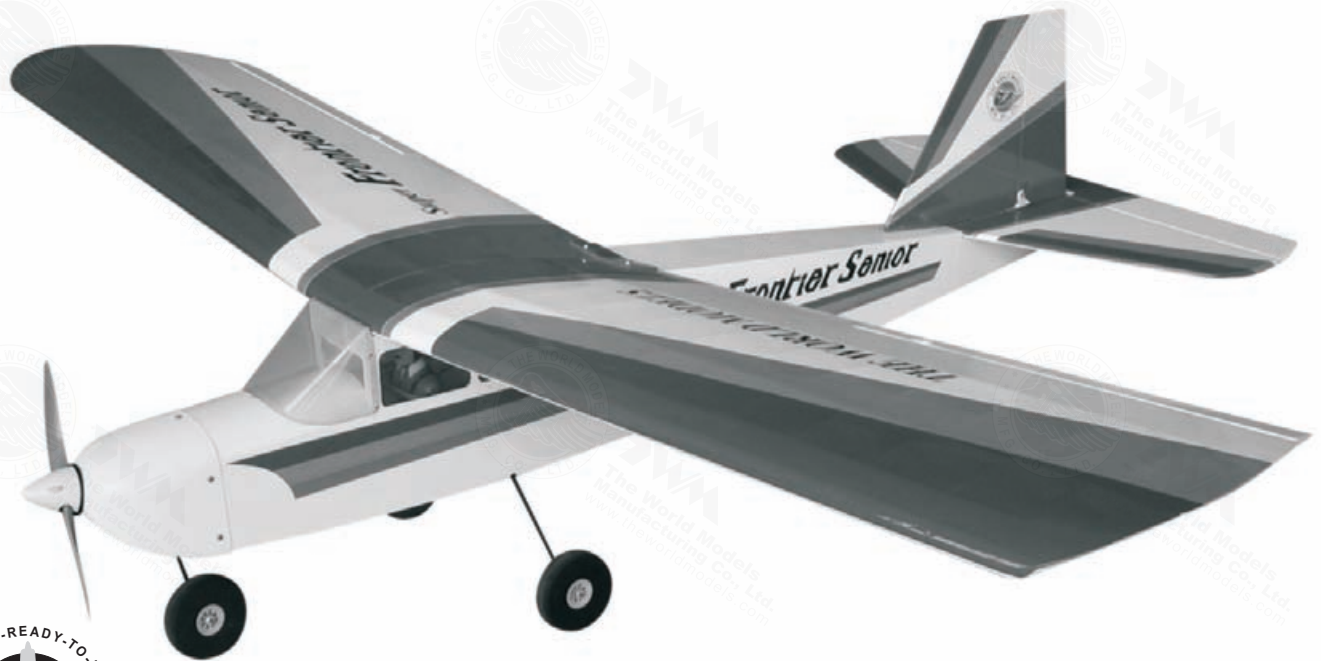


Super Frontier Senior



0.46 cu. in. displacement 2-cycle
Radio required : 4 - channel radio w/ 5 standard servos

Specifications

Wing Span	80.5 in / 2040mm
Wing Area	1232 sq in / 79.5 sq dm
Flying Weight	7.0 lbs / 3300g
Fuselage Length	65.5 in / 1670mm

* 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

Super Frontier Senior

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BEFORE YOU BEGIN	P. 1
PARTS LIST	P. 2
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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 : -



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.

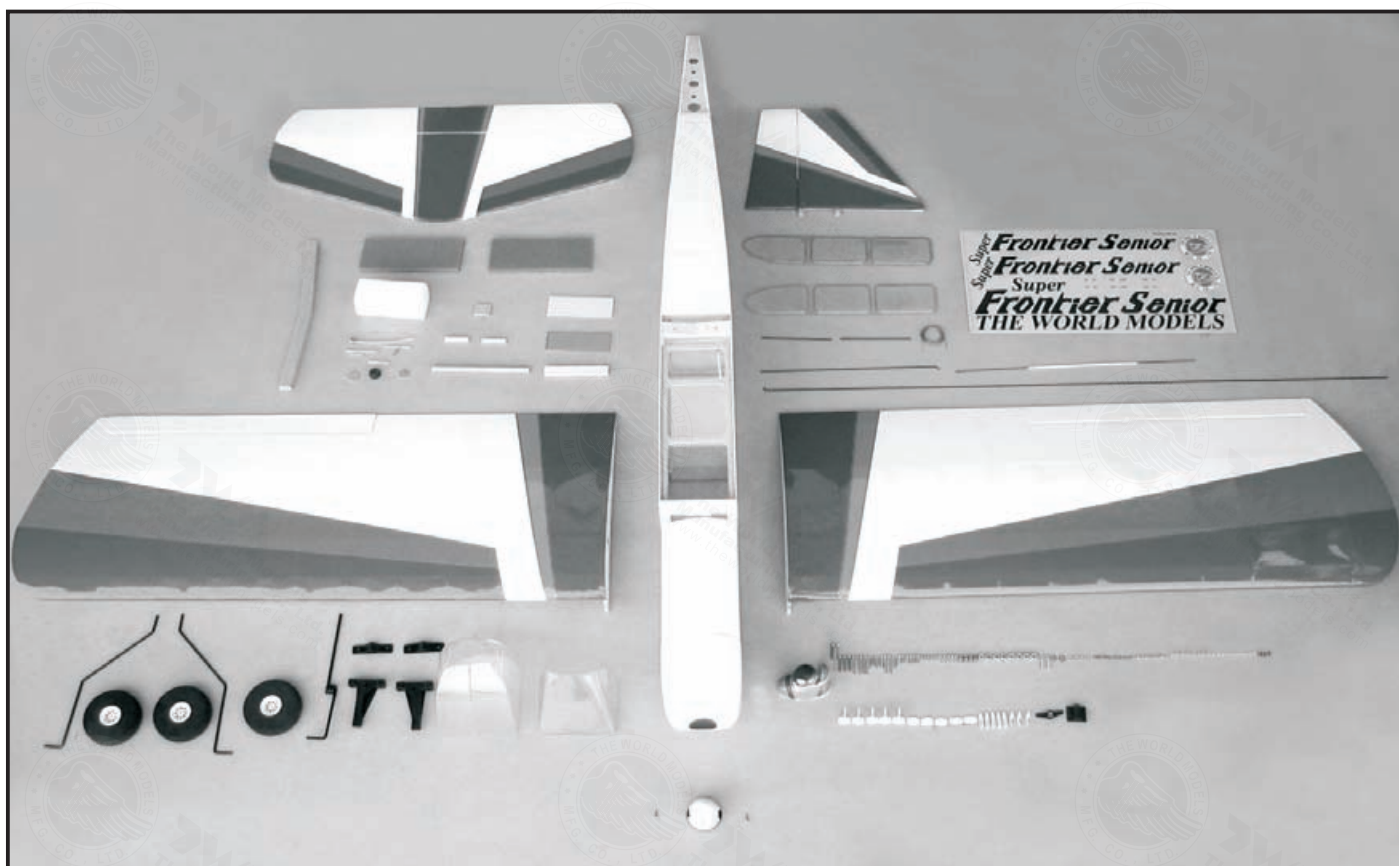


Pay close attention here!



