



P-51D Mustang





MTH HOBBY PRODUCTS INDUSTRIAL CO., LTD. www.mth.com.tw mthhobby@mth.com.tw © MTH HOBBY 2016



SPECIFICATIONS

Wing Span: 1710mm Wing Area: 59.7 dm² Length: 1430mm

Total Weight: 3600g (with motor and battery 5000mAh)

Radio: 4 ~ 6(if use flap) channels

Motor: 560KV brushless

XM6350EA-6

Thrust: 4 KGS and up

Battery: Li-Po 6 cell 5000mAh and up

ESC: 100A

Engine: 20cc 2-stroke(Gas) .90-.120 4-stroke

Propeller for EP: 16 x 10" Propeller for GP: 16 x 10" (Gas) Propeller for GP: 15 x 10"

Warning

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, following all instructions included with your radio.

Before beginning the assembly, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.



Contents of Kit / Parts Layout

Recommended radio and equipment (Not included in kit):

For GP version:

6 or up channel radio x 1 piece Receiver x 1 piece Servos (45g) x 7 pieces(or 45g x 6+9g x 1) 16x10" propeller x 1 piece Y-harness x 3 piece 30cm Extension x 4 piece

For GP version:

6 or up channel radio x 1 piece Receiver x 1 piece Servos (45g) x 6 pieces 100 Amp or up brushless ESC x 1 piece 16x10" propeller x 1 piece Y-harness x 3 piece 30cm Extension x 4 piece

Tools and suppliers needed (not included in kit):

1.5/2.0/3.0mm hex wrench 1mm/2mm driller

Driller 2mm/3mm/4mm/5mm

Shrinking tube Z-bender

Sharp Hobby Knife Sharp-nose pliers

Sealing Iron Soldering Iron Phillips PH0/PH1

Ruler

Marker and transparent tape

Side-cut pliers

POWERED BY

DUALSKY

XC10036HV V2

30min Epoxy Instant glue Heat gun UHU glue

5min Epoxy

Color manual

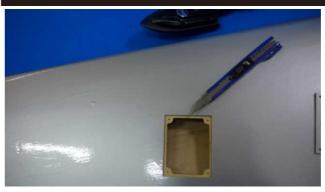


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Super glue



Please use sharp hobby knife or soldering iron to remove the covering.



Remove the covering out of the servo tray.



Remove the covering out of the slot on the aileron's servo cover.



Remove the covering out of the servo tray on the flap.



Remove the covering of out of the main gear mount.



Remove the covering out of the retracts mount and trim the edges with ironer.



Remove the covering out of the wing fixing



Try to find the exit hole for the servo line on the main wing. Remove the covering out of the hole.

XM6350-6 560KV Recommend!! XM5050-8 535KV

100 Amp brushless ESC



For the EP version: Place the fuselage upside down. Try to find the location of venting hole. Remove the covering out of the hole.



Spread some Super Glue on the top and bottom one-half of each hinge. Insert the hinges into the main wing until the hinge line is even with the trailing edge of the main wing.



Place the gear cover on the working table. Find the screw holes on the cover. Remove the covering out of the screw holes.



Try to find the rod holes for the horizontal and rudder. Remove the covering out of the holes.

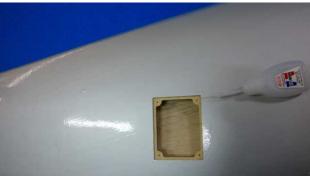


Place the fuselage upside down. Try to find the screw holes for the tail gear mount. Remove the covering out of the screw holes.



Spread some Super Glue to the remaining half of each hinge and place the aileron and flap onto the main wing. Secure the hinges with 2x15mm tapping screws. If the end of the screw is too long, use side-cutter to trim the end.

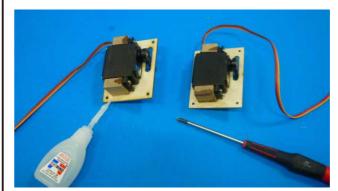




Drop some instant glue into the screw holes for the servo tray.



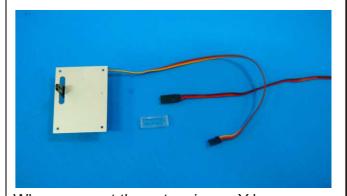
Drop some instant glue into the screws holes on the retracts mount.



Try to place the servo on the servo planking. Use instant glue to secure the servo planking on the cover. Set the servo arm to the center exit. Secure the servo in place with screws coming with servo.



