

# SUPER SPORTS 40S



**0.40-0.55 cu. in. displacement 2-stroke**  
**0.52-0.56 cu. in. displacement 4-stroke**  
**Requires: 4-channel radio w/ 4 standard servos**

## Specifications

<b>Wing Span</b>	<b>56.5 in / 1440 mm</b>
<b>Wing Area</b>	<b>574 sq in / 37.0 sq dm</b>
<b>Flying Weight</b>	<b>5.5 lbs / 2500 g</b>
<b>Fuselage Length</b>	<b>48.0 in / 1220 mm</b>

\* 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.



The World Models  
 Manufacturing Co., Ltd.  
[www.theworldmodels.com](http://www.theworldmodels.com)

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

# SUPER SPORTS 40S

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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).



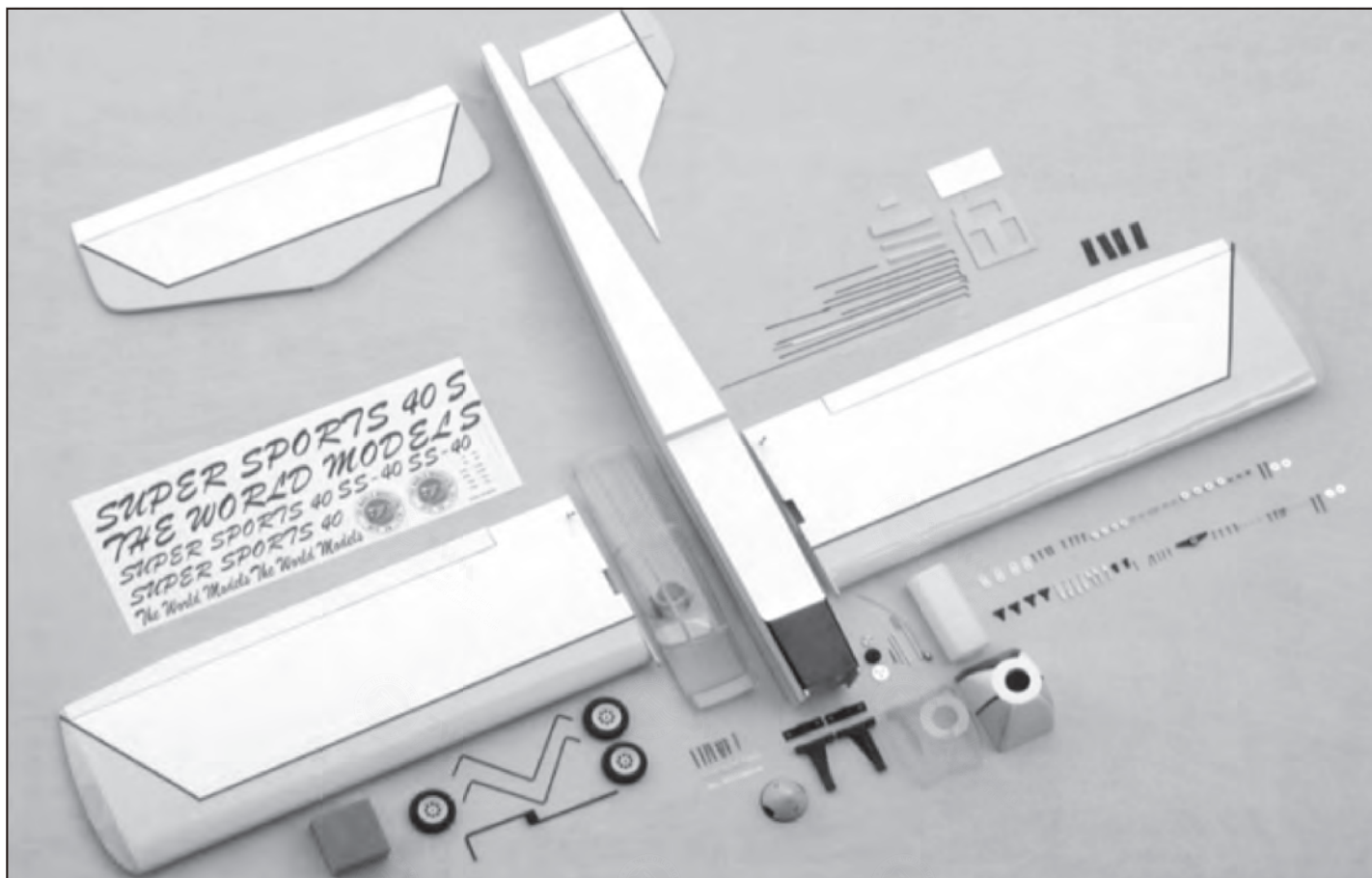
Pierce the shaded portion  
covering film.



Pay close attention here!



Do not overlook this symbol !



