

P-47D THUNDERBOLT EP



**Requires : 5-channel radio w/ 5 micro servos,
Outrunner Motor KM0283010
w/ Propeller Adaptor HW2340100,
20A brushless ESC, 3 cells 11.1V
2100 mAh Li-Po battery & charger.**

Specifications

Wing Span	39.5 in / 1000 mm
Wing Area	282 sq in / 18.2 sq dm
Flying Weight	31 oz / 880 g
Fuselage Length	34 in / 870 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 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

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

P-47D THUNDERBOLT 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 :-



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).



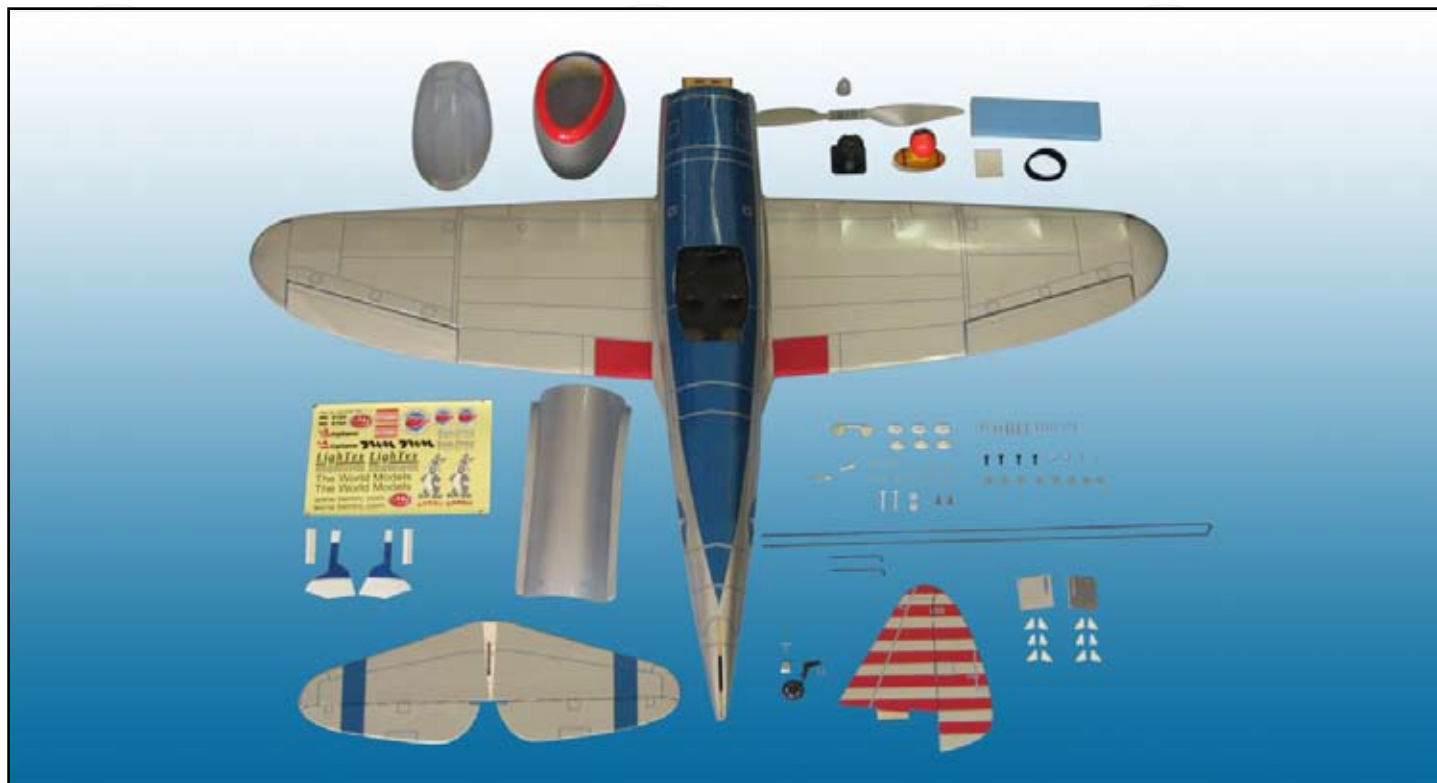
Pierce the shaded portion
covering film.



Pay close attention here!



Do not overlook this symbol !

