

Tai Ji - 40S



0.40 cu. in. displacement 2-cycle
0.52 cu. in. displacement 4-cycle
Radio required: 5 channels, 6 servos airplane radio

Specifications

Wing Span	55.0 in / 1400mm
Wing Area	584 sq. in. / 37.7 sq. dm
Flying Weight	5.5 lbs / 2600 g
Fuselage Length	55 in. / 1400mm

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.



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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 be difficult to extend to the good parts that are good before gluing to defective parts during assembly.
- 3 Symbols used throughout this instruction manual comprise of the following:--



Apply epoxy glue.



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



Assemble left and right
sides the same way.



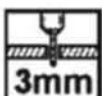
Ensure smooth non-binding
movement while assembling.



Peel off shaded portion
covering film.



Cut off shaded portion.



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



Must be purchased separately!



Pay close attention here!



Warning!



Pierce the shaded portion
covering film.

Do not overlook this symbol!

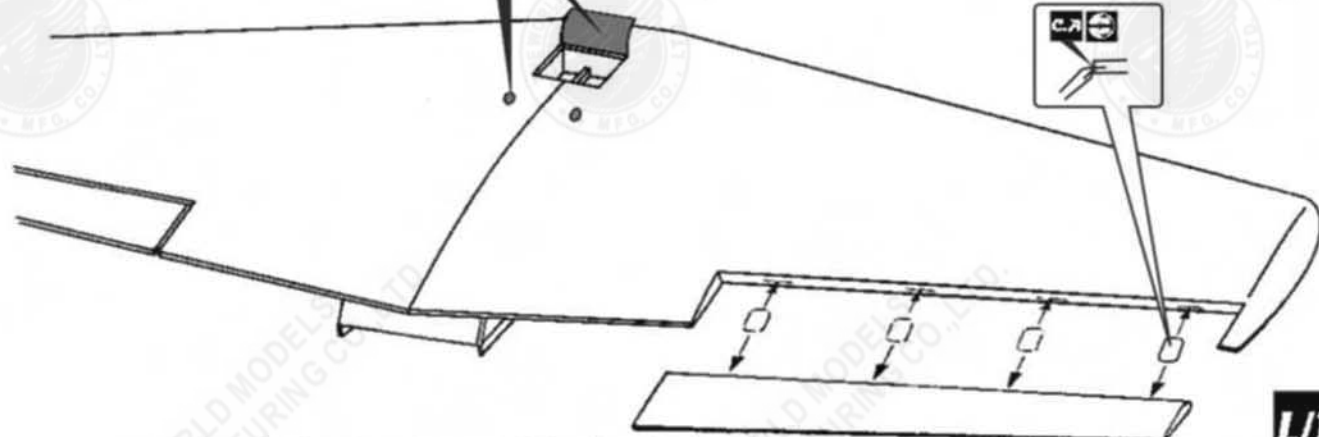


Parts List

1. FUSELAGE -- 1 pc.
2. MAIN WING -- 1 pair
3. STABILIZER & ELEVATOR -- 1 set
4. VERTICAL FIN & RUDDER -- 1 set
5. CANOPY -- 1 set.
6. COWLING -- 1 pc.
7. PILOT(#PC001050B) 1 pc.
8. SPINNER Ø57mm -- 1 pc.
9. ENGINE MOUNT PL5111-050 -- 1 set
10. FUEL TANK 320cc -- 1 set
11. SPONGE 10x80x200mm(For Radio Equipment) -- 2 pcs
12. TAIL LANDING GEAR -- 1 set
13. MAIN WHEEL Ø50mm -- 2 pcs
14. TAIL WHEEL Ø23mm -- 1 pc
15. PUSHROD, PUSHWIRE & PULLWIRE:--
COPPER TUBE d2.0 x D2.4x8mm (For Rudder) -- 4 pcs.
METAL ROD Ø1.8 x 27mm (For Rudder) -- 2 pcs.
METAL ROD Ø1.8 x 27mm w/Threads (For Rudder) -- 2 pcs
METAL ROD Ø1.8 x 90mm w/Threads (For Aileron) -- 2 pcs
