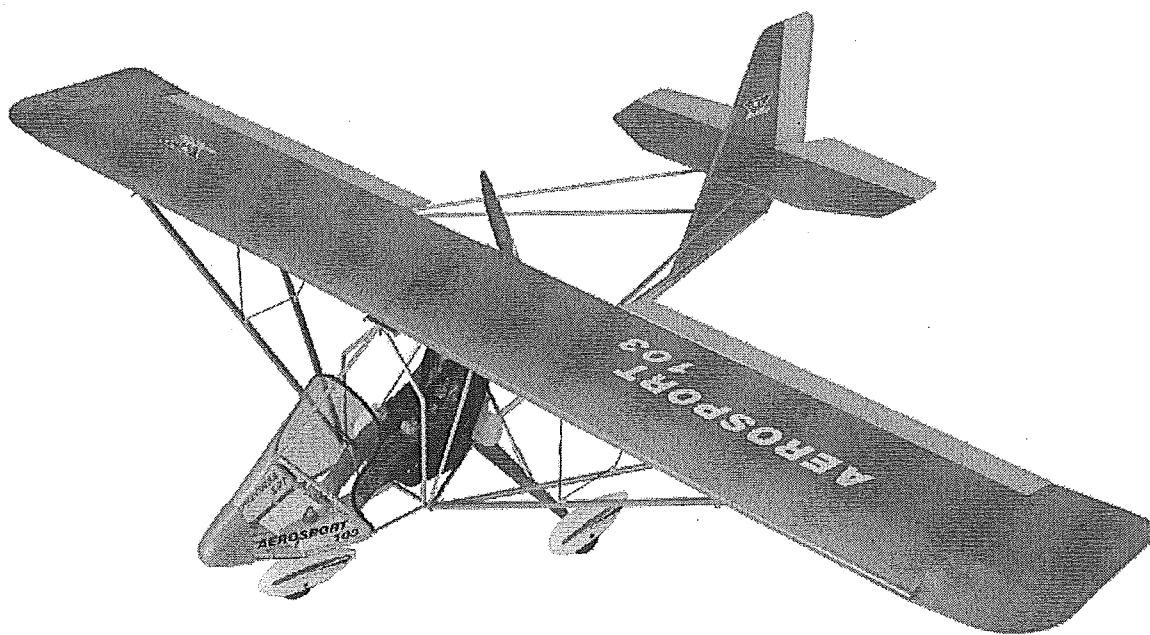




No. 8713

AEROSPORT 103

1:3 SCALE GP/EP



SPECIFICATIONS

Wing Span: 2390mm

Wing Area: 86.6 dm²

Length: 1550mm

Weight: 4700g

Radio: 6 channels

Engine: 20-30cc 2-stroke

1.20-1.70 4-stroke

Propeller: 16 x 8"

Motor: 380-400KV brushless

Thrust: 6 KGS

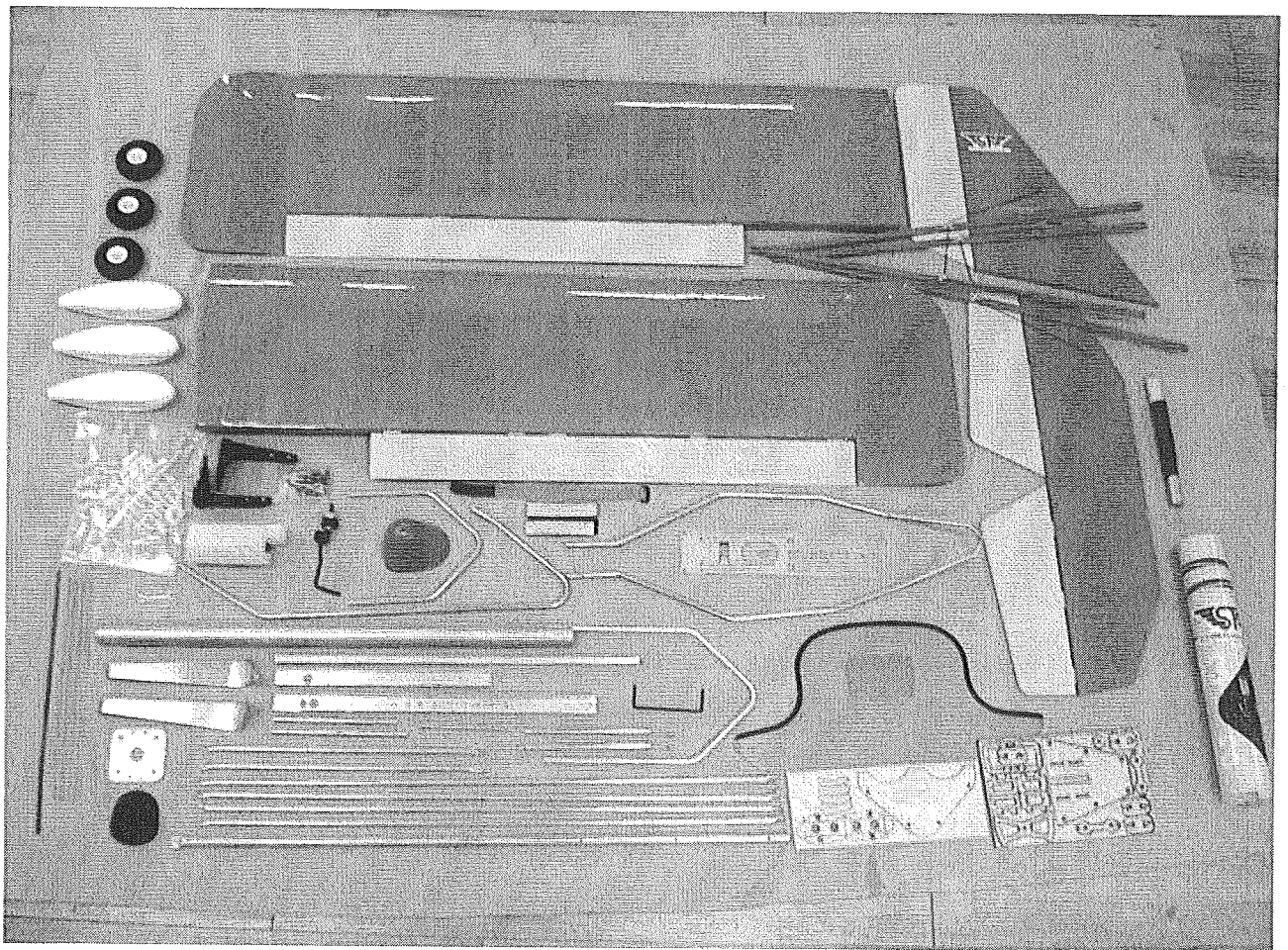
Battery: Li-Po 6-cell 5000mAh

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.

INSTRUCTION MANUAL



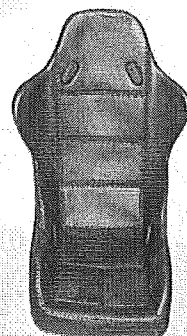
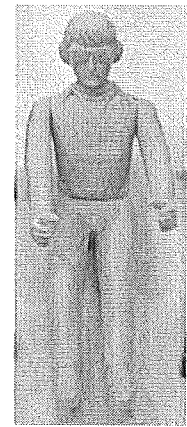
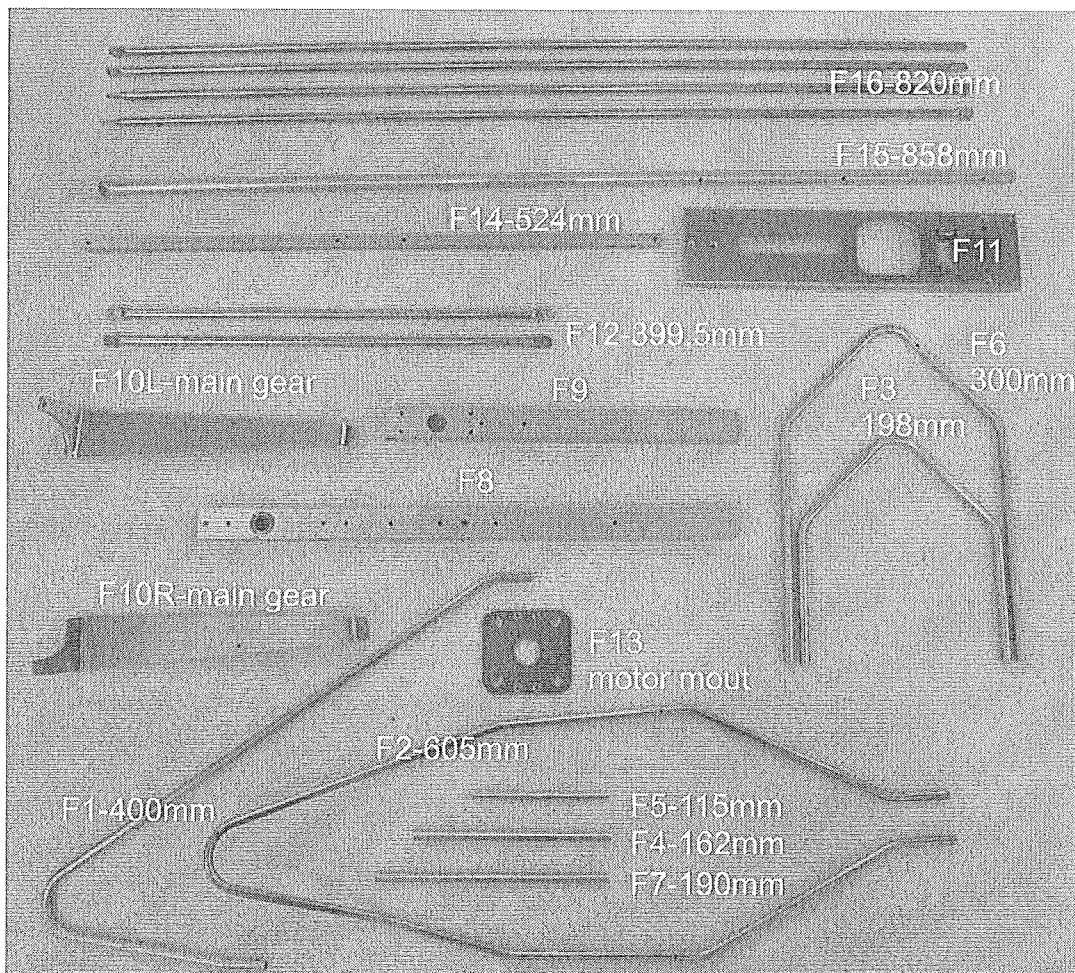
Contents of Kit / Parts Layout

Recommended radio and equipment (not included in kit):

- | | |
|---|--------------------------------|
| 6 channels radio x 1 piece | Engine: 20cc – 30cc 2-stroke |
| Receiver x 1 piece | 1.20 – 1.70 4-stroke |
| 45g servo x 2 pieces | Propeller: 16 x 8"; |
| Wing servo x 3 pieces | GP: 16X8" Pull Propeller |
| (metal gear w/thrust 4KGS and up) | Motor: 380-400KV brushless; |
| 13g Servo x 1 piece (metal gear for GP) | Thrust: 6KGS and UP |
| 30cm extension x 3 pieces | Battery: Li-Po 6-cell 4400 |
| 60cm extension x 2 pieces | – 5000mAh |
| (50-60 strands) | Receiver battery: 4.8V 2000mAh |
| 100cm extension x 2 pieces | ESC: HV80A |
| (50-60 strands) | |
| Y-harness x 2 pieces | |
| Switch x 1 piece | |

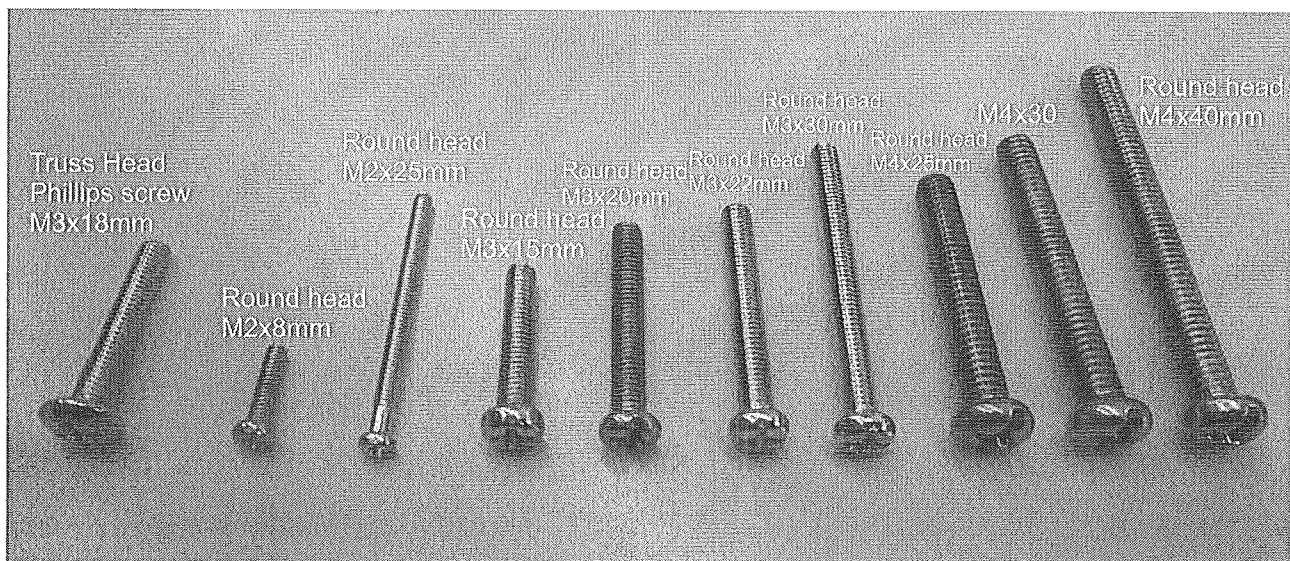
Tools and suppliers needed (not included in kit):

Phillips screws driver #0/#1; Curved scissors; Hobby knife; Ruler; Pliers; Z-bender; Sanding paper; Epoxy 5-10 minutes; Marker ; CA glue; UHU foam glue; Superglue; Cross wrench; Reamer; Solder Iron; Thread lock; Side Cutter Driller 1.2mm/2mm/4mm; Transparent Tape; Triangle (90 degree) ruler; Clamp Nipple pliers; Pins; Tweezers; Servo tester; 2.5mm L ball-end hex wrench(HB2.5); Spray printing; Painting ; Brushes; Hex wrench 1.5/2.0/2.5/3.0; Electric driller

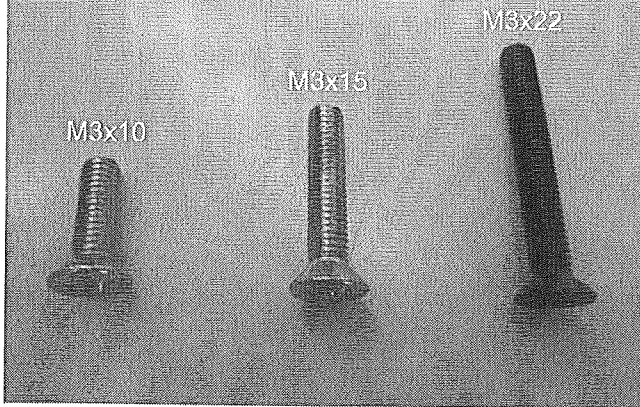


The content and its relative code of the aluminum tubes and parts:

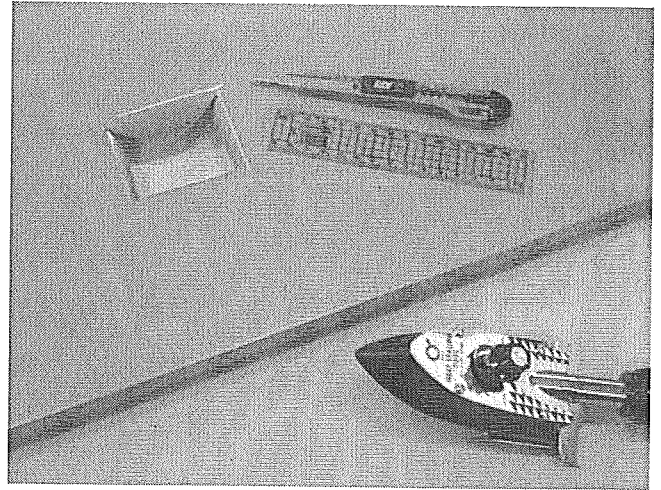
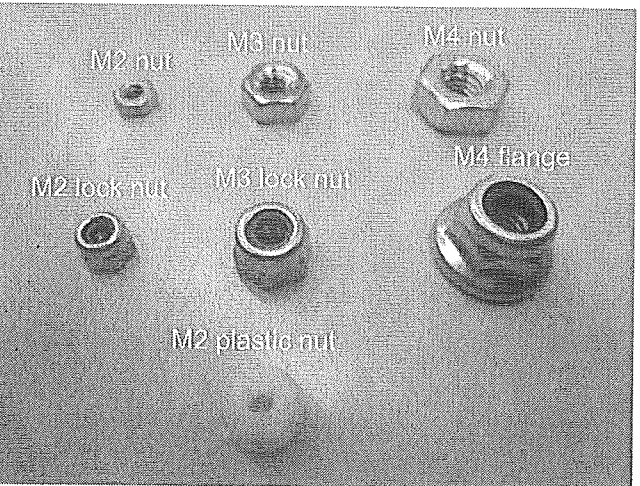
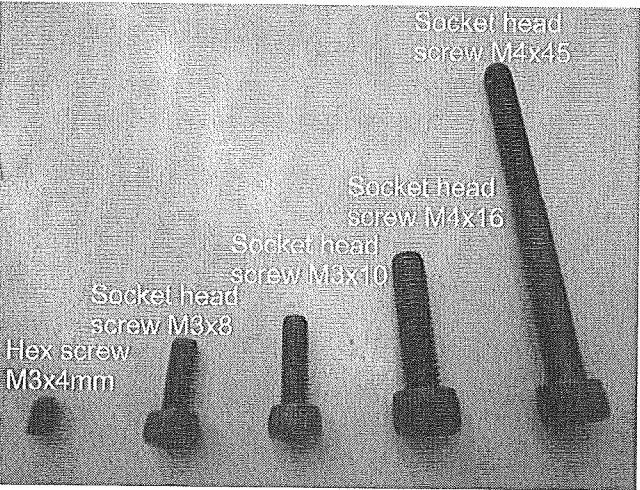
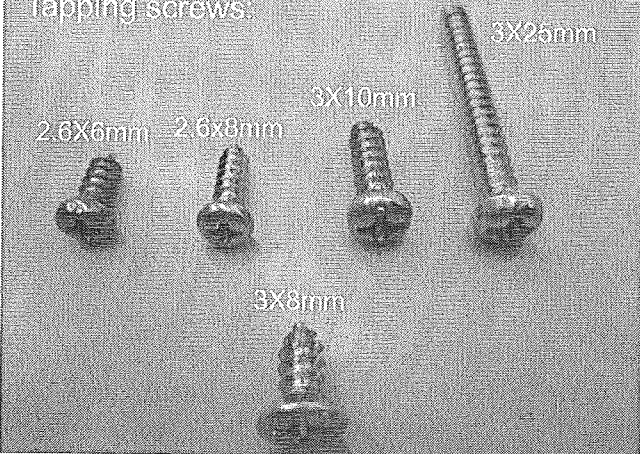
All the screws and nuts used in this kit:



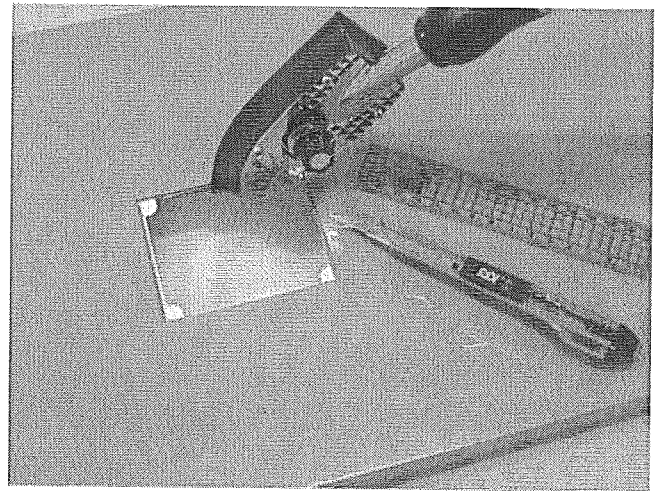
Flat head Phillips screws:



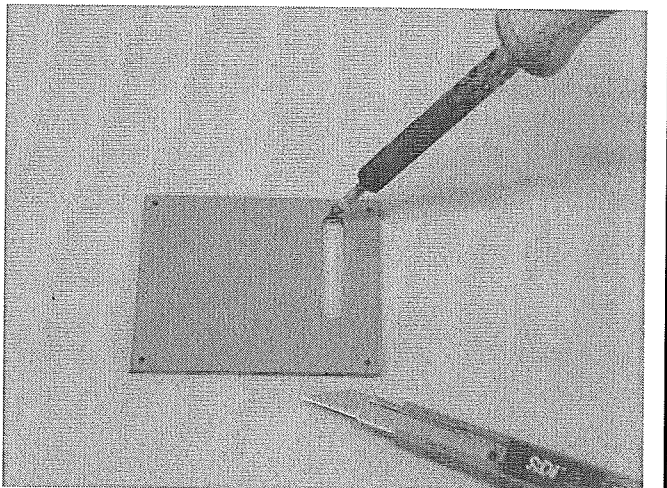
Tapping screws:



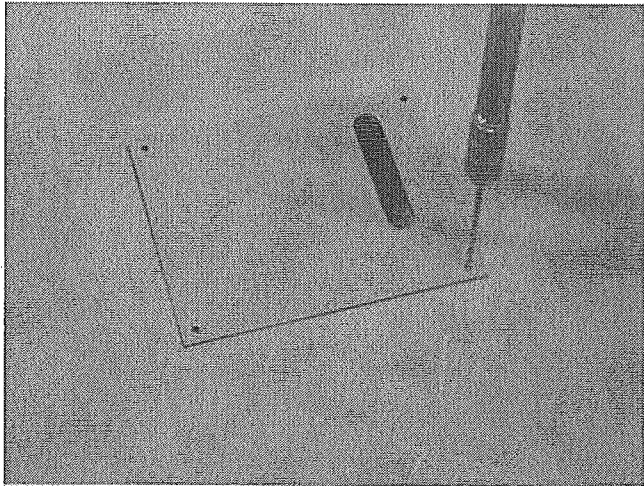
Using a ruler and sharp hobby knife carefully cut the covering away from the servo holes on the main wing.