Warning !

Do not overlook this symbol!



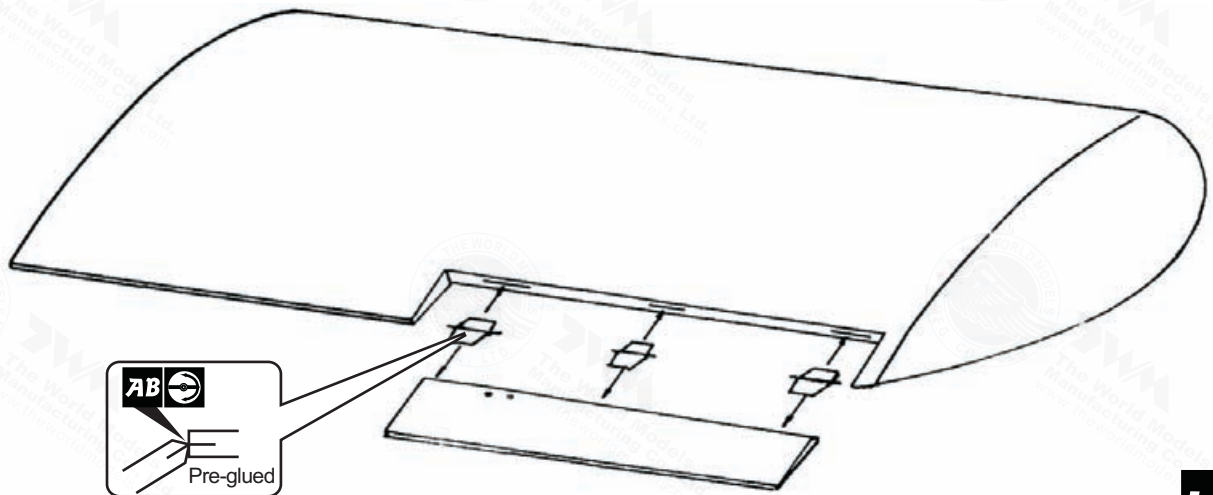
Parts List

1. MAIN WING – 1 pair
2. SCREW PB2x20mm – 4 pcs
FUEL TUBE Ø6x5mm – 4 pcs
CLEVIS PL4112103 – 2 pcs
STRAPER PL4112102 – 2 pcs
HORN PL4113101 – 2 pcs
PUSHROD Ø1.8x130mm w/ Threads (For Aileron Servo) – 2 pcs
3. WOODEN 12x22x346mm (Wing Joiner)(A) – 1 set
WOODEN Ø10x180.5mm (Wing Joiner)(B) – 1 set
4. STABILIZER & ELEVATOR – 1 set
FUSELAGE – 1 pc.
5. VERTICAL FIN & RUDDER – 1 set
6. MAIN LANDING GEAR – 1 set
MAIN WHEEL Ø95mm – 2 pcs
COLLAR Ø4.1mm w/ set screw – 4 sets
MOUNTING PLATE 12x20mm – 2 pcs
SCREW PA 3x12mm – 4 pcs
7. SOCKET HEAD SCREW M4x25mm – 4 pcs
WASHER d4xD9mm – 4 pcs
ENGINE MOUNT PL 5111050 – 1 set
8. FUEL TANK 380cc PL1111380 – 1 set
BALSA 10x15x117mm(For Fixing Fuel Tank) –1 pc.
9. SCREW PA3x14mm – 4 pcs
STEERING ARM STAND Ø4.7mm – 1 pc.
WOODEN 4x25x30mm (For Steering Arm Tank) –1 pc.
10. WIND SHIELD – 1 pc.
SCREW PWA 2.3x8mm – 5 pcs
SILICON GROMMET d1.5xD6.5mm – 5 pcs
11. FRONT LANDING GEAR – 1 set
FRONT WHEEL Ø95mm – 1 pc.
COLLAR Ø4.6mm – 3 set
STEERING ARM Ø4.6mm – 1 set
RIGHT ANGLE WHEEL SPACER PL4121040 – 1 set
12. SOCKET HEAD SCREW M3x30mm – 4 pcs
WASHER d3xD7mm – 8 pcs
M3 NUT – 8 pcs
SPINNER Ø52mm – 1 set
THROTTLE PUSH WIRE Ø1.2x445mm – 1 pc.
PLASTIC TUBE d2xD3x200mm – 1 pc.
13. SCREW PWA2.6x12mm – 5 pcs
SILICON GROMMET d1.5xD6.5mm – 5 pcs
COWLING – 1 pc.
TRANSPARENT 3D TEMPLATE – 1 pc.
14. SIDE WINDOWS – 1pair
15. LINKAGE CONNECTOR Ø2.1mm HW7111060 – 2 sets
16. SPONGE 60x70x122mm – 1 pc.
FUEL TUBE Ø6x5mm – 1 pc.
STRAPER PL4112102 – 1 pc.
WIRE Ø1x1100mm(For Rudder) – 2 pcs
COPPER TUBE Ø2.5xD3.2x8mm –2 pcs
RIGGING Z BEND Ø1.8x27mm(For Rudder) – 2 pcs
FRONT WHEEL PUSHROD Ø1.6x320mm – 1 pc.
PUSH ROD Ø1.8x1155mm w/ Threads (For Elevator Servo) – 1 pc.
17. SCREW PB2x16mm – 2 pcs
FUEL TUBE Ø6x5mm – 1 pc.
CLEVIS PL4112103 – 1 pc.
HORN PL4113101 – 1 set
18. SCREW PM2x16mm – 2 pcs
M2 NUT – 2 pcs
FUEL TUBE Ø6x5mm – 2 pcs
COPPER TUBE Ø2.5xD3.2x8mm –2 pcs
RIGGING COUPLER Ø1.8x27mm w/ Threads (For Rudder) – 2 pcs
HORN (w/ o-Base For Rudder) PL4113101 – 2 pcs
CLEVIS PL4112103 – 2 pcs
19. PILOT PC001085B –1 set
PLYWOOD 3x45x122mm (For Pilot) – 1 pc.
BALSA 6x6x45mm (For Pilot Stand) – 2 pcs
20. SCREW PM3x30mm – 2 pcs
WASHER d3xD12mm – 2 pcs
PLYWOOD 3x40x120mm (For Wing Protection) –1 pc.
21. DECALS A088DEC – 1 set