METAL ROD Ø1.8 x 120mm (For Elevator) -- 1 pc
METAL ROD Ø1.8 x 175mm w/Threads (For Elevator) -- 1 pc
METAL ROD Ø1.8 x 180mm w/Threads (For Elevator) -- 1 pc
PLASTIC TUBE d2 x D3x50mm (For Ruder) -- 2 pcs
PLASTIC TUBE d2 x D3x800mm (For Elevator) -- 2 pcs
WIRE Ø0.8 x 750mm (For Rudder) -- 2 pcs
WOODEN ROD Ø8 x 580mm (For Elevator) -- 1 pc
16. THROTTLE PUSHWIRE Ø1.2x410mm
w/Plastic tube d2 x D3 x 240mm -- 1 set
17. METAL ROD Ø 1.8 x 105mm
w/Plastic tube d2 x D3 x 105mm(For Belly Pan) -- 1 set
18. WOODEN PARTS : --
BALSA 8 x 8 x 74.5 mm (For Fixing Fuel Tank) -- 1 pc.
BALSA 5 x 5 x 57 mm (For Servos Stand) -- 4 pcs.
BALSA 8 x 10 x 60 mm (For Rudder Servo Stand) -- 2 pcs.
PLYWOOD 3 x 57 x 91 mm (Elevator Servo Stand) -- 2 pcs.
PLYWOOD 3 x 60 x 88 mm (Elevator Servo Stand) -- 2 pcs.
19. PLASTIC PARTS : --
CLEVIS -- 6 pcs
HORN -- 4 sets
HORN (w/o-Base For Rudder) -- 2 sets
STRAPER -- 3 pcs
SLEEVE (For Belly Pan) -- 2 pcs
SILICON GROMMET d1.5 x D6.5mm
(For Cowling & Canopy) -- 10 pcs
20. METAL PARTS : --
LINKAGE CONNECTOR 2.1mm -- 3 sets
COLLAR 2.1mm w/set screw -- 1 set
COLLAR 4.1mm w/set screw -- 2 sets
NUT 2mm -- 2 pcs
NUT 3.5mm -- 8 pcs
SCREW PA3 x 12mm -- 2 pcs
SCREW PM2 x 16mm -- 4 pcs
SCREW PM2 x 20mm -- 6 pcs
SCREW PM3.5 x 30mm -- 4 pcs
SCREW PM4 x 25mm -- 4 pcs
SCREW PM4 x 35mm -- 2 pcs
SCREW PWA2.3 x 8mm -- 6 pcs
SCREW PWA2.6 x 12mm -- 4 pcs
WASHER d3.5 x D8mm -- 8 pcs
WASHER d4 x D9mm -- 4 pcs
WASHER d4 x D15mm -- 2 pcs
21. FUEL TUBE Ø 6 x 5mm : -- 9 pcs
HEAT-SHRINK TUBE Ø8 x 40mm -- 2 pcs
22. DECALS (P/N:ST200 058) -- 1 set

1 Main Wing

Peel off shaded portion covering film

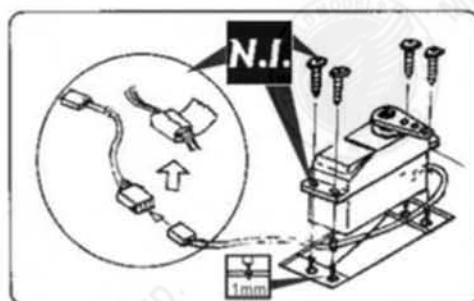


● Apply instant type CA glue to both sides of each hinge.

L/R

2 Aileron Servo

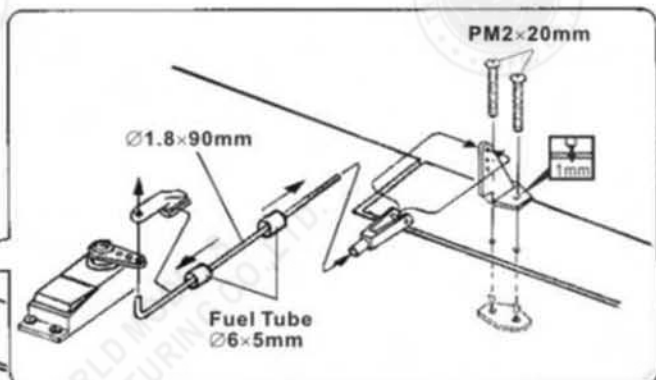
Peel off shaded portion covering film.