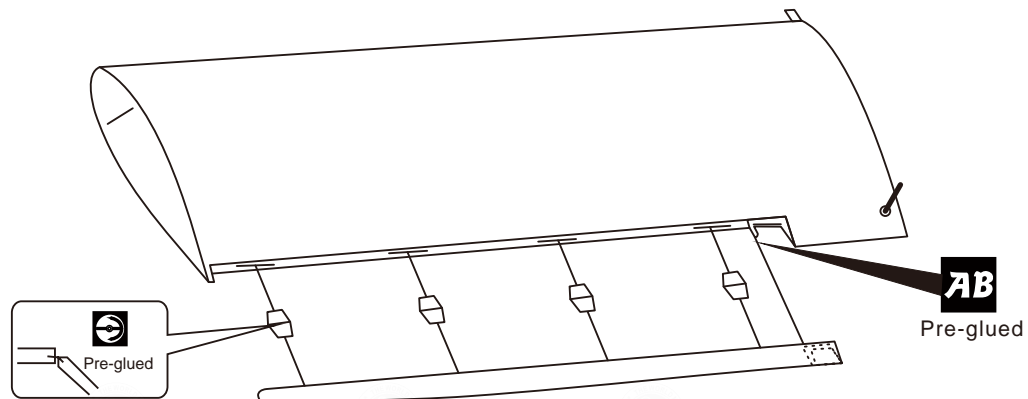
## Parts List

1. MAIN WING -- 1 pair
2. RING Ø2.3mm (For Aileron) -- 2 pcs
3. WING JOINER 6x16x84mm -- 1 pc.
4. PLYWOOD 3x45x90mm (Wing Protection) -- 1 pc.
5. PLYWOOD 3x10x25mm (For Aileron Servo) -- 1 pc.
6. FUEL TUBE Ø6x5mm -- 4 pcs  
STRAPER -- 2 pcs  
CLEVIS -- 2 pcs  
PUSHROD Ø1.8x100mm w/ Threads (For Aileron Servo) -- 2 pcs
7. MOUNTING PLATE 12x20mm -- 4 pcs  
SCREW PA3x12mm -- 8 pcs  
MAIN LANDING GEAR -- 1 set
8. MAIN WHEEL Ø58mm -- 2 pcs  
COLLAR Ø3.1mm w/ set screw -- 4 sets
9. FUSELAGE -- 1 pc.  
STABILIZER & ELEVATOR -- 1 set  
SCREW PM3x22mm -- 1 pc.  
SCREW PM3x25mm -- 1 pc.  
WASHER d3xD12mm -- 2 pcs
10. VERTICAL FIN & RUDDER -- 1 set
11. FUEL TANK 320cc -- 1 set  
CABLE TIE(For Fuel Tank) 1.5x5x400mm -- 1 pc.  
DOUBLE-SIDED TAPE 40x100mm -- 1 pc.
12. SOCKET HEAD SCREW M3x25mm -- 4 pcs  
WASHER d3xD7mm -- 4 pcs  
ENGINE MOUNT PL5111030 -- 1 set
13. FRONT LANDING GEAR -- 1 set  
COLLAR Ø4.1mm w/ set screw -- 4 sets  
WHEEL Ø58mm -- 1 pc.  
STEERING ARM Ø4.1mm -- 1 set
14. SOCKET HEAD SCREW M3x25mm -- 4 pcs  
WASHER d3xD7mm -- 8 pcs  
M3 NUT -- 8 pcs  
SPINNER Ø57mm -- 1 set  
THROTTLE PUSHWIRE Ø1.2x365mm -- 1 pc.  
PLASTIC TUBE d2xD3x235mm -- 1 set
- SCREW PWA2.6x12mm -- 4 pcs  
SILICON GROMMET d1.5x6.5mm (For Cowling) -- 4 pcs  
COWLING -- 1 pc.  
TRANSPARENT 3D TEMPLATE -- 1 pc.
15. SCREW PB2x12mm -- 3 pcs  
TRI-HORN M3x22mm (S) -- 1 set  
CLEVIS -- 1 pc.  
FUEL TUBE Ø6x5mm -- 1 pc.  
PUSHROD Ø1.8x745mm w/ Threads (For Rudder Servo) -- 1 pc.
16. SCREW PB2x14mm -- 3 pcs  
TRI-HORN M3x22mm (S) -- 1 set  
CLEVIS -- 1 pc.  
FUEL TUBE Ø6x5mm -- 1 pc.  
PUSHROD Ø1.8x745mm w/ Threads (For Elevator Servo) -- 1 pc.
17. LINKAGE CONNECTOR Ø2.1mm -- 2 sets
18. FUEL TUBE Ø6x5mm -- 2 pcs  
STRAPER -- 2 pcs  
PUSHROD Ø1.6x330mm (For Front Landing Gear) -- 1 pc.  
PLASTIC TUBE d2xD3x235mm -- 1 pc.  
BALSA 6x6x95mm (For Fuselage Servos Stand) -- 2 pcs  
PLYWOOD 3x82x95mm (For Fuselage Servos) -- 1 pc.  
SPONGE 60x70x75mm (For Radio Equipment) -- 1 pc.  
CHARGE RECEPTACLES KP0041300 -- 1 pc.
19. SCREW PWA2.3x8mm -- 6 pcs  
CANOPY -- 1 pc.  
SILICON GROMMET d1.5xD6.5mm (For Canopy) -- 6 pcs  
PILOT 063A(063B) -- 1 set  
DOUBLE-SIDED TAPE 8x1000mm -- 1 pc.
20. SOCKET HEAD SCREW M3x22mm -- 2 pcs  
WASHER d3xD12mm -- 2 pcs
21. DECALS A049SDEC -- 1 set