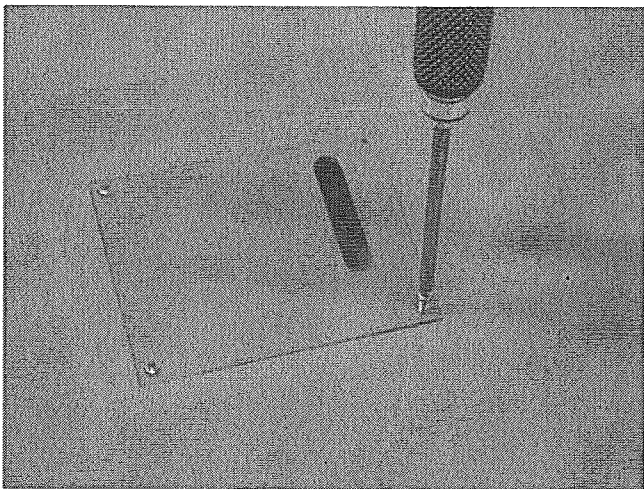
Use the solder iron (set the temperature at 150°C) to trim the covering around the holes. Use hobby knife to cut out the extra film.



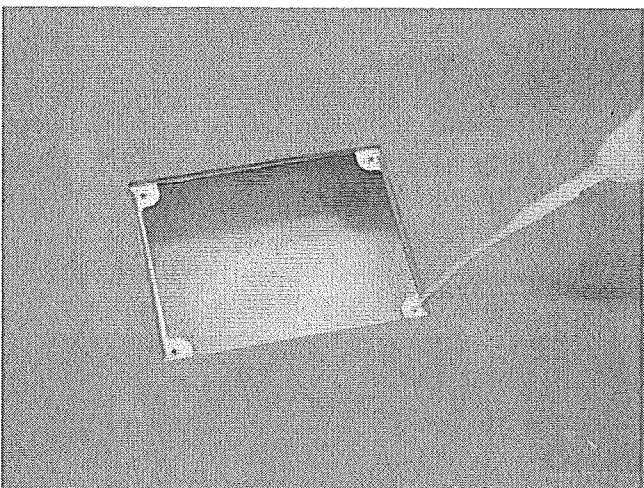
Take the servo tray out of the hardware bag. Use hobby knife to remove the covering on the top of the pre-cut hole (leave 3mm around the edge). Use solder iron to trim the edge and melt the 4 screws holes on the corner.



Place the servo tray on the bottom of the main wing. Use 1.5mm driller to drill 4 screws holes on the corner.



Use 3x10mm tapping crews to secure the servo tray in place temporary.



Remove the tapping screws and servo tray. Drop some instant glue on the screw holes for reinforcement.



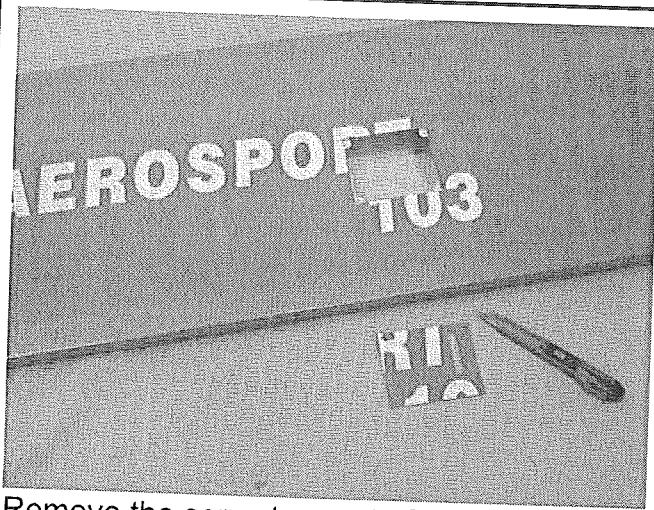
Place the servo tray in place. Spray some glass-cleaner on the surface for removing the dirt and keep some moisture.



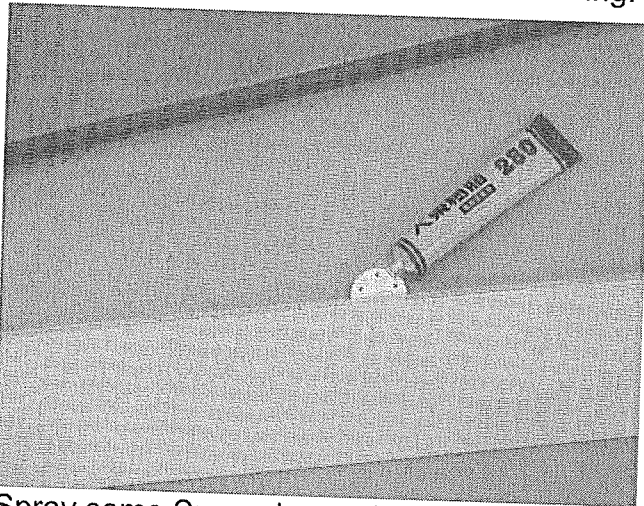
Apply the sticker "AEROSPORT" on the center of the main wing carefully. Use ruler to remove the bubble and extra glass cleaner between the sticker and main wing. Use tissue to suck the cleaner.



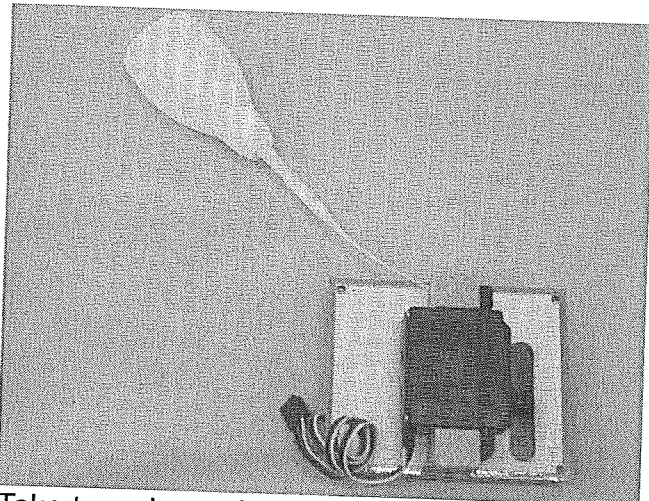
Use hobby knife and ruler to trace the outline of the servo tray.



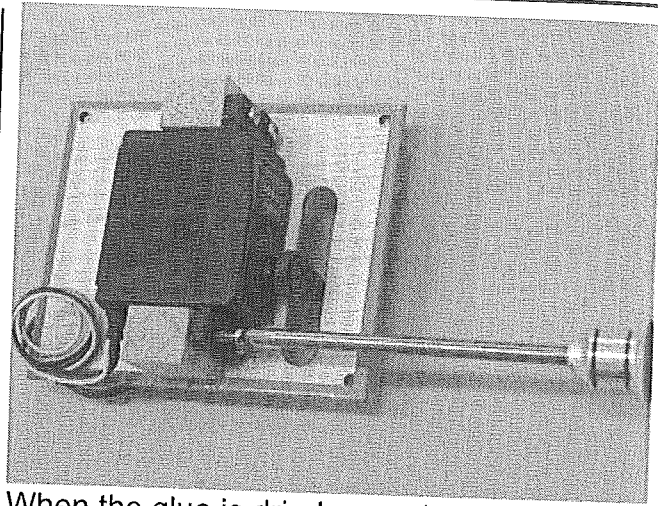
Remove the servo tray out of the main wing.



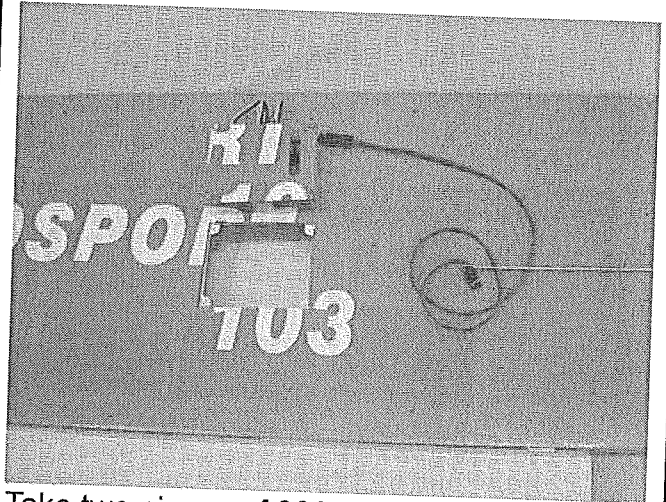
Spray some Superglue on both sides of the hinges. Insert one side of the hinge to the aileron; another side to the pre-serving hinge hole on the main wing. Use transparent tape to hold the aileron in place until the Superglue is dried enough.



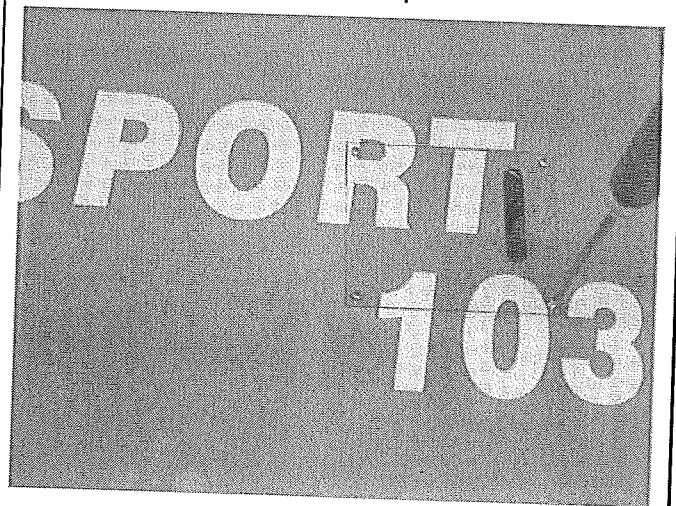
Take two piece of 12mm x 13.5mm hard block out of the hardware bag. Place the blocks on two sides of the servo. Set the servo arm on the center part of the exist hole. Drop some instant glue to secure the blocks in place.



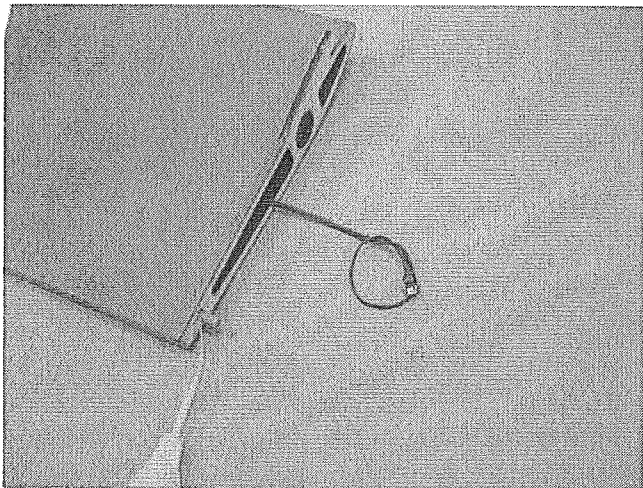
When the glue is dried enough; secure the servo on the blocks with the tapping screws comes with the servo. Connect the servo with the receiver and set the servo at neutral position.



Take two pieces of 330mm rods out the hardware bag. Apply one piece of tape to the conjunction of two rods. Insert the rod through the root of the main wing. Connect the servo with 60cm extension. Use transparent tape to secure the end of rod and the extension together temporary. Pull the rod and extension out of the root of the main wing. Remove the transparent tape



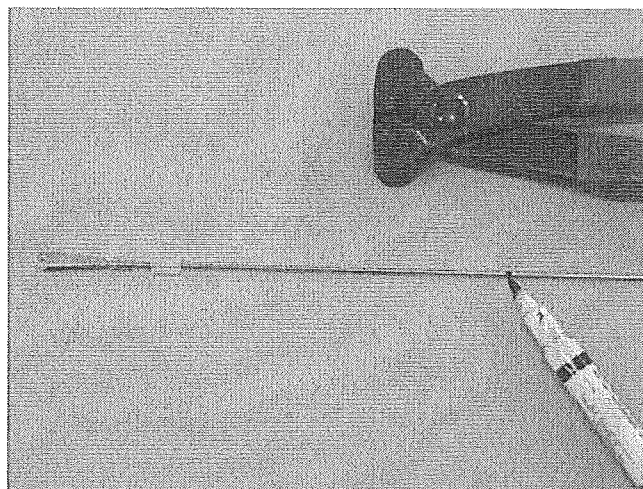
Secure the servo tray in place with 3x10mm tapping screws.



Take on piece of 7x18mm wood dowel out of the hardware bag. Use sand paper to trim both ends. Insert the one half of dowel into the hole on the root of the main wing. Drop some instant glue to secure the dowel in place.



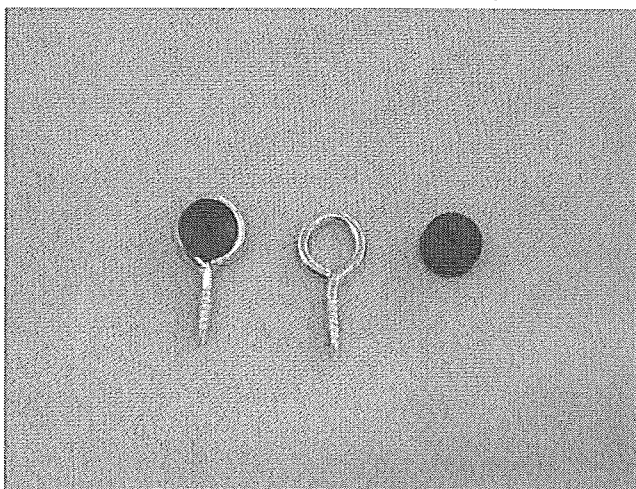
Place bottom of a triangle ruler on the rear edge of the aileron. Adjust the vertical side the triangle ruler to the servo arm. Use a clip to hold the triangle ruler in place; use a marker to mark the position on the leading edge of the aileron for secure the control horn. Position the control horn on the mark. Use 2mm driller to drill holes and secure the control horn in position with M2x25mm round head phillips screws.



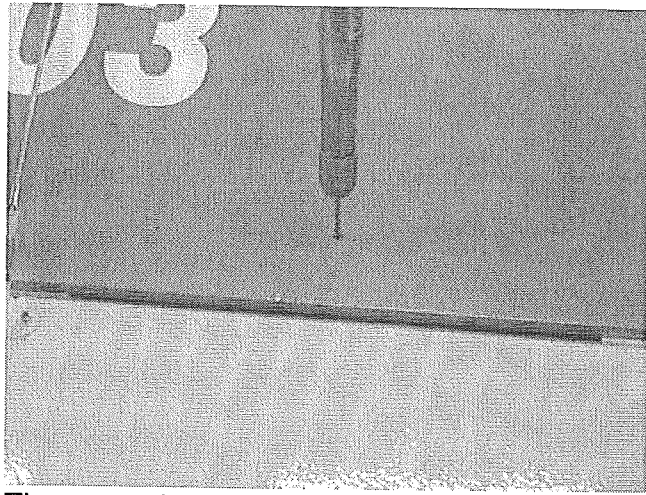
Cut one piece of 5mm silicone tube and insert through the rod. Thread one end of the rod into the metal clip. Connect the clip with the control horn and insert the other end of rod through the servo arm. Make a mark on the conjunction place where the rod contacts with the servo arm.



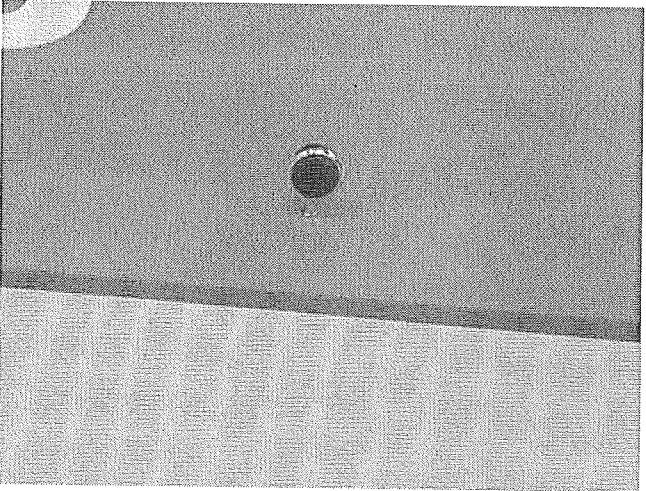
Use a Z-bender to make a Z on the marking place. Use nipple pliers to snip off the extra rod (around 5mm after the Z bend.)



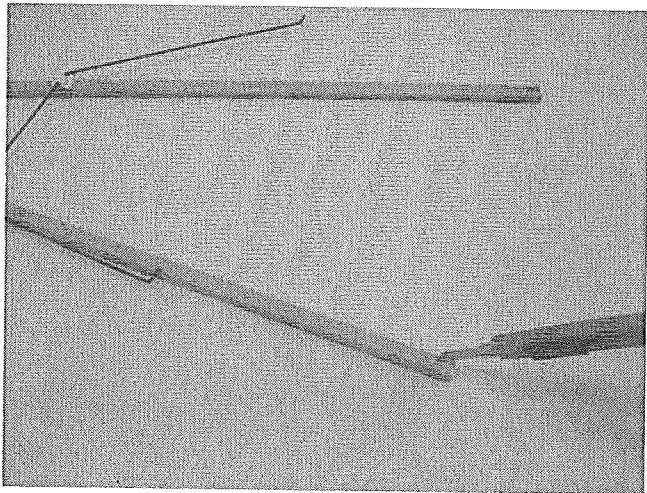
Take eye-screws and rubber eyelets out of the hardware bag. Stuff the rubber eyelets into the eye-screws. Drop some water on the rubber will make the stuffing easier.



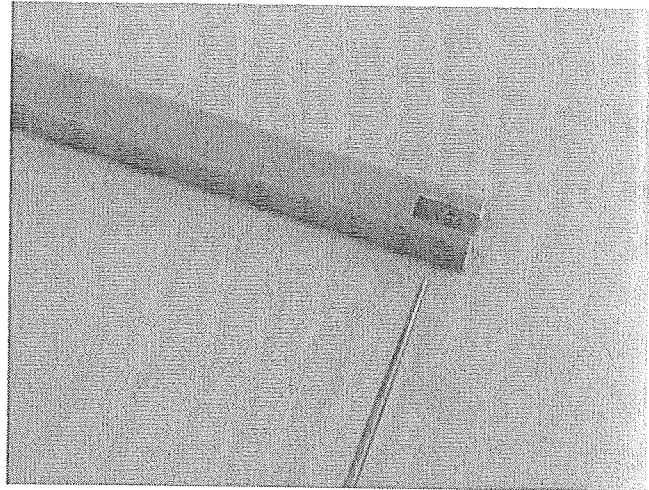
There are 4 markings on the main wing for inserting the eye-screws. Try to find them and use 1.2mm driller to drill holes on the markings.