L/R

3 Aileron Servo

PM 2×20mm Screw
4



L/R

4 Main Landing Gear

KA3×14mm Screw

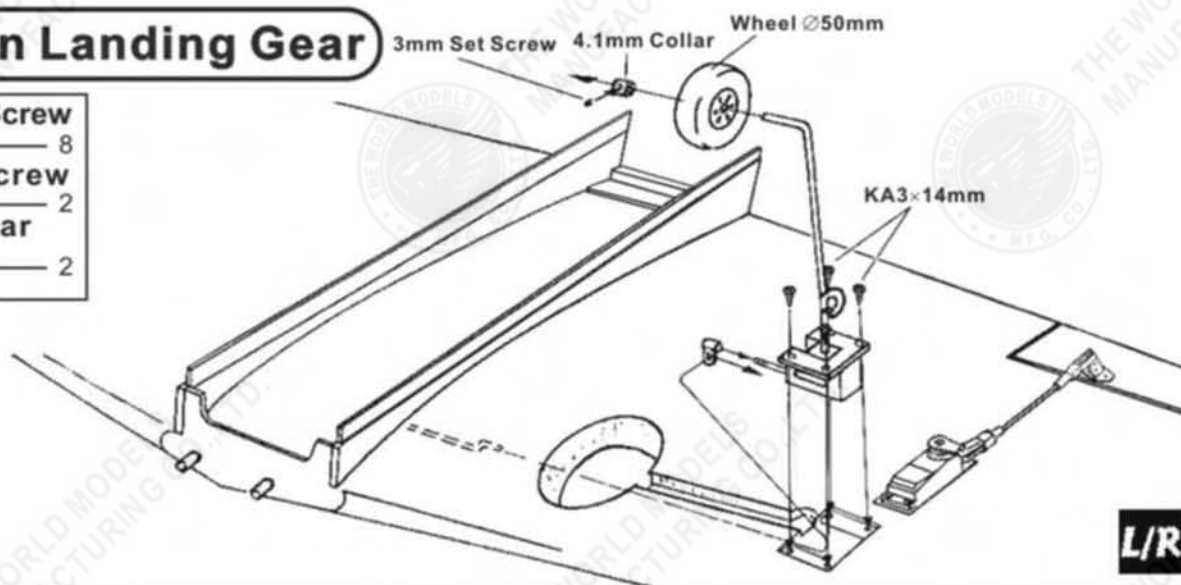
3mm Set Screw

4.1mm Collar

Wheel Ø50mm

KA3×14mm

L/R



5 Landing Gear Servo

LINKAGE CONNECTOR

3mm Set Screw

Linkage Connector

2mm Nut

2mm Washer

1.5mm

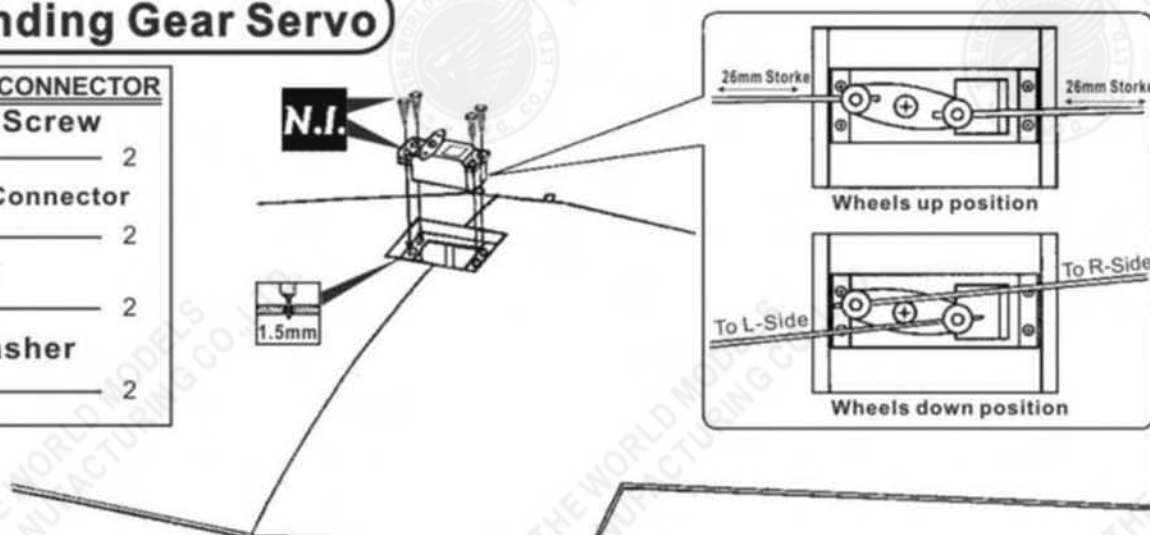
N.I.

Wheels up position

To L-Side

To R-Side

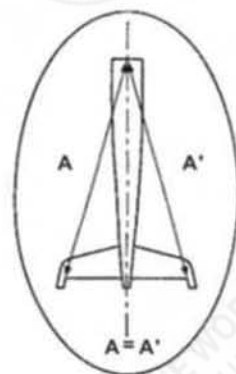
Wheels down position



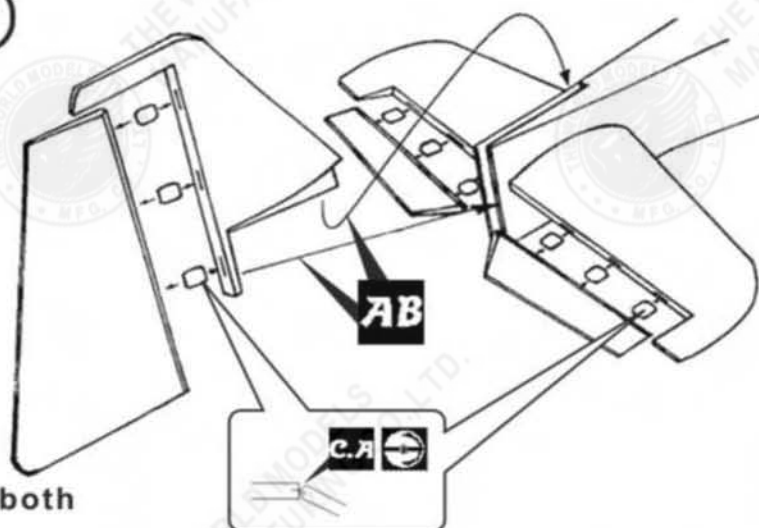
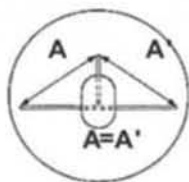
6 Stabilizer