● COVERING:--

LIGHTEX SGX 100 WHITE
 LIGHTEX SGX 250 BLUE
 LIGHTEX SGX 251 SKY BLUE
 LIGHTEX SGX 312 BRIGHT RED
 LIGHTEX SGX 313 PINK
 LIGHTEX SGX 351DARK BLUE

1 Main Wing



L/R

2 Aileron Servo

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

PB2x20mm Screw 4

Pushrod Ø1.8x130mm

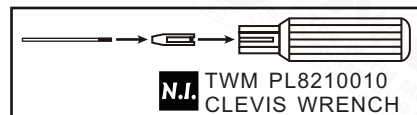
Fuel Tube Ø6x5mm

Clevis

Aileron servo lead

Peel off shaded portion covering film.

1mm



PB2x20mm

Horn

● Bottom View

L/R

3 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.

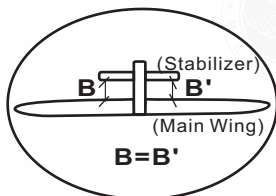
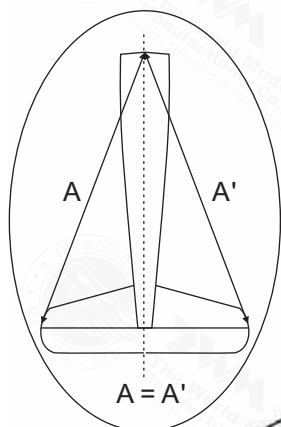
AB

Wing Joiner(A)
12x22x346mm

AB

Wing Joiner(B)
Ø10x180.5mm

4 Stabilizer

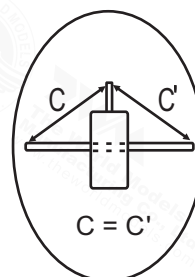


AB



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

5 Vertical Fin / Rudder



AB



AB

6 Landing Gear

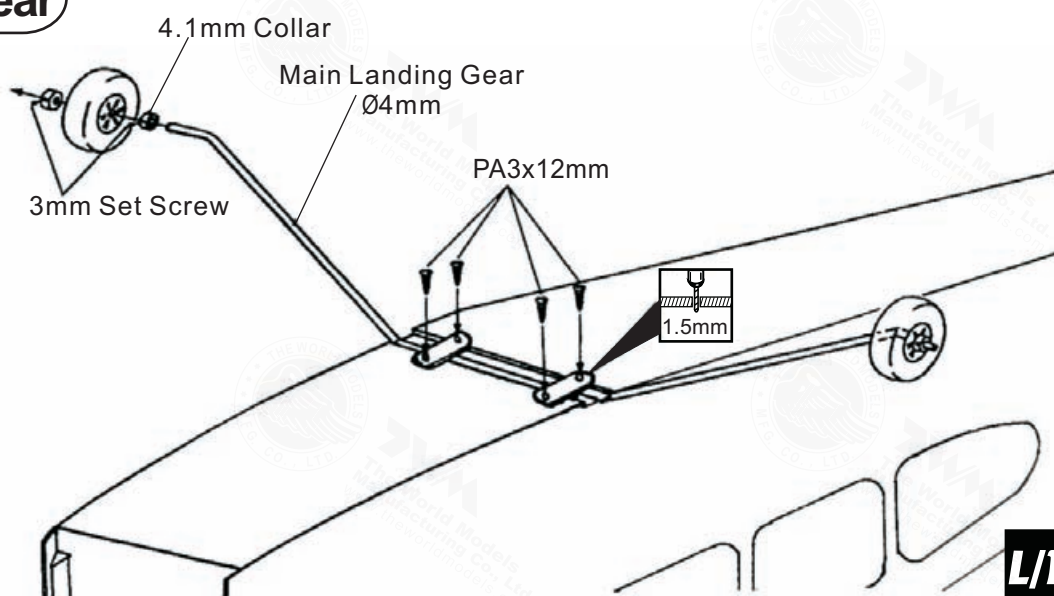
PA3x12mm Screw

3mm Set Screw

4.1mm Collar

3mm Set Screw

4.1mm Collar



L/R

7 Engine Mount

M4x25mm Socket Head Screw



4

d4xD9mm Washer



4

Engine Mount
PL5111050

M4x25mm

d4xD9mm Washer

8 Fuel Tank

Fuel Tank
380cc

Install Balsa 10x15x117mm
(For Fuel Tank Position Fixing)

Fuel Tank
380cc

● Bottom View

9 Front Landing Gear

PA3x14mm Screw



4

AB

2mm

Steering Arm Stand

PA3x14mm

10 Canopy

PWA2.3x8mm **Screw**

5

d1.5xD6.5mm Silicon Grommet

5

PWA2.3x8mm.

➤ PWA2.3x8mm

Silicon Grommet
d1.5xD6.5mm

1.5mm

1.5mm

11 Front Wheel

3mm **Set Screw**

3

4.6mm Collar

3

Collar
4.6mm

Collar
4.6mm

Collar
4.6mm

Right Angle Wheel Spacer

12 Engine

M3x30mm Socket Head Screw

4

d3xD7mm **Washer**

8

M3 Nut

8

➤M3x30mm

d3xD7mm
— **Washer**

Plastic Tube
d2xD3x200mm

Throttle Pushwire
Ø1.2x445mm

d3xD7mm
Washer

M3 Nut

Install Engine position

Spinner
Ø52mm

105mm
4.13 in.