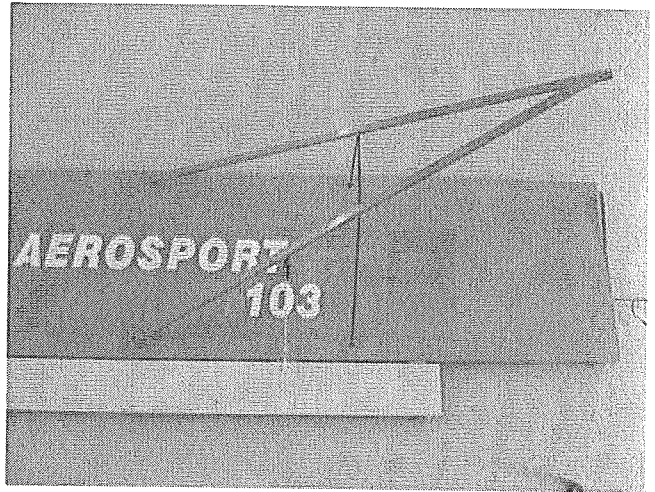
Screw in the eye-screws into the holes.



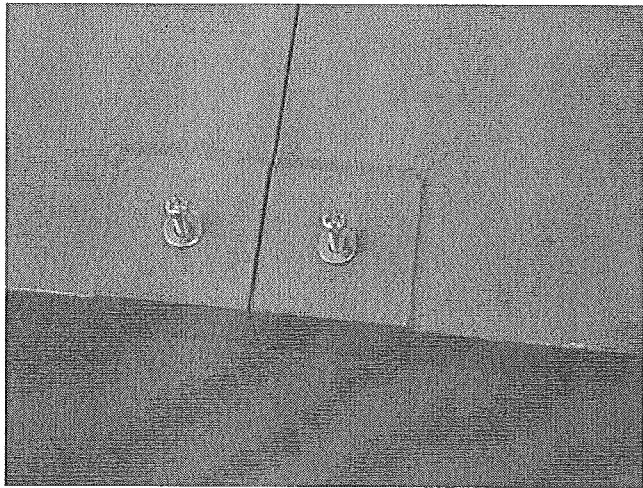
Place the wing struts on the working table. There are pre-serving slots on the ends. Use hobby knife to remove the covering over the slots.



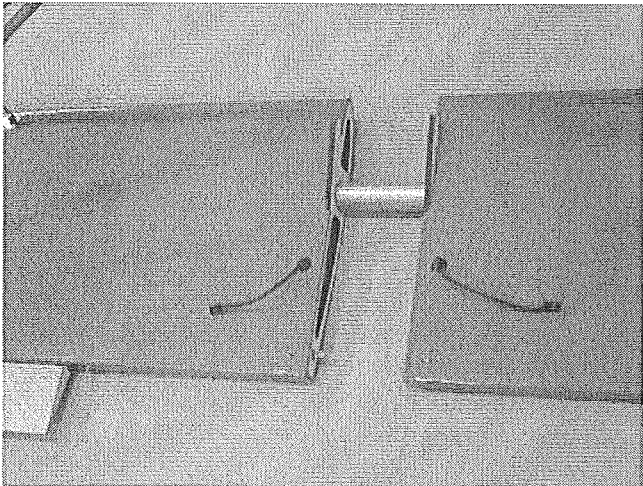
There are pre-serving holes on both sides of the struts. Use 1.2mm driller to drill opens the covering.



Take R-pins out of the hardware bag. Try to place the slots on the ends of struts on the eye-screws. Make sure the eye-screws are inside the slots; the holes on both sides of slots are at the same level as the center hole on the rubber eyelets. Use R-pins to secure the struts in place. Insert the ends of the black wires (on the center part of the struts) to the rubber rings on the main wing. When transportation, please remove the black wires from the rubber rings and place some hard paper board on the main wing for protection.



Take M4x40mm round head wing bolts and 4mm washers out of the hardware bag. Cut 2 pieces of 3mm silicone tubes. Use solder iron to melt open the holes for the wing bolts. Insert the wing bolts and 4mm washers into the holes and insert the silicone tube on the ends of wing bolts for avoiding losing off.



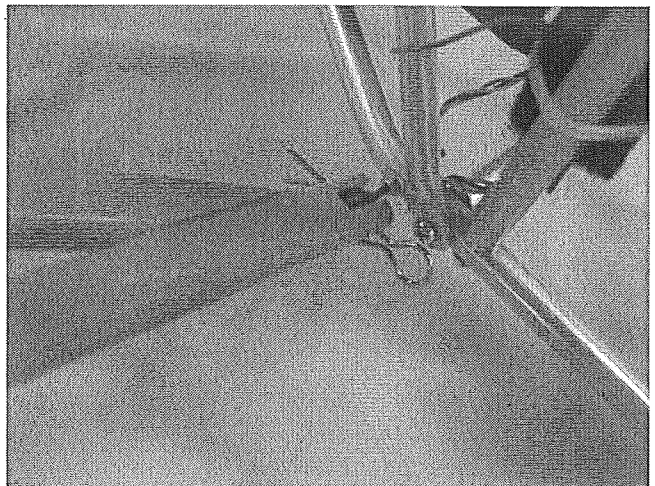
Use solder to melt open the exits for the cables. Use Tweezers or nipple-pliers to pull the extensions out of the exits. Inert the aluminum wing joiner for joining two wing halves. If the joiner cannot insert smoothly; use sand paper to trim the wing joiner for inserting easier.
(The following 3 steps cannot be assembled on the airplane until the fuselage is assembled.)



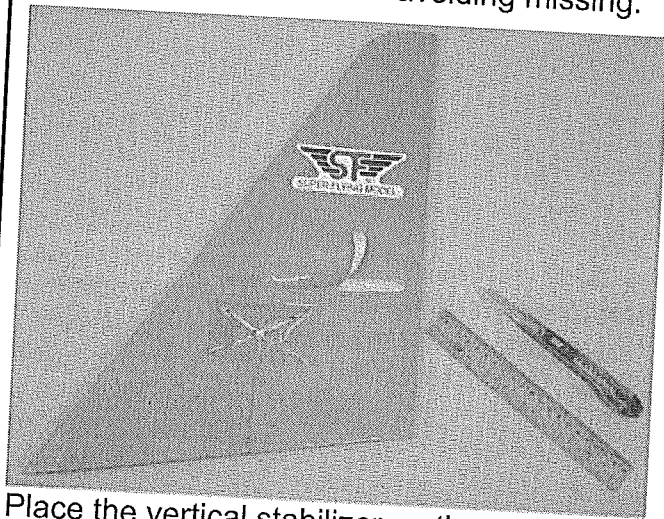
Place the leading edge of main wing on the main wing mount and push the main wing forward to the front slot of F11, so the rear edge will be stuck into the square aluminum tube on the rear part of the fuselage. Screw-in the wing bolts tightly for secure the main wing in place.



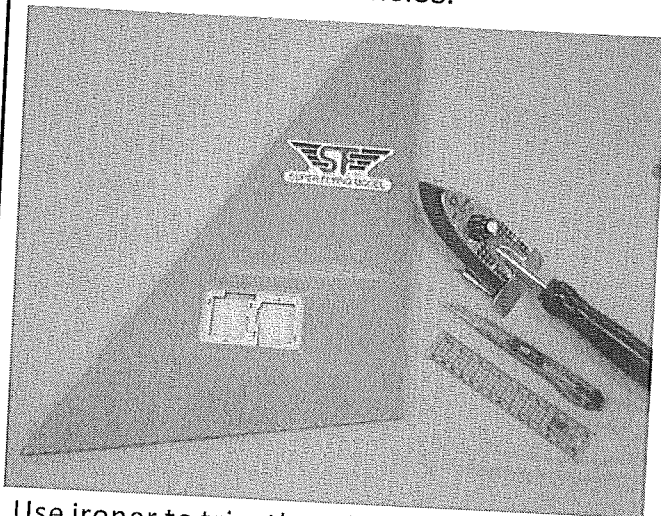
There are pre-serving holes on the ends of the aluminum square tube. Use 3x25mm tapping screws to secure the rear edge of the main wing on the square tube. When transportation and remove the main wing; it's better to screw the tapping screws back for avoiding missing.



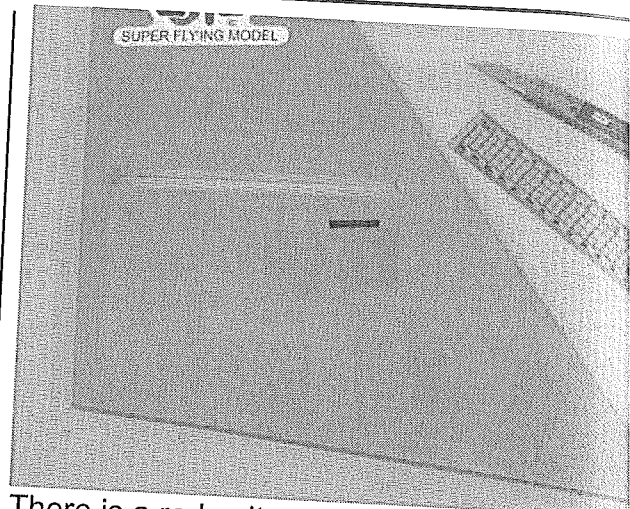
Place the slot of the strut on the eye-screw and make sure the eye-screw is inside the slot. Use R-pin to secure the strut in place. It can be adjusted by screw-in or screw-out the eye-screw. When remove the main wing for transportation; it's better to insert the R-pin back to the eye-screw for avoiding missing.



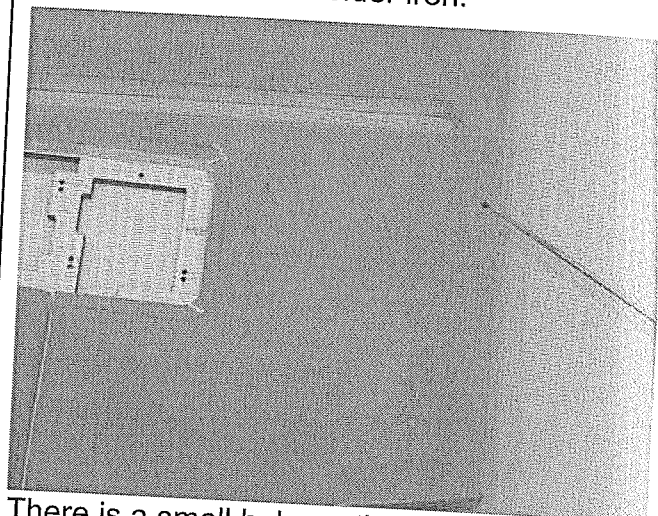
Place the vertical stabilizer on the working table. Please find the pre-serving slot for the horizontal, pre-serving hole for the servo and cable exit. Use hobby knife and ruler to open the covering over these holes.



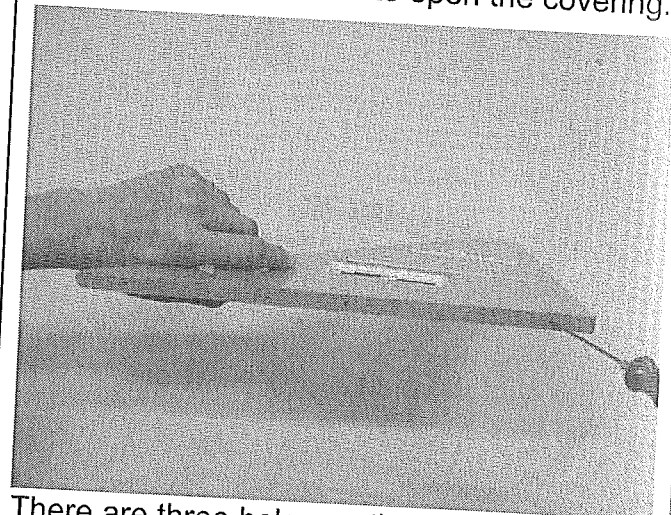
Use ironer to trim the edges of these holes. Set the temperature at 150°C. Cut out the extra covering.



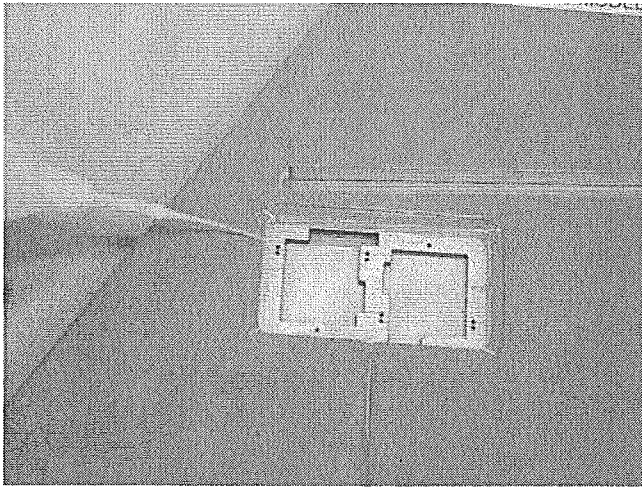
There is a rod exit on the other side of vertical. Use hobby knife to cut it open and trim the edges with solder iron.



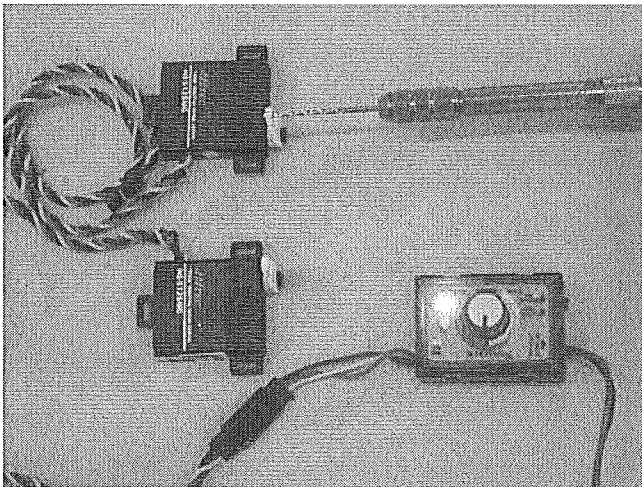
There is a small hole on the center part of the rear vertical. Use driller to open the covering.



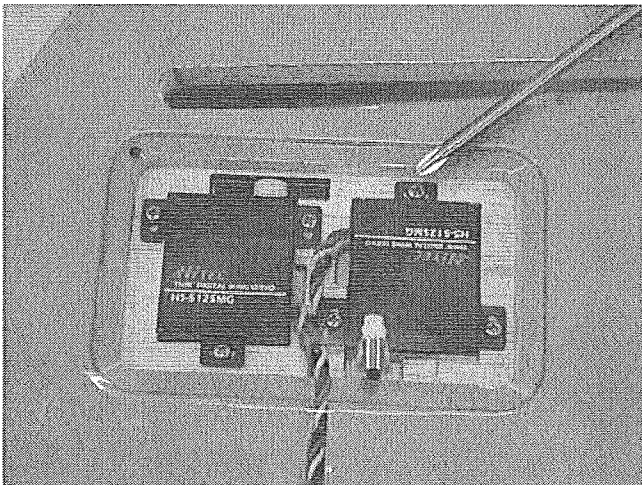
There are three holes on the bottom of the vertical. Use driller to open the covering.



Drop some instant glue on the screw holes for reinforcement.

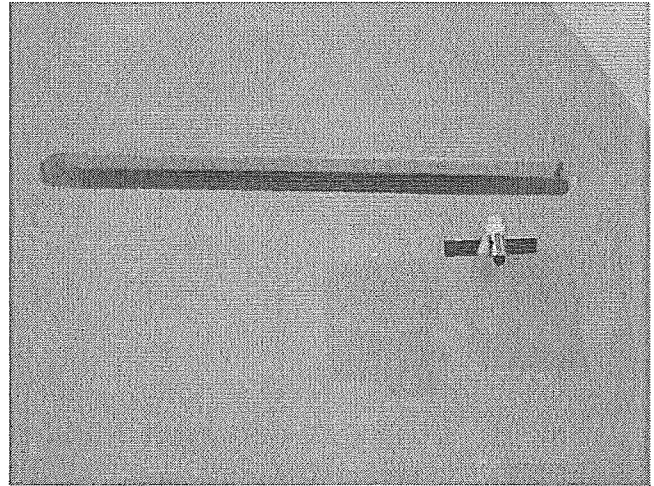


Assemble the servo with servo arm. Connect the servo with servo tester. Set the servo at neutral position and use 2mm driller to open hole on the servo arm.

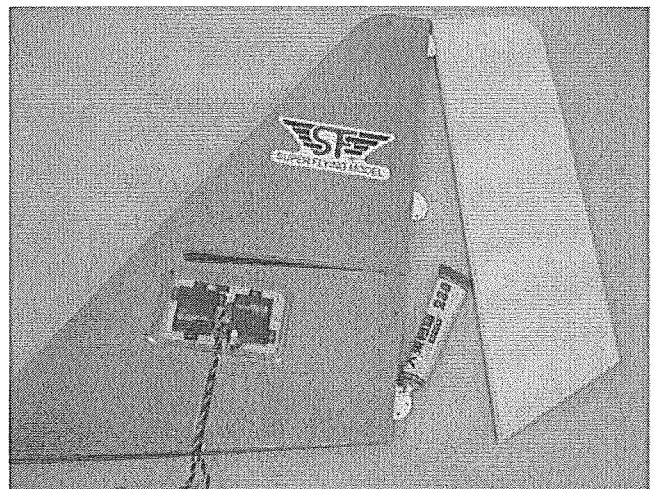


Secure the servo on the servo tray with M2.6x6mm tapping screws. Place the transparent cover to covering the servos. Apply the tape to secure the cover in place. Screw-in the rod adjusting stand with plastic nut and M3 x 4mm hex screw. Make sure the adjusting stand can be operated freely. Route the servo cable

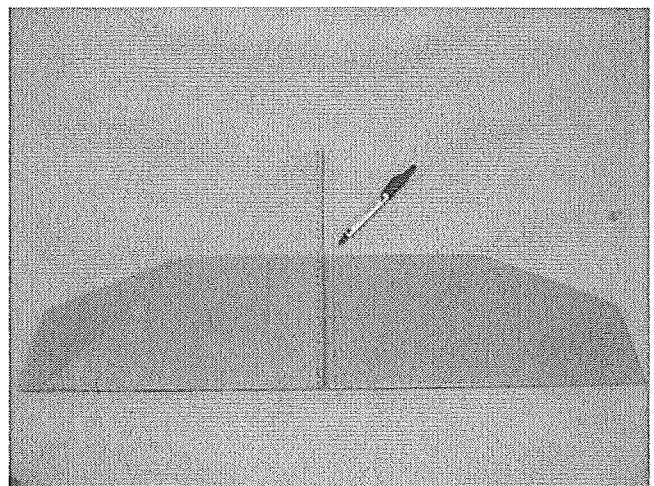
through the slot. Use the transparent tape to secure the cable inside the slot.



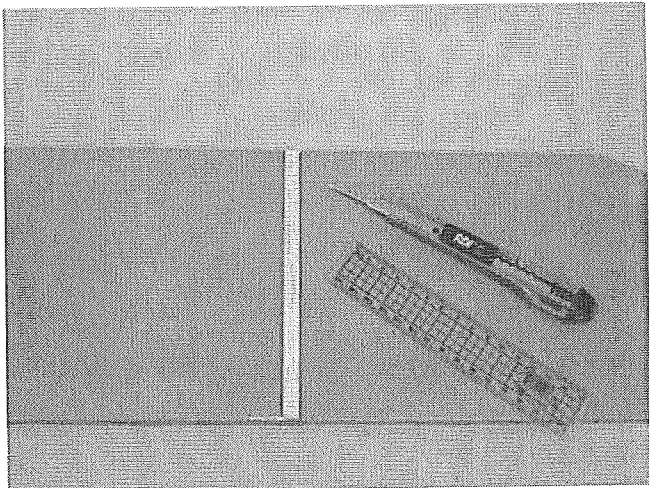
Screw-in the adjusting stand on the servo arm.



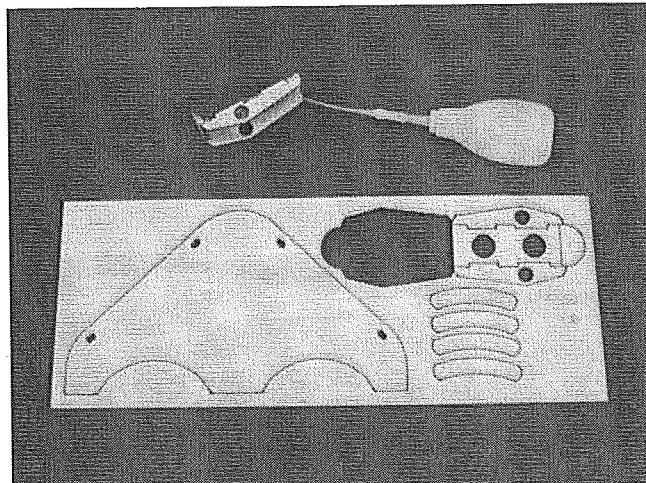
Spread small amount of the Superglue on the hinges. Insert the hinges into the vertical and rudder. Apply tapes to hold the rudder in place until the glue is dried enough.