AB

AB



7 Vertical Fin/Rudder



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

8 Tail Landing Gear

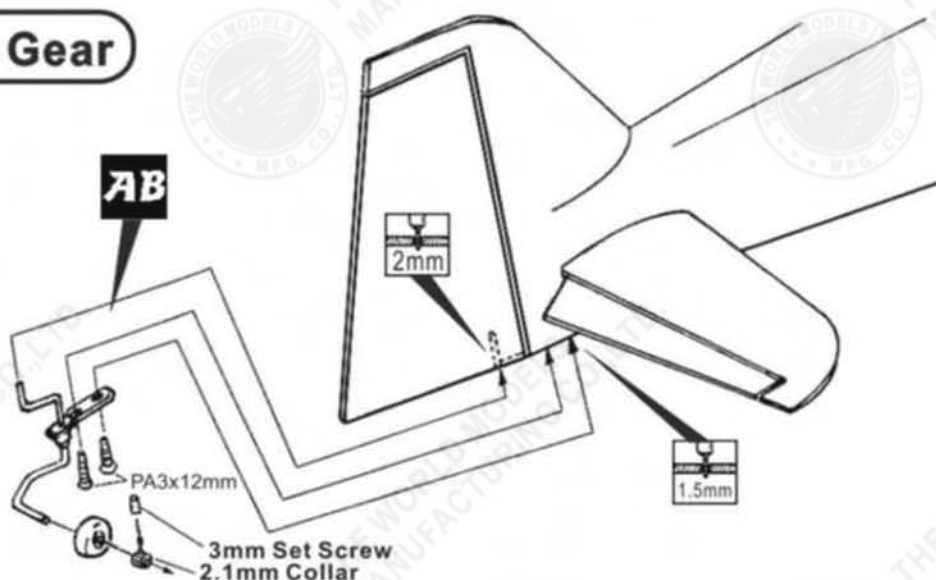
PA3×12mm Screw

3mm Set Screw

2.1mm Collar

2.1mm Collar

2.1mm Collar



9 Engine Mount

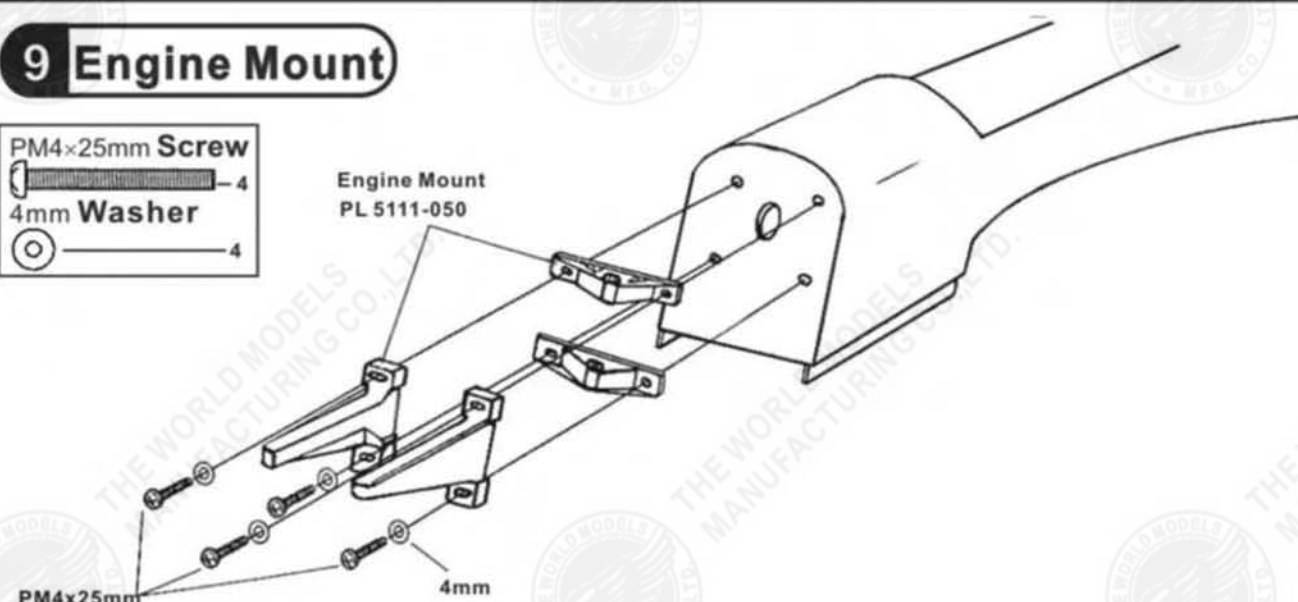
PM4×25mm Screw

4mm Washer

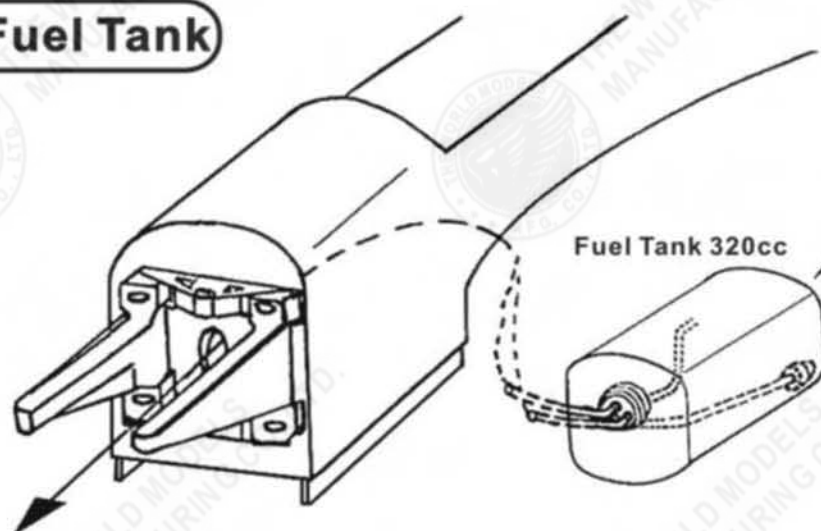
4mm Washer

4mm Washer

Engine Mount
PL 5111-050



10 Fuel Tank



Install Balsa & Plywood for fixing fuel tank
Balsa 8-8-74.5mm