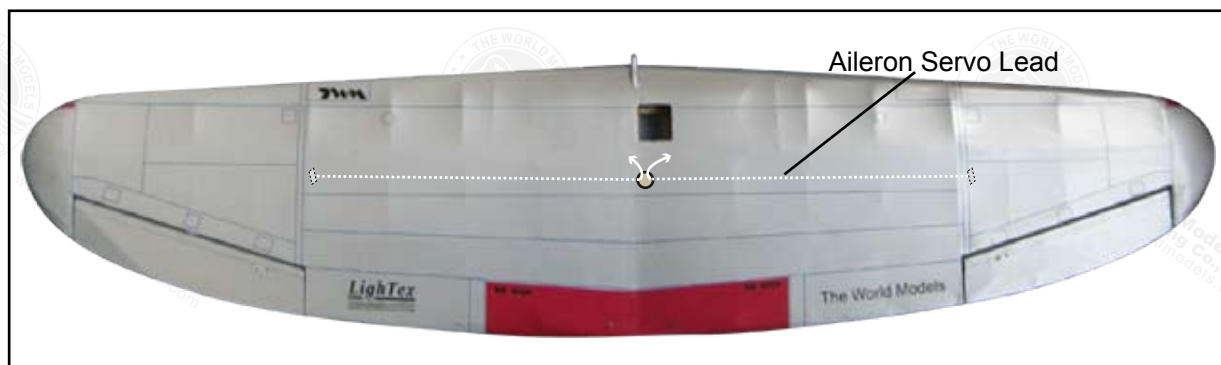
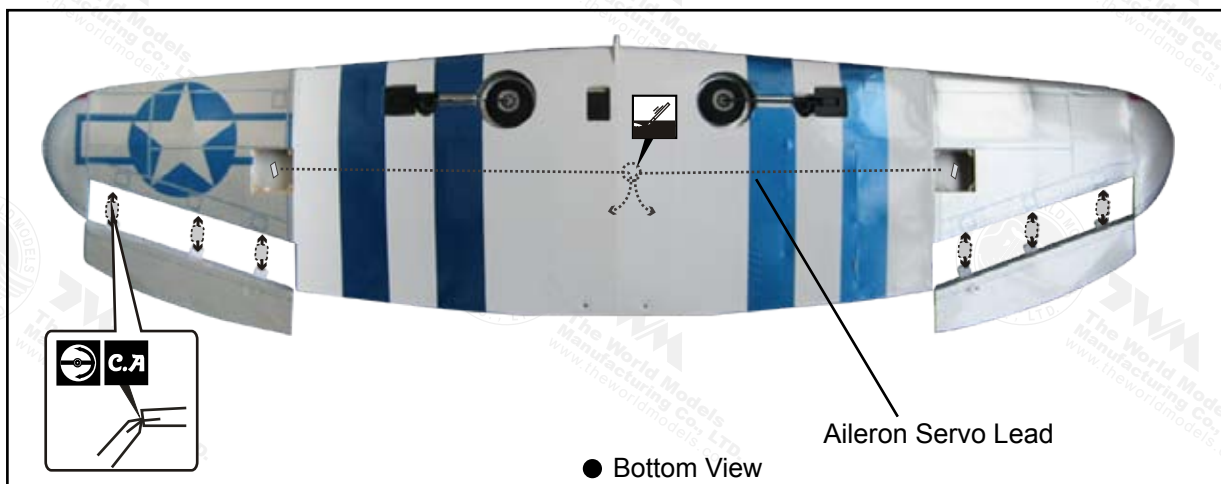


Parts List

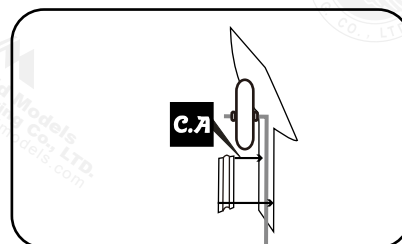
1. MAIN WING – 1 pc.
 2. RETRACTABLE LANDING GEAR – 1 pair
SCREW KA2.3x8mm – 8 pcs
COLLAR Ø2.6mm w/ Set Screw – 2 pcs
MAIN WHEEL Ø40mm – 2 pcs
RETRACTABLE LANDING GEAR COVER – 2 sets
 3. LINKAGE CONNECTOR Ø2.1mm w/ Set Screw – 2 sets
 4. SCREW PB2x18mm – 4 pcs
SCREW PA1.7x8mm – 8 pcs
SREVO MOUNTING PANEL – 1 pair
FUEL TUBE d2xD4x4mm – 4 pcs
STRAPER – 2 pcs
CLEVIS – 2 pcs
HORN – 2 sets
PUSHROD Ø1.4x56mm w/ Threads (For Aileron) – 2 pcs
 5. STABILIZER & ELEVATOR – 1 set
FUSELAGE – 1 pc.
SCREW PB2x8mm – 2 pcs
ELEVATOR LINK PL4510010 – 1 pc.
 6. VERTICAL FIN & RUDDER – 1 pc.
TAIL LANDING GEAR – 1 pc.
TAIL WHEEL Ø23mm – 1 pc.
ALUMINUM PLATE 0.3mm – 1 pc.
PLASTIC COLLAR d1xD5x2mm – 2 pcs
SCREW PA2x8mm – 2 pcs
SCREW PM2x8mm – 1 pc.
M2 NUT – 1 pc.
 7. PUSHROD Ø1.4x475mm w/ Threads (For Rudder) – 1 pc.
FUEL TUBE d2xD4x4mm – 1 pc.
CLEVIS – 1 pc.
HORN – 1 set
SCREW PB2x10mm – 2 pcs
 8. PUSHROD Ø1.4x477mm w/ Threads (For Elevator) – 1 pc.
FUEL TUBE d2xD4x4mm – 1 pc.
CLEVIS – 1 pc.
 9. SOCKET HEAD SCREW M2.5x8mm – 4 pcs
SCREW PM3x6mm – 4 pcs
SCREW PM2x12mm – 2 pcs
SCREW PWA2x8mm – 4 pcs
WASHER d3xD7mm – 8 pcs
MOTOR MOUNT PL5440000 – 1 pc.
FOLDING PROPELLER SET PL6314030 – 1 set
COWLING – 1 pc.
EP SPINNER NUT Ø15mm (PL23G0150) – 1 set
 10. BATTERY TIE 200mm – 1 pc.
FUEL TUBE d2xD4x4mm – 2 pcs
STRAPER – 2 pcs
SPONGE 10x50x150mm – 1 pc.
DOUBLE-SIDED TAPE 30x35mm – 1 pc.
 11. NYLON WASHER d2.6xD9mm – 2 pcs
NYLON SCREW PM2.5x20mm – 2 pcs
BELLY PAN – 1 pc.
 12. CANOPY – 1 pc.
SCREW PWA2x8mm – 4 pcs
PILOT (PC101042B) – 1 pc.
 13. DECALS: E242XMDEC – 1 set
- COVERING:-
LIGHTEX SGX 100 WHITE
LIGHTEX SGX 550 PEARL BLUE
LIGHTEX SGX 242000
LIGHTEX SGX 242001

