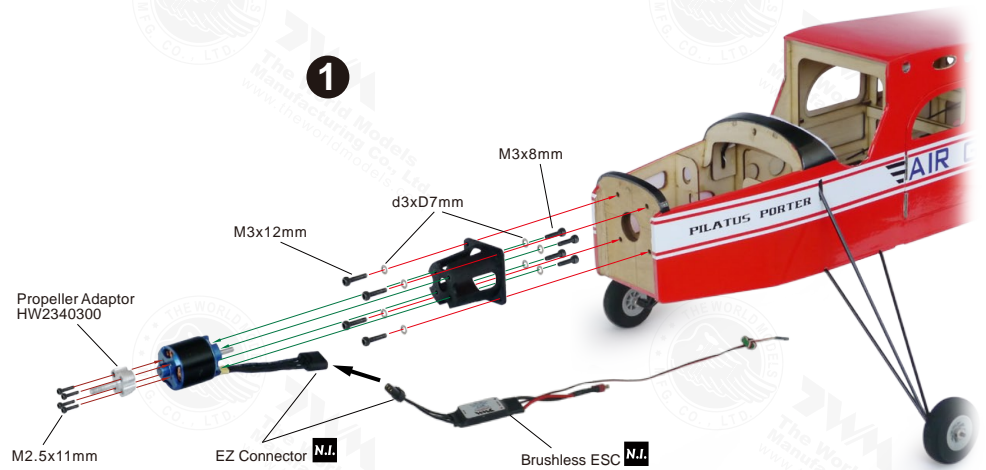


● Optional Electric Power Package

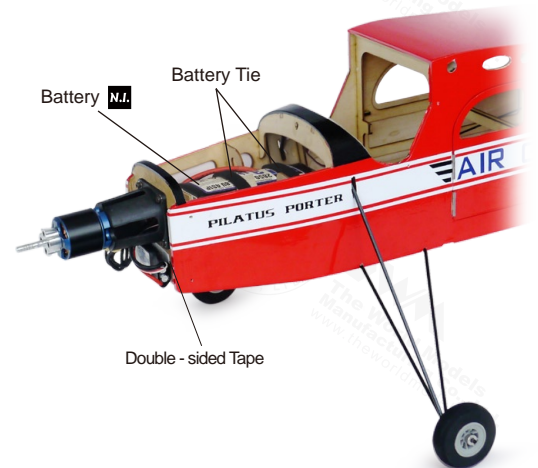


● First insert the grommet to the cowling then apply screw.

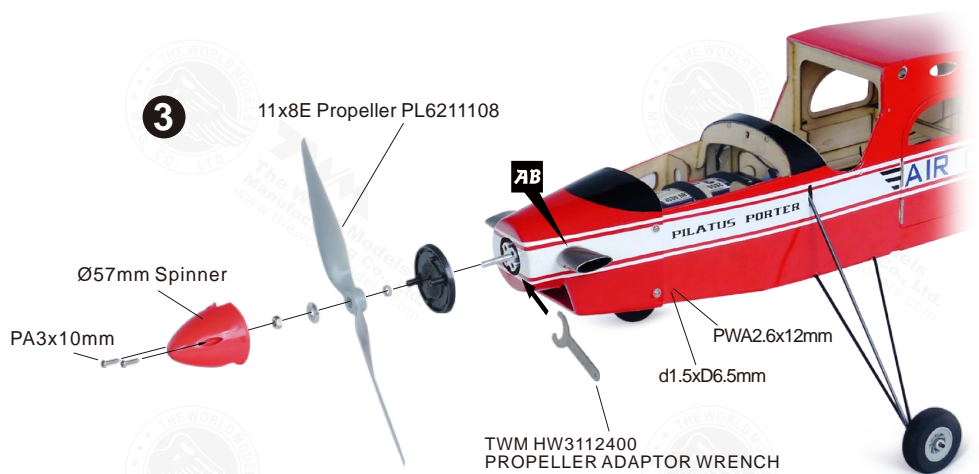
1



2



3



4



8B Engine

● If Pilatus PC-6 Porter 40 is engine powered. Please follow this step.

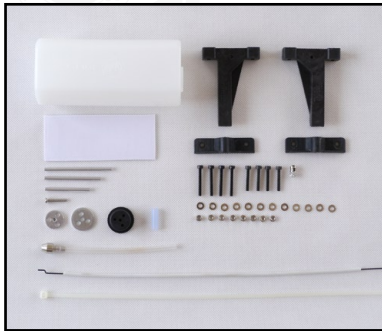
PWA2.6x12mm Screw 4



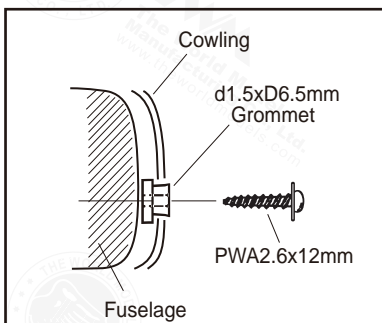
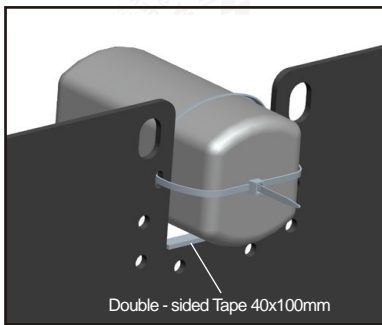
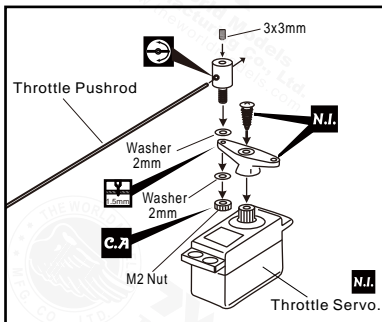
PA3x10mm Screw 2