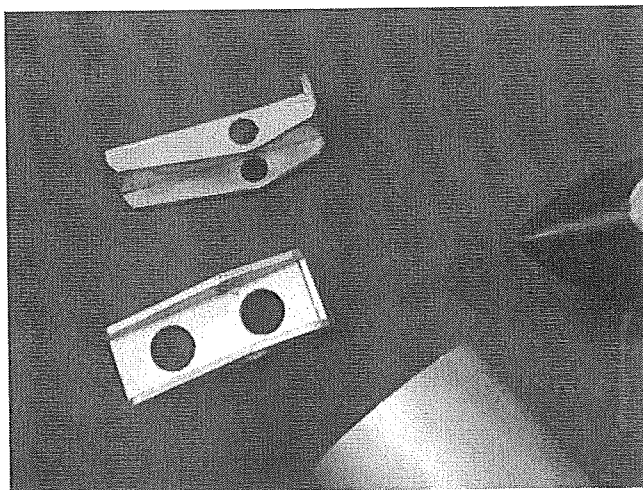
Place horizontal on the working table. Use ruler and marker to mark a center line on both sides of the horizontal.



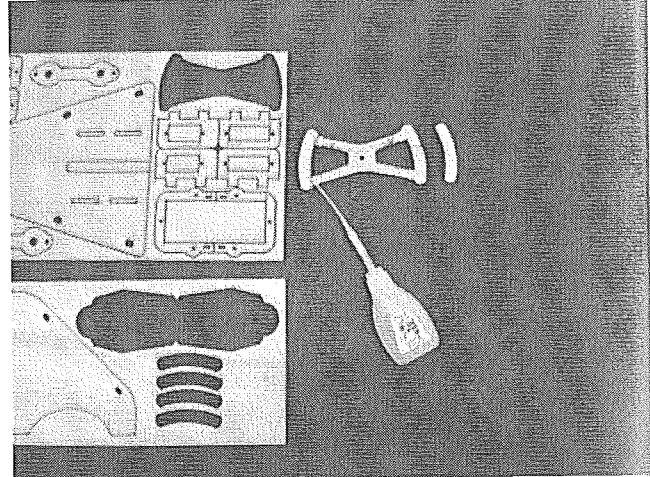
Use marker to mark the area around 5mm on both sides from the center line. Use hobby knife to remove the covering inside the marking area carefully, don't cut into the wood.



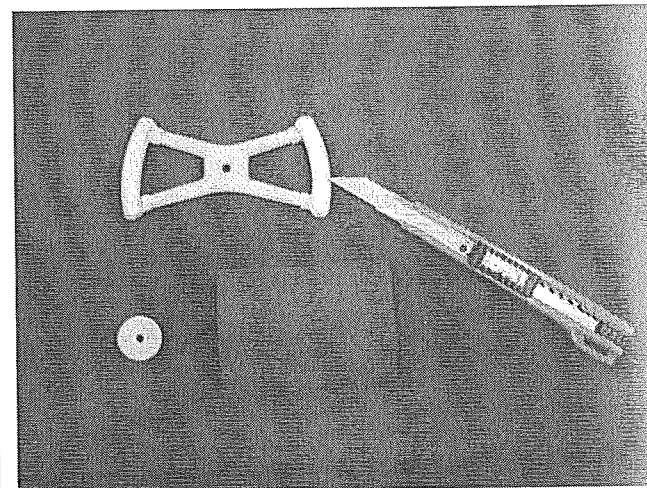
Take the laser cutting board out the hardware bag. Use instant glue to assemble the foot board. Use sand-paper to trim the surface of the contacting area.



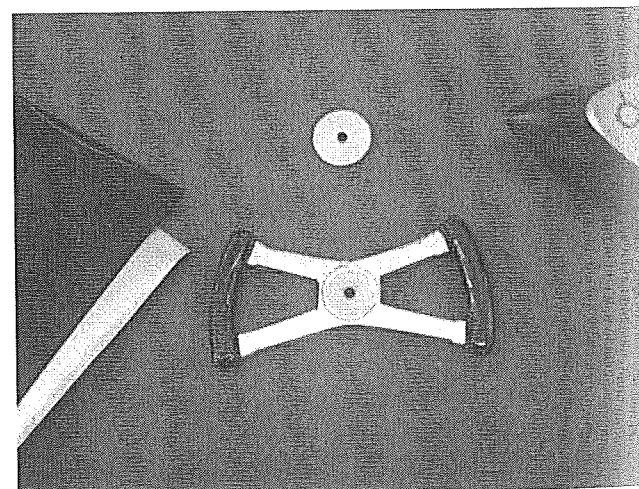
Iron on silver covering and use solder iron to trim the edges.



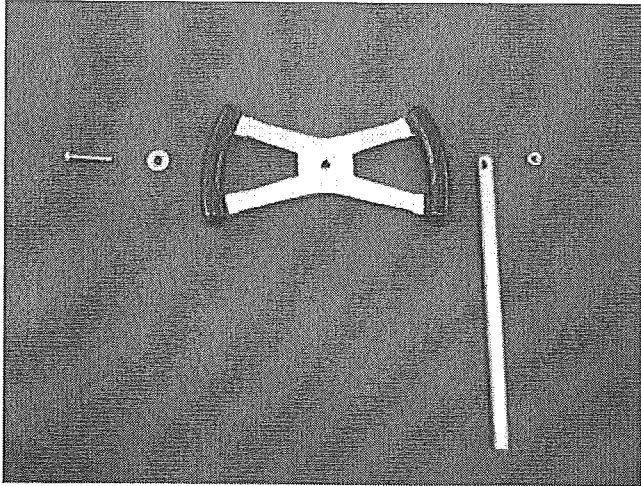
Find another laser cutting board with steering wheel. Use instant glue to assemble the steering wheel. Please note the wood parts for the right, left, top and bottom are different. Please check carefully before gluing.



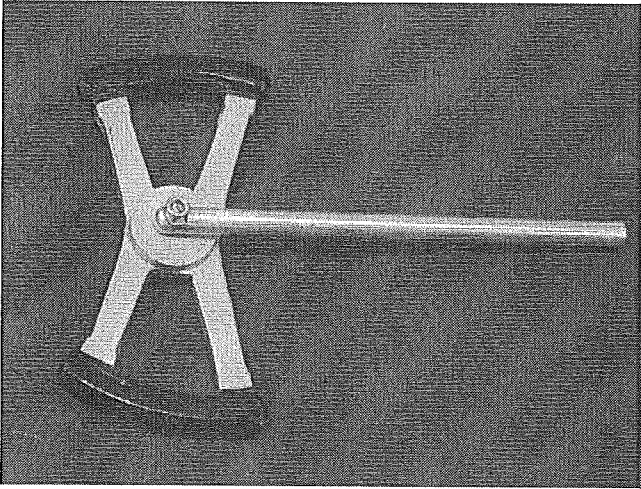
Use hobby knife and sand paper to trim the edges. Remove the small wood plate out of the laser cutting board. Use sand paper to trim the surface and edges.



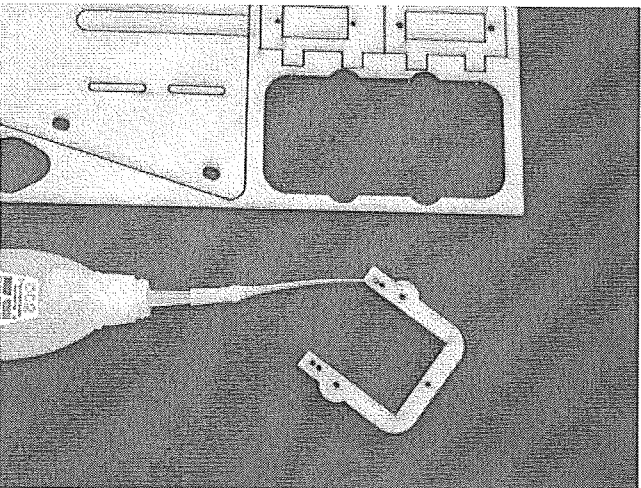
Iron the silver and black covering on the steering wheel and the wood plate. Please refer to the picture. Drop some instant glue to secure the wood plate on the steering wheel.



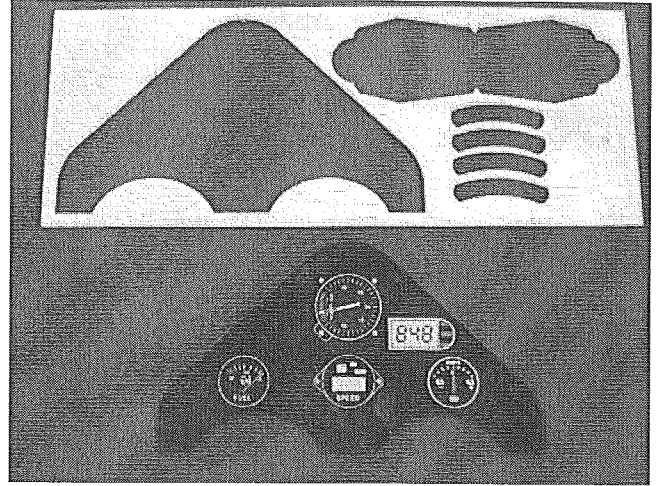
Assemble the steering wheel on the lever (F5) with M3x15mm round head phillips screw, 3mm washer and 3mm locknut.



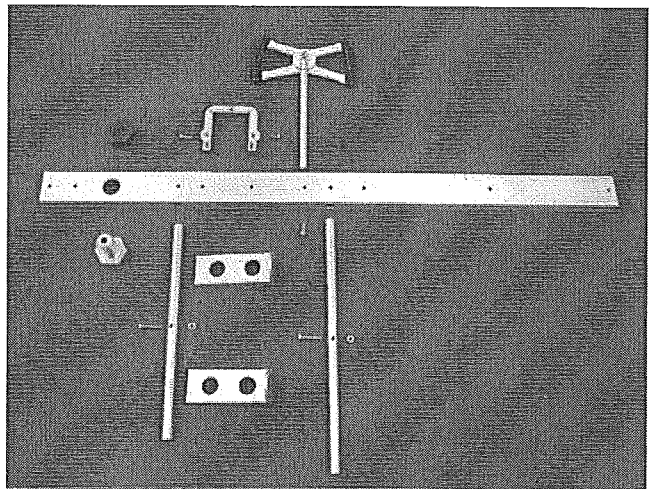
Steering wheel combination.



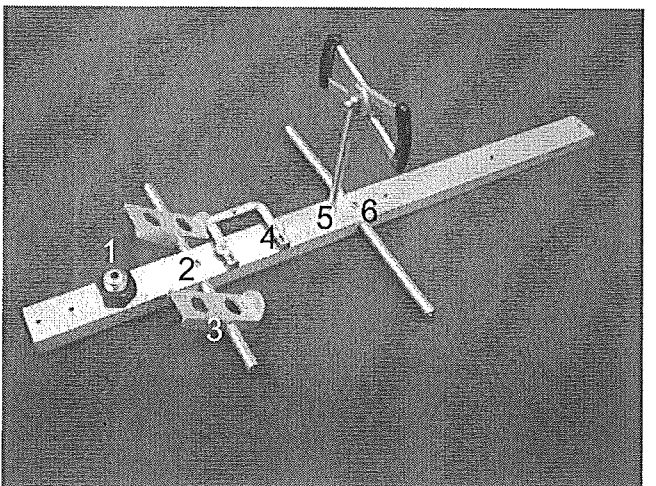
Remove 2 pieces of servo mount out of the laser cutting board. Use instant glue to secure them together. Please also drop some glue on the screw holes.



Remove the dashboard out of the laser cutting board. Apply the dashboard decoration sticker on the dashboard.

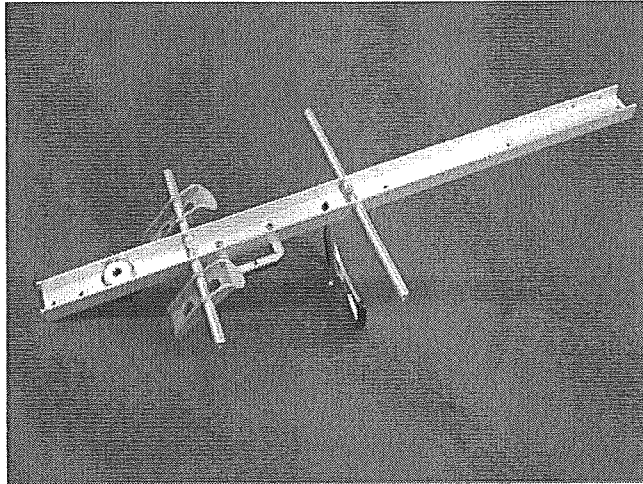


Please refer to the picture and place all the accessories on the working table, including aluminum main beam (F8); one short (F4) and one long (F7) aluminum tubes; screws and nuts for the nose gear; 3x10mm tapping screws; M3x15mm round head phillips screws; foot board; steering wheel combination; servo mount; M3x8mm socket head screws and 3mm locknuts.

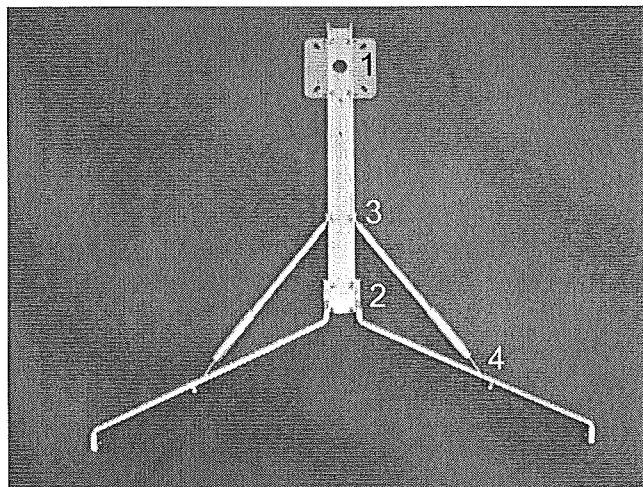


Try to assemble main beam combination. Please refer to the picture.

- 1) Secure the nose gear mount screw with nut.
- 2) Insert the F4 into the F8. Center F4 and use M3x15mm round head phillips screw and 3mm locknut to secure the F4 in place.
- 3) Insert the foot boards on both sides of F4.
- 4) Secure the servo mount with 3x10mm tapping screw.
- 5) Secure the steering wheel combination in place with M3x8 socket head screw.
- 6) Insert F7 into the F8. Center the F7 and secure it in place with M3x15mm round head phillips screw and 3mm locknut.



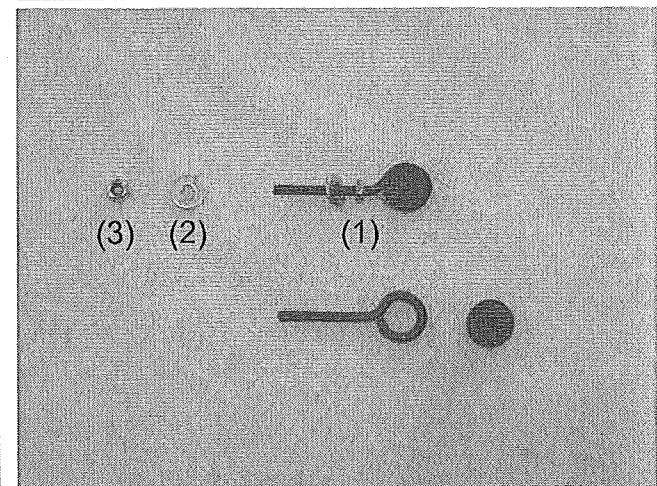
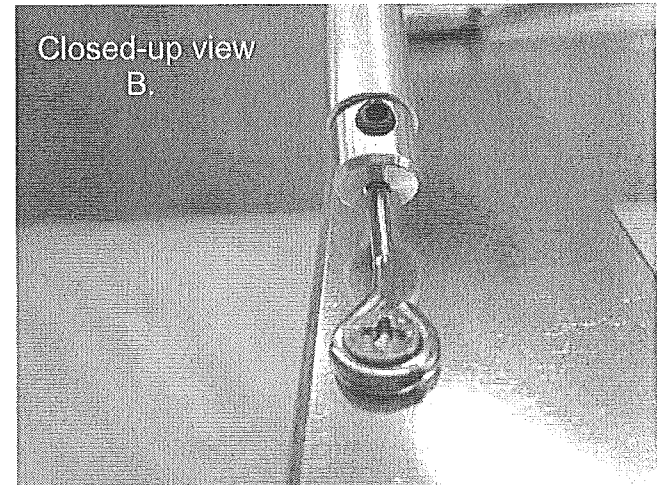
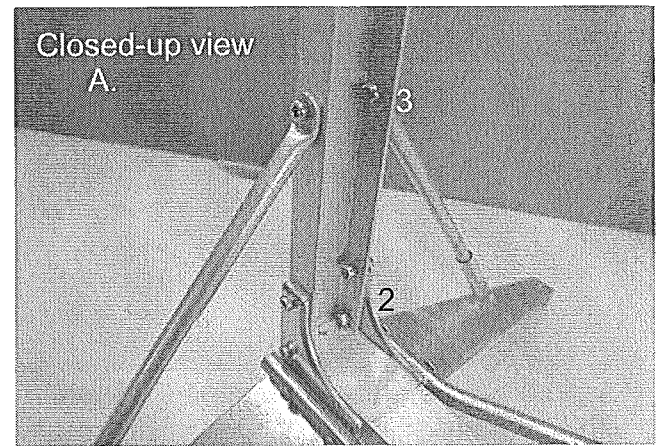
The main beam combination after assembling.



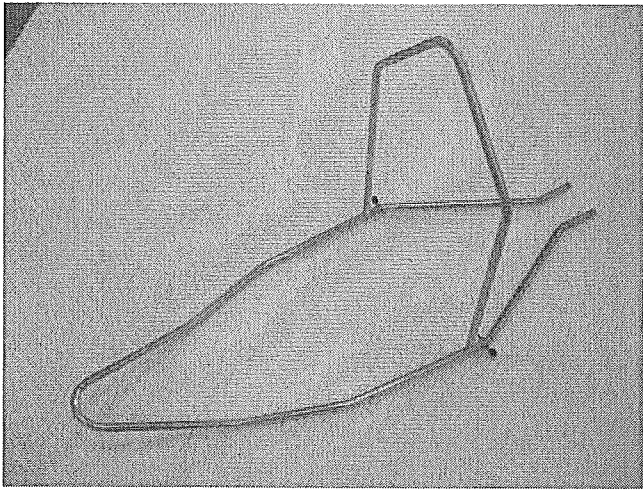
Please refer to the picture and take the relative accessories out of the hardware bag.

- 1) Use M3 x10mm flat head phillips screws and M3 locknut to secure the motor mount (F13) on the F9.
- 2) Use M3x10mm socket head screws and M3 locknut to secure the landing gear on the F9. Please refer to the closed-up view on picture A.
- 3) Use M3x 8mm socket head screws and M3 locknut to secure the shock-absorbing on the F9.
- 4) Screw the M3x10mm flat head phillips screw and M3 locknut on the hole of the

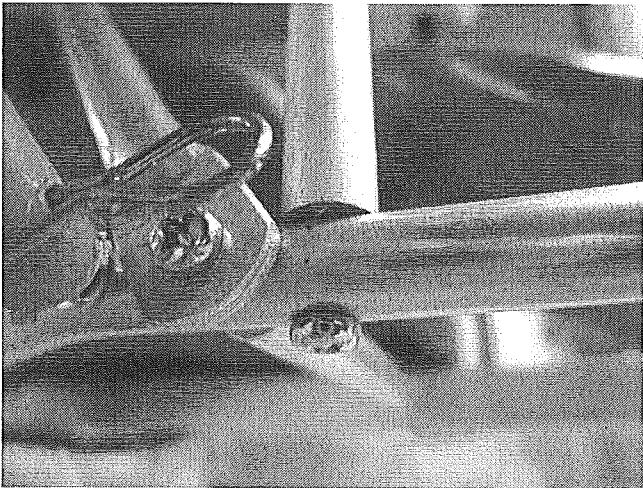
center part of the gear. Please refer to the closed-up view on picture B. Don't secure too tight, only for temporary.



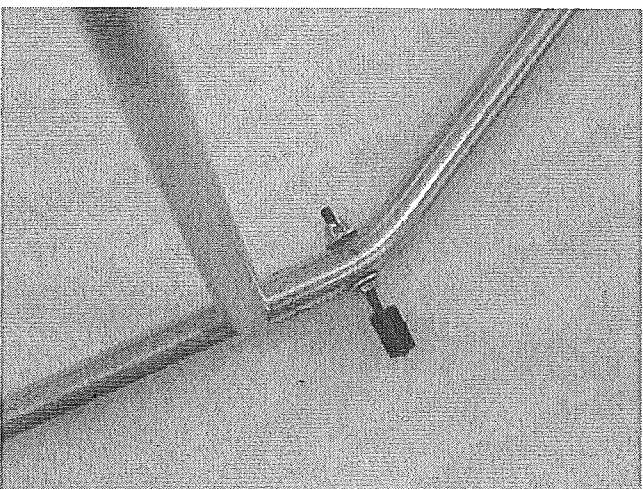
Refer to the picture and place the accessories on the working table. Stuff the eyelets into the eye-screws. Screw in 2mm nut(1) and 2mm washer(2). Place 2mm washer and 2mm locknut(3) on the working table.