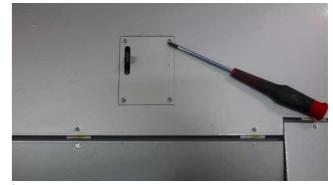
If use Y-harness on the flap, please install the left wing and right wing servos at the same side. If want to use mixer on the radio, the location of both servos must be on different side.



When connect the extension or Y-harness with the servo, please apply some tapes on the connections for avoiding losing off during flying.



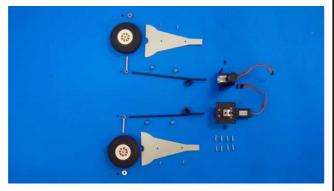
Pull the servo line out of the exit hole.



Secure the servo cover in place with M2.6x8 tapping screws.



Place the triangle rule along the servo arm to the trailing edge for setting the location for installing the control horn on the aileron. Use 1.5mm hand driller to drill holes for the control horn. Place the control horn in position and the strap on its back and secure with M2x25mm screws.



Place the accessories for the main gear on the working table:

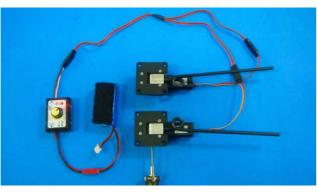
70mm round sponge wheels x 2 pieces
4mm collar x 6 pieces
axle x 2 pieces
M3 x 4 flat-head hex screw x 4 pieces
M3 x 8 flat-head hex screws x 2 pieces
wheel paints x 2 pieces
retracts x 2 pieces
left main gear x 1 piece
right main gear x 1 piece





Thread the clip to the rod. Slide one piece of 5mm silicone tube to the connection of the control horn and clip. Use Z-bender to make a Z bend on the rod for connecting with servo arm.

5



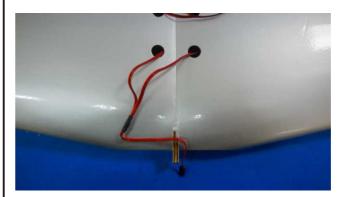
Caution: left main gear is different from right main gear. For identification, please set the gear up, secure the gear to retracts with M3x8 hex screws (the flat side of the gear must face the side screw holes of retract.



Spread generous amount of 30-min epoxy to the top and bottom of wing joiners, and wing root. Insert the wing joiners to the left and right main wing for securing both main wing together.



Use tapes and clip to hold the main wing set temporary until the glue is dried enough. Use tissue to wipe away the excess glue.



Pull the Y-harness from the retracts to the wire exit.



Place the main wing upside down. Try to find the Y-harness from the main gear mount. Plug the Y-harness and apply some transparent tape around the plug. Assemble the retracts on the main wing with M3x12 tapping screws.



Turn on the power and set the gear down. Install the vacuum-formed mounts for wheels on the main wing and secure them in place with instant glue.

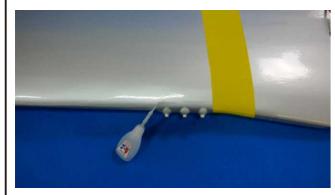


Use M3x6 flat-head screws to secure the collars on the wheel covers for temporary. Don't screw too tight.

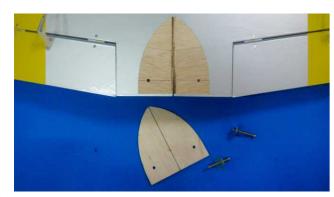


Assemble the gear covers to the gear mounts. Secure the axles to the main gear with M3x4 screws. Install the wheels and collars.

Turn on the power and set the gear up. Try to adjust the positions for wheels and gear covers. When satisfy the location, secure them in position with the screws. (It is normal that the screws will push the gear cover when the screws are tight.)



Use instant glue to secure the machine guns on the main wing.



Place the main wing upside down. Take the reinforcement planking out of the hardware bag. Try to place the planking along the trailing edge and set its center line on the center line of main wing. Use screws to hole the planking in place for temporary.



Use sharp hobby knife remove the covering inside the planking area carefully.



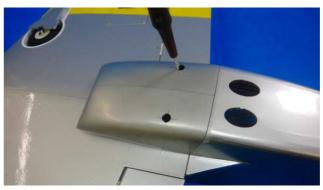
Place the venting M4x35 wing bolts (hex), washers and silicone tubes on the working table.



Spread some epoxy on the area where the covering was removed on previous step.