### ● COVERING:--

LIGHTEX SGX 100 WHITE  
LIGHTEX SGX 311 FERRARI RED  
LIGHTEX SGX 251 SKY BLUE  
LIGHTEX SGX 350 CORSAIR BLUE

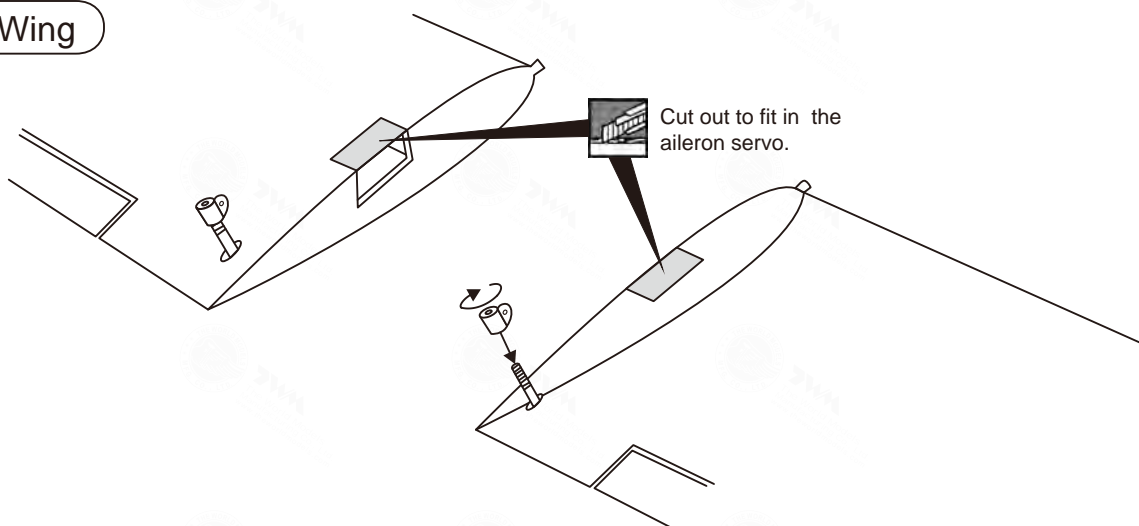
## 1 Main Wing



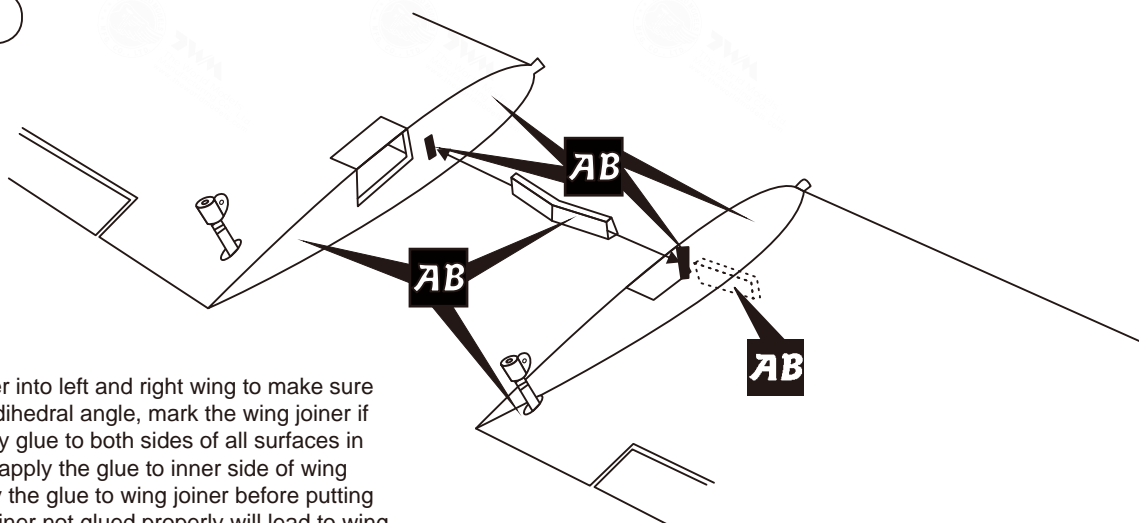
● Bottom View

**L/R**

## 2 Main Wing



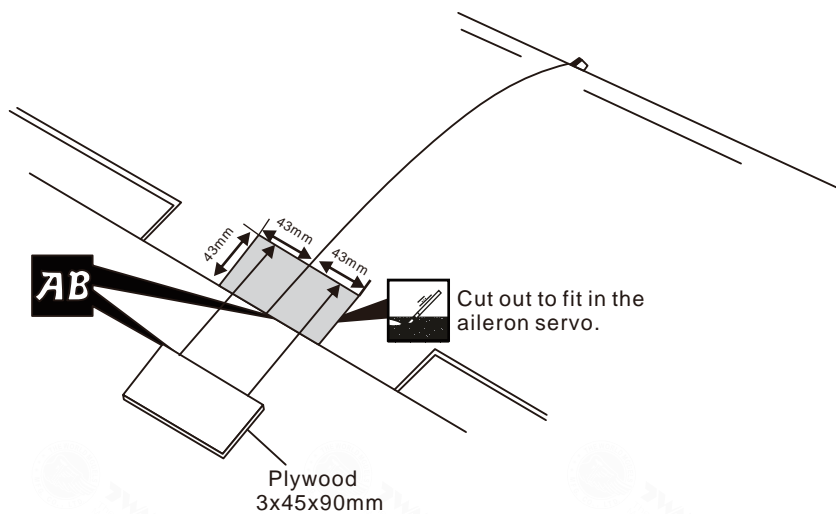
## 3 Main Wing



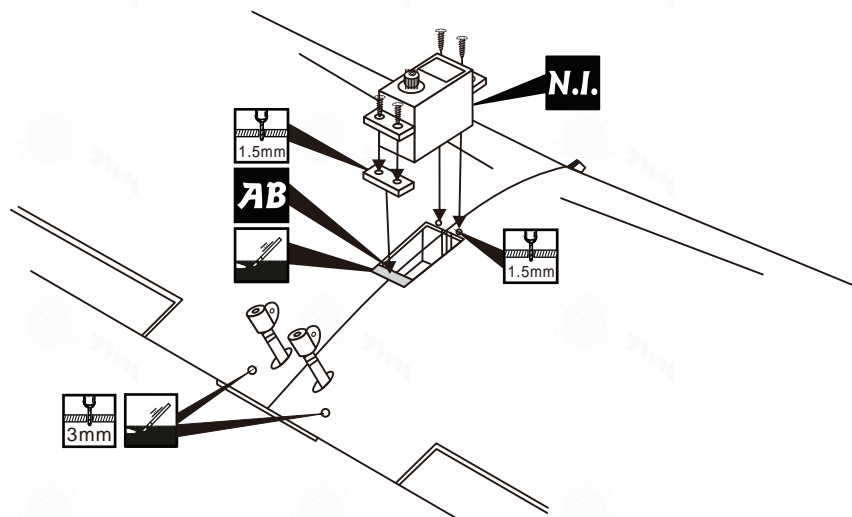
### ! Warning!

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.

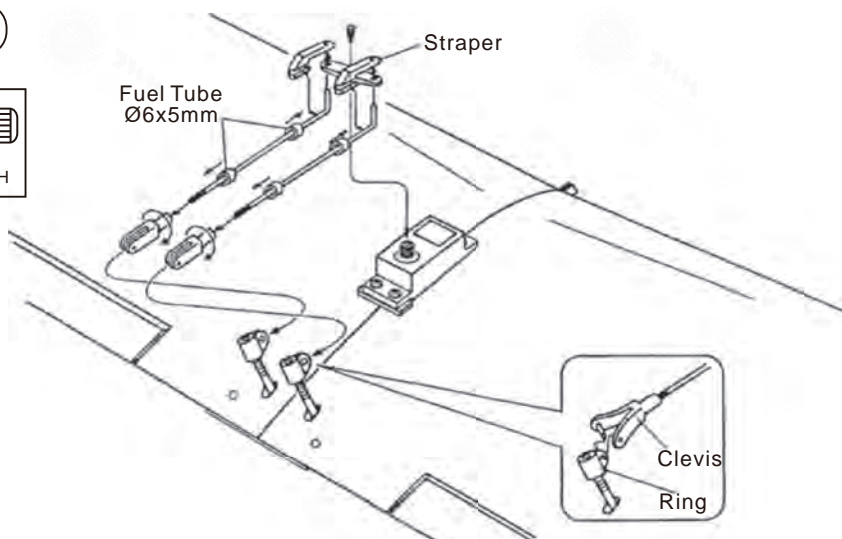
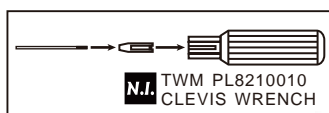
#### 4 Main Wing