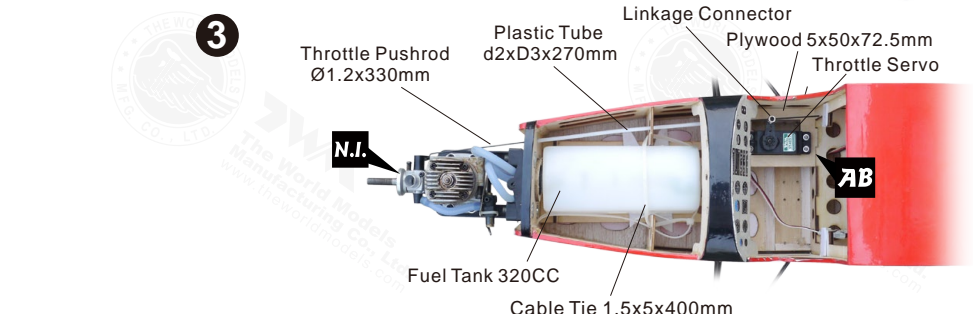
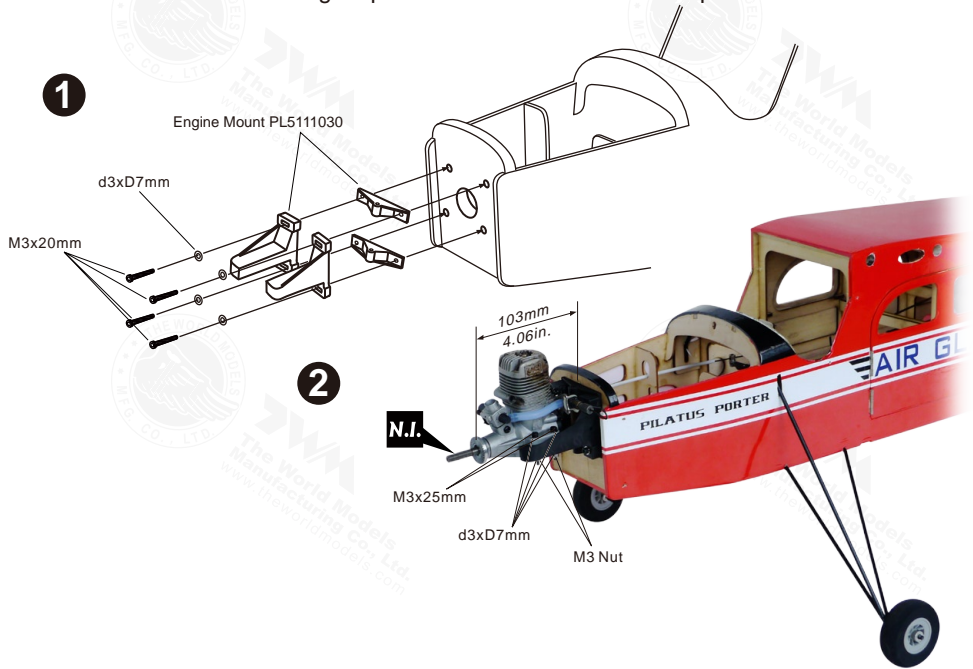
d1.5xD6.5mm Silicon Grommet Screw 4



● Optional Glow Engine Power Package

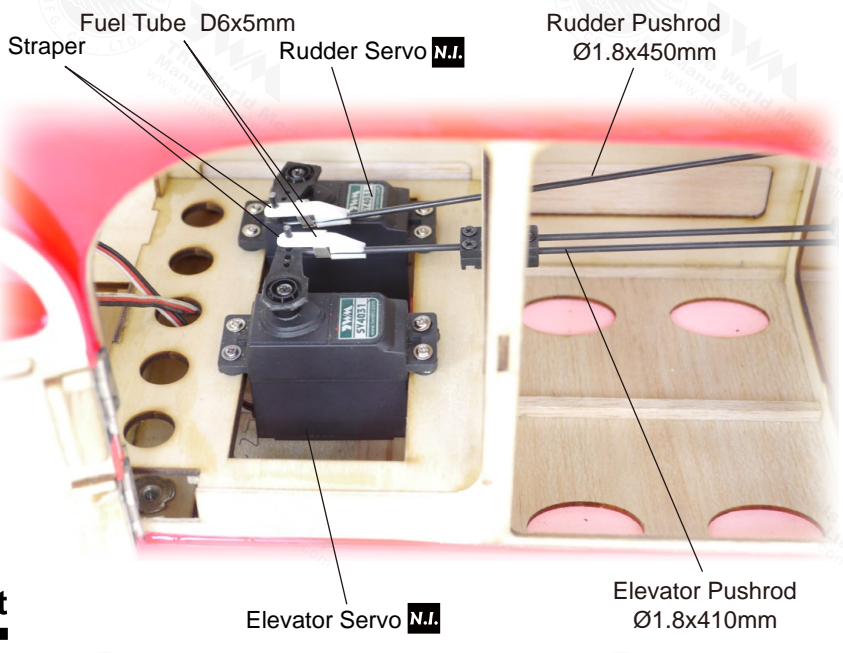
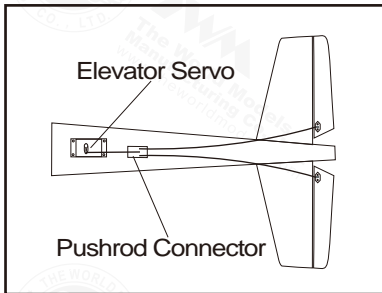
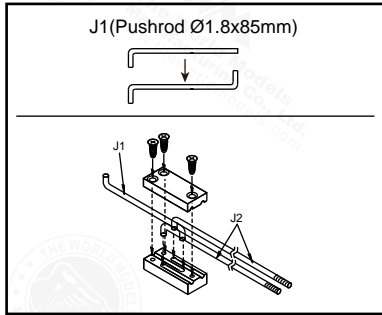