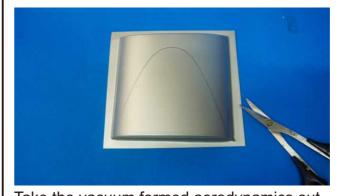
Insert the wing bolts and washers through the venting. Try to the fit the vent onto the main wing with the wing bolts into the bolt holes.



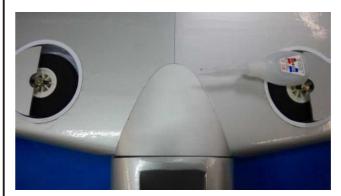
Secure the wing bolts for temporary until the epoxy is dried enough.



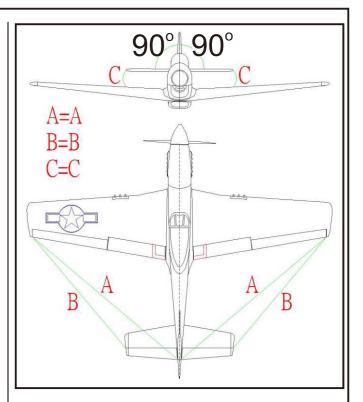
Insert the silicone tube to the end of wing bolt.



Take the vacuum formed aerodynamics out of the hardware bag. Use scissors to trim the part along the line.

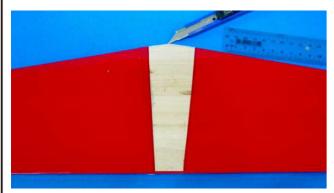


Try to place the aerodynamics on the leading edge of the center main wing. Sue instant glue to secure it in place.





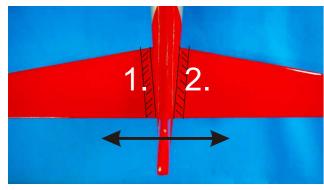
Remove the elevator out of the horizontal. Trial fit the horizontal in place on the fuselage. Please note the distance to the tip of the horizontal must be equal on both sides. Please refer to the last drawing. When you are satisfied with the alignment, use marker to carefully trace around the top and bottom of the horizontal where it meets the fuselage.



Remove the horizontal from the fuselage. Using a sharp hobby knife carefully cut away the covering inside the marking area. Do not cut into the balsa wood as this will affect the structural integrity of the horizontal.



Use Super glue to secure the hinges insides the hinges slot of elevator. Also use Super glue to secure the half of hinges to the horizontal.



Two ways to glue the horizontal to the fuselage:

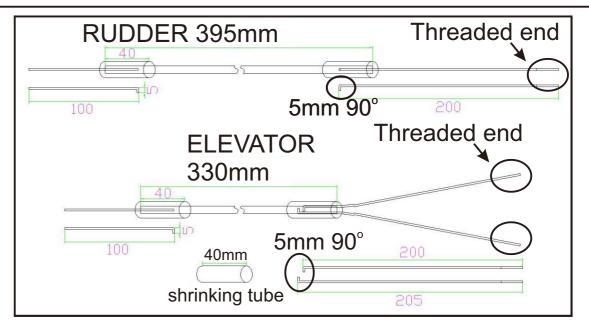
- a. Fit the horizontal to the fuselage. Spread generous amount of epoxy on the area where the covering was removed on top and bottom. Move the horizontal from the left to the right several times, so the epoxy will move into the fuselage. Set the horizontal to the correct position, wipe off the extra epoxy and wait until the glue is dried enough.
- b. Fit the horizontal to the fuselage. Inject generous amount of instant glue to the conjunctions and wait the glue to dry.



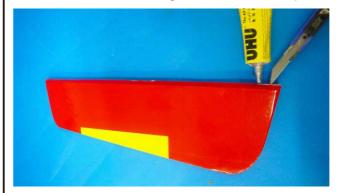
Use 2x15mm tapping screws to secure the hinges. Use side-cutter to remove extra length of screws.



Secure the tail wheel to the tail gear. Use M3x10 tapping screws to secure the tail gear mount to the tail.



Please follow the following drawings to assemble the rods. Insert the 90-degree bend into the hole of the pushrod dowel and saturate the dowel with instant glue where the rod contacts the dowel. Allow to cure. Slide a piece of heat shrink tubing over the end of the pushrod dowel and use a heat gun to shrink it in place over rod/dowel connection.



Try to find the slot on the rudder for installing the tail gear. Use sharp hobby knife to remove the covering out of the slot. Spread UHU glue or epoxy into the slot.



Secure the hinges in place with M2x15 tapping screws.