#### 5 Aileron Servo



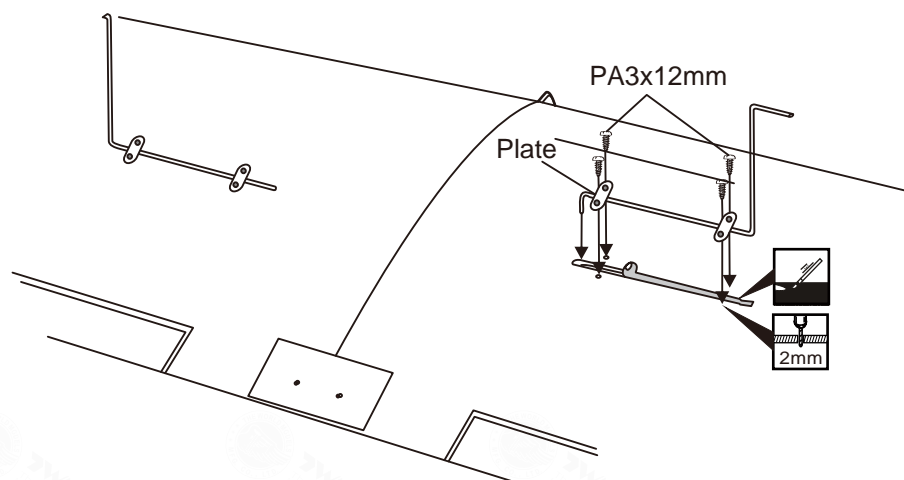
#### 6 Aileron Servo



## 7 Main Landing Gear

PA3x12mm Screw

8



● Bottom View

L/R

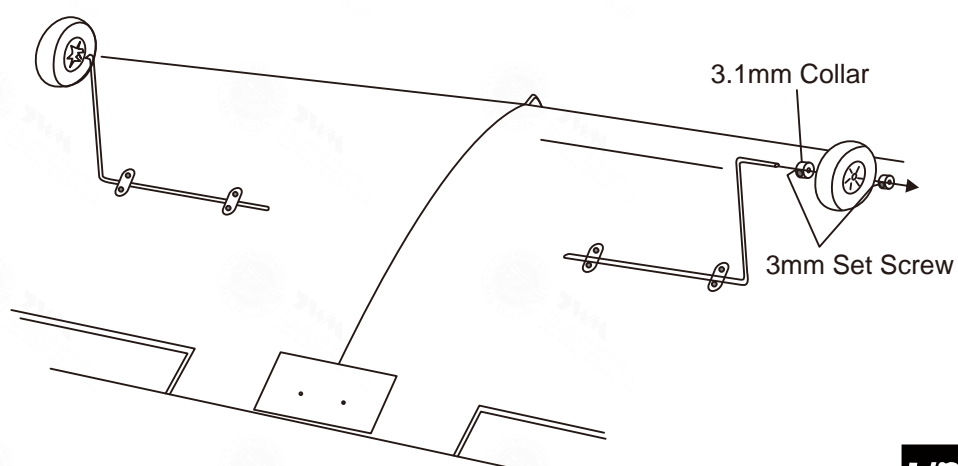
## 8 Main Landing Gear

3mm Set Screw

4

3.1mm Collar

4



● Bottom View

L/R

## 9 Stabilizer & Elevator

PM3x22mm Screw

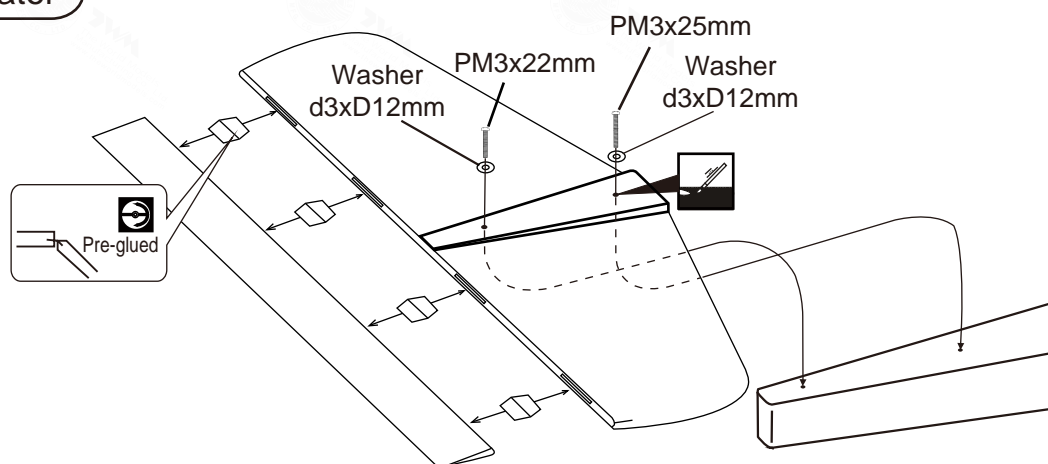
1

PM3x25mm Screw

1

d3xD12mm Washer

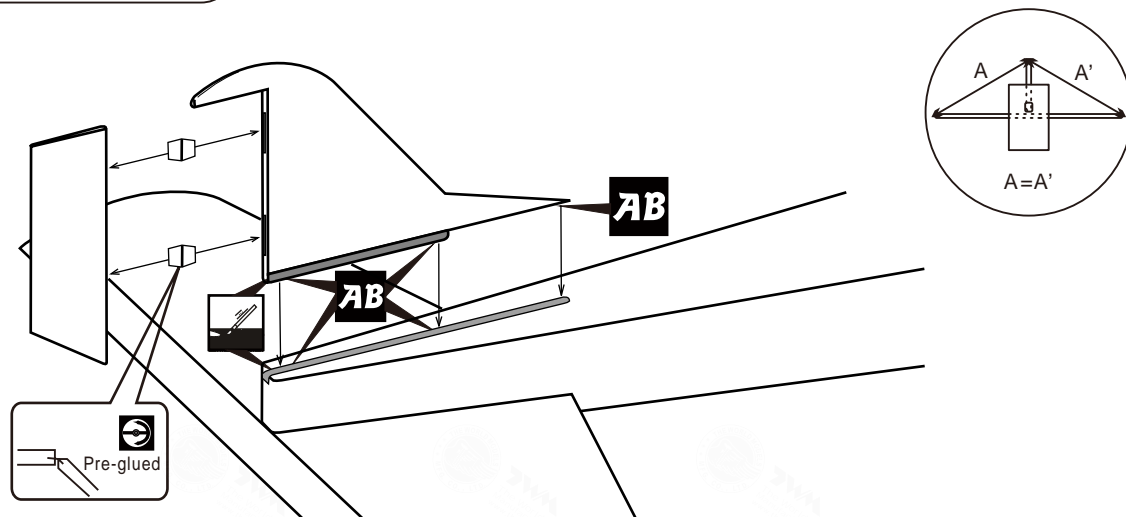
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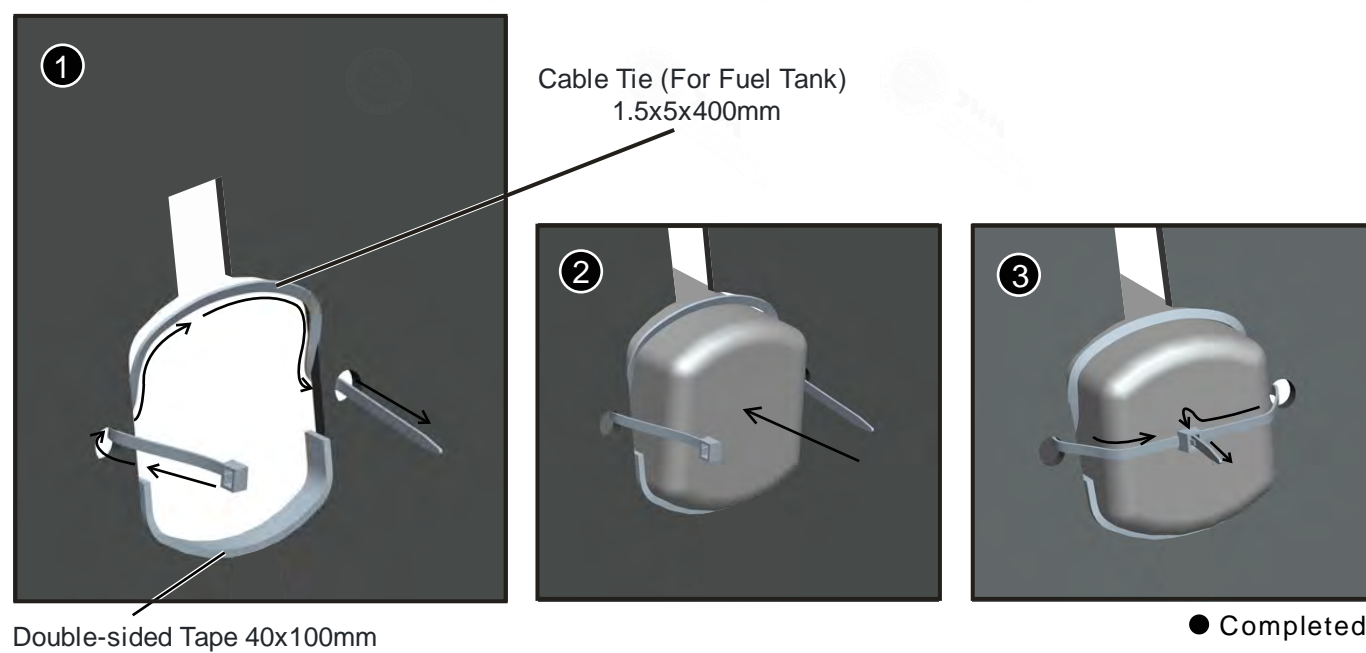
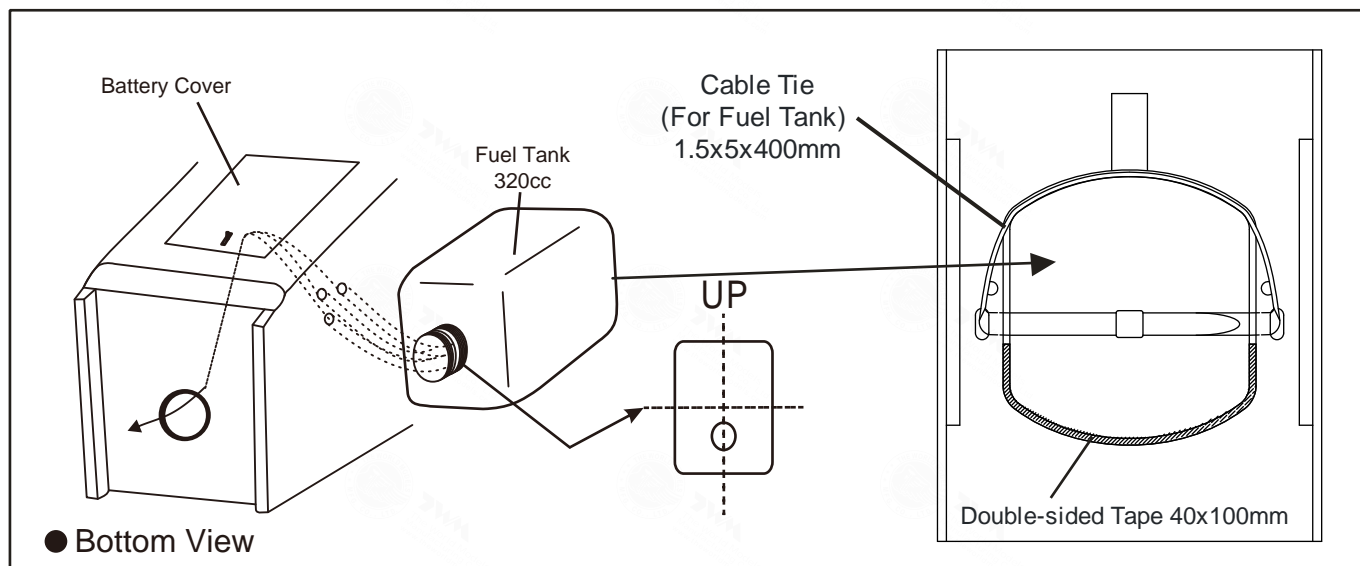
● Bottom View