● First insert the grommet to the cowling then apply screw.



5

9 Servos Setting

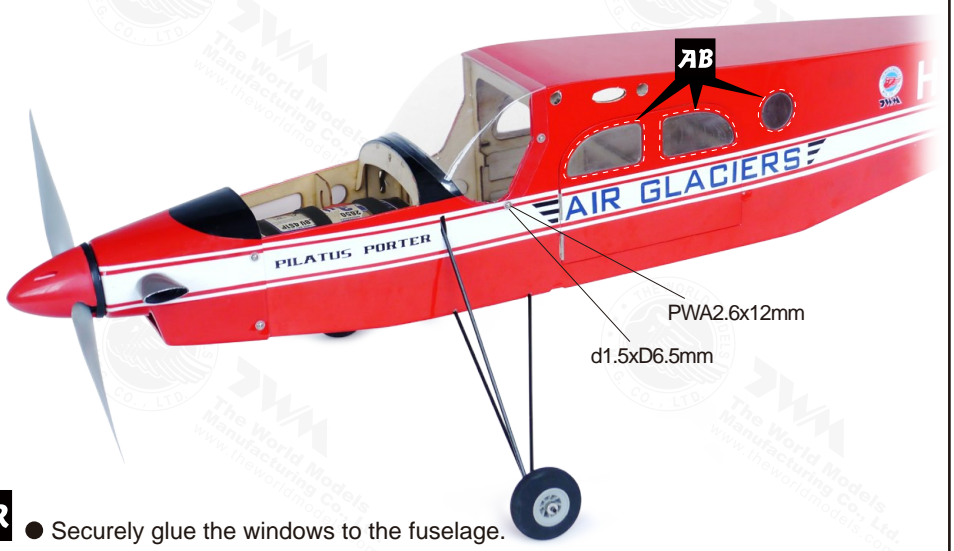


Front

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

10 Windows

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

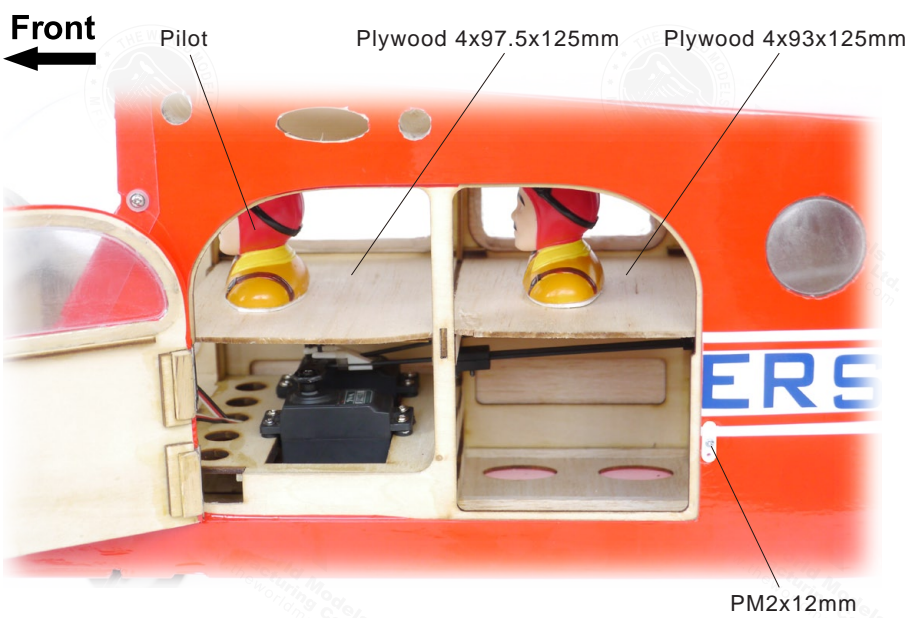
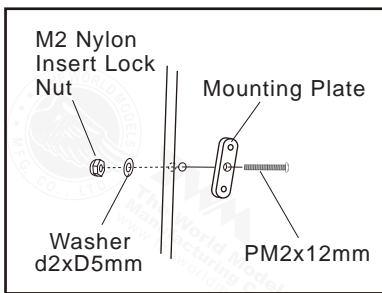


L/R

● Securely glue the windows to the fuselage.