Spread Super glue on the one half of hinges and insert the hinges to the hinge slots on the rudder. Spread Super glue on the other half of hinges and insert the hinges to the slots on the vertical.

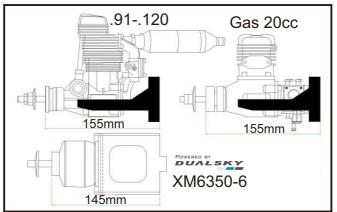




- 1) Take 1200mm transparent tube out the hardware bag. Cut the tube into two pieces from the center. Slide the tube from the rod opening on the fuselage, through the fuselage and to the rod opening of the tail.
- 2) Cut 3 pieces of 60mm transparent tube. Slide the one pieces of rudder rods and two piece of elevator rod into the tubes.
- 3) Slide one piece of 5mm silicone tube to the rod and thread the metal clip to the end of rod.
- 4) Pull the rod straight. Mark the locations for installing the control horn on rudder and elevator where the straight rods meet the rudder and elevator. Secure the control horns on the marked locations with M2x25mm screws.
- 5) Adjust the metal clips for connecting the control horn properly. Slide the silicone tube over the connecting place.
- 6) Keep the distance between the end of the transparent tube and the metal clip around 30mm and drop some instant glue to secure the transparent tube to the fuselage. Make sure the movement of the rods will be freely.



- 1) Use 2.0mm hand driller to open holes for the screws on the servo arm. Screw the adjustable rod stand and plastic nut to the servo arm. Make sure the rod stand can move freely.
- 2) When install the servo for elevator; please set its servo arm to the center of the fuselage.
- 3) Secure the servo to the servo tray with the screws coming with servo Insert the rod to the adjustable rod stand, set the servo to its neutral position and secure with M3x4 hex screws.





Following are the steps for assembling adjustable rod stand:

- 1) Drill 2mm hole on the servo arm.
- 2) Insert the metal clip to this hole and secure it in place with plastic nut.
- 3) Insert the rod to the stand and secure it in place with M3x4 hex screw.

GP ONLY

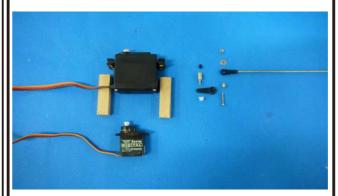


Push the claws nails to the holes inside the fuselage. It's better to use the engine screw M4x30 hex screw to secure the claws nails hard into the planking. Drop instant glue around the claws nail for securing it in place. Don't let the instant glue touch the screw.

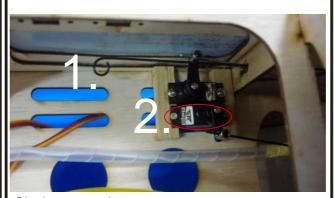
GP ONLY



Connect the throttle rod with ball-end.
Secure with M2x15mm screw and plastic nut. Connect the ball-end rod with throttle.
Connect the rod for Choke with adjustable rod stand.



The servo for the throttle can be standard or mini servo.



Choke control:

- 1) Use 1.2mm rod pulling to the fuselage and use hand to open it.
- 2) Use another servo to operate.







Diagram for assembling the tubing and linkage of the engine.



Please take the picture as a reference and assemble the fuel tank combination. If equip with **gas** engine, please select the **yellow** fueling tube.

GP ONLY



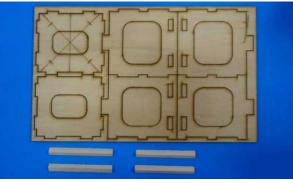
Connect the feed-line tubing and vent-line tubing to the fuel tank. Please purchase correct tubing for the engine.

Apply a piece of adhesive Velco tape on the bottom of fuel tank and another Velco tape on the battery tray.

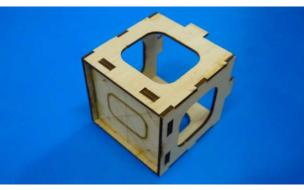


Use Velcro tape to secure the tank and receiver inside in fuselage.

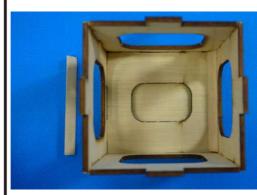
EP ONLY



Take the laser cutting planking out of the hardware bag and place on the working table.



Remove every part out of planking and assemble the parts into motor mount. Use instant glue to secure the parts.