A088PO25531103

P.6

13 Cowling

PWA2.6x12mm Screw

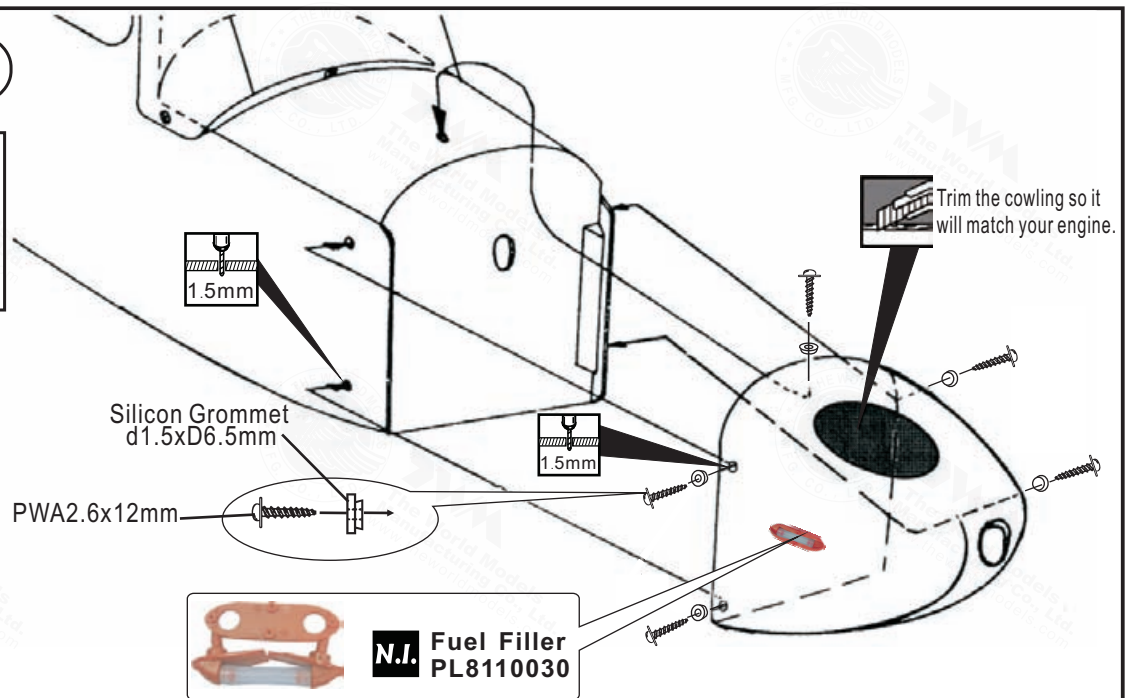


5

d1.5xD6.5mm Silicon Grommet

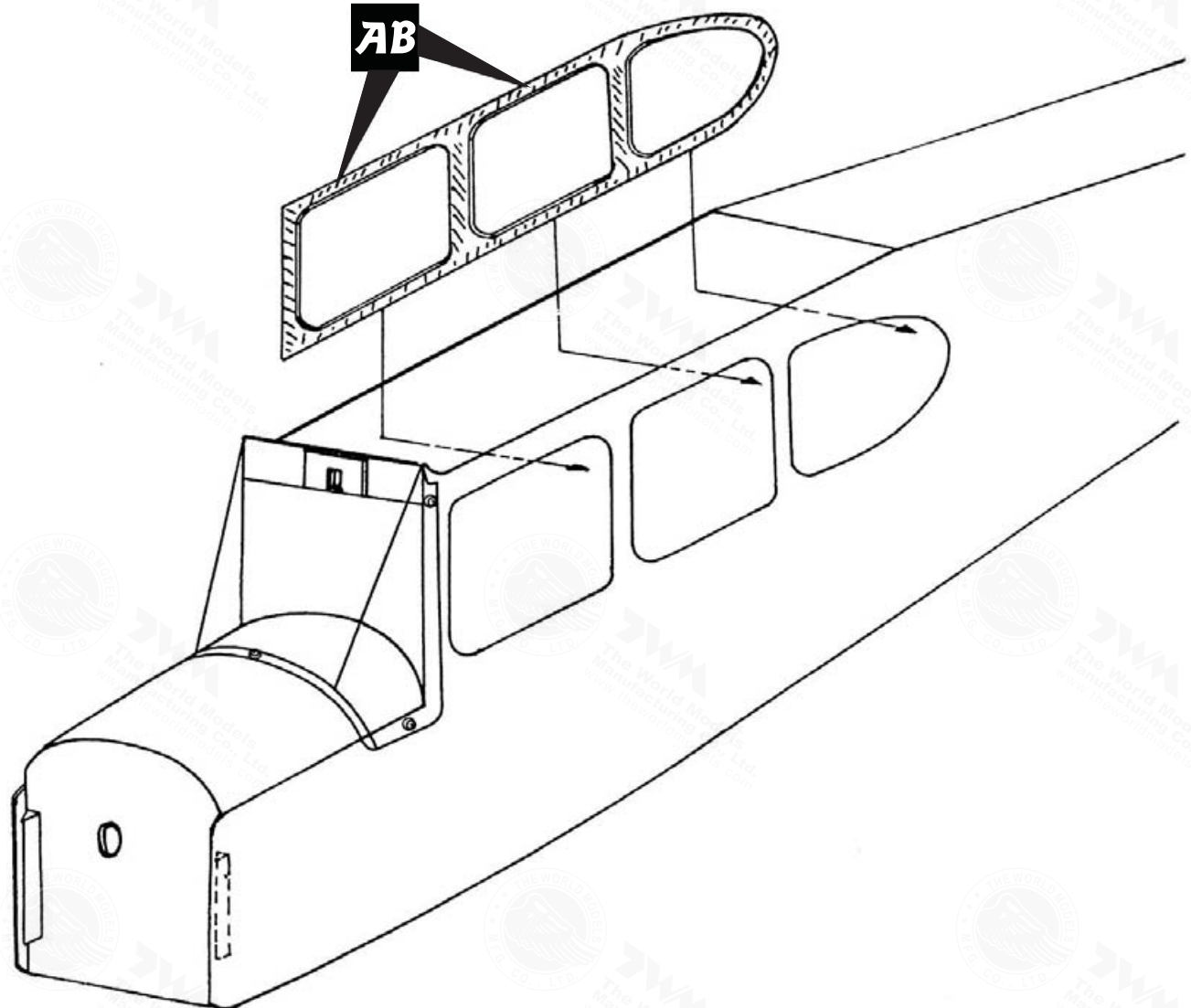


5



14 Windows

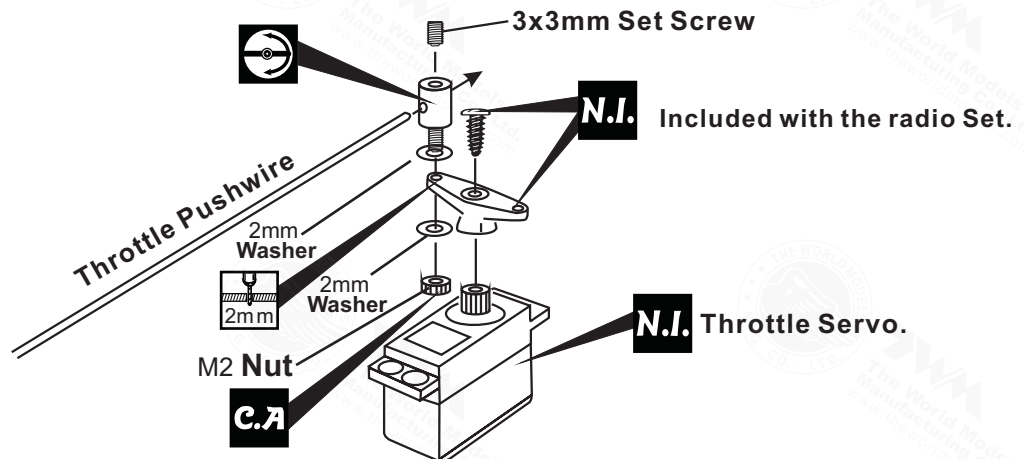
AB



L/R

15 Servo Set

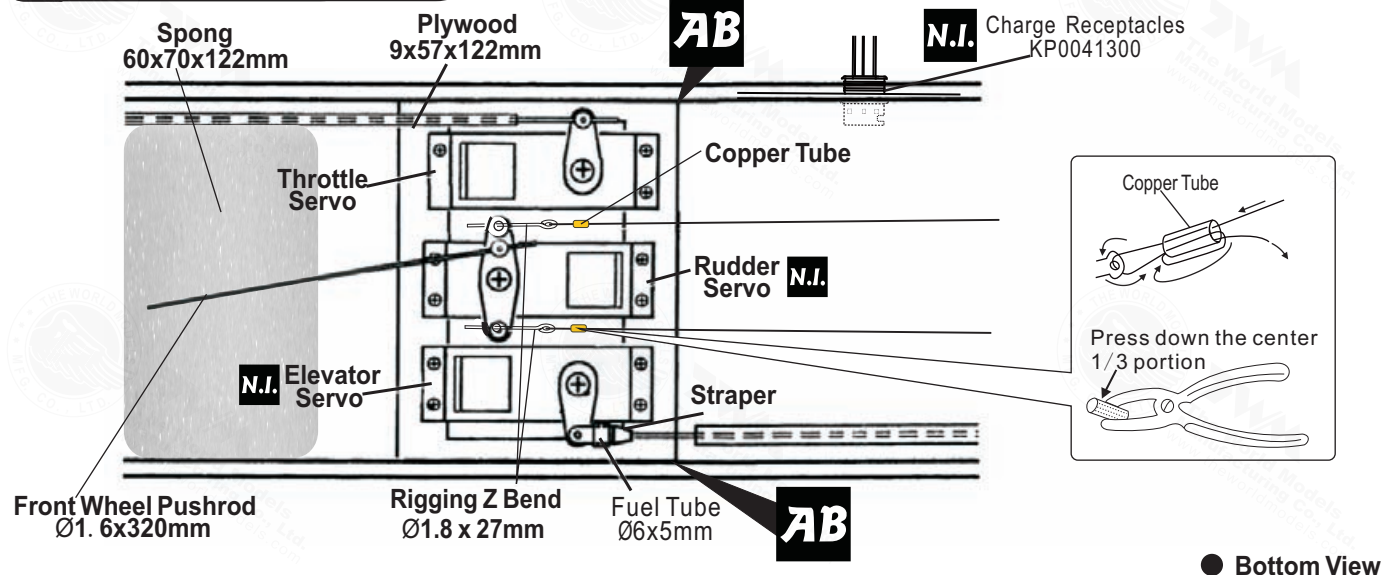
3 x 3mm Set Screw	1
Linkage Connector	1
M2 Nut	1
2mm Washer	2



! Please refer to attached sheet for linkage connector installation.

16 Radio Equipment

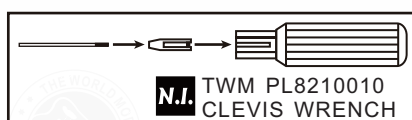
● Install and arrange the servo as shown in the diagram.