11 Pilot

- | | | |
|----------|-----------------------|---|
| PM2x12mm | Screw | 1 |
| M2 | Nylon Insert Lock Nut | 1 |
| d2xD5mm | Washer | 1 |

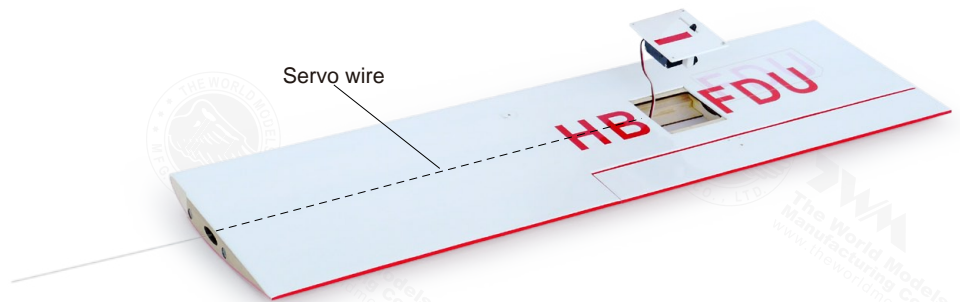
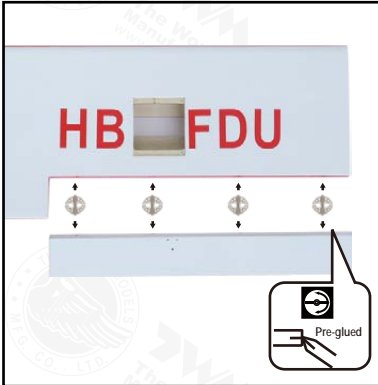
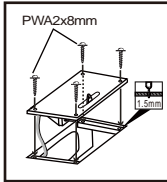
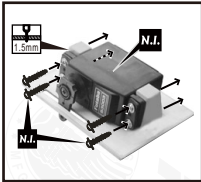


Front

12 Aileron Servo

PWA2x8mm n

Screw



L/R ● The hinges are factory glued.

● Bottom View

13 Aileron Pushrod

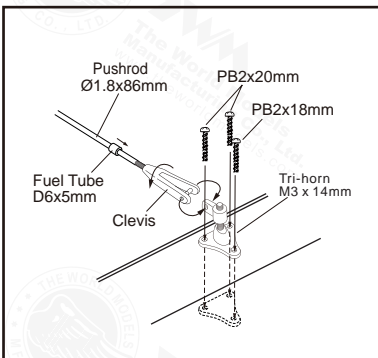
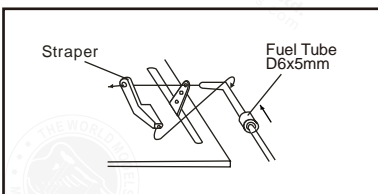
PB2x20mm

Screw



PB2x18mm

Screw

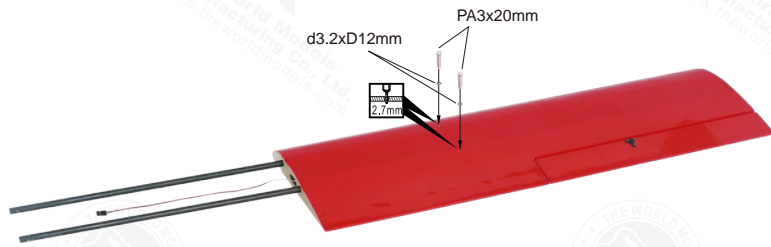


L/R ● Ø1mm pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

● Bottom View

14 Main Wing

- | | | |
|---|---------------|---|
| PA3x20mm | Screw | |
|  | | 4 |
| d3.2xD12mm | Washer | |
|  | | 4 |








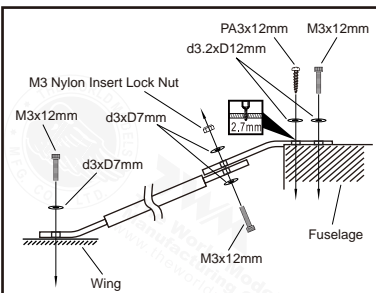
Insert carbon wing tubes into right wing, apply the PA Screws.



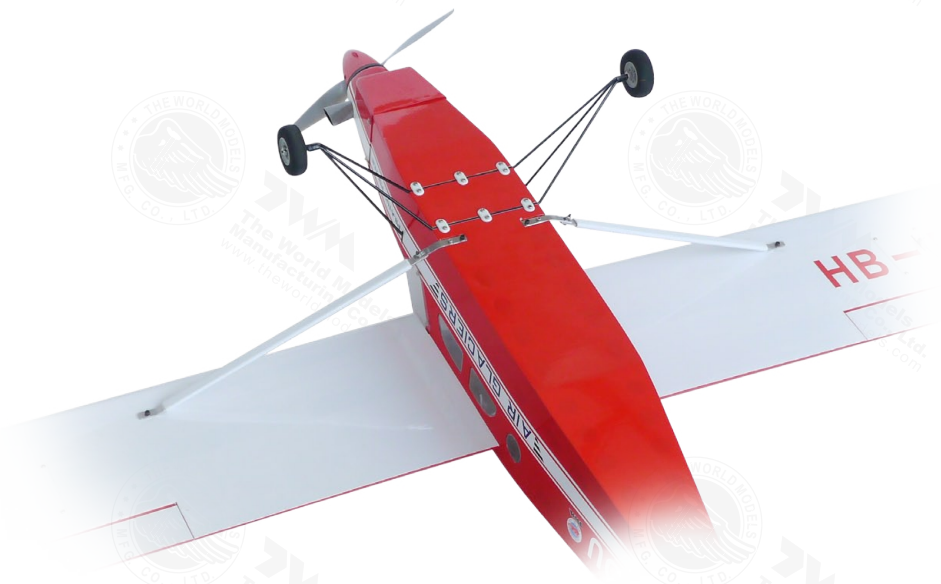
Insert the right wing tubes through the Fuselage, and then install the left wing. Press the wings against the fuselage then apply PA screws to the left wing.