1 Main Wing

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



2 Retractable Landing Gear

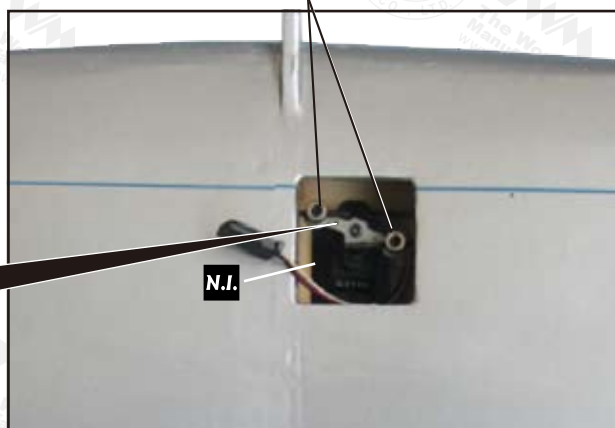
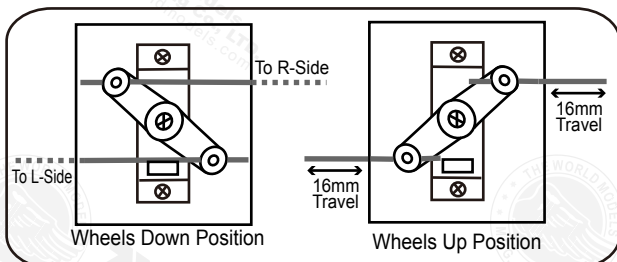


L/R

3 Retract Servo

! Please refer to the attached sheet for linkage connector installation.

N.I. Linkage connector



4 Aileron Servo

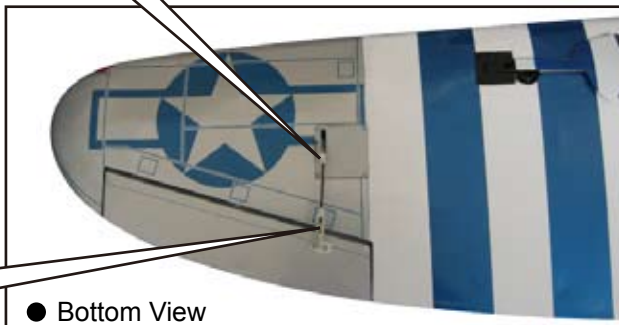
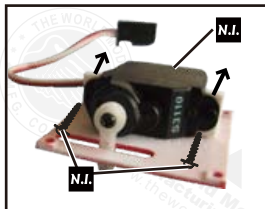
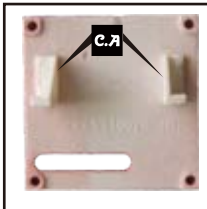
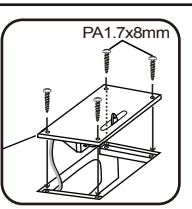
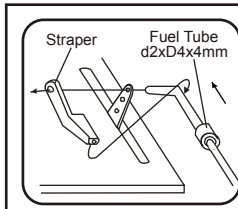
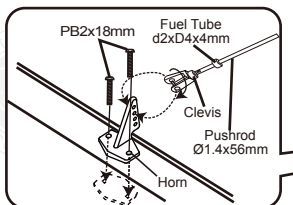
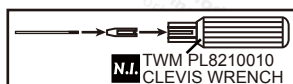
● Ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

PB2x18mm Screw

4

PA1.7x8mm Screw

8



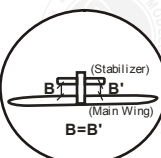
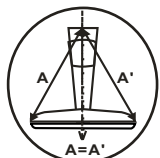
L/R

● Please choose either (02L & 02R) or (03L & 03R) or (04L & 04R) that suits your servo.

5 Stabilizer & Elevator

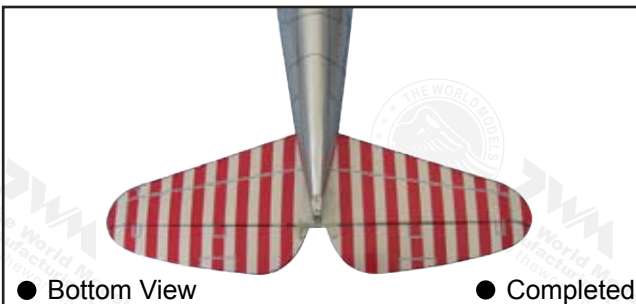
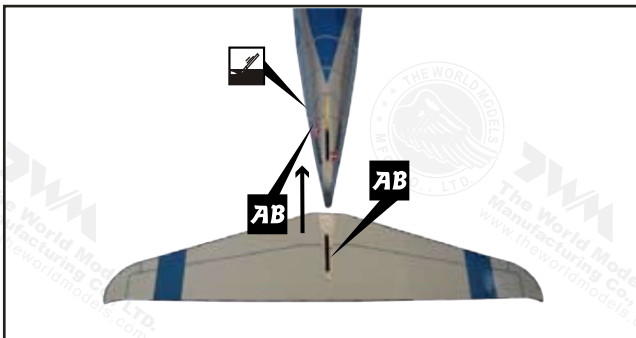
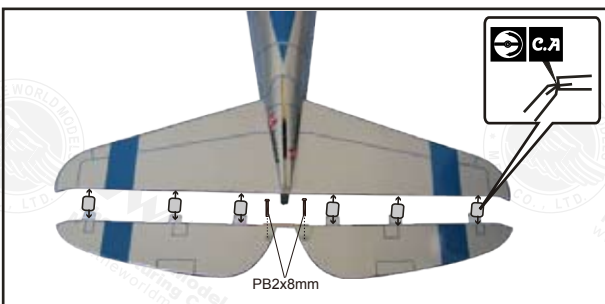
PB2x8mm Screw