17 Elevator Pushrod

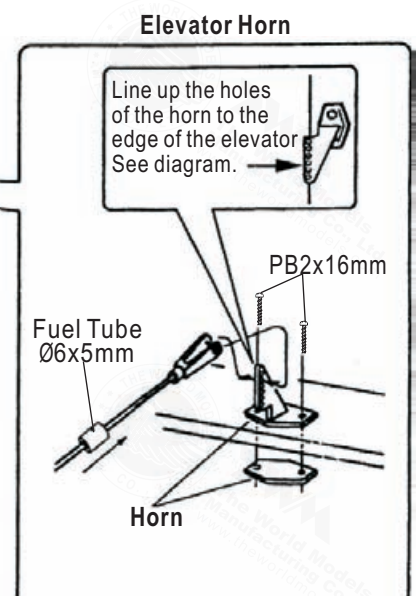
PB2x16mm Set Screw

2



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

● Bottom View



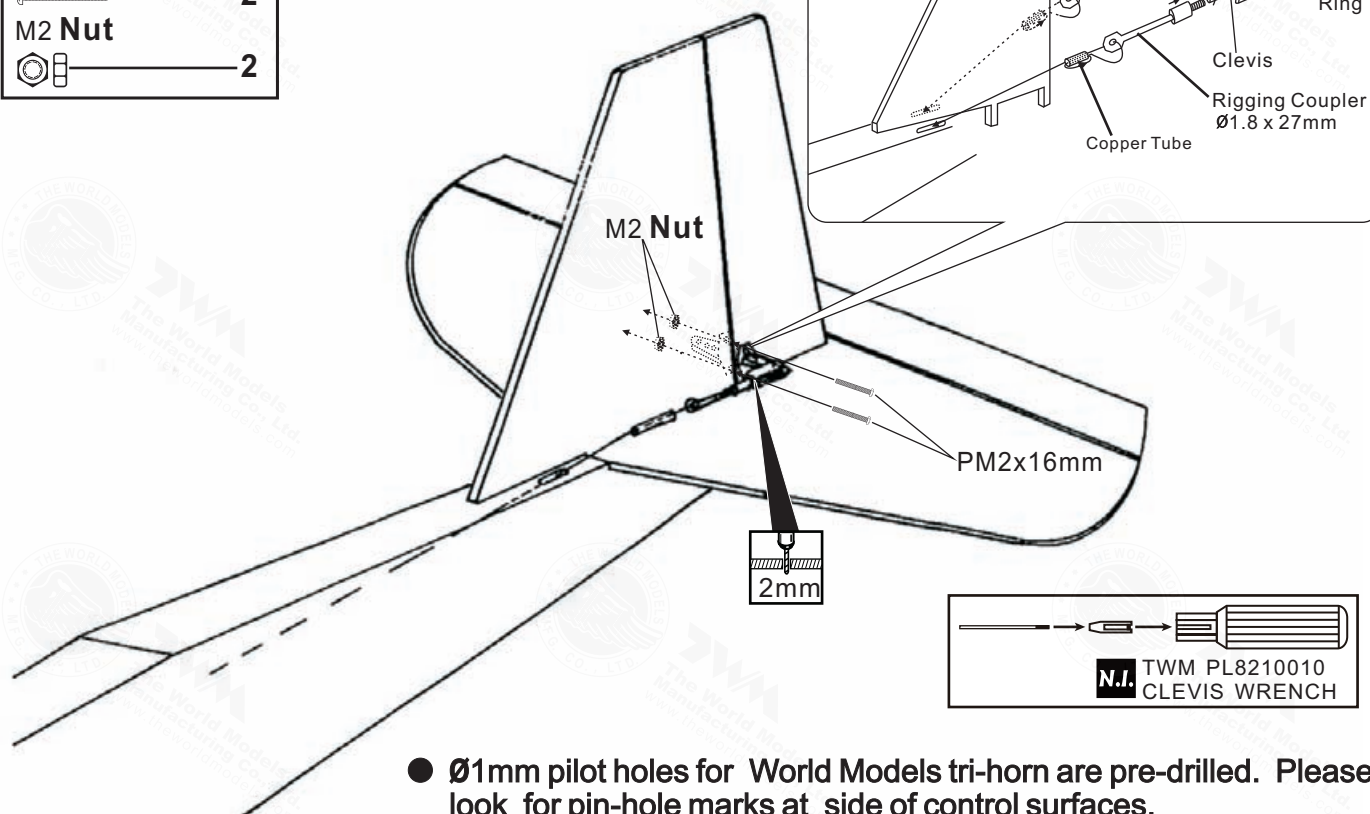
18 Rudder Pullwire

PM2x16mm **Screw**