15 Wing Struts

- | | | |
|---|------------------------------|---|
| M3x12mm | Socket Head Screw | |
|  | | 6 |
| PA3x12mm | Screw | |
|  | | 2 |
| M3 | Nylon Insert Lock Nut | |
|  | | 2 |
| d3xD7mm | Washer | |
|  | | 6 |
| d3.2xD12mm | Washer | |
|  | | 4 |



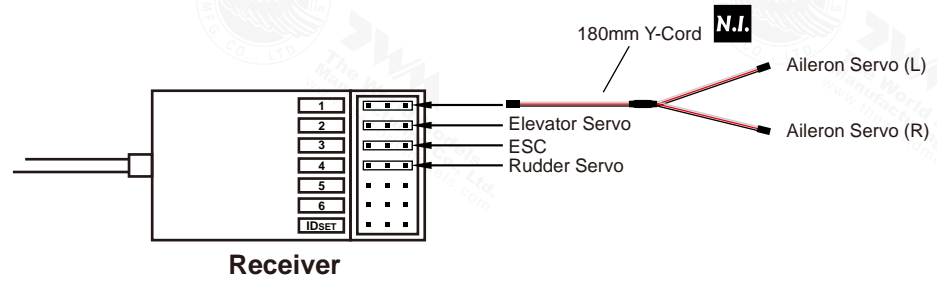
L/R



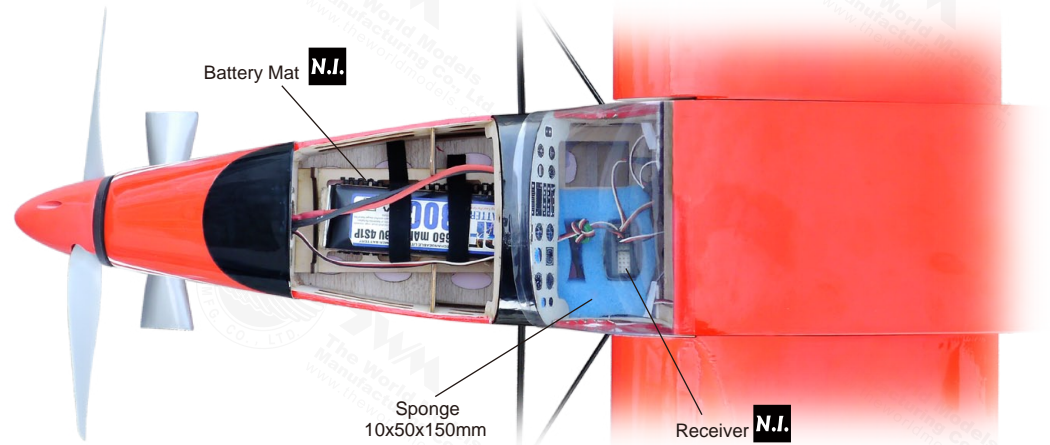
● **Bottom View**

16A Radio

- This step is for electric powered. Please follow step 16B if your model is engine powered.

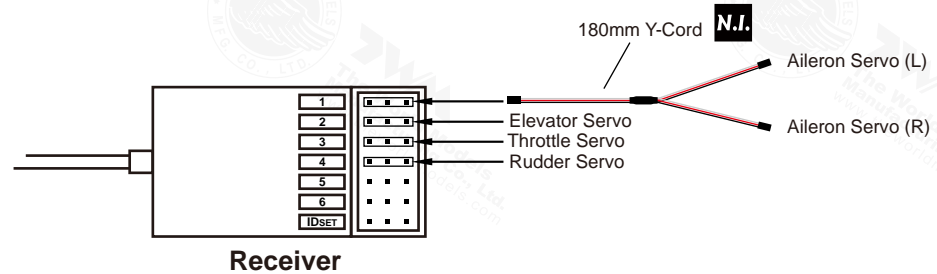


- Plug in the Aileron Servos wire to channel 1
- Plug in the Elevator Servo wire to channel 2
- Plug in the ESC Throttle wire to channel 3
- Plug in the Rudder Servo wire to channel 4