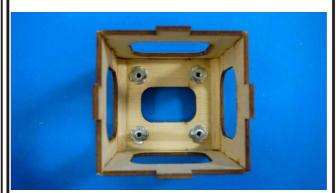


Use wood glue to secure the reinforcing block on the bottom of motor mount. Spread Epoxy on every corner for reinforcement.

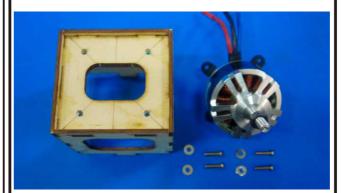
EP ONLY



Try to fit the motor onto the motor mount. When satisfy the location, use marker to mark the position for the screws. Remove the motor and use hand driller to open holes on the marked positions.



Push claws nails into the opened holes.



Use m4x20 hex screw to secure the claws nails into the holes. Drop some instant glue around the claws nails, not the screws.



Use Epoxy to secure the motor mount on the fuselage and reinforcing blocks on two sides of moor mount.



Assemble the spinner with propeller. Install the spinner to the motor. Please keep the distant between spinner and cowl around 2mm.

GP ONLY



If use GP; please use scissors to trim the cowl for meeting the outline of the engine before securing the cowl to the fuselage.

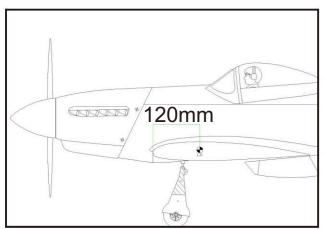


Installing the anti-vibration rubber inside the cowl. Try to fit the cowl to the motor or engine. When satisfy the location, use M2.6x12 tapping screws to secure the cowl in position.

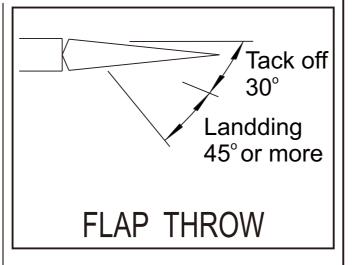


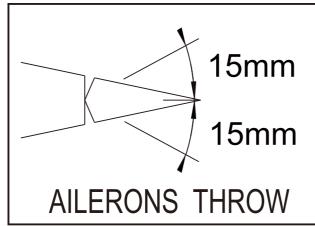
Apply your favorite stickers!

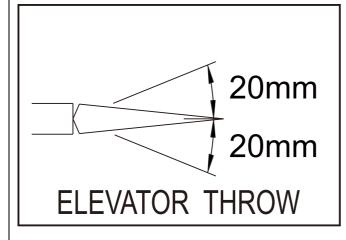


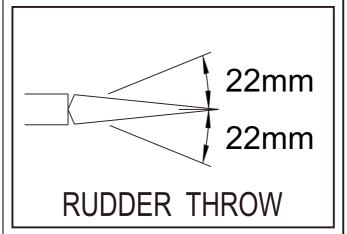


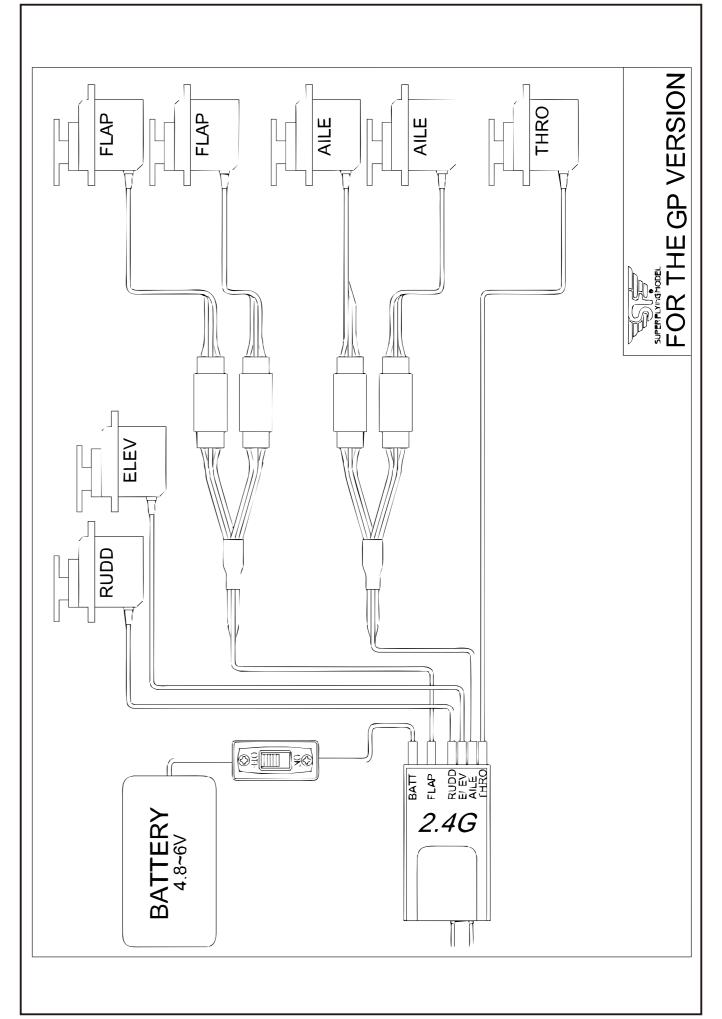
C.G. The recommended Center of Gravity location is 120mm back from the leading edge against the fuselage.