Fuel Tank

● Bottom View

11 Engine

PM3.5×30mm Screw

d3.5×D8mm Washer

3.5mm Nut

8

8

Plastic tube
d2×D3×240mm

Throttle Pushwire
Ø1.2×410mm

● Apply thread locker to screws.

Install Engine Position

Spinner
Ø57mm

115mm
4.53in.

Fire Wall

3.5mm

PM3.5×30mm

12 Elevator Pushrod

1.8×120mm

Heat-shrink Tube

Ø1.8×180mm

5mm

Ø1.8×175mm

1.8×180mm

8×580mm

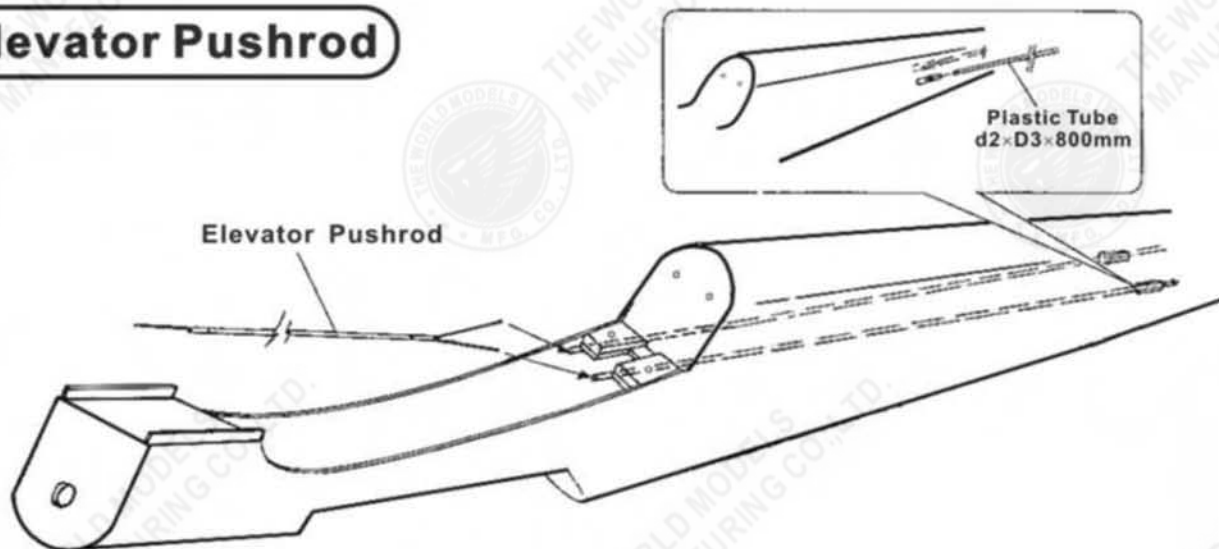
1.8×175mm

Fuel Tube
Ø6×5mm

Be careful not to scorch
the heat-shrink tube !