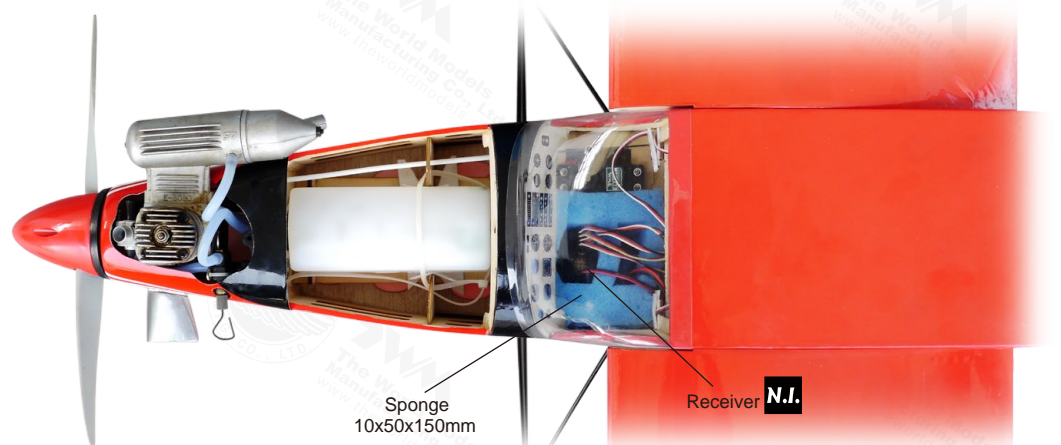


16B Radio

- If Pilatus PC-6 Porter 40 is engine powered. Please follow this step.



- Plug in the Aileron Servos wire to channel 1
- Plug in the Elevator Servo wire to channel 2
- Plug in the Throttle Servo wire to channel 3
- Plug in the Rudder Servo wire to channel 4



17 Battery Cover



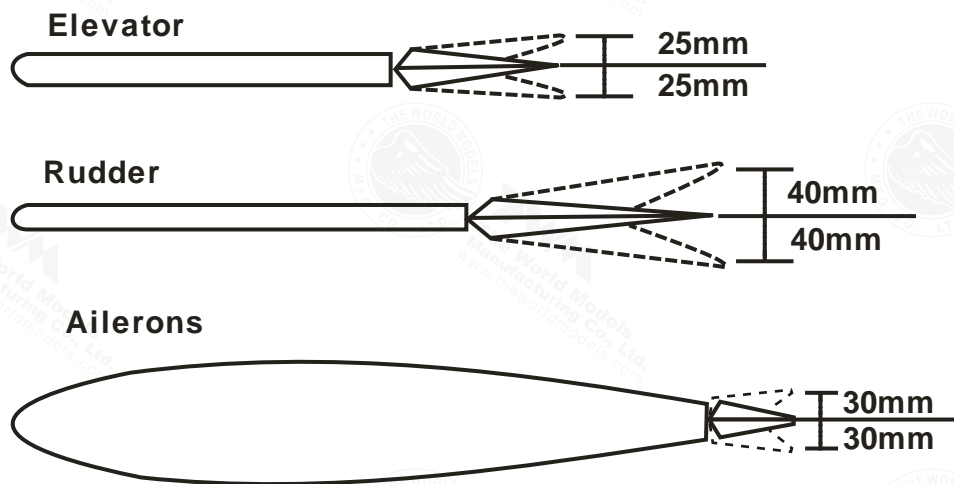
18 Wing Setting



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

19 Control Throws

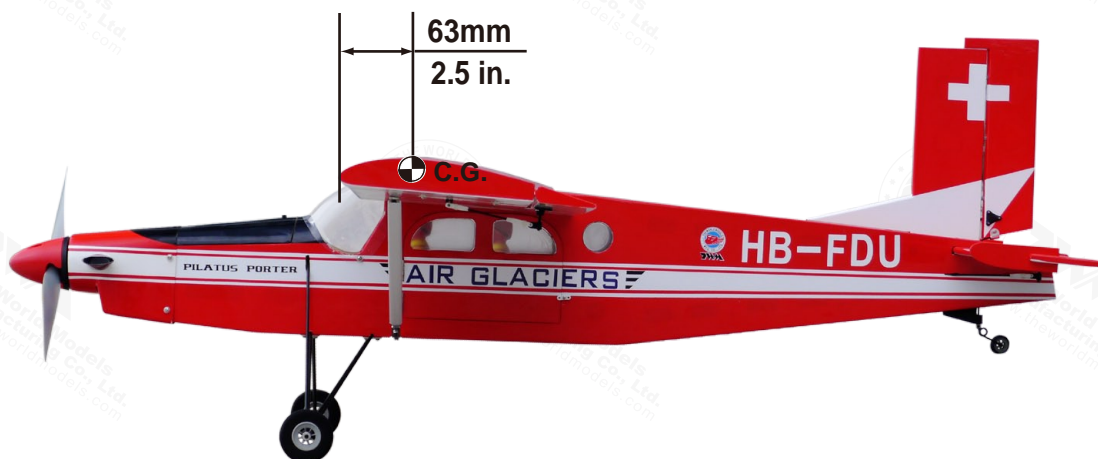
Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.



20 C.G.

- The ideal C.G. for electric powered model is 63mm (2.5 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.

For glow engine powered model, set C.G. at 67mm (2.6 in.) to compensate for weight of fuel.