## 10 Vertical Fin & Rudder



## 11 Fuel Tank



## 12 Engine Mount

M3x25mm Socket Head Screw



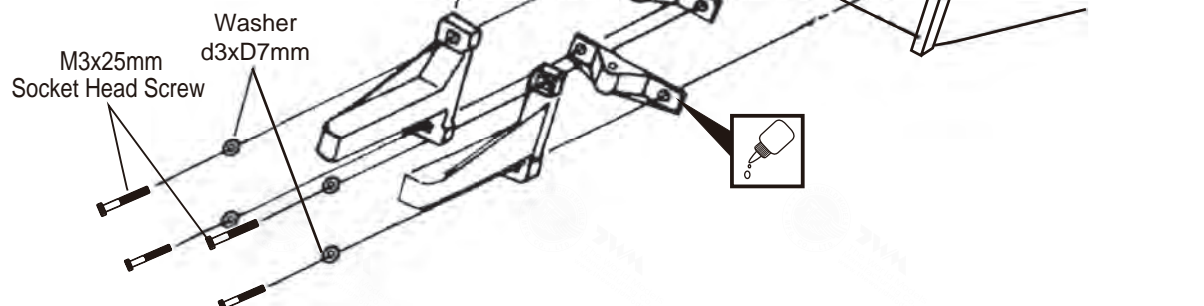
d3xD7 Washer



M3x25mm  
Socket Head Screw

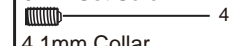
Washer  
d3xD7mm

Engine Mount  
PL5111030

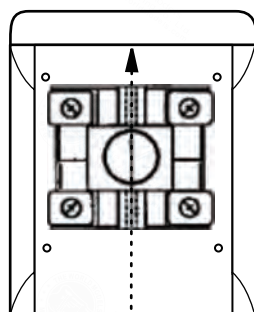


## 13 Front Wheel

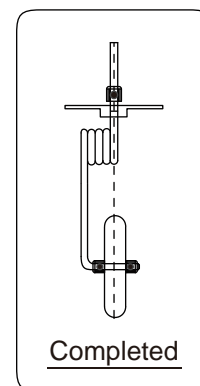
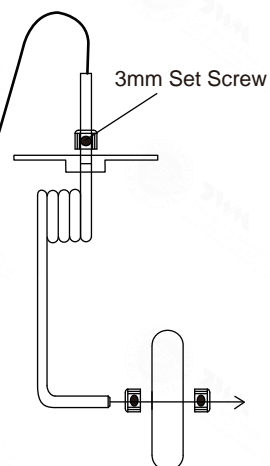
3mm Set Screw



4.1mm Collar



● Front View



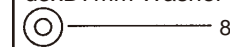
Completed

## 14 Engine

M3x25mm Socket Head Screw



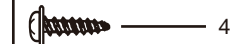
d3xD7mm Washer



M3 Nut



PWA2.6x12mm Screw



d1.5xD6.5mm Silicon Grommet



Throttle Pushwire  
Plastic Tube

M3x25mm

Washer  
d3xD7mm

**AB**

**N.I.**



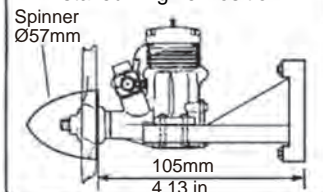
Nut M3

Nut M3

PWA2.6x12mm

Silicon Grommet  
d1.5xD6.5mm

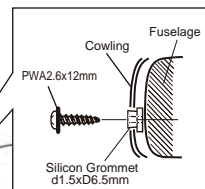
Installed Engine Position



If the engine throttle control is on the opposite side, install the throttle pushwire accordingly.

Install the throttle servo with the drive pinion on the same side of throttle pushwire.

Raise throttle servo if necessary to provide clearance between throttle and front wheel pushwires.



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

**L/R**

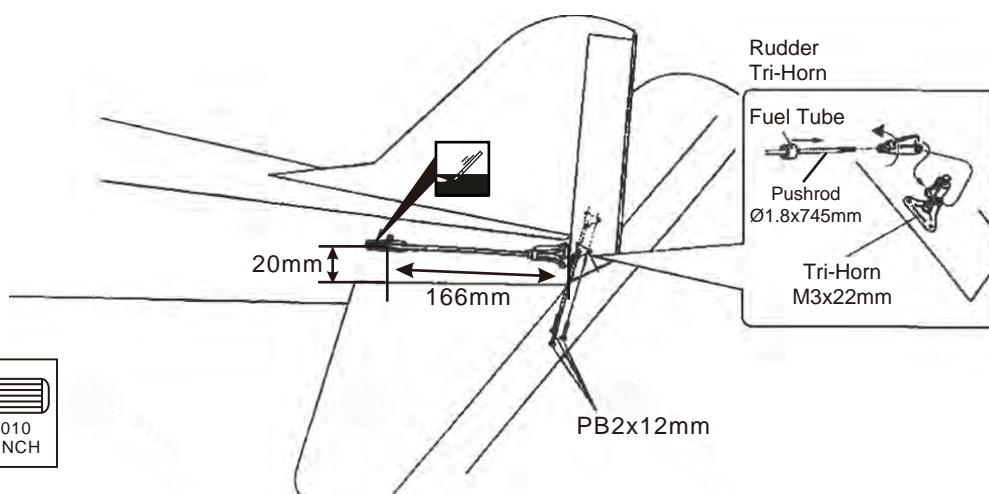
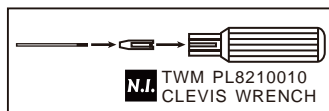