2



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

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



6 Vertical Fin, Rudder & Tail Landing Gear

PA2x8mm Screw

2

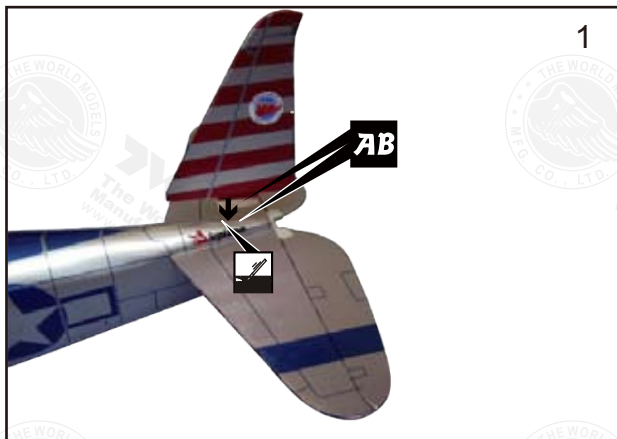
PM2x8mm Screw

1

M2 Nut



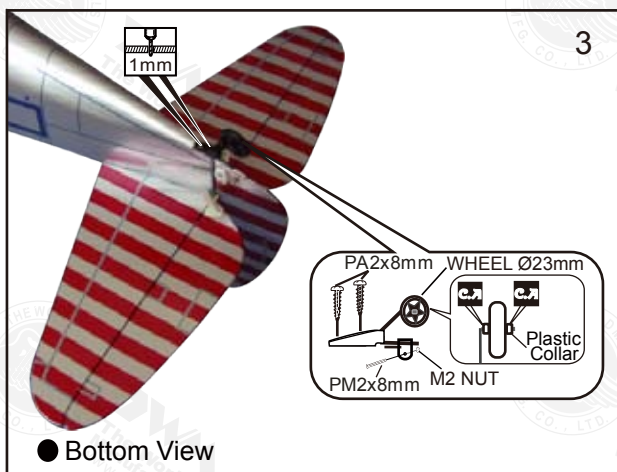
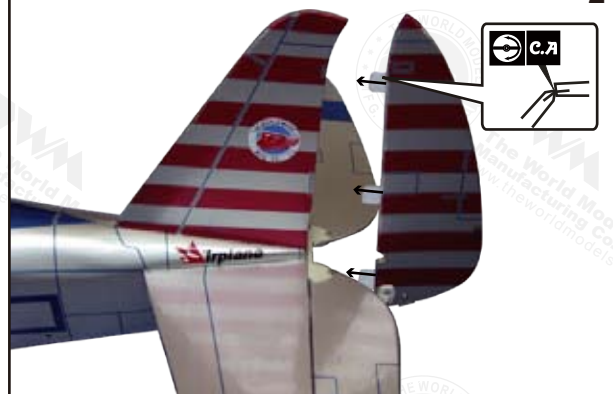
1



1

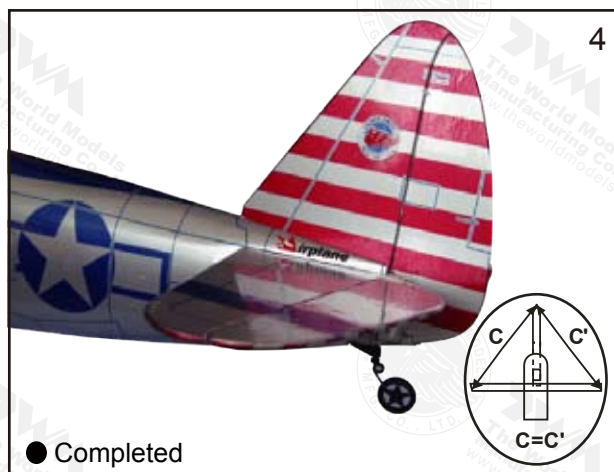
● Apply instant type CA glue to both sides of each hinge.

2



3

● Bottom View



4

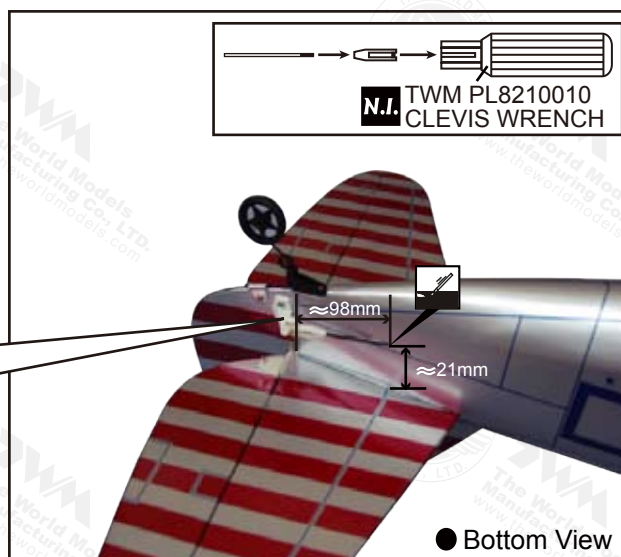
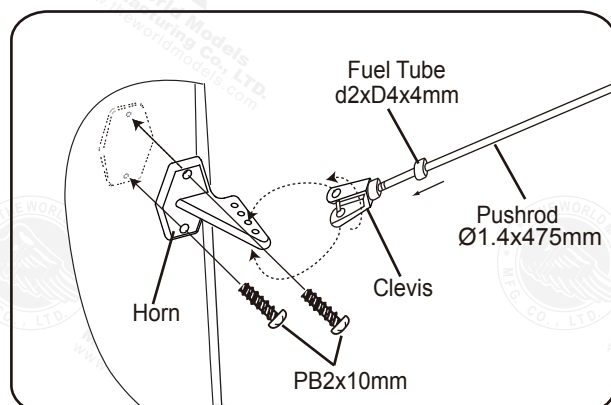
● Completed