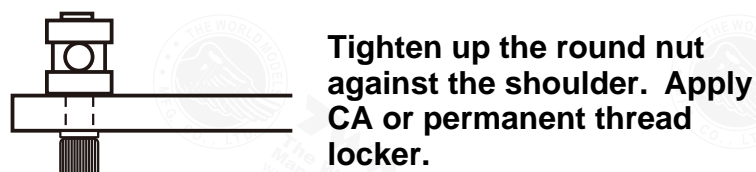
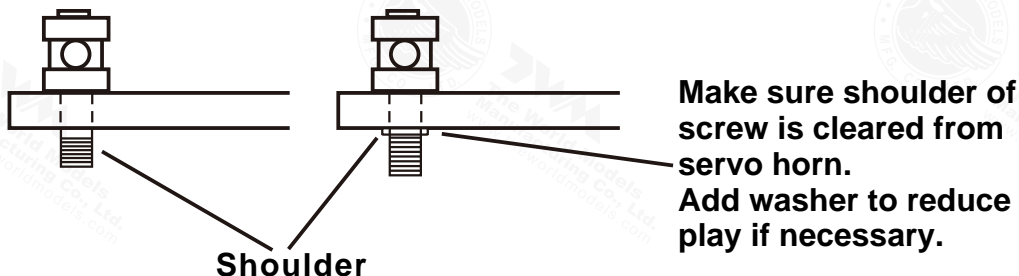
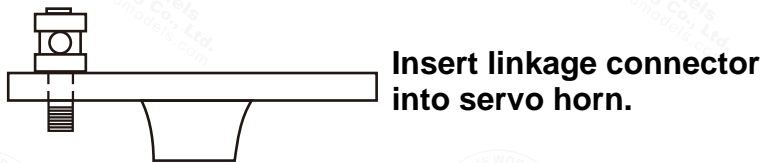
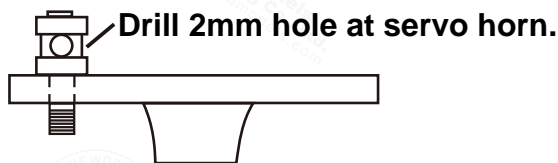
! Warning!

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.
- # **PILATUS PC-6 PORTER 40 is specially designed to be powered by KM37490750 Outrunner Motor or 2-stroke 0.40-0.46 engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause structural 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. Extreme caution should be exercised when working with electric powered models. Make sure the propeller is cleared of all objects, especially your hands before connecting the battery to the model. Make sure you understand the operation of the ESC (Electronic Speed Control) by studying the ESC manual. Once you plug in the battery for electric powered model, always treat the propeller as a rotating one, as accidental movement of the throttle stick will spin the propeller and could cause injuries.
- # 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.

LINKAGE CONNECTOR

HW7111050 & HW7111060



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: _____

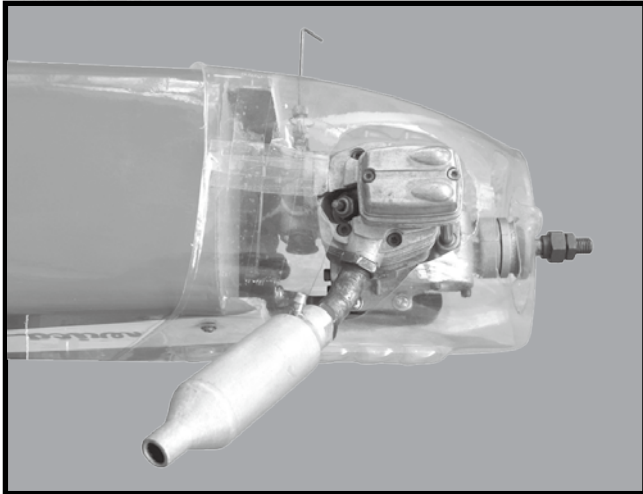
Please call AirBorne Models at 925 371 0922 for any assistance in filling this form. Thank you very much for purchasing our product.

Usage of the transparent 3D template

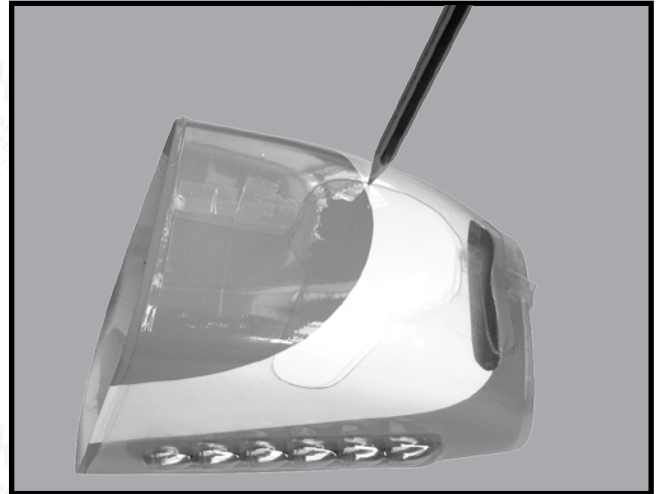


This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

1



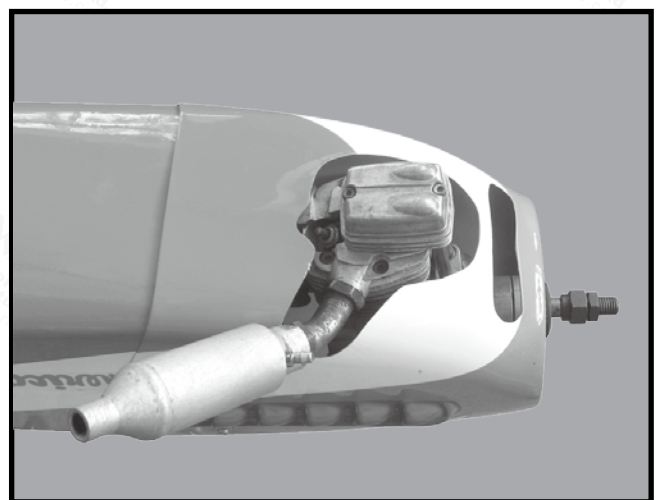
2



3



4



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

(TWM ACCESSORIES)