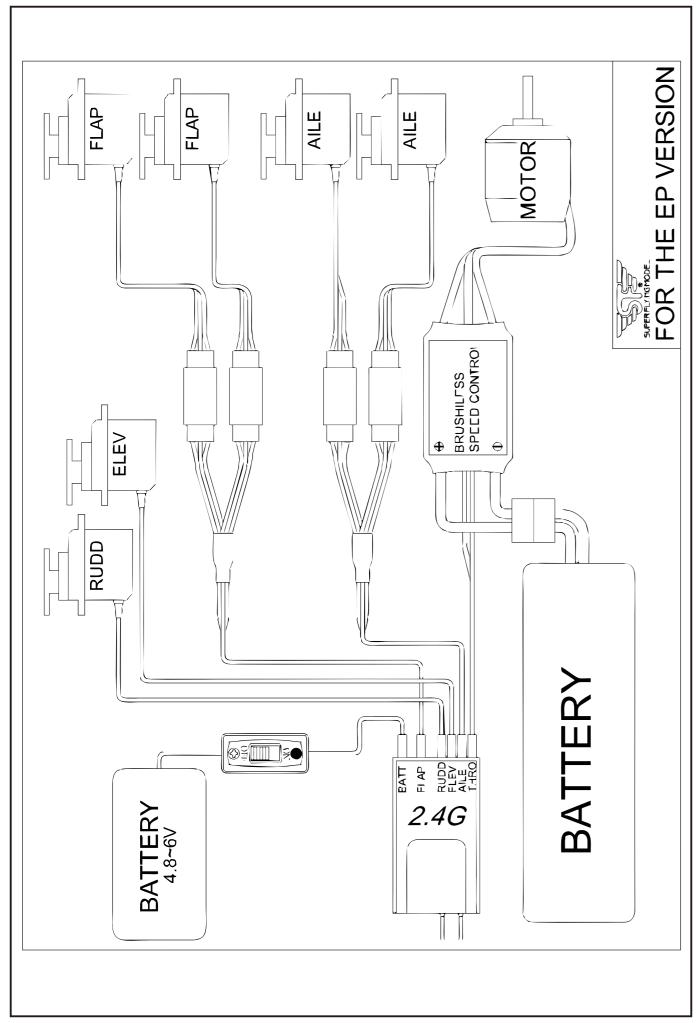












The Best Recommendation for Assembly

17 IN 1 Tool Pouch Set

Plastic Extendable Gearless Precision Screwdriver

High-carbon steel Replaceable Tips

SPECIFICATION:

Nut Drivers:

4mm,5mm,5.5mm,7mm,8mm

Hex1.5 x Hex3.0

Hex2.0 x Hex3.5

Hex2.5 x Hex4.0

- (-)Slotted 3.0 x (+)Ph0
- (-)Slotted 4.0 x (+)Ph1
- (-)Slotted 2.0 x (+)Ph00

Item:

#5002-1



Item:

#5005

High Quality
Canvas Zip Bag
Plastic Extendable
Gearless Precision
Screwdriver &
Propeller Reamer
High-carbon steel
Replaceable Tips
Glue Gun and Glue
Stick



20 pcs Tool Pack

SPECIFICATION:

Glue gun: 3S-11.1V (included TX-60 Socket) Propeller Reamer: 5mm,6.5mm,8mm,9.5mm Nut Drivers: 4mm,5mm,5.5mm,7mm,8mm

Hex1.5 x Hex3.0

- (-)Slotted 3.0 x (+)Ph0
- Hex2.0 x Hex3.5
- (-)Slotted 4.0 x (+)Ph1
- Hex2.5 x Hex4.0
- (-)Slotted 2.0 x (+)Ph00