7 Rudder Pushrod

PB2x10mm Screw

2

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

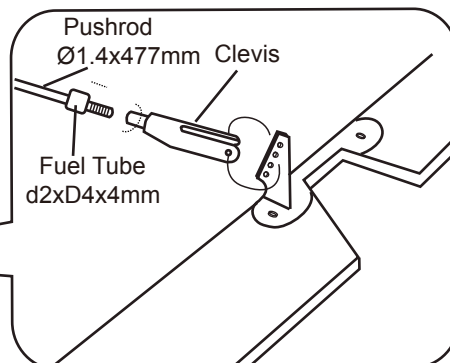
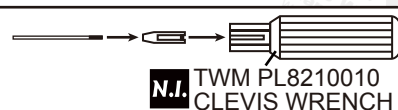
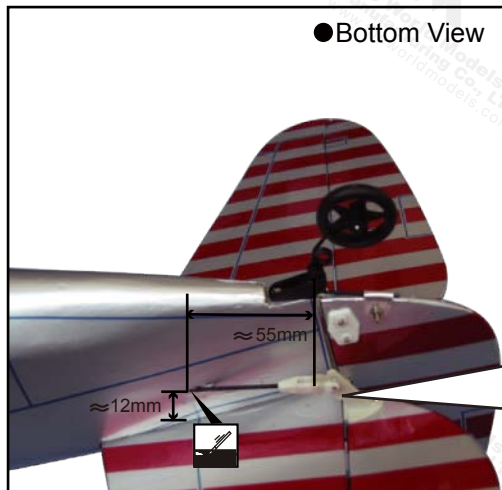


● Bottom View

8 Elevator Pushrod

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

● Bottom View



L/R

9 Outrunner Motor / Cowling

PWA2x8mm Screw

4

PM2x12mm Screw

2

PM3x6mm Screw

4

PA2.6x8mm Screw

2

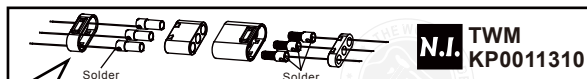
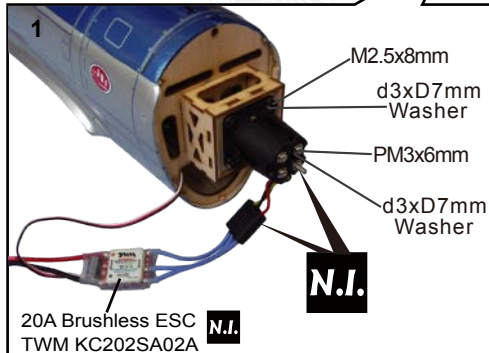
d3xD7mm Washer

8

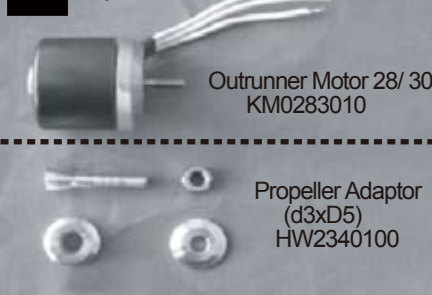
M2.5x8mm

Socket Head Screw

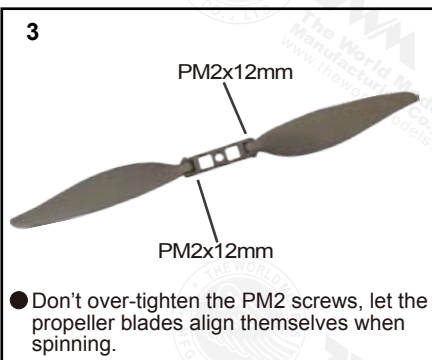
4



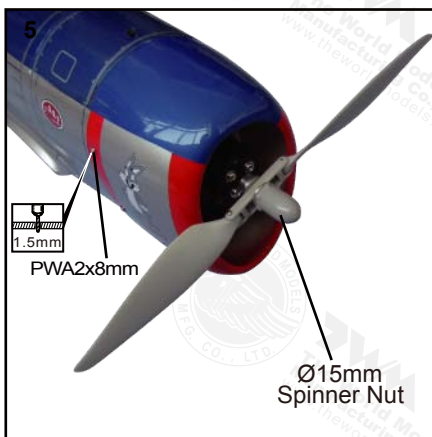
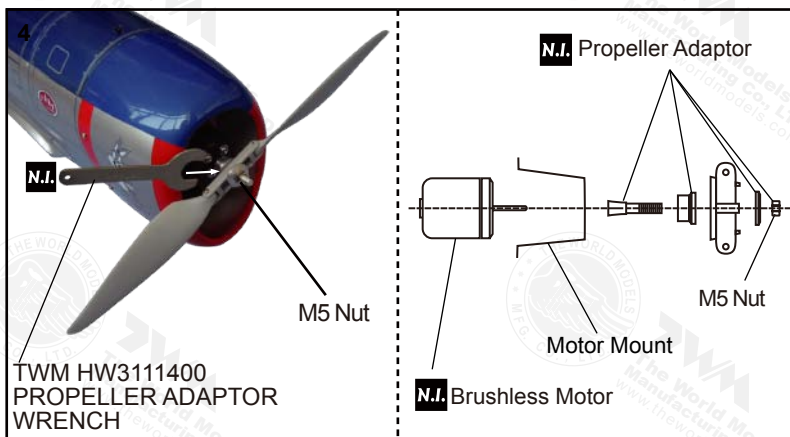
N.I. Optional Parts