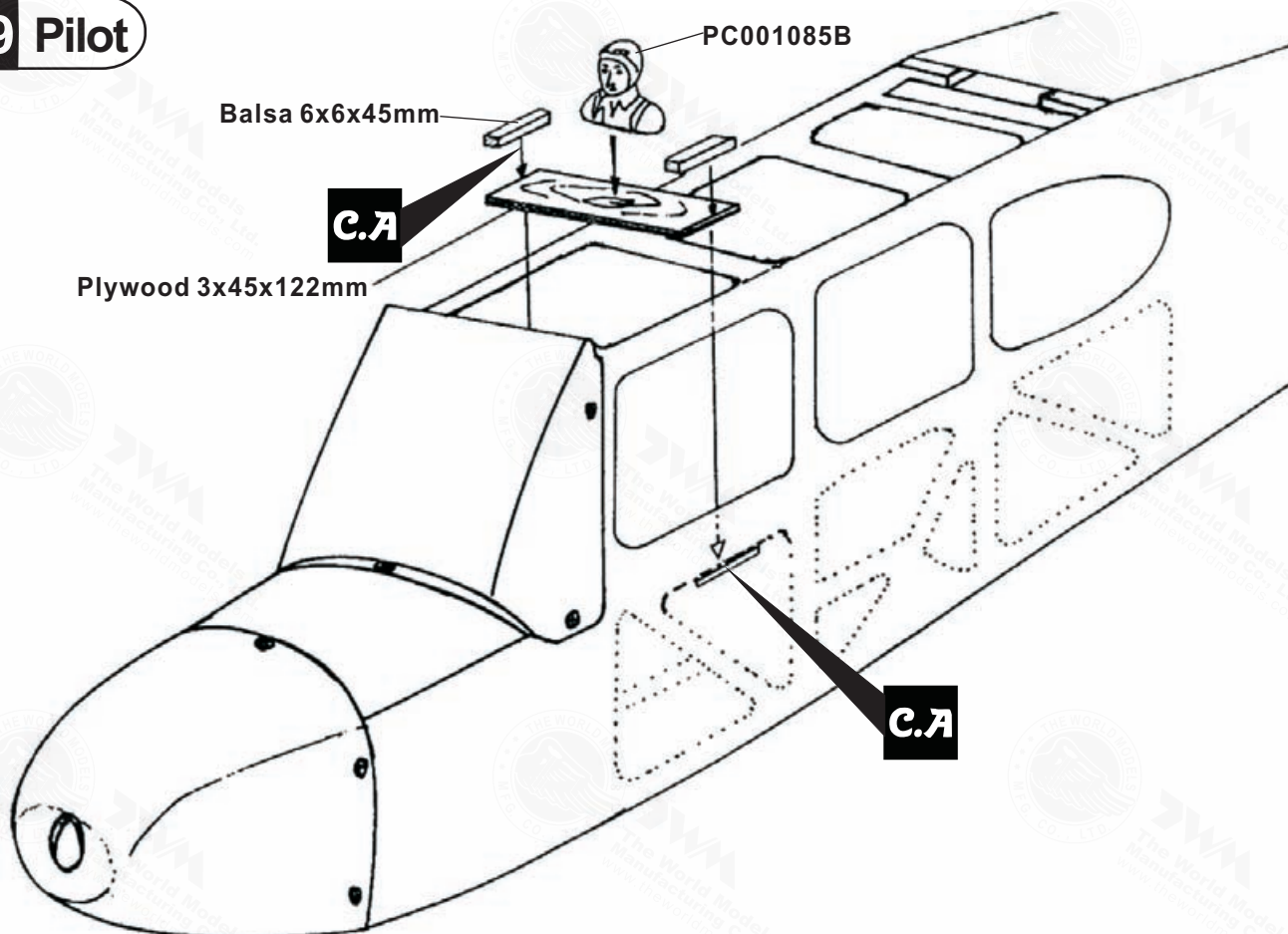
2

M2 Nut

2



19 Pilot

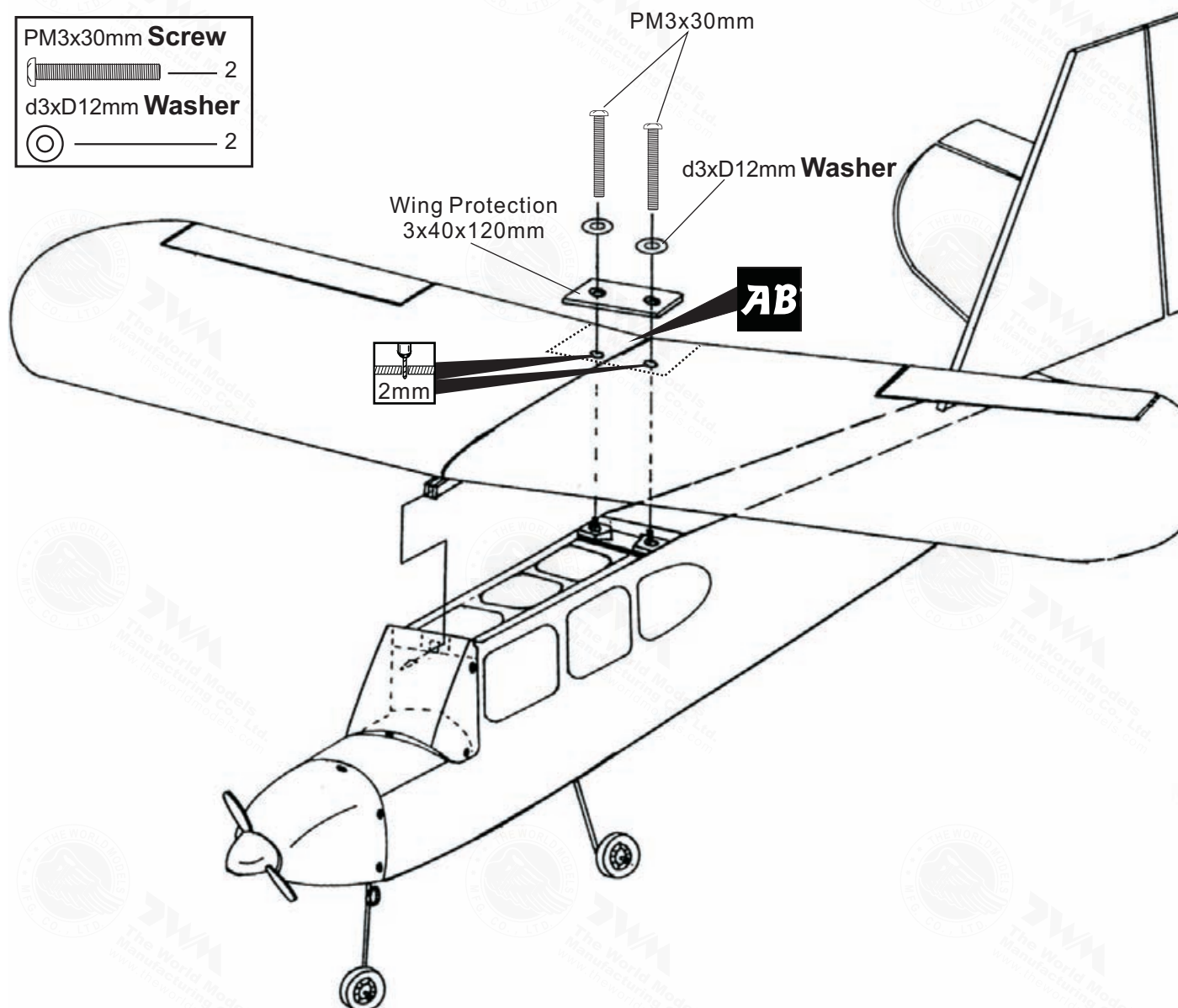


20 Main Wing

PM3x30mm **Screw**

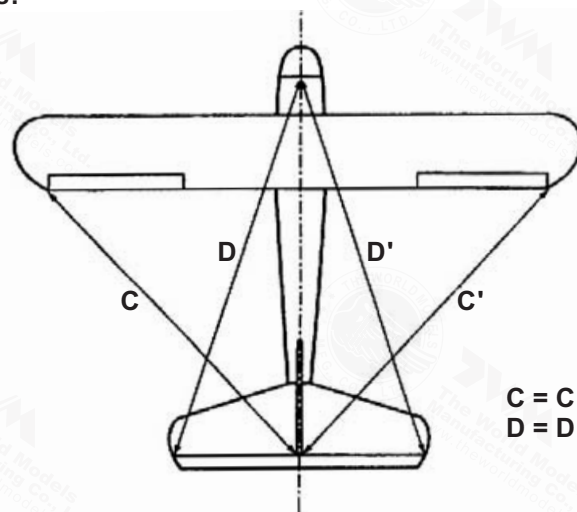
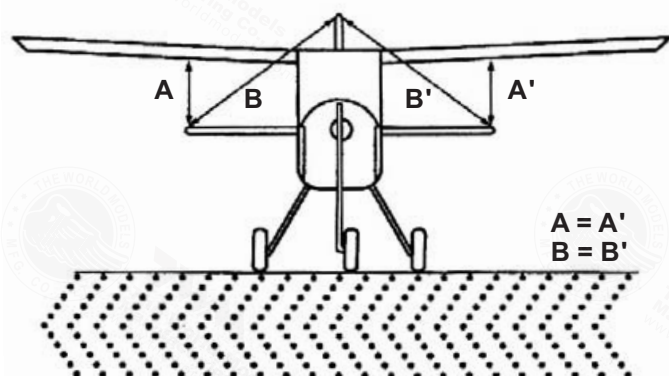