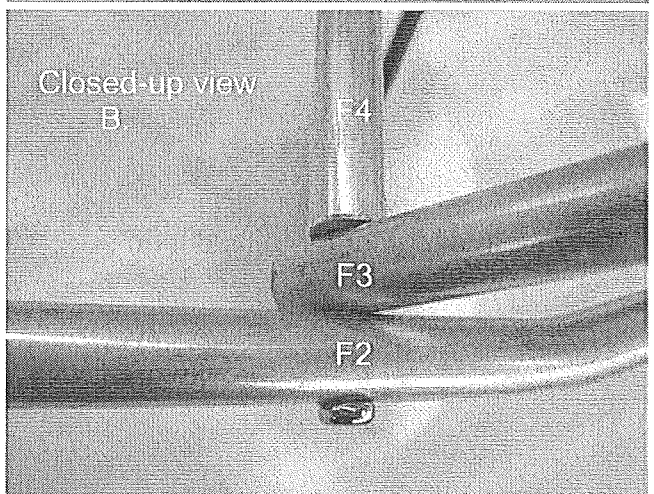
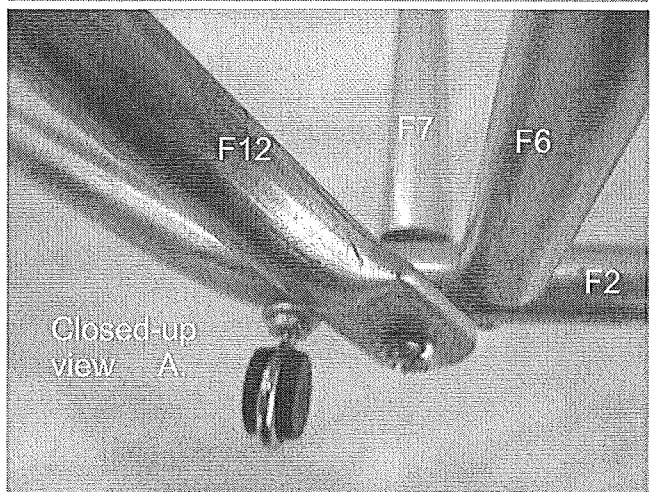
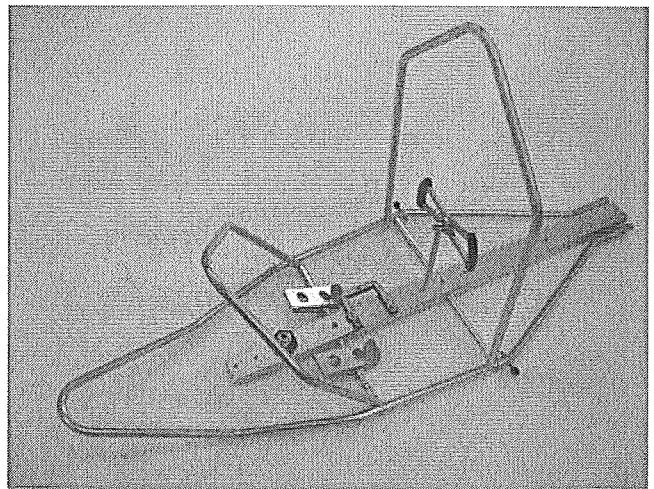
Please refer to the picture and place the F2 & F6 on the working table. Secure the F6 on the F2 tube with M3 x 15mm round head phillips screws from the bottom of the F2.



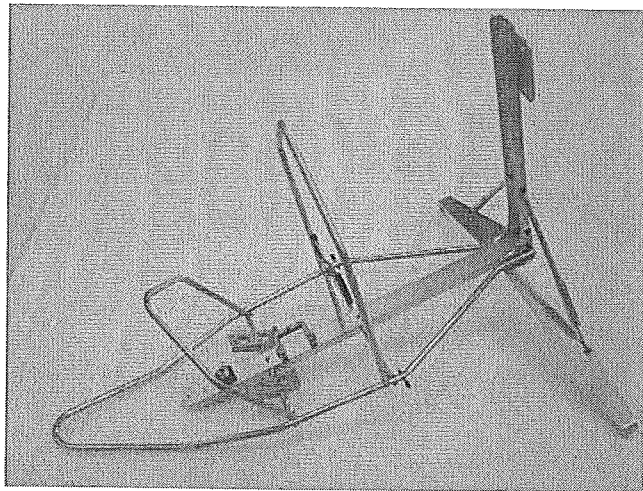
Close-up view of securing F6 on F2.



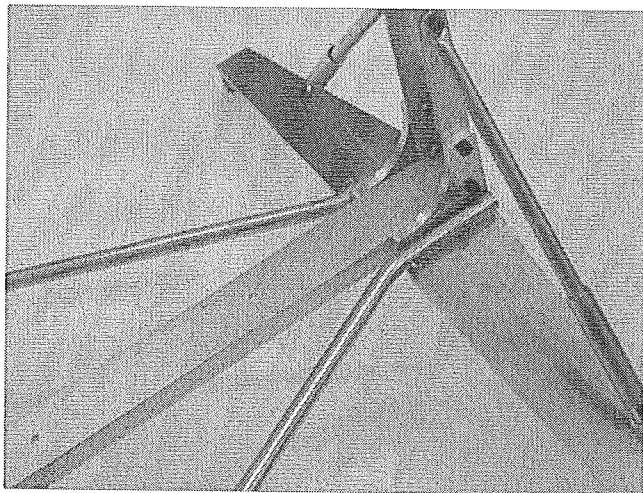
Use 2mm washer and M2 locknut to secure the eye-screws combination on the F2.



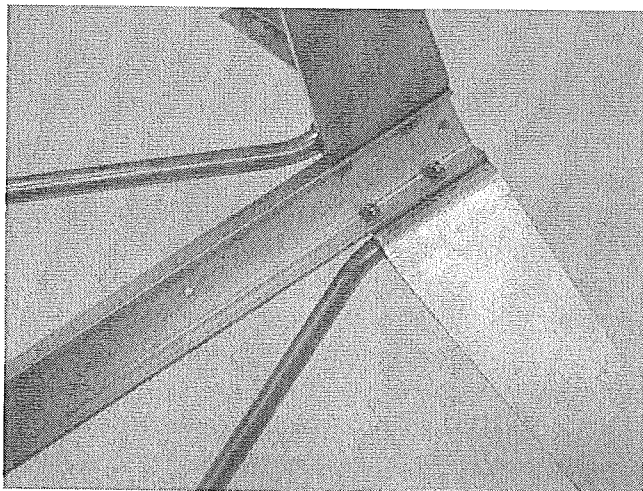
Place the main beam combination (assembled on step 55 including F4, F7 and F8) on the F2 tube. Secure the F7 on F2 with M3x22mm round head phillips screws. Please refer to the closed up view on picture A. Please don't secure too tight. This screw will be removed for assembling the F12 in the following steps. Insert the round head phillips screw M3 x22mm through F2, F3 and secure on F4. Adjust the angle of F3 around 45 degree before securing. Please refer to the closed-up view on picture B



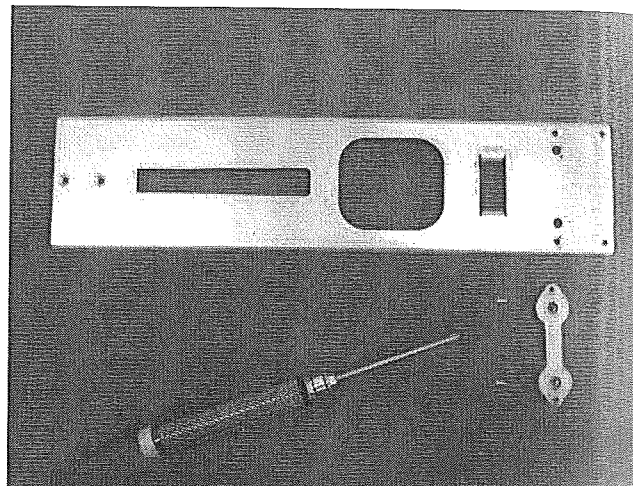
Place the short aluminum (F9) U tube assembly (assembled on step 56) on the tail of the main beam and secure it in place with M3x18mm truss head phillips screws and 3mm locknut.



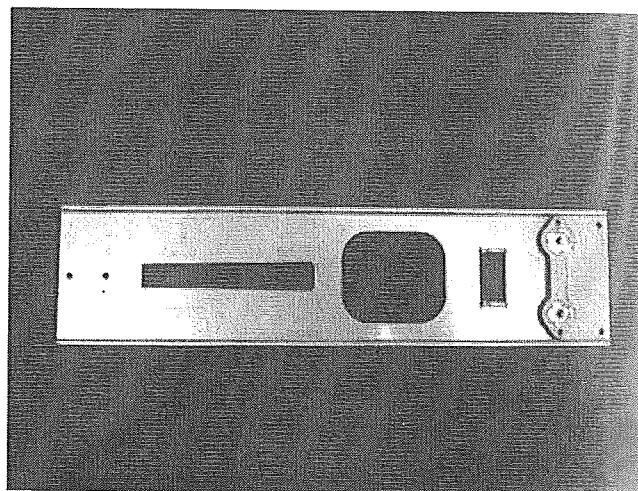
Check the securing from the top. Please use 90-degree triangle ruler to hold it on 90-degree position. Please find the 5.5mm stamped wrench inside the kit and use it for securing all screws.



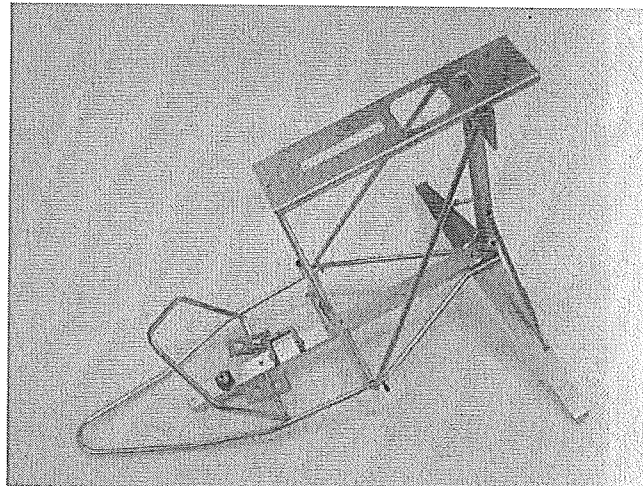
Check the securing from the back (Use 5.5mm stamped wrench to secure the M3 locknut.)



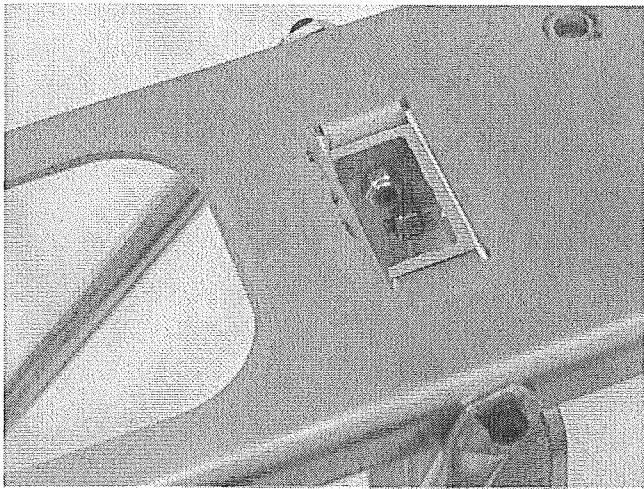
Secure the main wing fixing mount on the F1 with 3 x 8mm flat head phillips screws.



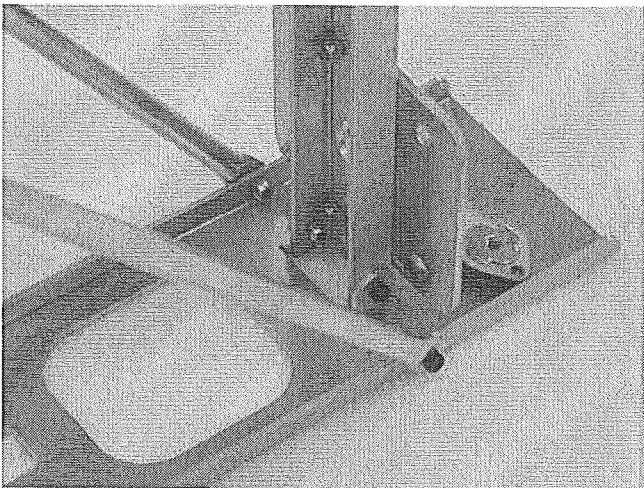
Using 4mm clutch nail for securing from the back side.



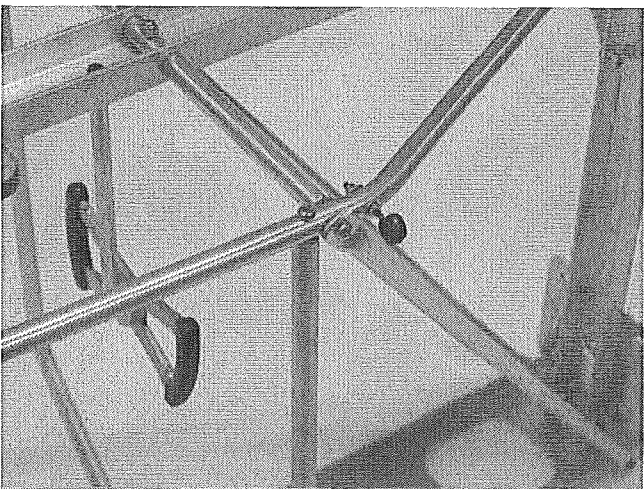
Assemble the top beam F11 on the fuselage.



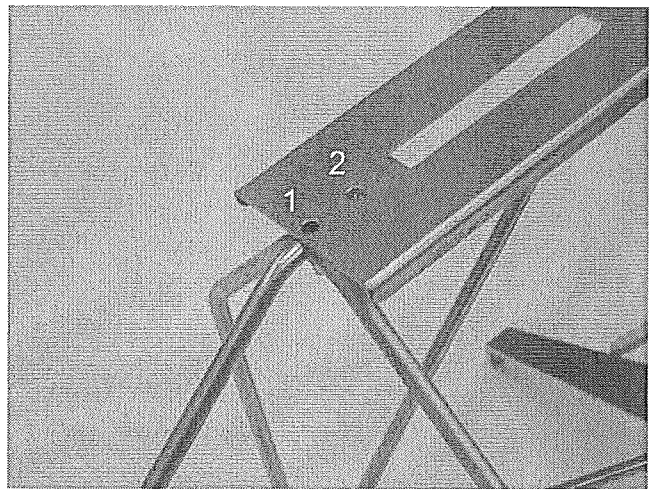
1. Insert the top of F9 assembly into the F11. Secure with M3x8mm socket head screw and M3 locknut (by using HB2.5mm wrench and 5.5mm stamped wrench).
2. Secure the aluminum arms F12 on the top beam F11 with M3 x 8mm socket head screws and M3 locknuts. Please don't secure the left screw too tight for installing the pilot and the seat.



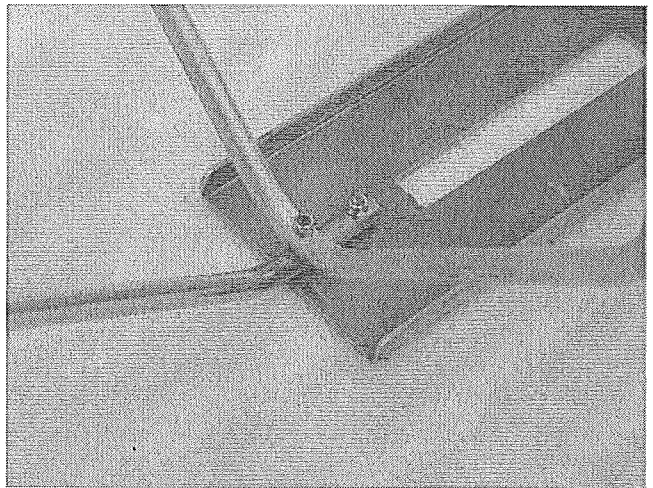
Checking the securing from the back side.



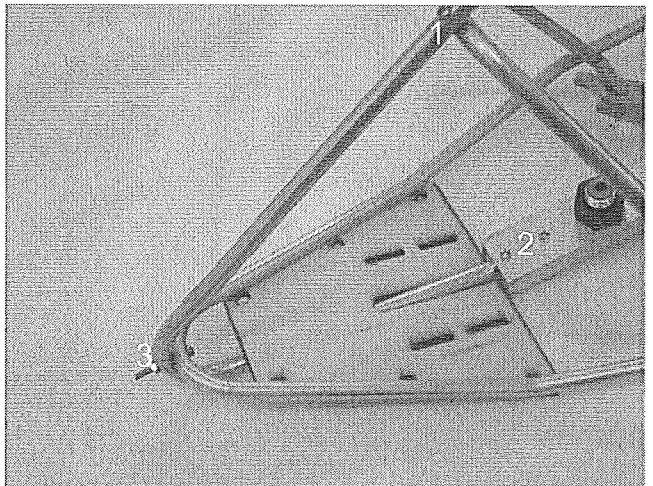
Secure the aluminum arms F12 on the F2 with M3x15mm round head phillips screws.

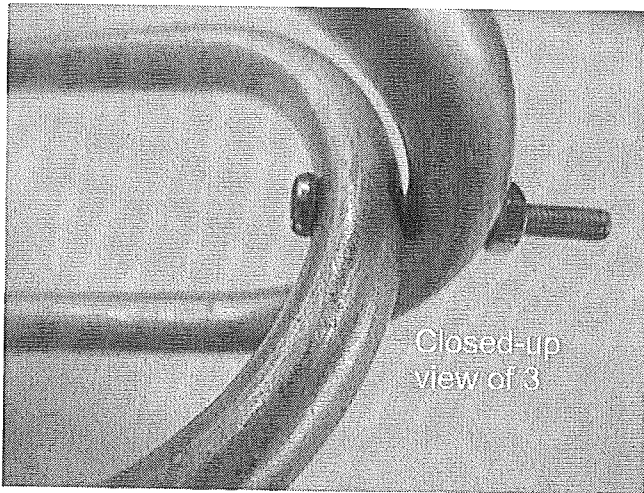


1. Secure the F11 on the F1 with M3x22mm flat head phillips screw.
2. Screw in M3 x15mm flat head phillips screw.



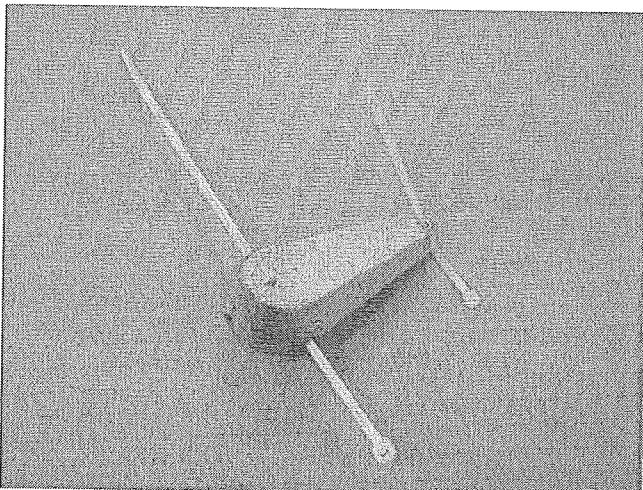
Check the bottom side and secure with 2 pieces of 3mm locknuts.



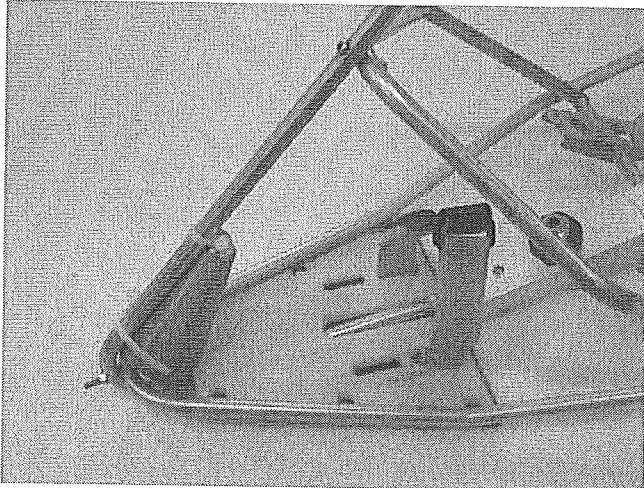


Closed-up view of 3

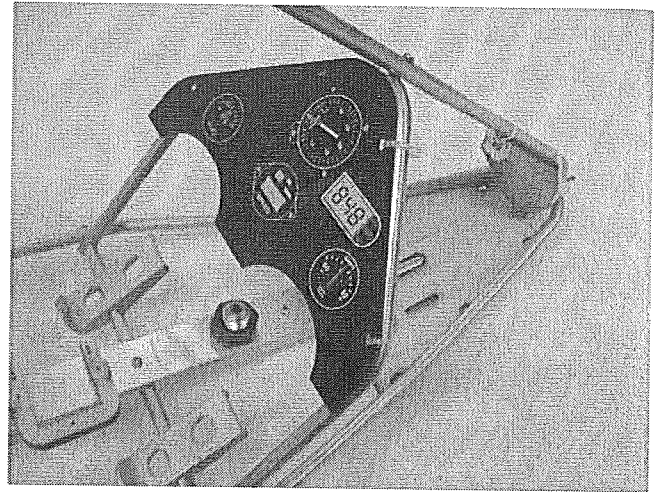
- 1) Secure the aluminum tube F1 with M3x20mm round head phillips screw and M3 locknut.
- 2) Secure main beam F8 on F1 with 2 pieces of M3x15mm round head phillips screws and M3 locknut.
- 3) Secure the front connecting point of the fuselage with M3x30mm round head phillips screw and M3 nut from inside.