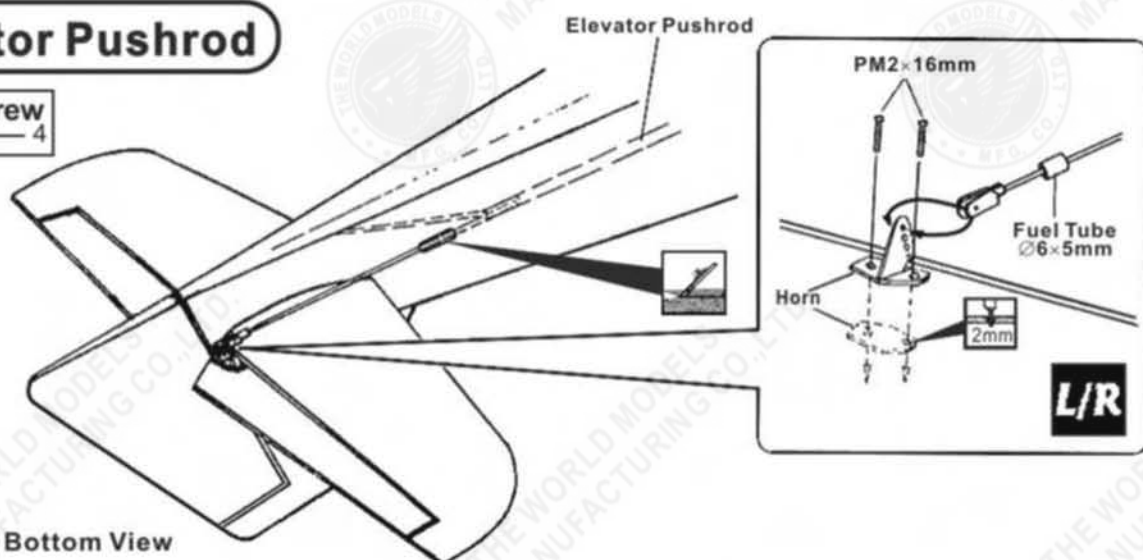
Completed

13 Elevator Pushrod



14 Elevator Pushrod

PM 2x16mm Screw 4



15 Servo Set

LINKAGE CONNECTOR

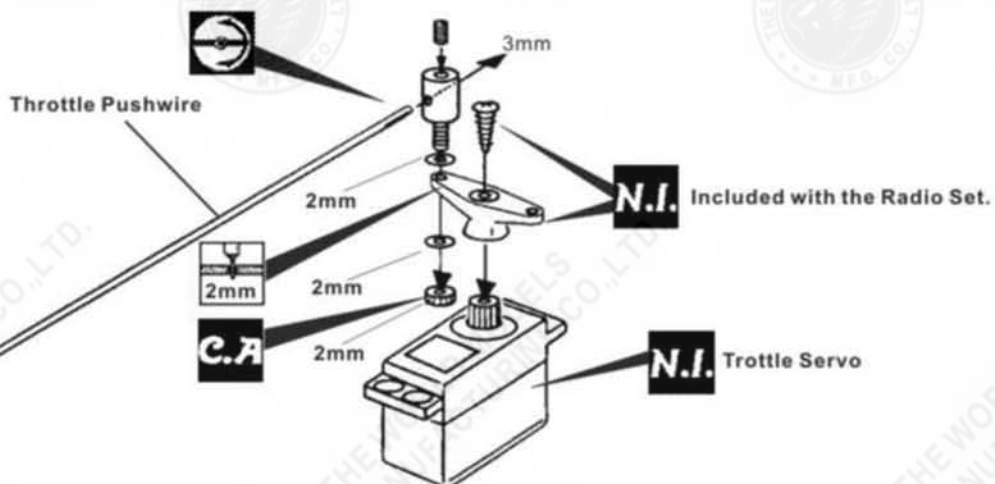
3mm Set Screw 1

Linkage Connector 1

2mm Nut 1

2mm Washer 1

2mm Washer 2



! Please refer to attached sheet for linkage connector installation.