3 - Pin EZ Connector

Code No.	Size	Package
KP0011310	40A Max. Current	1 set



-ideal for electric models

2 - Pin EZ Connector

Code No.	Size	Package
KP0011210	40A Max. Current	1 set



-ideal for electric models

Electronic Speed Control 15A

Code No.	Size	Package
KC2015A01	37 x 19 x 7mm	1 pc



- Current : 15A continuous
- Weight : 22g (with wires)
- BEC output : Switch 5V / 1.5A
- Input :
- Bec function for 7 - 8 cells;
- (Nimh / Nicd) operation

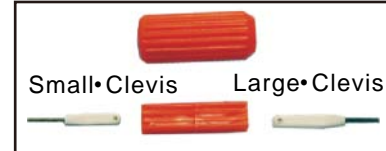
Propeller Adaptor Wrench

Code No.	Size	Package
HW3112400		1 pc



Clevis Wrench

Code No.	Size	Package
PI8210010		1 set



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

Radial Mount Adaptor Set

Code No.	Size	Package
HW2340300		1 set



Outrunner Motor 37 / 49 -750kv

Code No.	Package
KM37490750	1 pc



- Kv (rpm / V): 750
- Operating Power: 590 W
- Operating Voltage: 8.5 - 18V
- Operating Current: 40A
- Peak Current: 65A (max.15 sec.)
- Internal Resistance: 34 m ohms
- Diameter: 37.2 mm
- Length: 49.4 mm
- Weight: 183 g
- Shaft Diameter: 5 mm
- Shaft Length: 20.6 mm
- Mounting Screw:
- M3 (Front) and M2.5 (Back)
- Distance of Mounting Holes: 25mm (Front) and 15.5mm (Back)

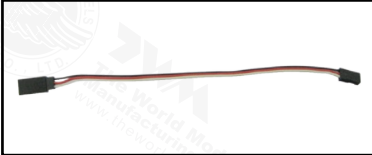
Optional Parts

(ACCESSORIES)

180mm Extension

Code No.	Size	Package
----------	------	---------

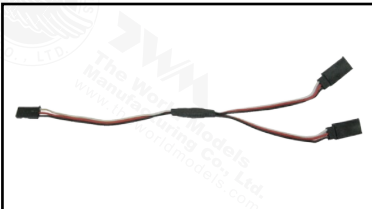
KW0011800 180mm 1 set



180mm Y-Cord

Code No.	Size	Package
----------	------	---------

KW0021800 180mm 1 pc



Charge Receptacles

Code No.	Size	Package
----------	------	---------

KP0041300



Fuel Filler

Code No.	Size	Package
----------	------	---------

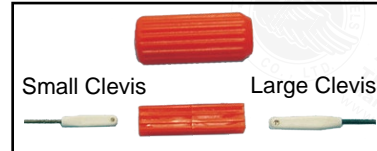
PL8110030 15 x 22 x 49mm 1 x 1 pc



Clevis Wrench

Code No.	Size	Package
----------	------	---------

PL8210010 1 set



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

Field Stand

Code No.	Size	Package
----------	------	---------

MS9111450 600 x 240 x 350mm 1 pc



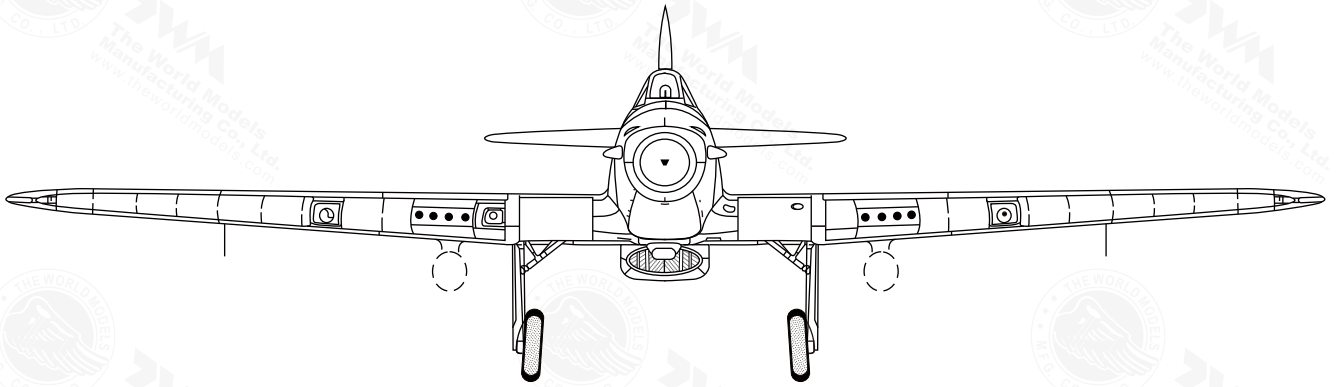
Standard Servo

Code No.	Size	Package
----------	------	---------

SV4031 40.6 x 20 x 37mm 1 set



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)



TWM

**The World Models
Manufacturing Co., Ltd.**
www.theworldmodels.com