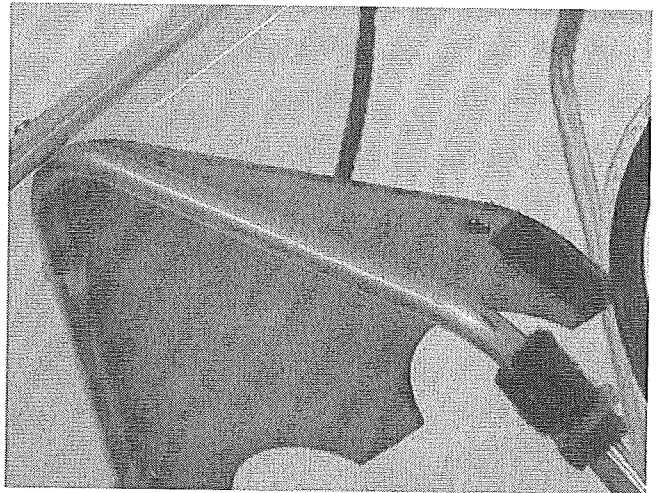
Place the lead on the working table. Insert the long cable tie on the large end and the short cable tie on the small end.



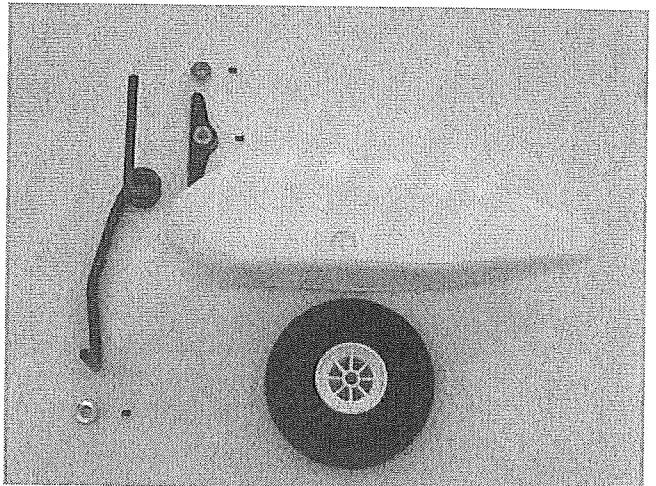
Place the lead on the front end of the fuselage and secure on the aluminum tube with the cable ties. With side cutter to remove the extra cable tie. Install the battery tray on the front and insert the hook and loop trap through the battery tray.



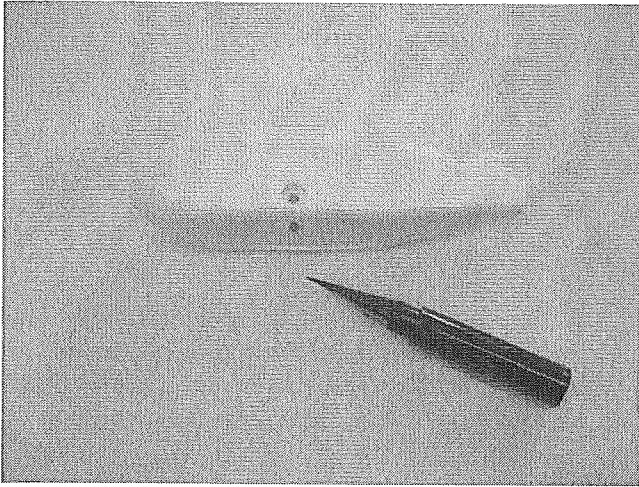
Try to fit the dashboard inside the fuselage. Use hobby knife to open 2 holes on right side of the dashboard. Insert the cable ties through the holes and secure the dashboard in place.



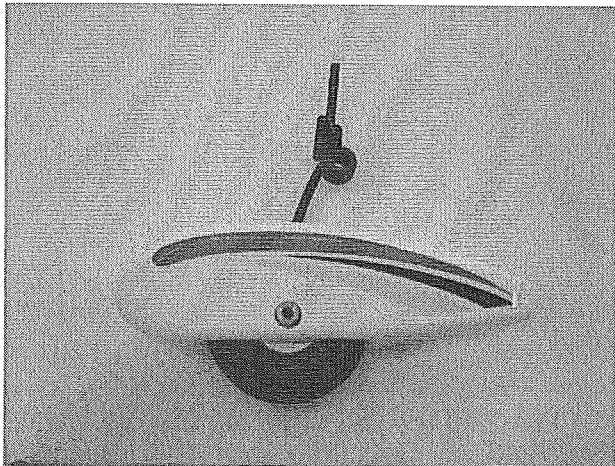
Apply one piece of 20mm adhesive Velcro tape on left side of the dashboard. Use cable tie to secure another Velcro tape on the aluminum tube.



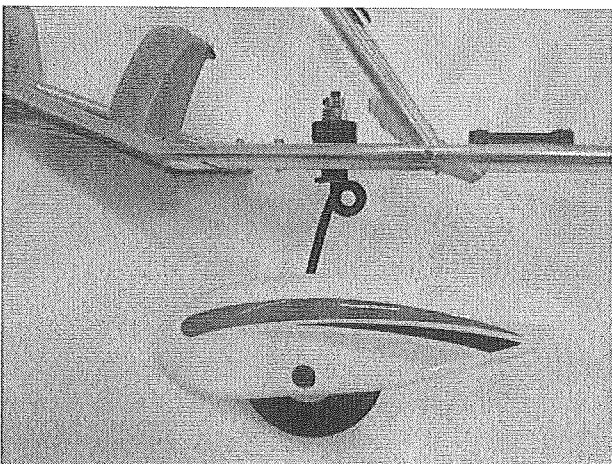
Place the nose gear, Ø5mm collars x 2 pieces, wheel paints, M3x4 hex screw x 3 pieces and 76mm sponge wheel(5mm hole) on the working table.



Use reamer to open a 5.2mm hole on the recess of the wheel paints.

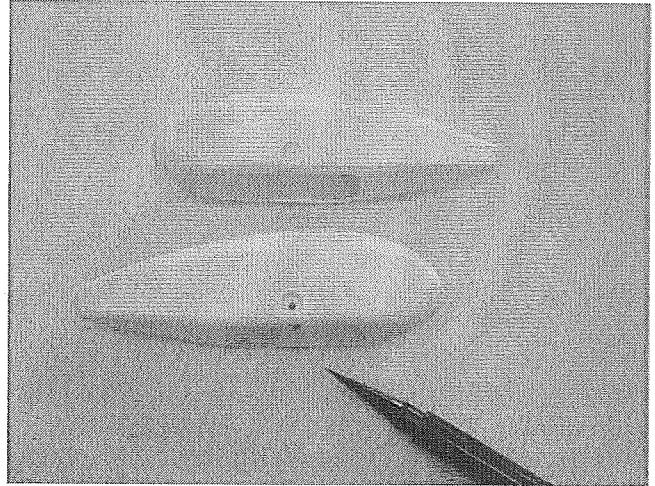


Insert the nose gear into the wheel paints and the sponge wheel. Insert the collar and secure with M3x4 hex screw. Apply the decoration decal on the wheel paints.

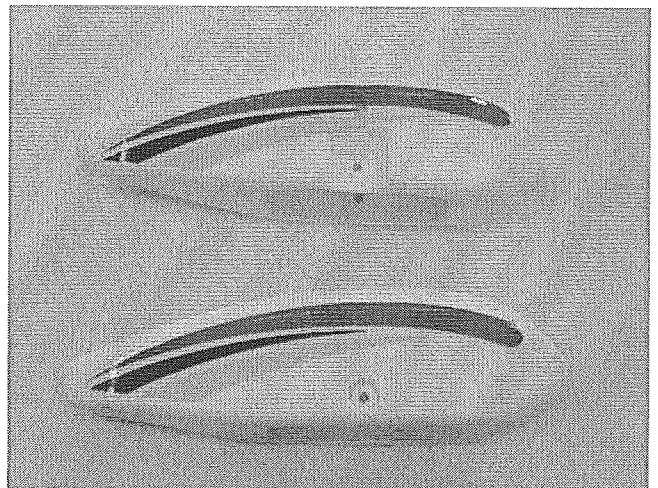


Insert the nose gear through the control arm and try to fit into the fuselage. Screw in the M3x4mm hex screw and place the nose gear mount, collar on the top of the nose gear.

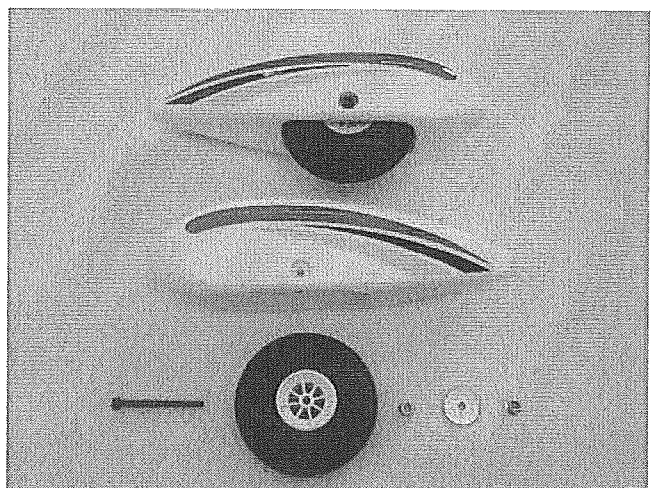
Secure the nose gear in place with M3x4mm hex screw.



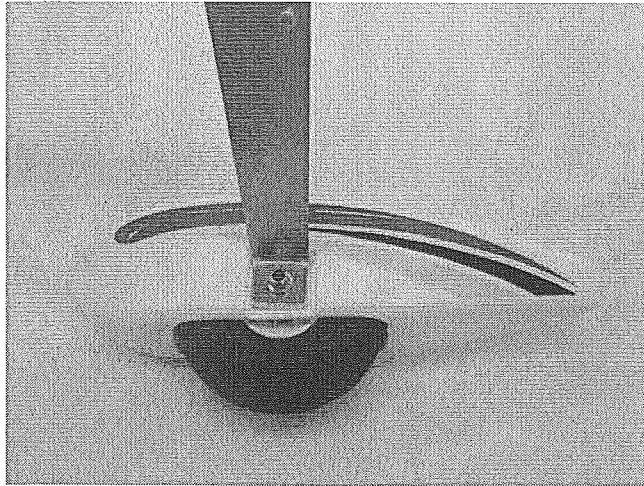
Place the right and left wheel paints on the working table. Use reamer to open 4.2mm holes on the wheel paints.



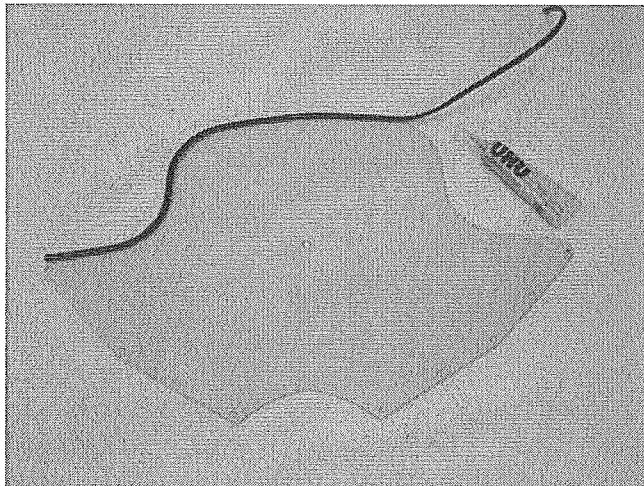
Apply the decoration decal on the wheel paints.



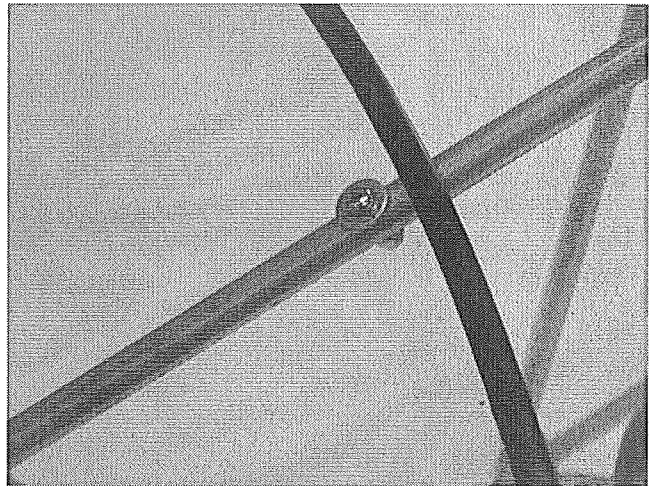
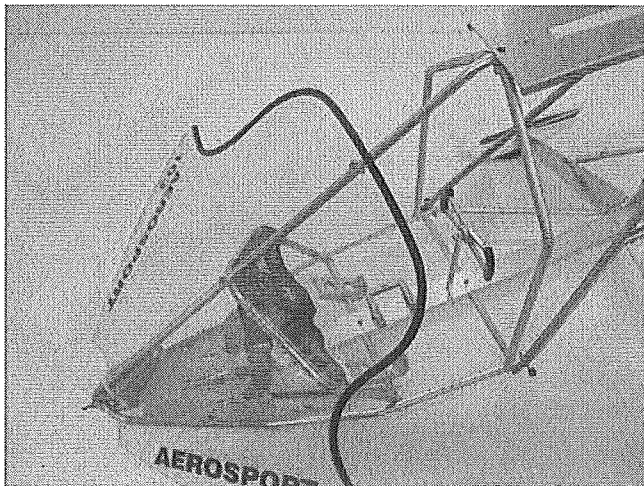
Take the M4 x 45mm socket head screw x 2 pieces, M4 nut x 2 pieces, 4mmx20mm washer x 2 pieces, M4 flange and 76mm sponge wheel (4mm hole) x 2 pieces on the working table.



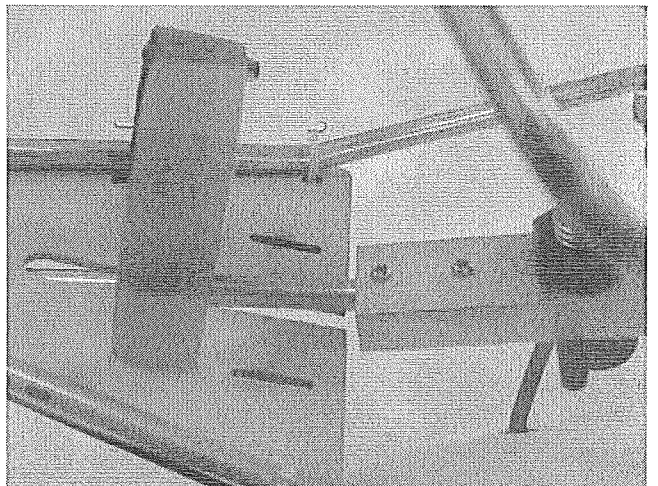
Insert the M4 x 45mm socket head screw through the wheel paints, sponge wheel, M4 nut, washer in order and secure on the main gear with M4 flange. Please keep some space between the wheel and the M4 nut for moving freely.



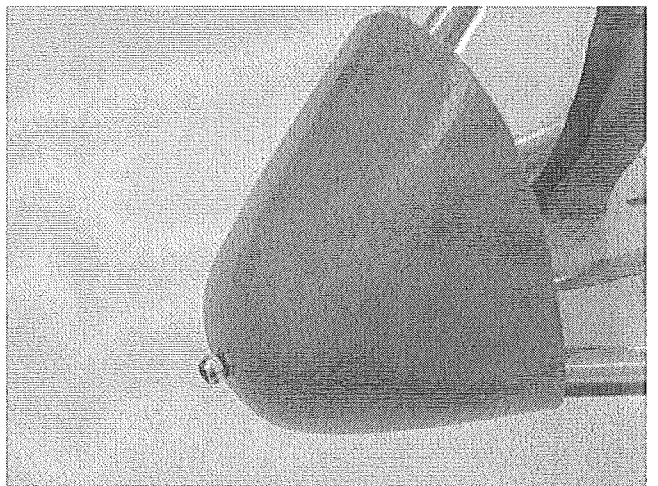
Take the transparent canopy and black rubber out of the hardware bag. Remove the protecting film from the canopy. Apply some UHU glue inside the slot of the rubber. Insert the long edge of canopy into the slot.



Please find the pre-open hole on the canopy near the rubber edge. Use M3x15mm round head phillips screw, 3mm washer and M3 locknut to secure the canopy on F1.



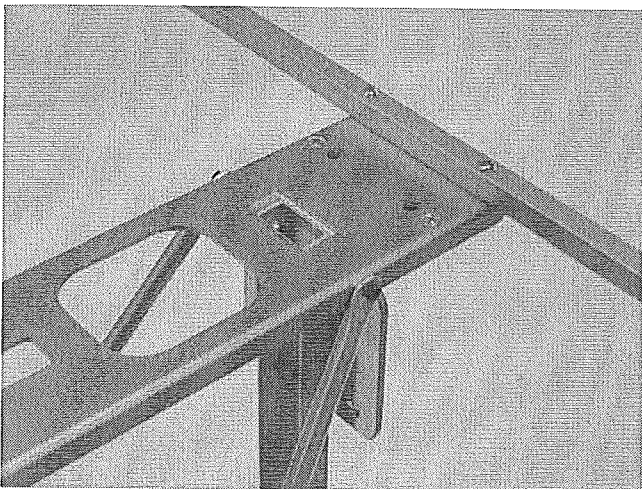
Secure the right and left side of the canopy on the aluminum tube with cable ties. Use side-cutter to remove the extra cable ties.



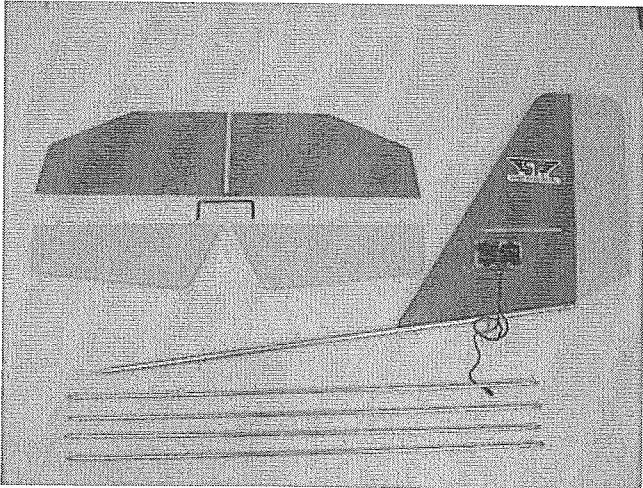
Try to fit the red F.R.P. nose and secure in place with M3 locknut.



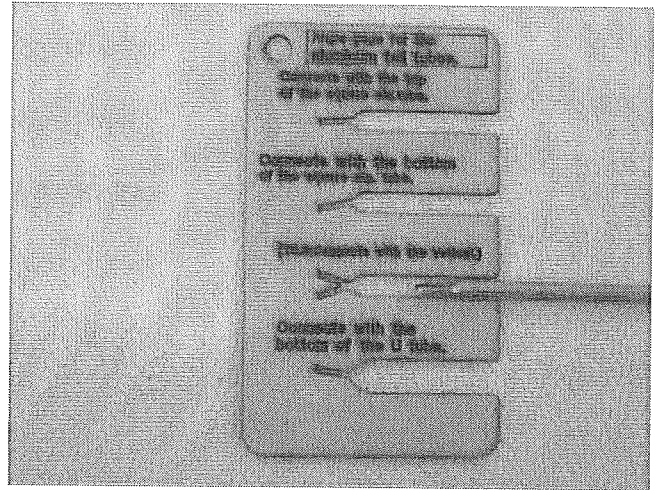
Apply the decoration decal on both sides of the canopy.



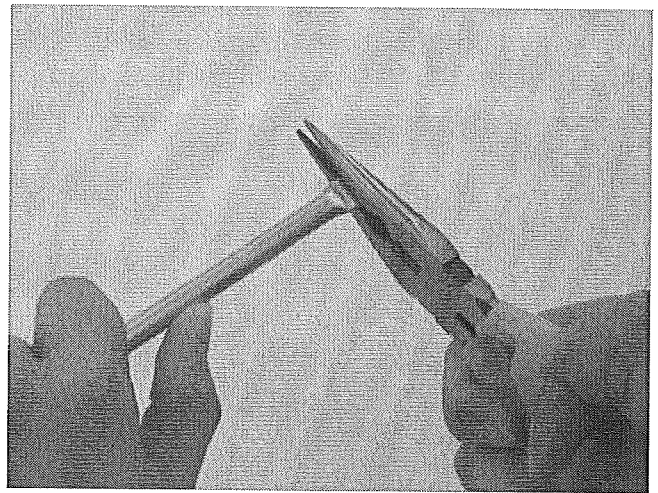
Place F14 on the top beam (F11) and secure it in place with M3x18mm truss head Phillips screws and M3 locknuts.