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

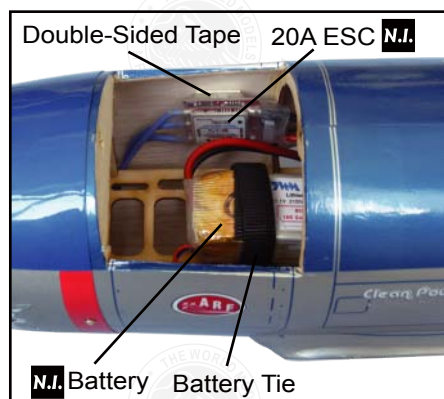
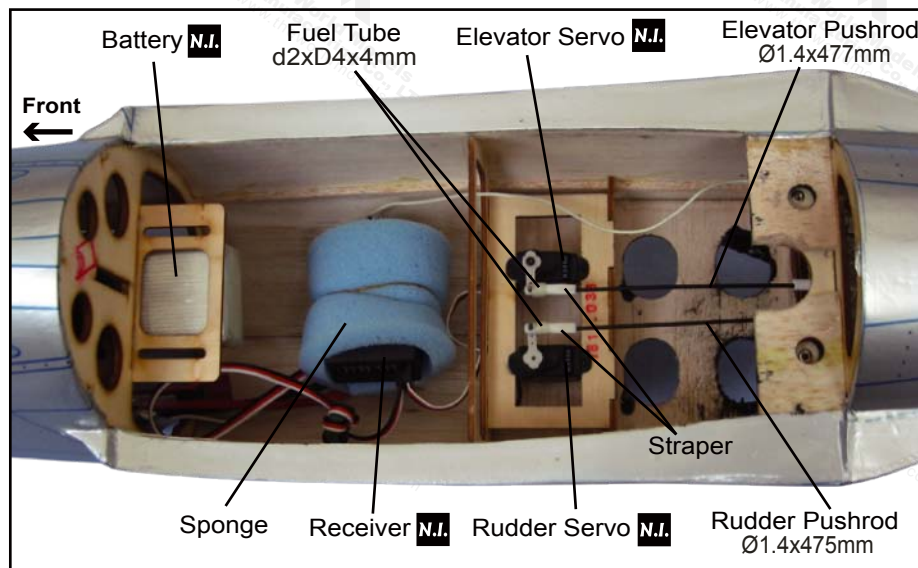


- Don't over-tighten the PM2 screws, let the propeller blades align themselves when spinning.



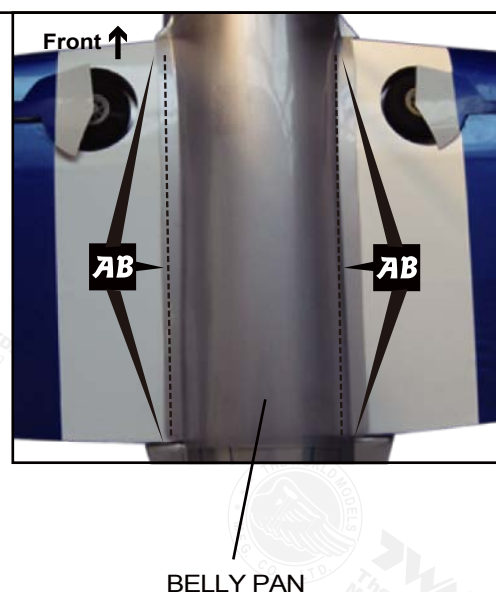
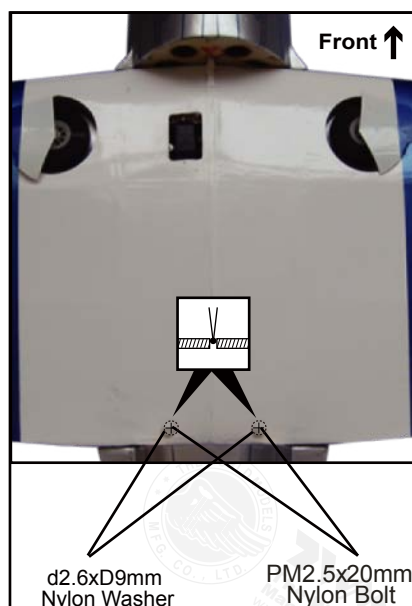
10 Radio equipment