## 15 Rudder Pushrod

PB2x12mm Screw



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

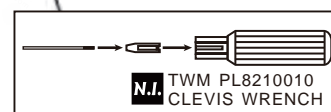
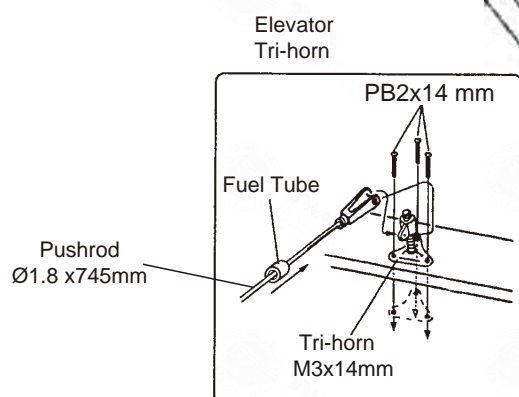


## 16 Elevator Pushrod

PB2x14 mm Screw



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



## 17 Servo Set

3x3mm Set Screw



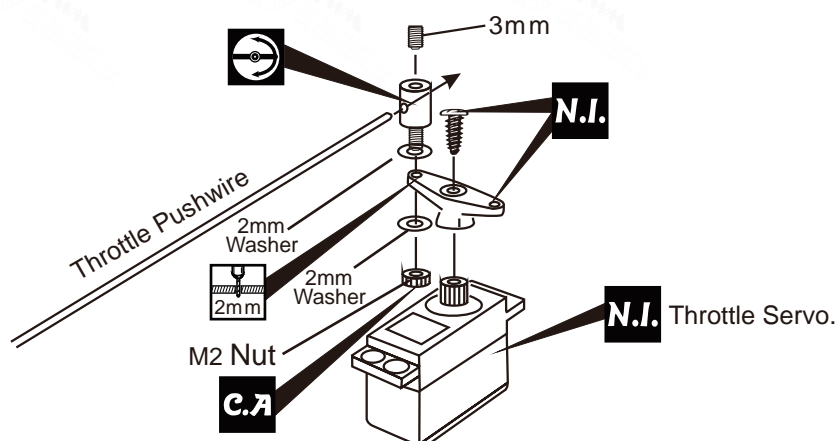
Linkage Connector



M2 Nut



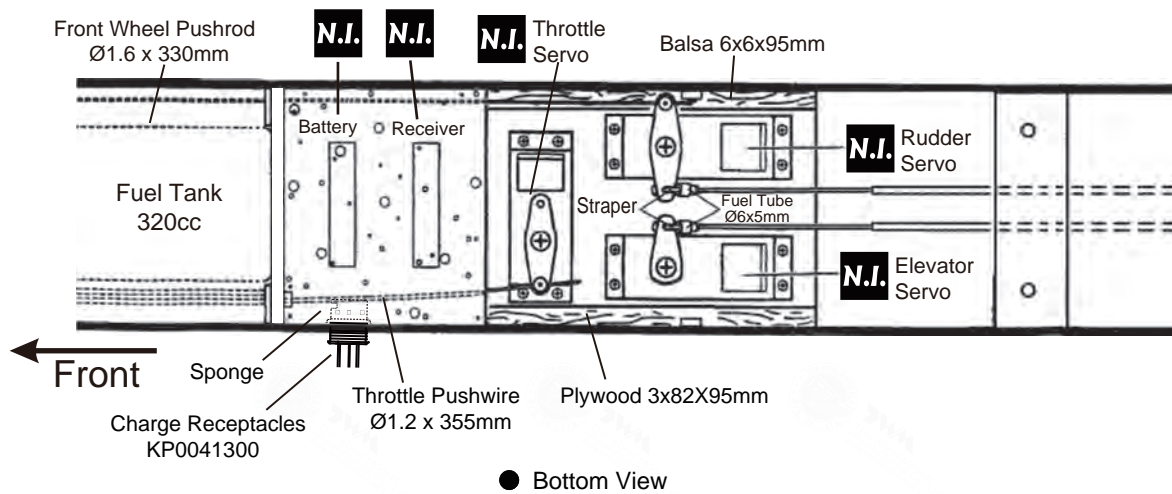
2mm Washer



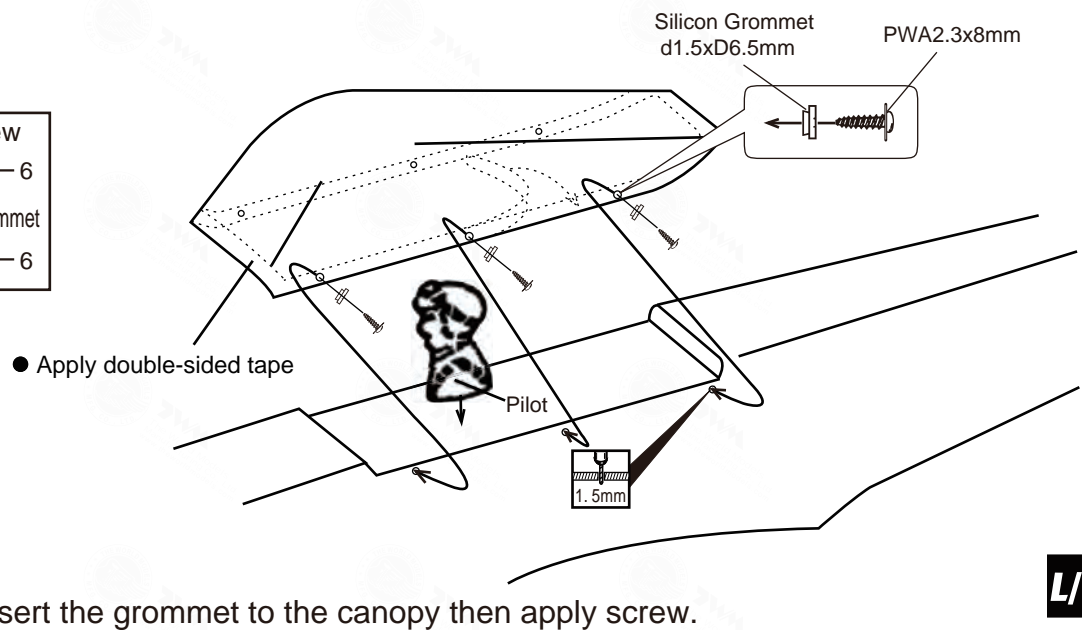
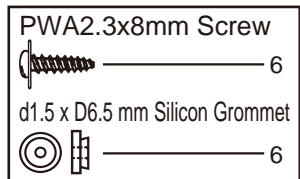
Please refer to the attached sheet for linkage connector installation.

## 18 Radio Equipment

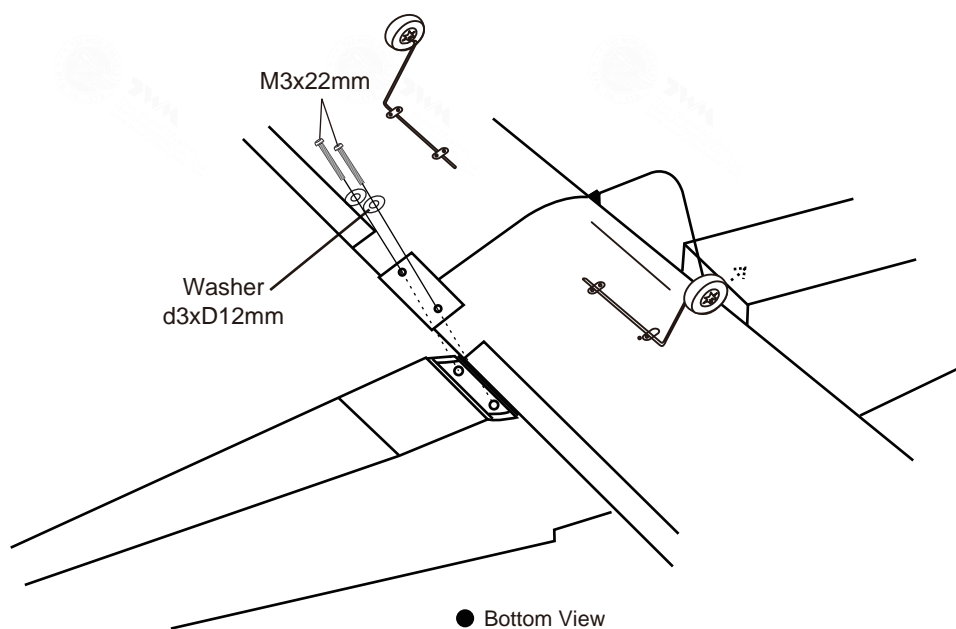
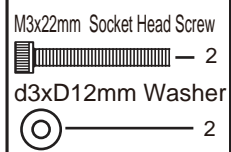
● Install and arrange the servo as shown in the diagram.