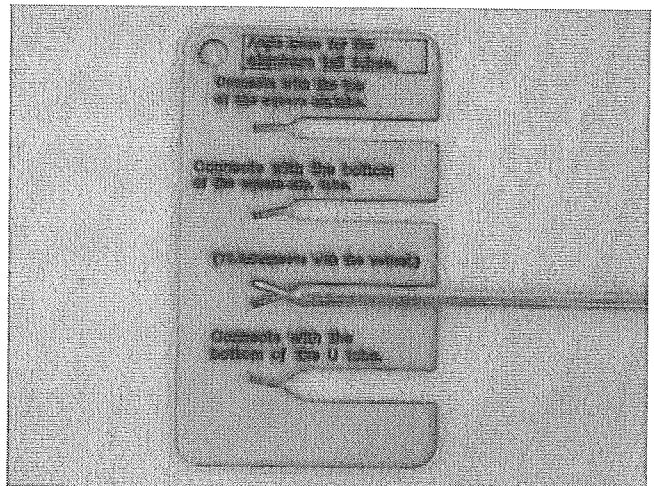
Place the rod (for elevator), 8mm x 820mm(L) aluminum tube (F16) x 4 pieces, vertical, horizontal and 12.5mm x 858mm(L) aluminum tube (F15) on the working table. Try to find 3 pre-serving holes on the bottom of the vertical and F15. Try to fit the vertical on F15 and secure in in place with 3 x 25mm tapping screws.



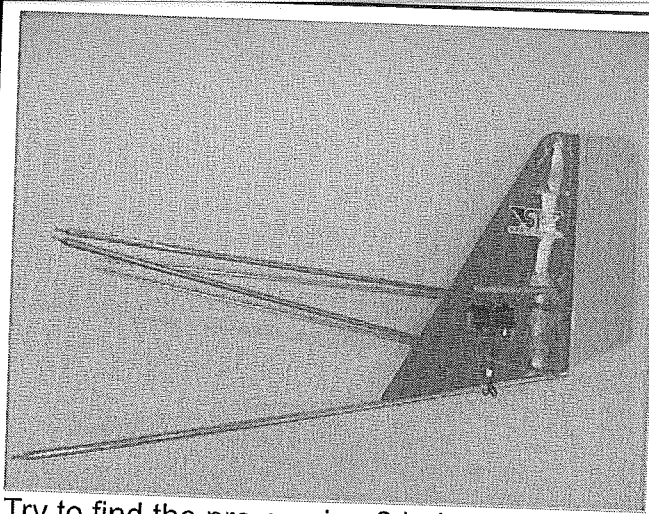
Please find the tube-angle-gauge inside the kit. Try to fit the end of the tail tube into its correspondent hole on the gauge.



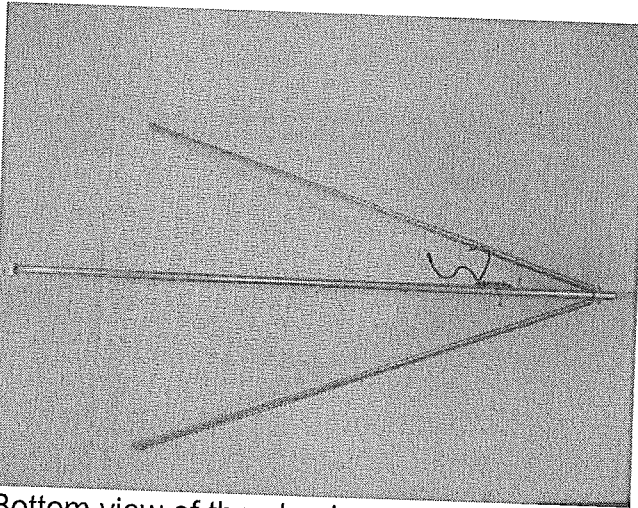
Use the nipple pliers to adjust the end of the aluminum tail tube.



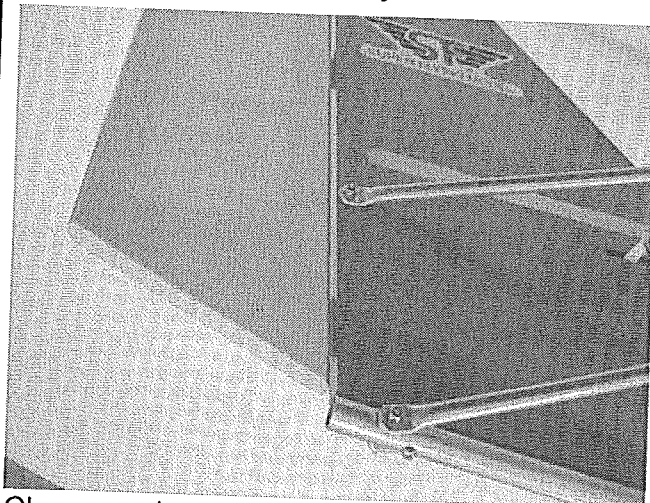
Make sure the end of the aluminum tail tube must fit into its correspondent hole on the gauge.



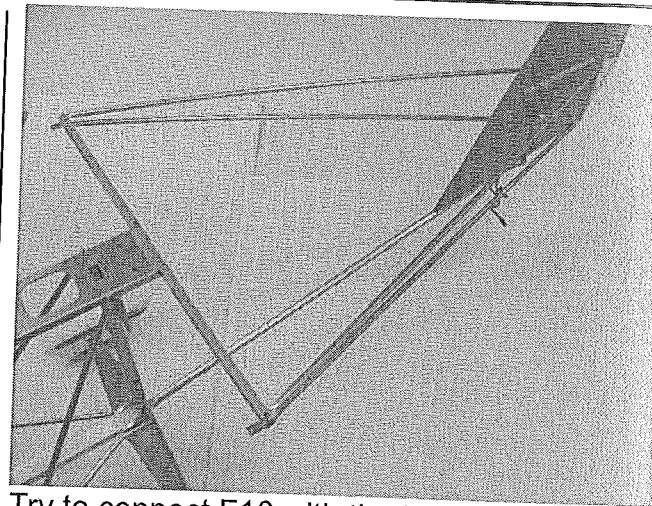
Try to find the pre-serving 2 holes on the vertical and the aluminum side-tubes (F16). Secure F16 in position with M3 x 20mm round head phillips screws and M3 locknuts. Secure another 2 pieces of F16 on F15 with M3 x 20mm round head phillips screws and M3 locknuts.



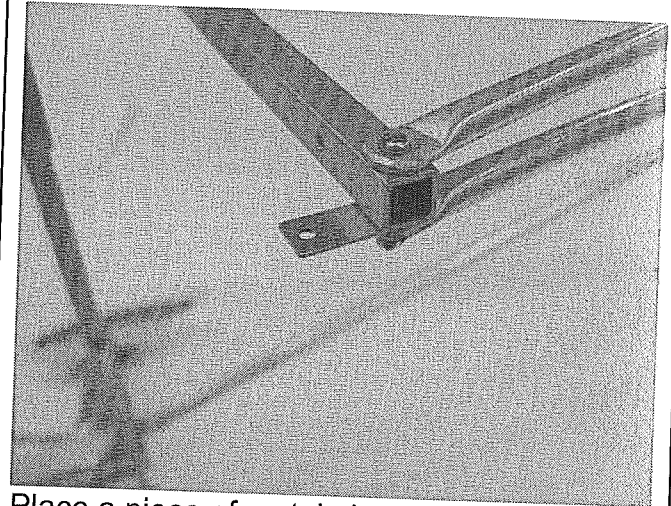
Bottom view of the aluminum tail (F15) and side tubes (F16) assembly.



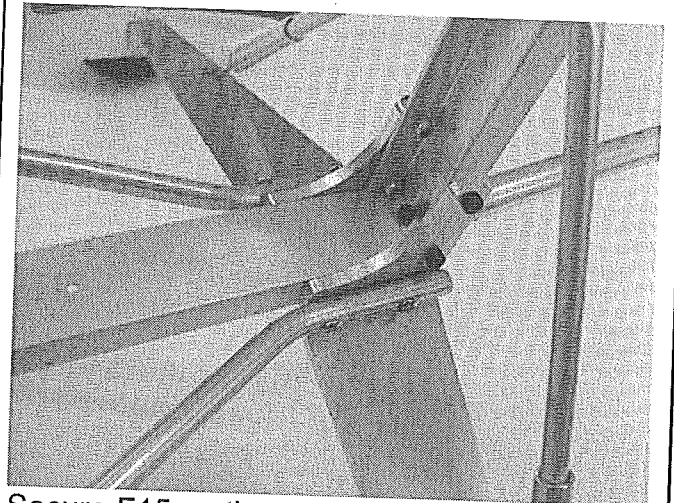
Close-up view of the aluminum tail (F15) and side tubes (F16) assembly.



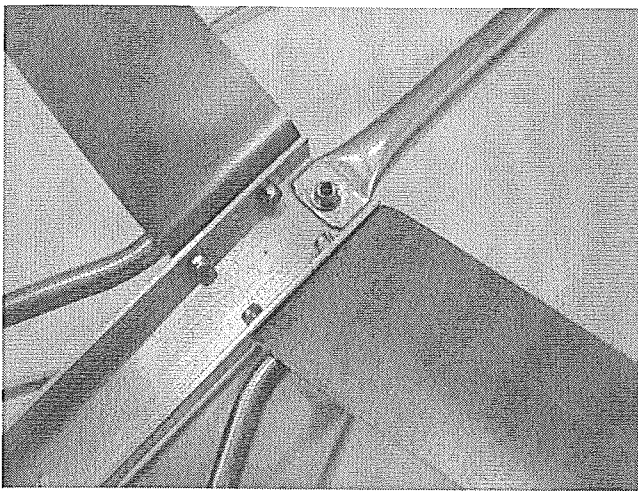
Try to connect F16 with the F14.



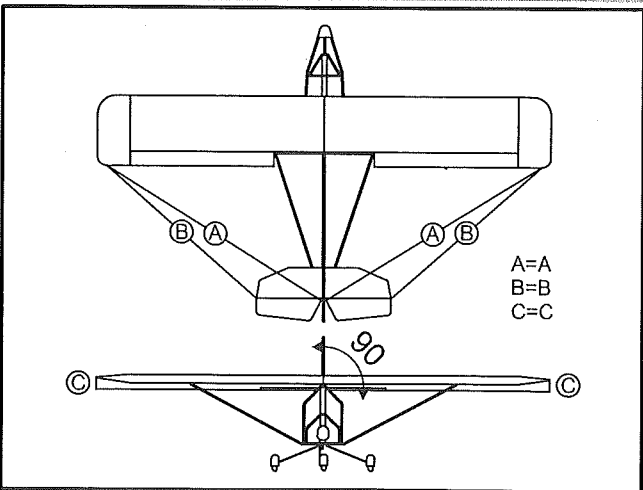
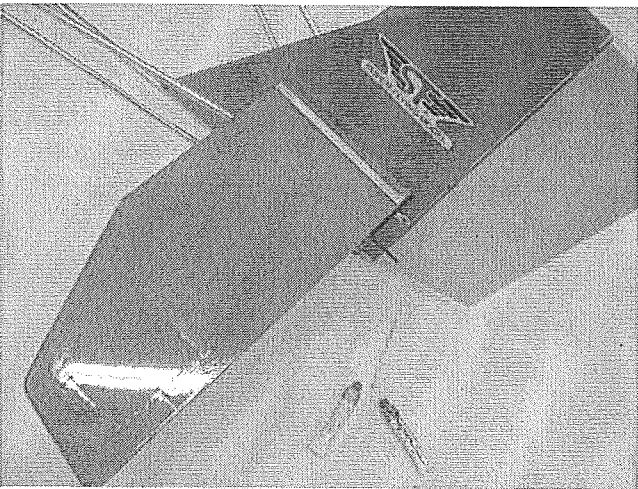
Place a piece of metal plate between the square tube (F14) and the side tube (F16). Secure F16 in position with M3x20mm round head phillip screws and M3 locknuts.



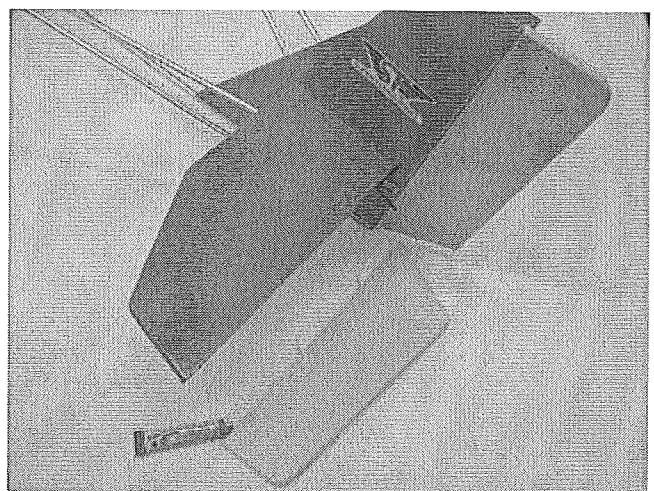
Secure F15 on the main beam (F8) with M3x8 socket head screw and M3 locknut.



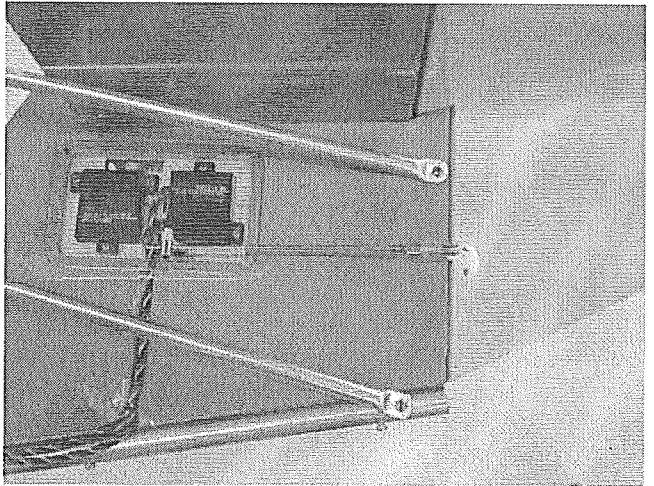
Securing with M3 locknut from the back.



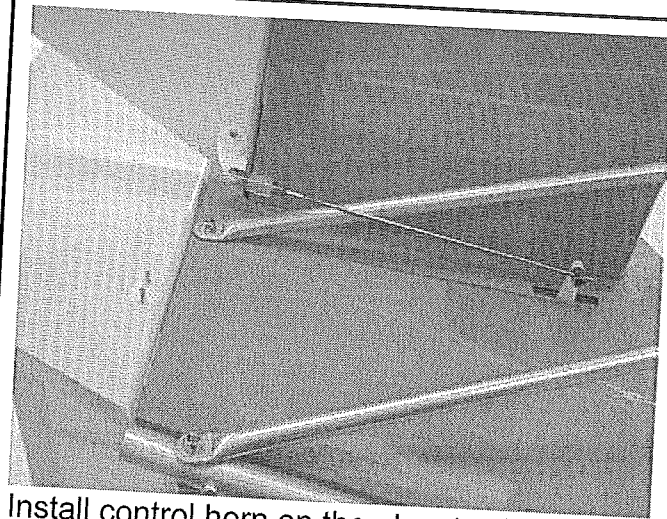
Assemble the elevator rod on the rear edge of the vertical. Try to fit the horizontal into the vertical. When satisfy the location, remove the horizontal and spread some epoxy on the connecting area. Insert the horizontal into the vertical and wait for the glue to dry enough. Please apply transparent tape and pins to hold the vertical in position until the glue is dry enough.



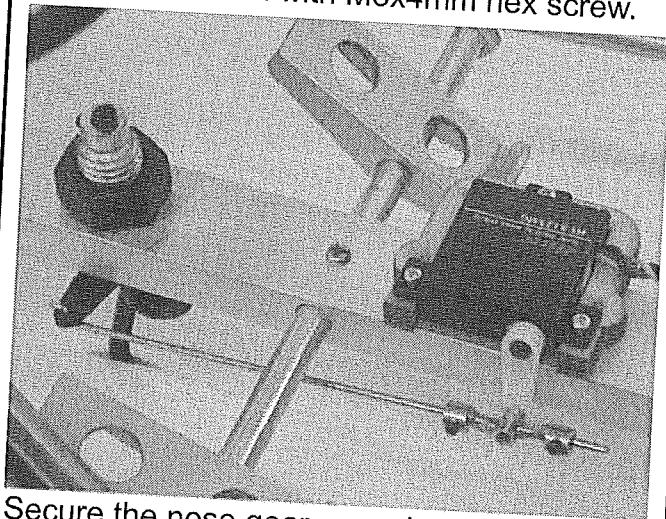
Spread some Superglue on the top and bottom sides of the hinges and insert to the hinge holes on the elevator. Fix the elevator rod on the vertical with epoxy. Apply transparent tape on the horizontal before the glue is dry enough.



Install the control horn on the rudder for connecting with rudder servo arm. Please note the location of the control horn and the servo arm must be at the same straight line. Use 2mm driller to drill holes on the rudder and secure the control horn in place with M2 x25mm round head phillips screws. Take one piece of 330mm rod with thread. Thread the metal clip on the threaded end. Slide in one piece of silicone tube on the rod. Set the servo arm at neutral position. Connect the metal clip on the control horn. Pull the rod straight and use marker to make a mark on the rod where it pass through the servo arm. Please leave 7mm length and use nipple pliers to cut off the extra rod. Secure the rod on the servo arm with M3x4mm hex screw.

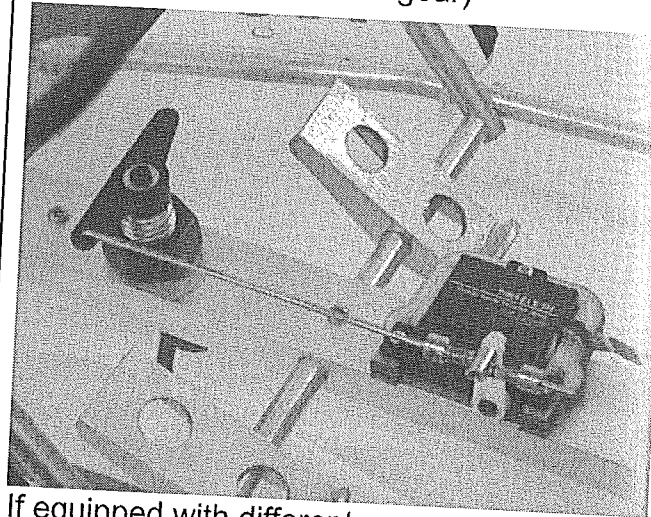


Install control horn on the elevator for connecting with elevator servo arm. Please note the location of the control horn and the servo arm must be at the same straight line. Use 2mm driller to drill holes on the elevator and secure the control horn in place with M2 x25mm round head phillips screws. Take one piece of 330mm rod with thread. Thread the metal clip on the threaded end. Slide in one piece of silicone tube on the rod. Set the servo arm at neutral position. Connect the metal clip on the control horn. Pull the rod straight and use marker to make a mark on the rod where it pass through the servo arm. Please leave 7mm length and use nipple pliers to cut off the extra rod. Secure the rod on the servo arm with M3x4mm hex screw.