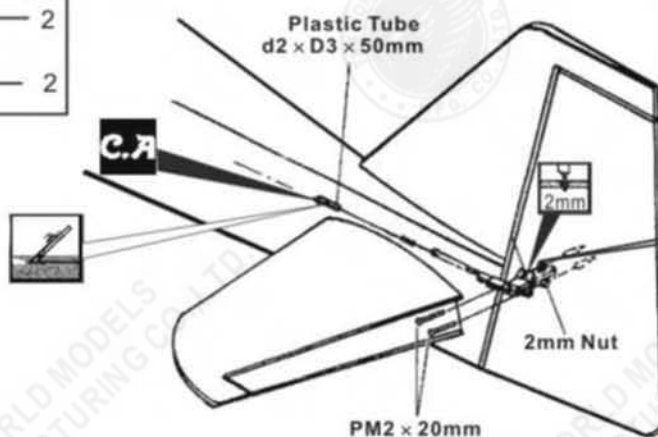
16 Rudder Pushwire

PM 2x20mm Screw

2

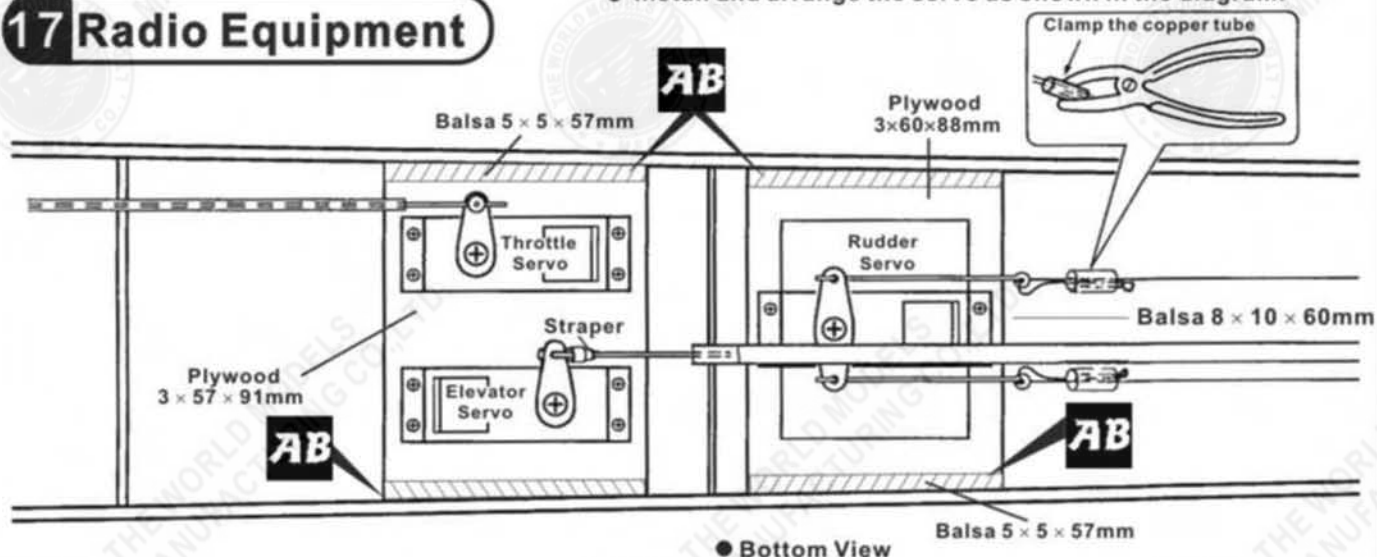
2mm Nut

2



17 Radio Equipment

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



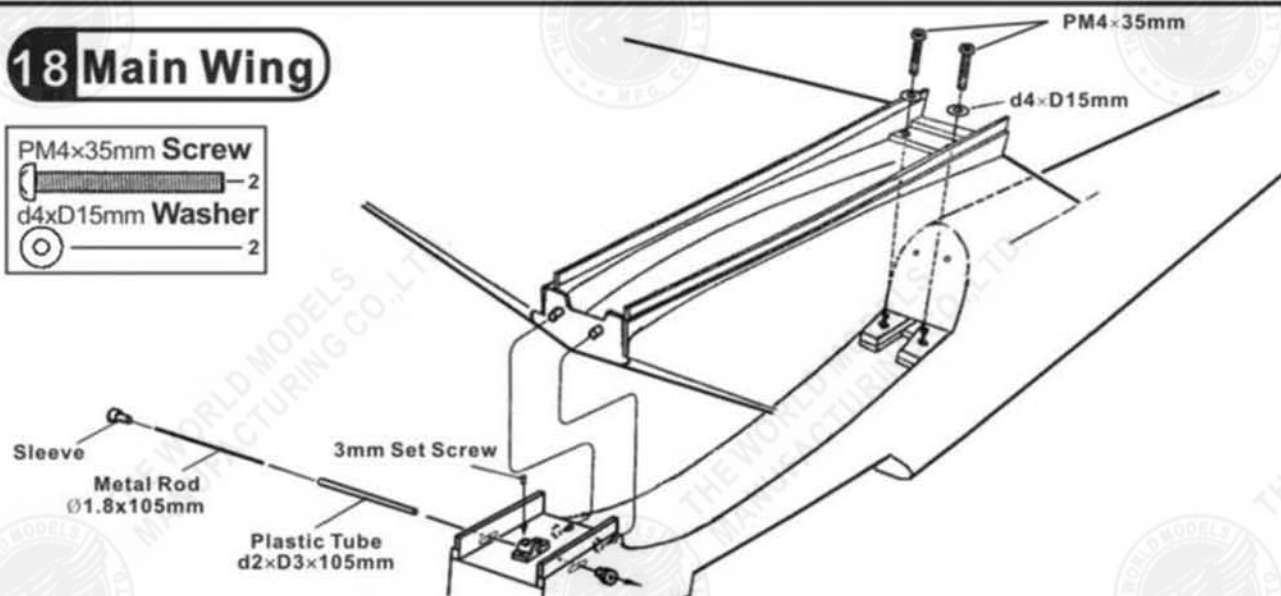
18 Main Wing

PM4x35mm Screw

2

d4xD15mm Washer

2



19 Cowling

PWA2.6 x 12 mm Screw

4

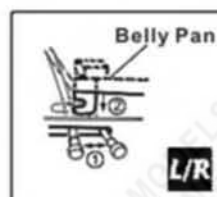
d1.5 x D6.5 mm Silicon Grommet

4

Silicon Grommet
d1.5xD6.5mm

PWA2.6x12mm

20 Belly Pan



21 Canopy

PWA2.3 x 8 mm Screw

6

d1.5 x D6.5 mm Silicon Grommet

6

Silicon Grommet
d1.5xD6.5mm

PWA2.3x8mm

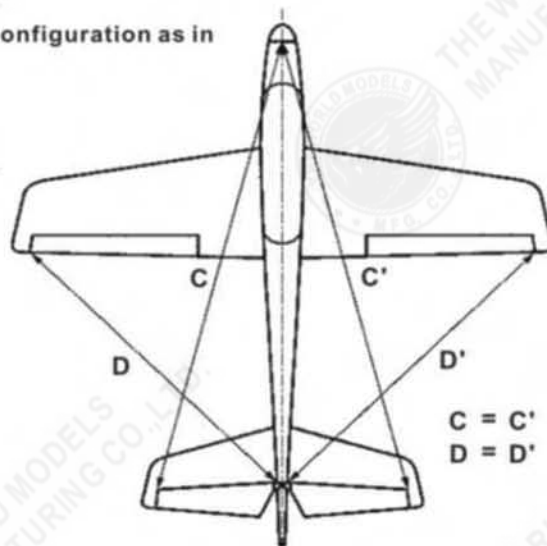