d3xD12mm **Washer**



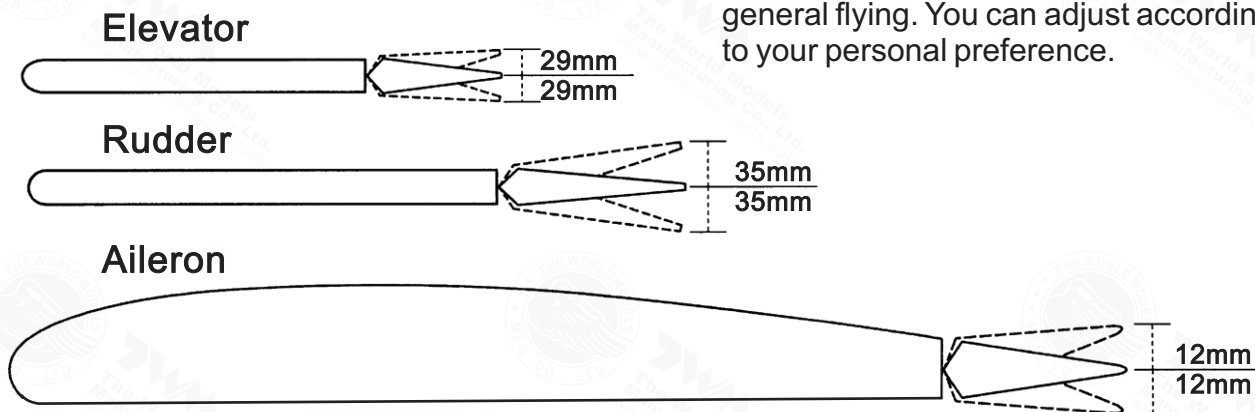
21 Wing Setting

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

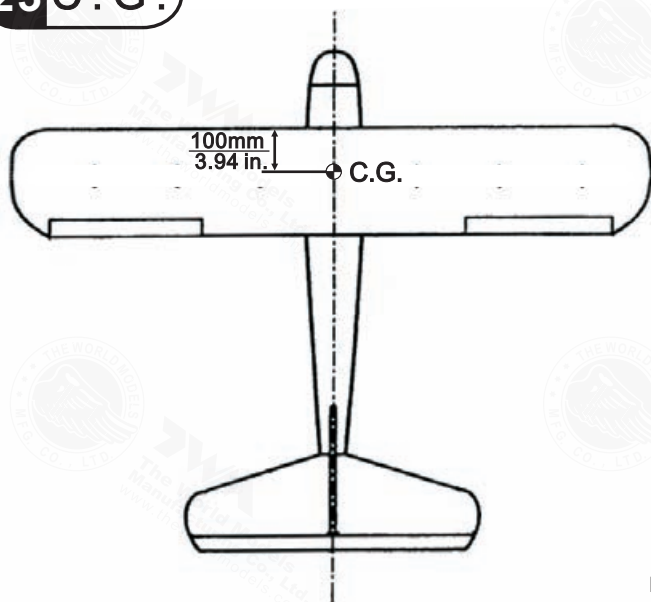


22 Control Throws

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



23 C . G .



The ideal C.G. position is 100mm(3.94in) 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.

<http://www.theworldmodels.com/para/instruction/instructionManuals.php>

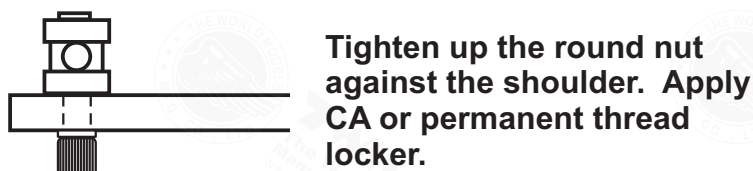
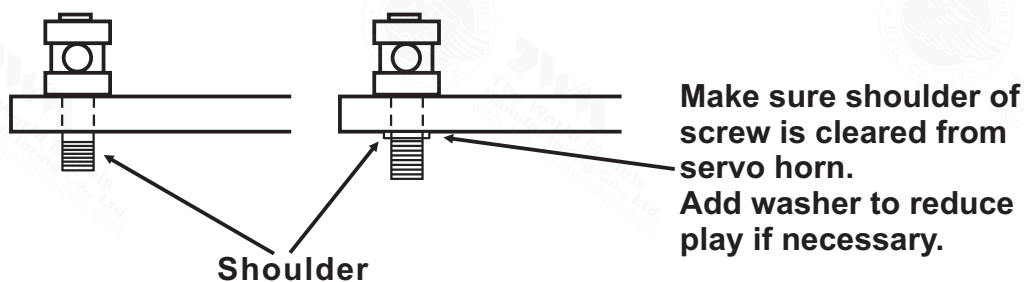
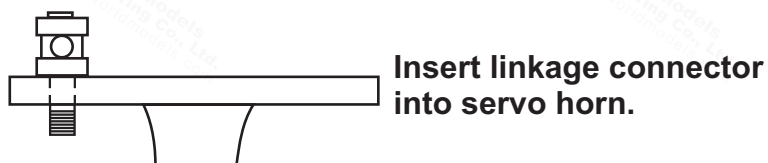
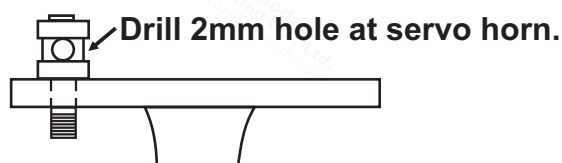
! Warning!

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.
- # **Super Frontier Senior** 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.
- # Check and re-tighten up all factory assembled screws, use thread locker if applicable.

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.

Optional Parts

(ACCESSORIES)

180mm Extension

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

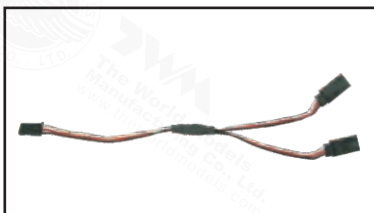
KW0011800 180mm 1 set



180mm Y-Cord

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

KW0021800 180mm 1 pc



Charge Receptacles

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

KP0041300



Field Stand

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

MS9111450 600 x 240 x 350 1 pc



Fuel Filler

Code No.	Size	Package
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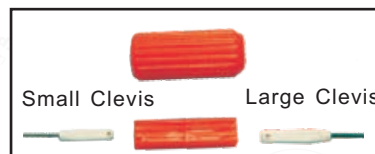
PL8110030 15 x 22 x 49mm 1 x 1 pc



Clevis Wrench

Code No.	Size	Package
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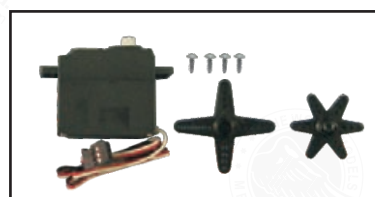
PL8210010 1 set



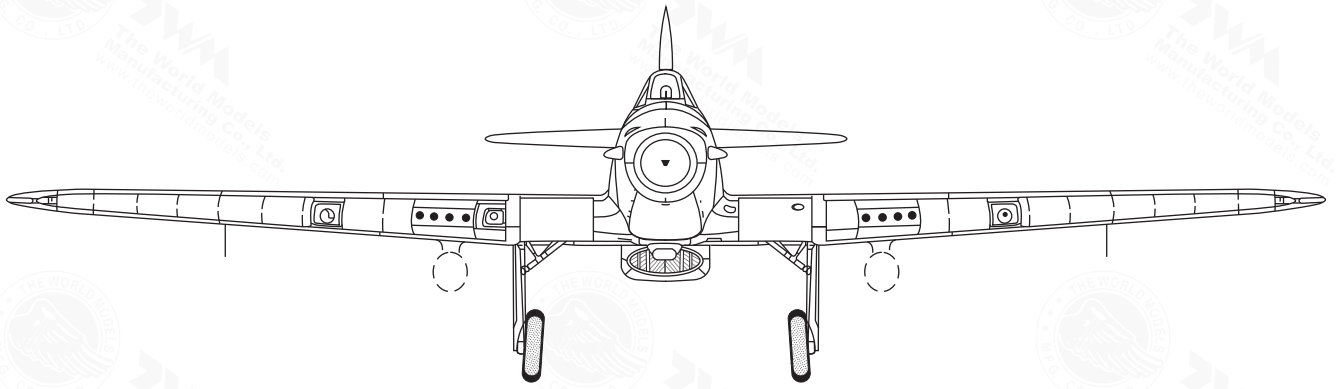
Special tool for clevis installation.
Suitable for standard and small
(EP) clevis.

Standard Servo

Code No



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 /oughlon)



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