## 19 Canopy

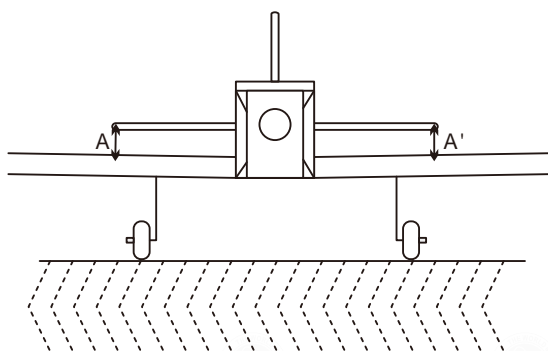


## 20 Main Wing

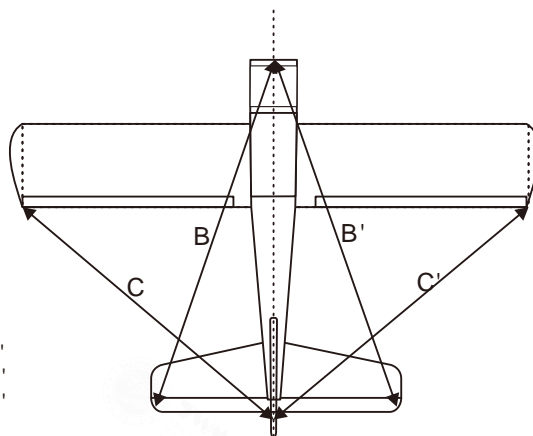


## 21 Wing Setting

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

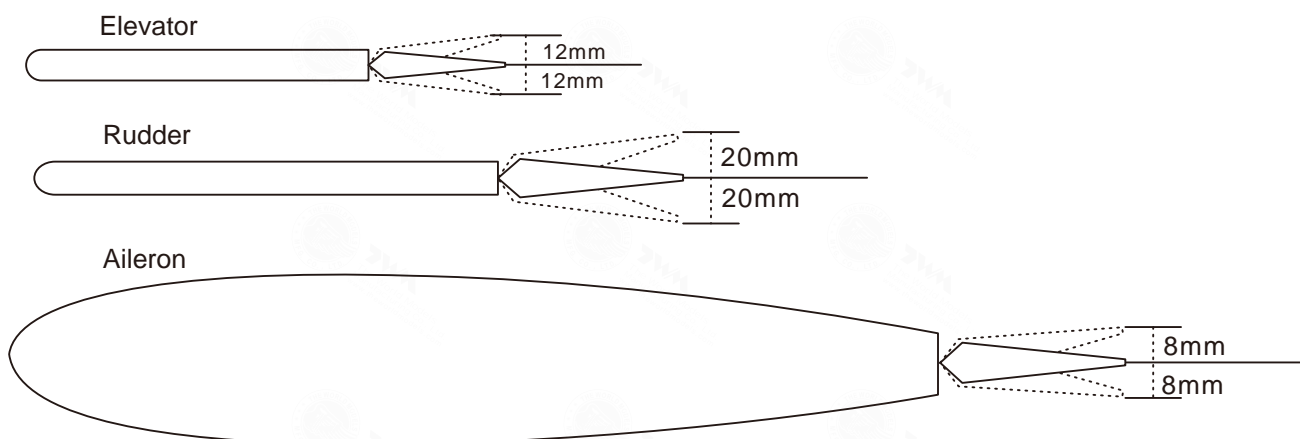


$$\begin{aligned} A &= A' \\ B &= B' \\ C &= C' \end{aligned}$$



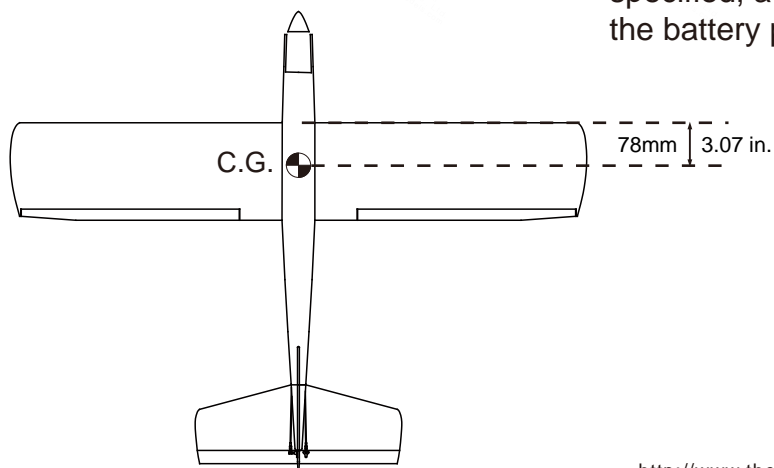
## 22 Control Throws

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 78mm (3.07 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

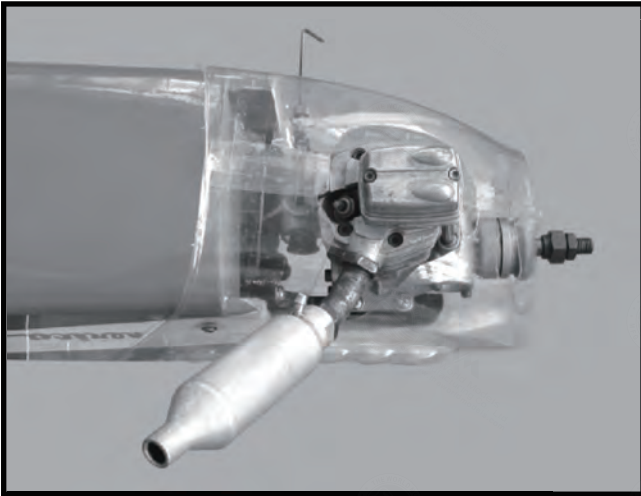
- # First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.
- # Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.
- # *SUPER SPORTS 40S* is specially designed to be powered by 2C 0.40 - 0.55 or 4C 0.52-0.56 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.