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



11 Main Wing

- PM2.5x20mm NYLON BOLT 2
 d2.6xD9mm NYLON Washer 2



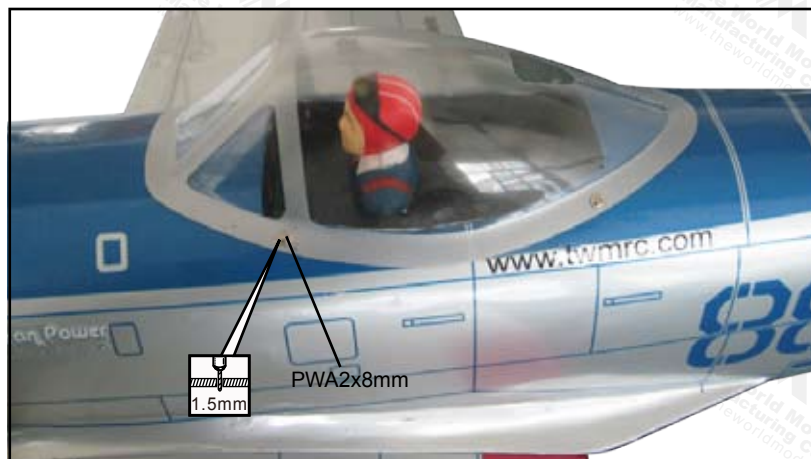
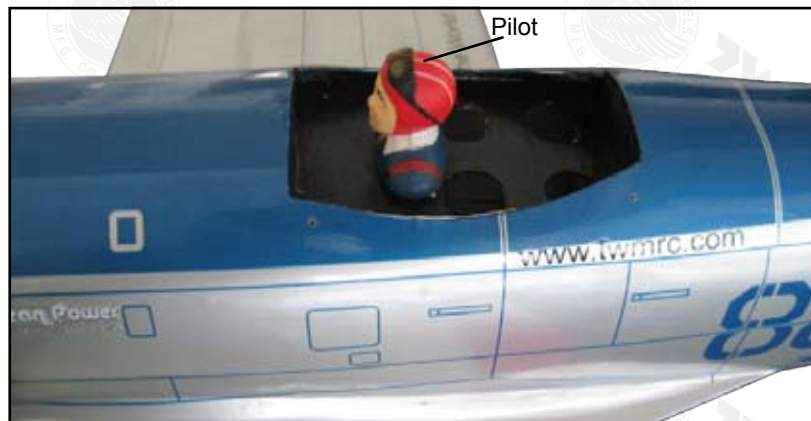
●Bottom View

12 Canopy

PWA2x8mm Screw



Canopy

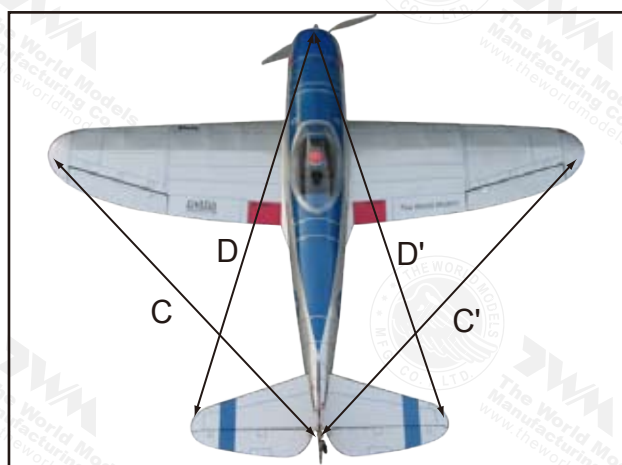
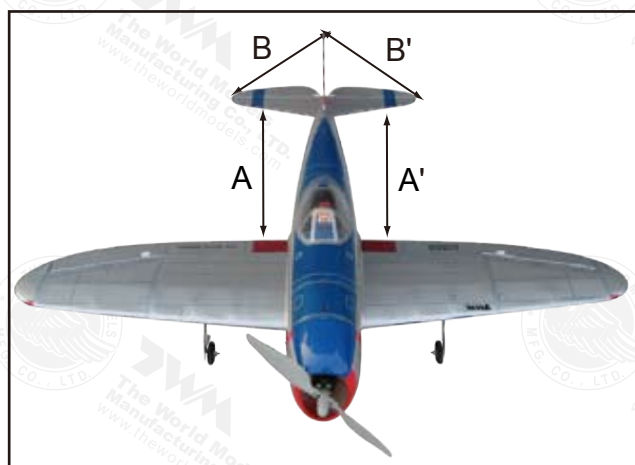


L/R

13 Wing Setting

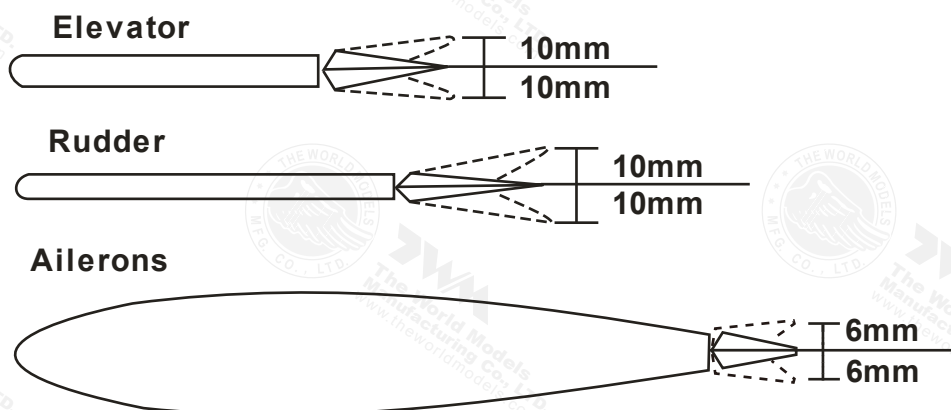
● Adjust the wing and fuselage configuration as shown in the diagrams.

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



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 **68mm (2.7in)** 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.



- Measure **C.G.** with the wheels in retracted position.

! 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.
- # **P-47D THUNDERBOLT EP** is specially designed to be powered by **KM0283010 Outrunner Motor**.
- # 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.