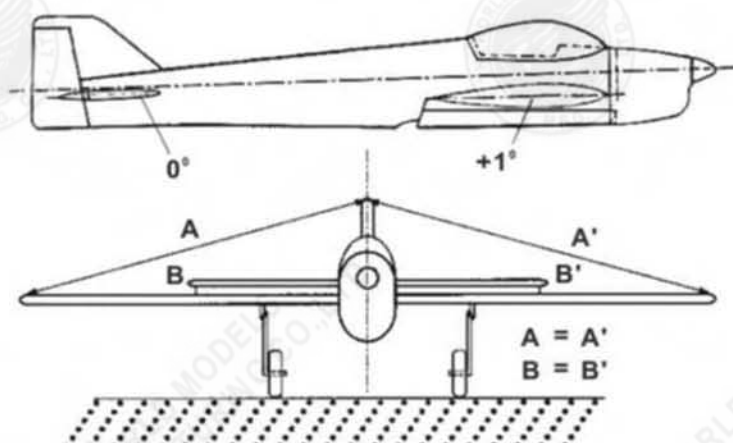
Pilot

1mm

L/R

22 Wing Setting

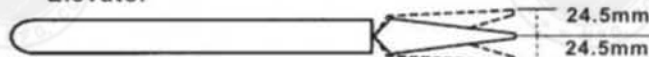
Adjust the wing and fuselage configuration as in the diagrams.



23 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.

Elevator



Rudder



Aileron



24 C.G.

The ideal C. G. Position is 135mm(5.31in.) 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.
- #**Tai Ji - 40S** is specially designed to be powered by 2C 0.40 or 4C 0.52 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.

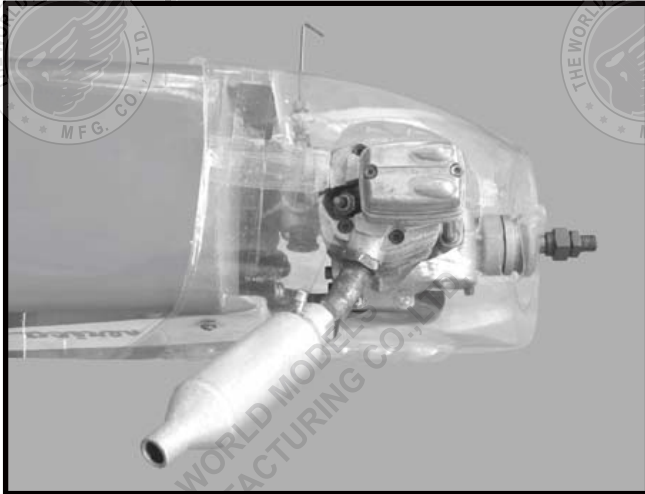
A084S0401

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.