# Usage of the transparent 3D template



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

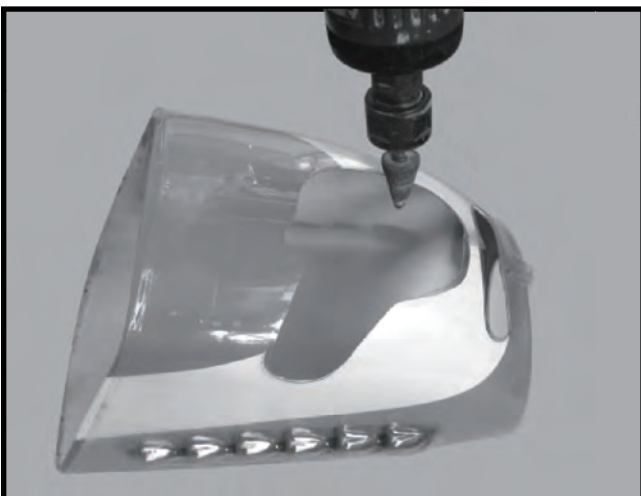
1



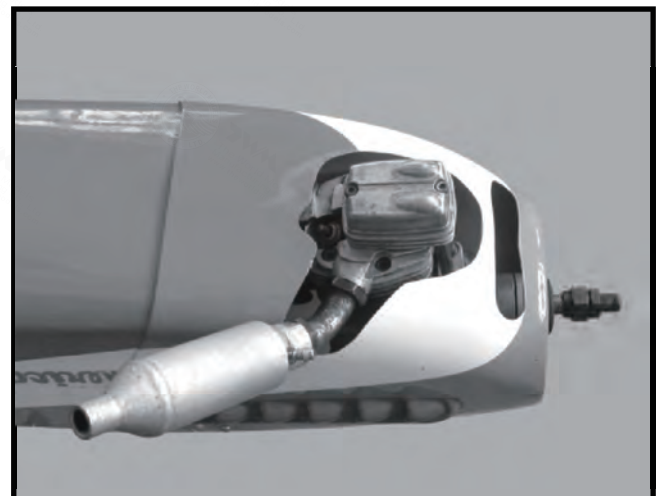
2



3



4

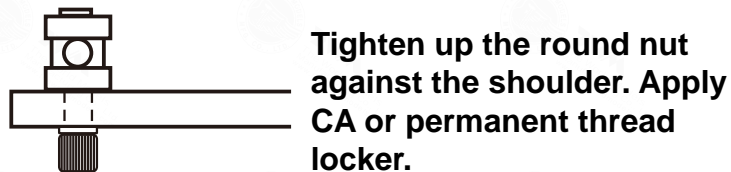
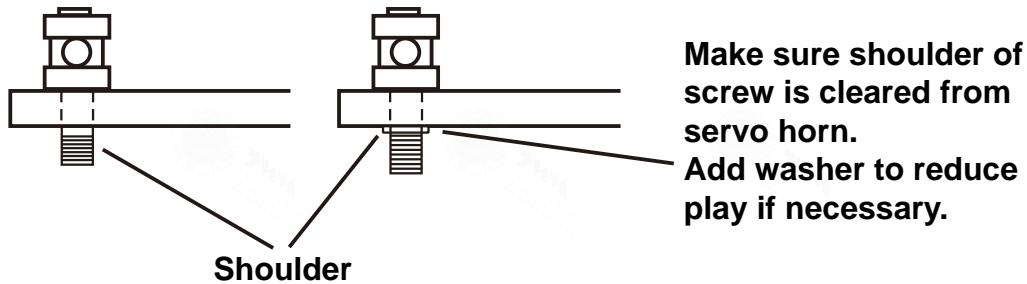
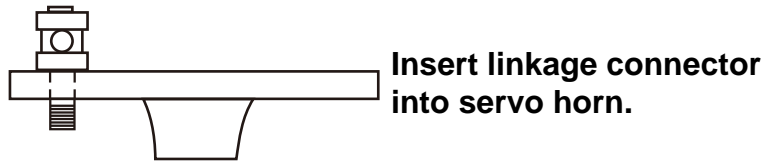
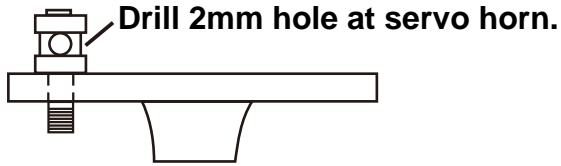


Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.



# LINKAGE CONNECTOR

## HW7111050 & HW7111060



**After fastening the round nut, make sure that the linkage connector can rotate freely.**

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### 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.

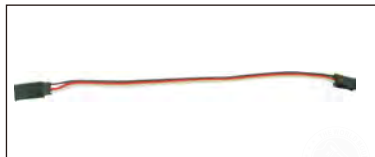
# Optional Parts

## (TWM ACCESSORIES)

### 180mm Extension

Code No.	Size	Package
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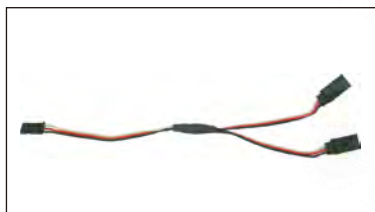
KW0011800 180mm 1 set



### 180mm Y-Cord

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

KW0021800 180mm 1 pc



### Charge Receptacles

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

KP0041300



### Field Stand

Code No.	Size	Package
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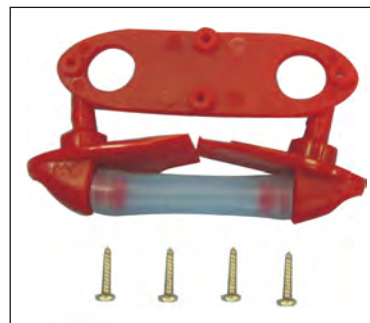
MS9111430 600 x 240 x 310mm 1 pc



### Fuel Filter

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

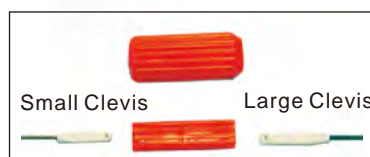
PL8110030 15 x 22 x 49mm 1 x 1 pc



### Clevis Wrench

Code No.	Size	Package
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PL8210010 1 set



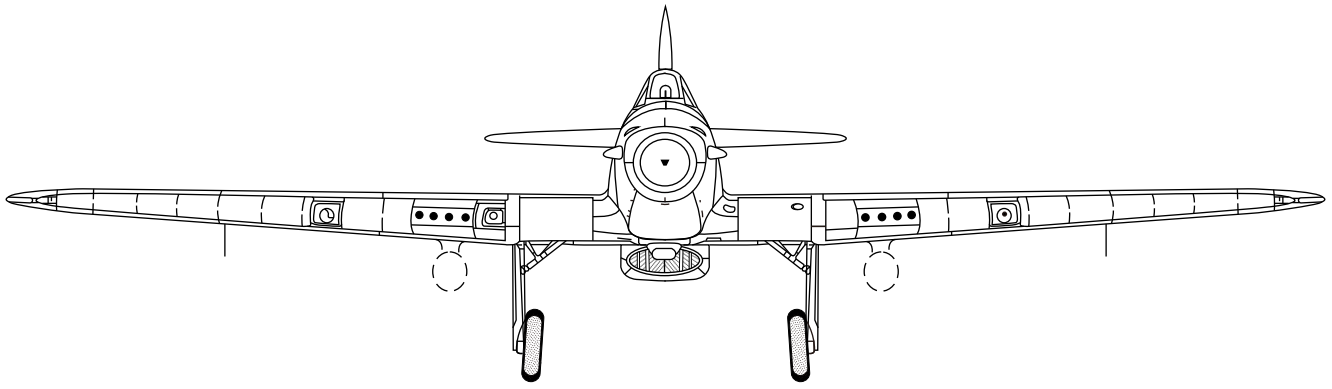
Special tool for clevis installation.  
Suitable for standard and small (EP)clevis.

### Standard Servo

Code No SV4031



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)**



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