Optional Parts

(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

Propeller Adaptor Wrench

Code No.	Size	Package
HW3111400		1 pc



Brushless ESC

Code No.	Size	Package
KC2025A02A	24x45x11mm	1 pc



- Voltage Range : 5.6 ~ 16.8V
- Current : 25A continuous
- Current (Burst, <10 seconds): 30A
- Weight : 24 g
- (with wires and connector)
- BEC : 5V / 2A
- Low Voltage Cut-off : /
- Light weight with low internal resistance for high current operation
- BEC function for Li-ion / Li-poly
- 2 – 4 cells; Nimh / Nicd 5 – 12 cells operation.
- Low battery voltage auto cut off to reserve power to the servos.
- Safe start up motor.

Clevis Wrench

Code No.	Size	Package
PI8210010		1 set



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

Propeller Adaptor

Code No.	Size	Package
HW2340100	d3xD5	1 set



Outrunner 28/ 30

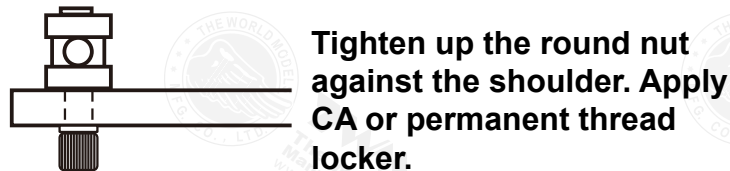
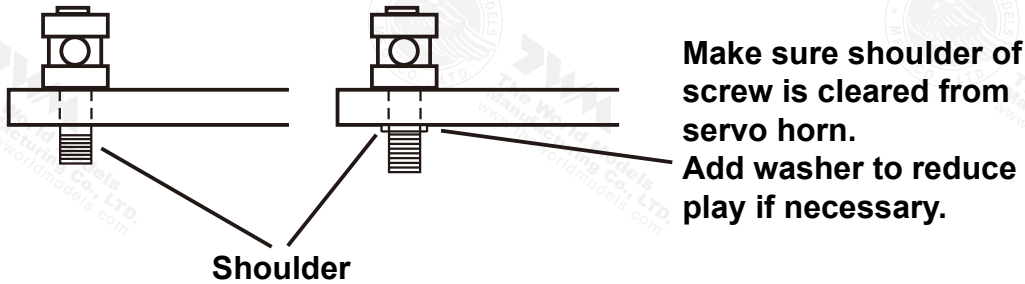
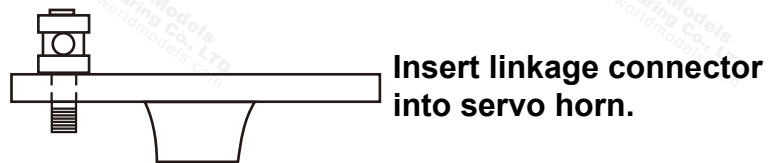
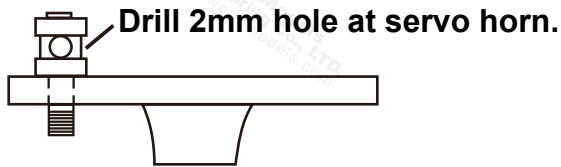
Code No.	Package
KM0283010	1 pc



- Max speed: 12000 rpm
- Kv (rpm/V): 1015
- Operating Power: 180W
- Operating Voltage: 6-12V
- Operating Current: 15A
- Peak Current: 20A (max. 15 sec.)
- Internal Resistance: 95 m ohms
- Diameter: 28mm
- Length: 30mm
- Weight: 60g
- Shaft Diameter: 3mm
- Shaft Length: 14.8 mm
- Mounting Screw: M3
- Distance of Mounting Holes: Front (16mm and 19mm)

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, 2403 Research Drive, Livermore, CA 94550 USA.

1. Name: _____

2. Address: _____

3. Phone #: _____ E-mail: _____

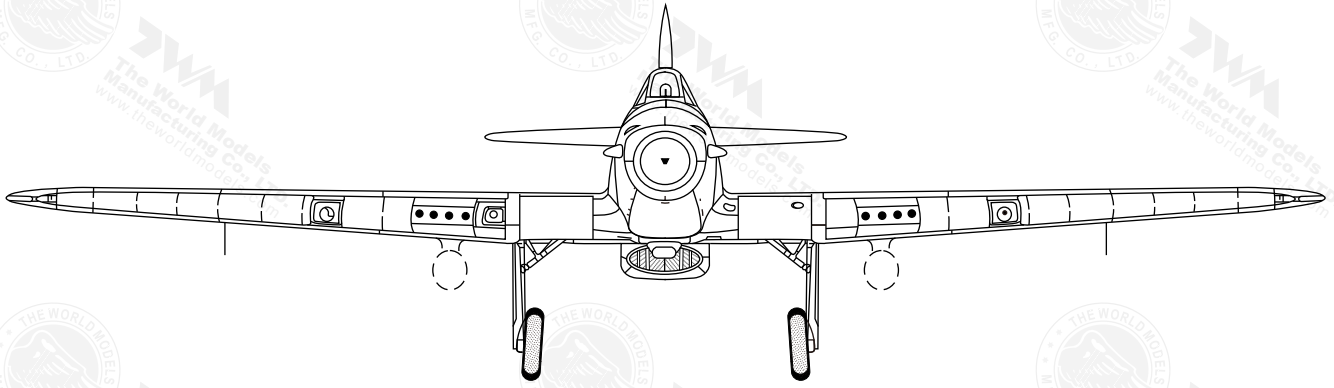
4. Model: _____

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.



Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer

Boat

Accessories

Covering

(Lightex / Toughlon)



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