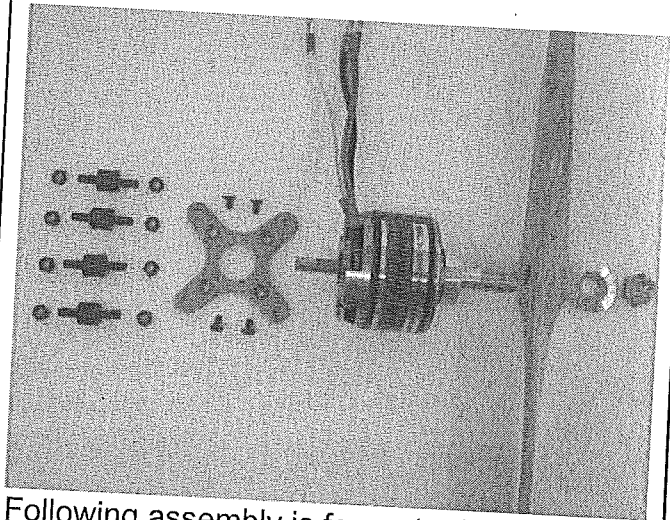


Secure the nose gear servo in place with 2.6x8mm tapping screws. Use 2mm driller to drill a hole on the servo arm. Install an adjusting stand on the opened hole. Install a plastic nut into the adjusting stand. Take one piece of no-threaded rod. Make a Z-bend on one end and connect with control arm of the nose gear. Insert the other end through 2mm color, spring, adjusting stand (on the servo arm), spring, collar in order. Adjusting springs and secure the collars with M3 x 4mm hex

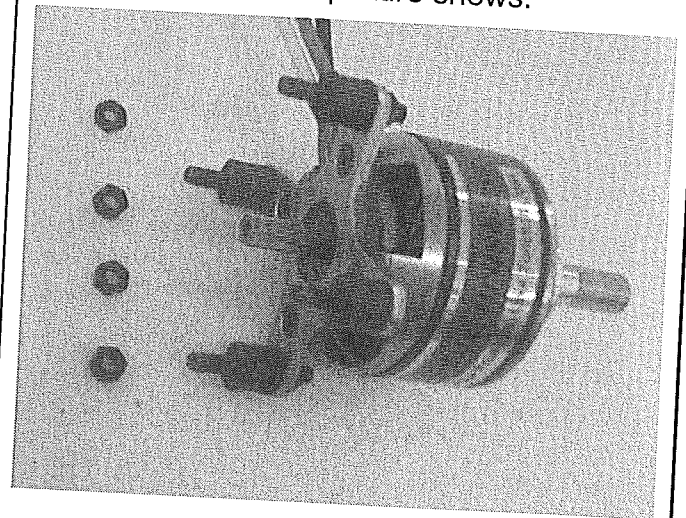
screw.
(Recommendation for servo:
Hitec HS-5125MG metal gear)



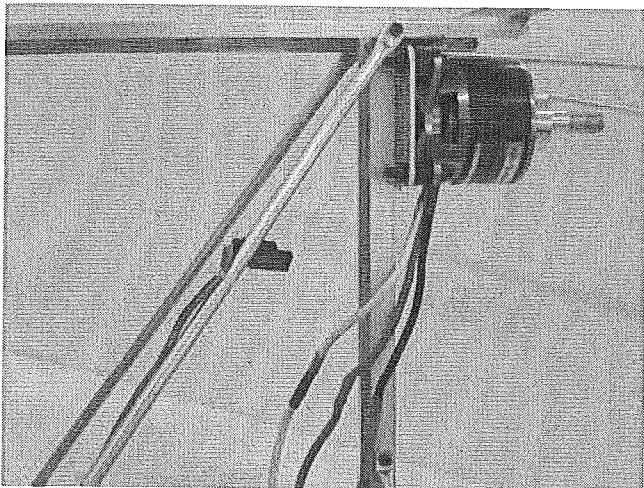
If equipped with different servo with different rotation; please install the control arm and servo arm in different direction. Please refer to the picture.



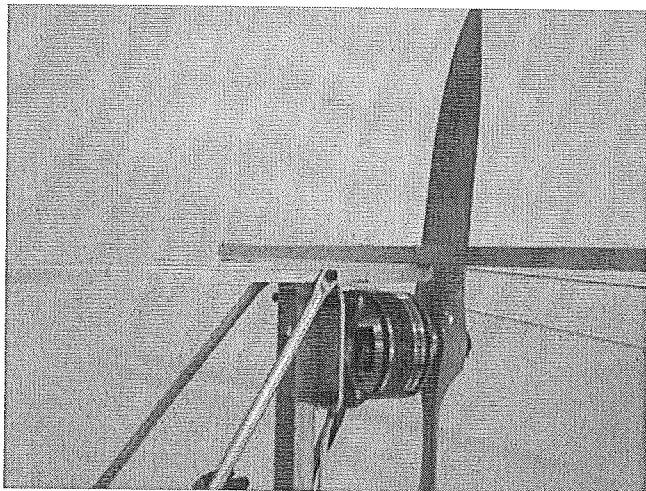
Following assembly is for motor HIMAX #HC6325 350KV which is not included in the kit. Place all the hardware comes with the motor and the 16X8" propeller on the working table in order as the picture shows.



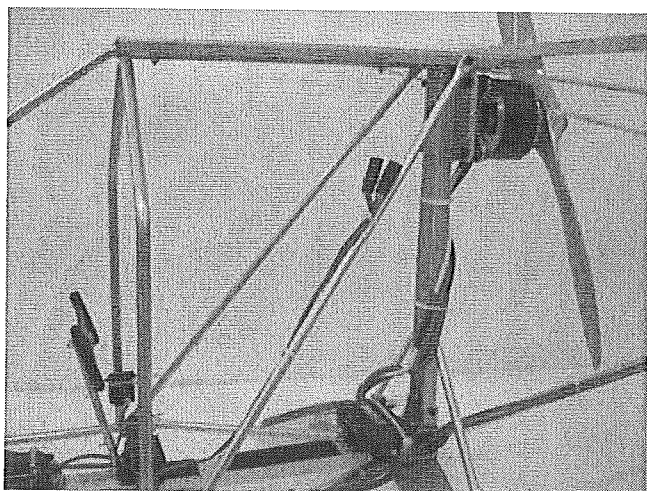
Secure the motor stand on the motor with the screws.



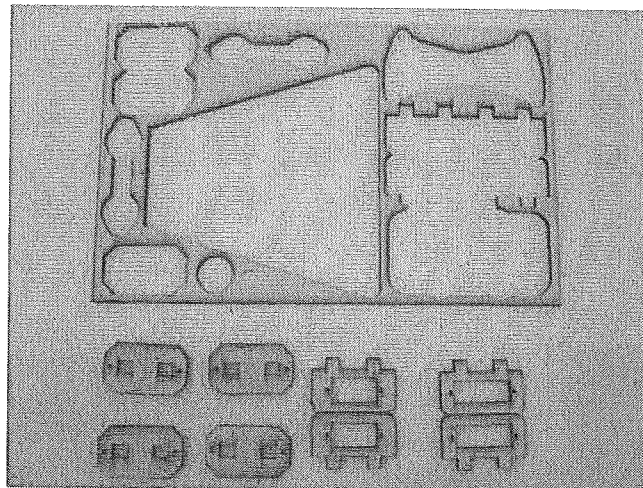
Secure the motor on the motor mount F13 with the screws and nuts. Connect the motor cable with ESC and if the motor rotation is clock-wise.



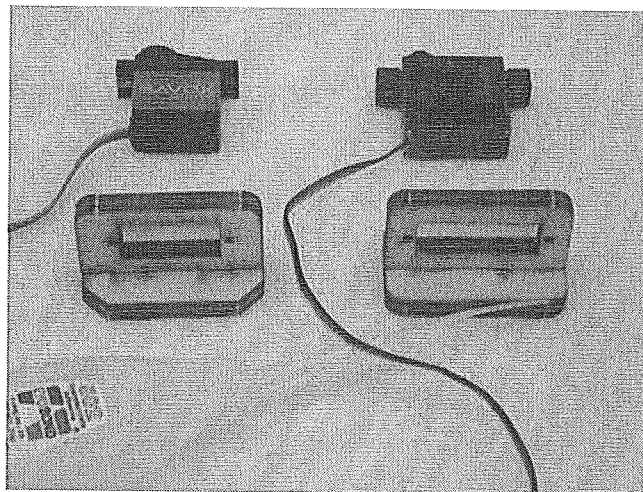
Install the propeller on the motor (the LOGO on the propeller must face forward) and secure in place with washer and nut.



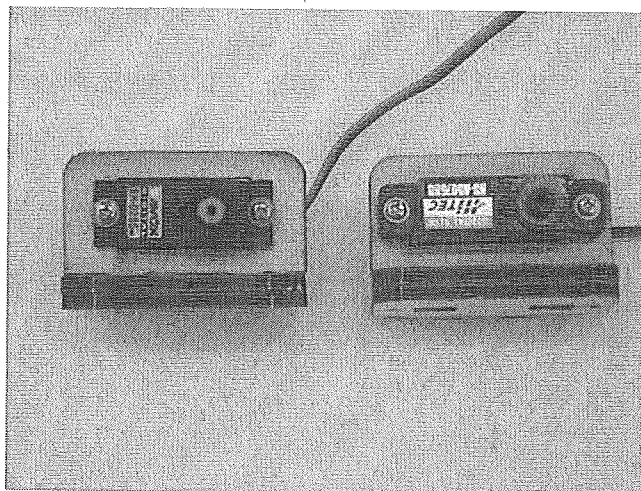
Secure the ESC on the rear edge of fuselage with cable tie.



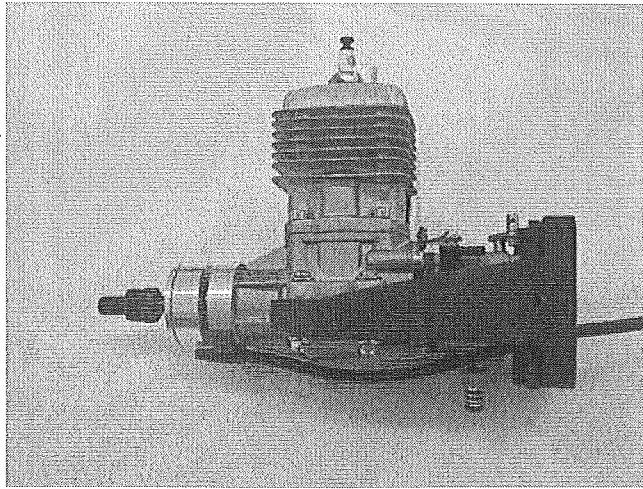
Place the laser-cutting wooden accessories on the working table. Glue two pieces (same shape) together for assembling the servo mount.



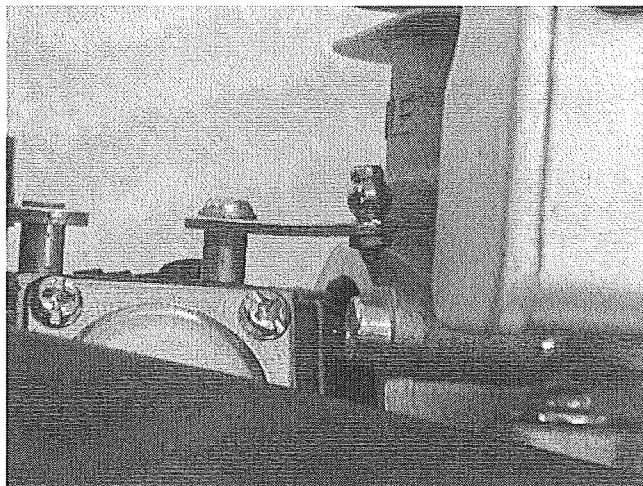
Assemble the servo mount as the picture shows and use instant glue to fix the servo mount. Please use 13g metal gear servo (SAVOX or HITEC).



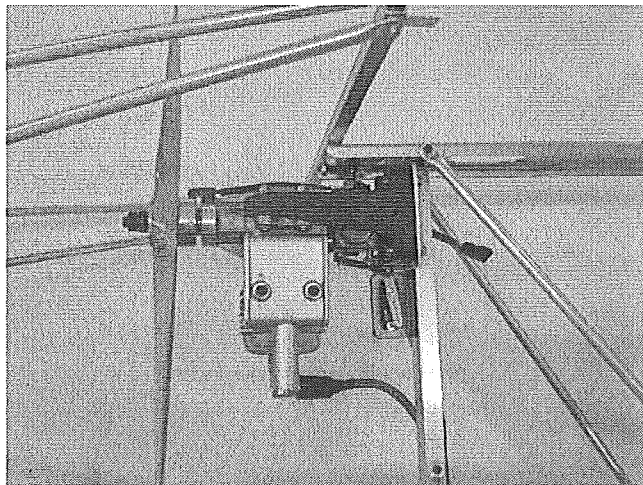
Secure the servo on the servo mount with the screws come with the servo.



Following assembly is for GAS engine DLE20cc. Try to fit the engine on the engine mount. When satisfy the location, use marker to make markers for drilling holes. Use 4mm electric driller to drill holes on the marked location. Secure the engine in position with M4x30mm round head phillips screws, 4mm washers and M4 flange.

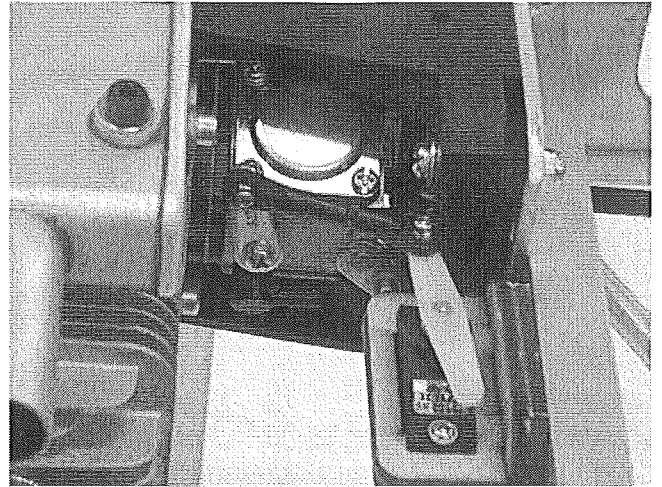


Secure the ball end onto the control lever of the carburetor with M2x8mm round head phillips screw and M2 nut. Drop some thread-locker onto the nut.

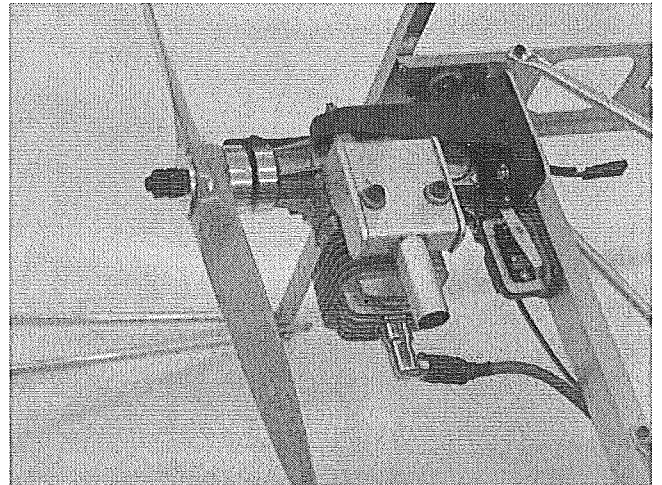


Secure the servo mount onto the U aluminum tube F9 with 3x10mm tapping screws. Place

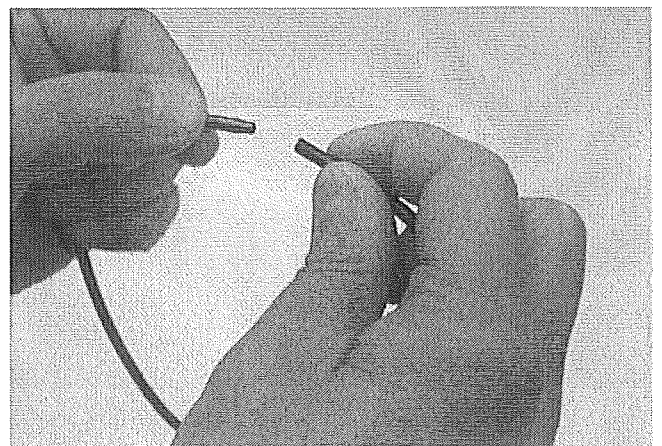
the engine mount on the center part of the motor mount F13 and secure in place with M4 x 25mm round head phillips screws, 4mm washers and M4 flange.



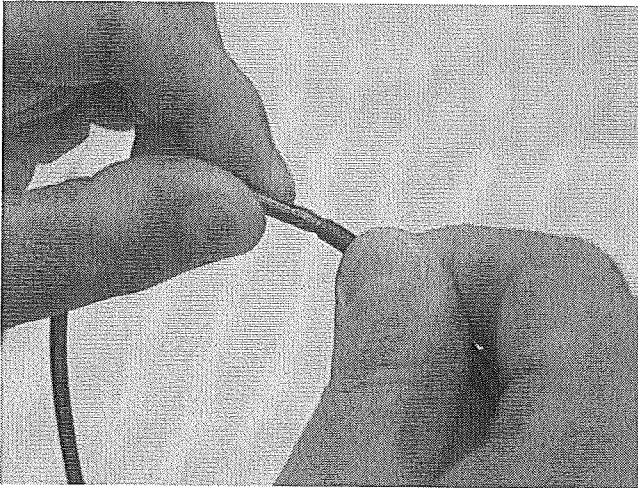
Use 2mm nut driller to drill hole on the servo arm. Screw in the M2x8mm round head phillips screw, ball end and M2 nut onto the servo arm. Connect the servo cable with receiver. Set the program; connect the ball end rod onto the servo arm.



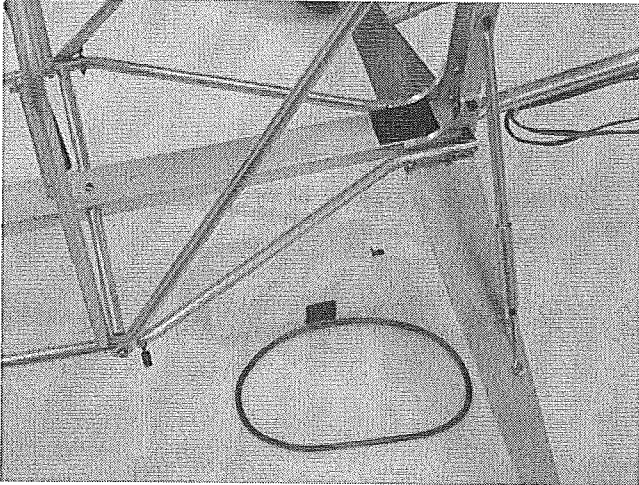
If assemble the pull-propeller; secure the propeller with washer and locknut. Use starter can install spinner. Install glow-glug and connect all the cables. (Please refer to the instruction comes with the engine.)



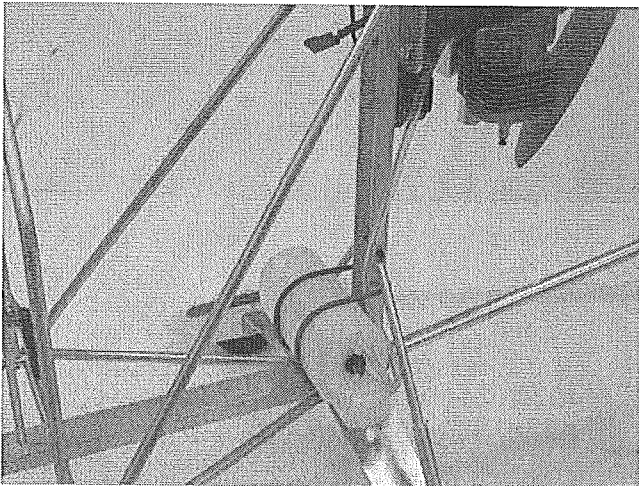
Please find a 320mm long spring in the hardware bag. Insert its nipple end to another end.



Screw the nipple end clockwise and another end anticlockwise several turns and make sure it won't loss off.

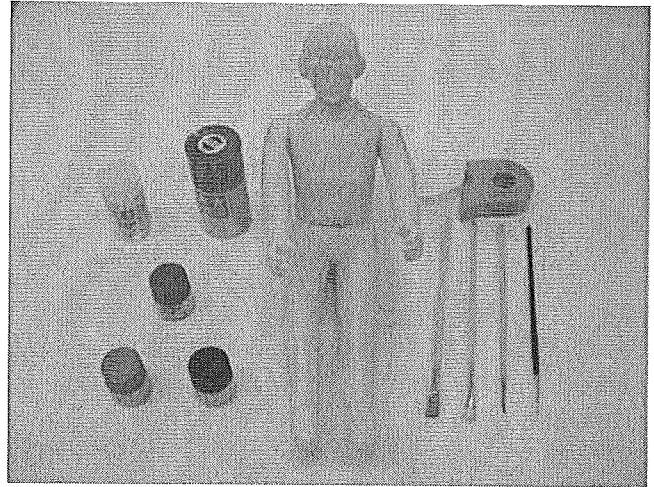


Take one piece of 25mm long Velcro peel and stick adhesive. Apply one side on the center part of the fuel tank and another side on the fuselage. Use Velcro peel and stick to hold the fuel tank in position.

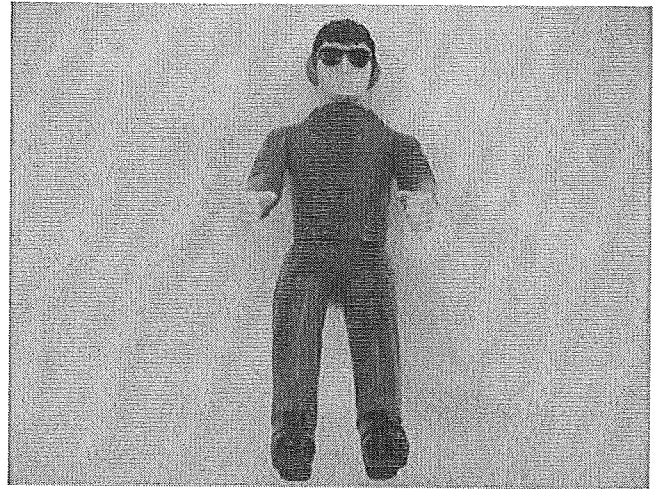


Push the fuel tank through the spring. Pull the spring through the shock-absorbing and secure on another end of fuel tank. Connect

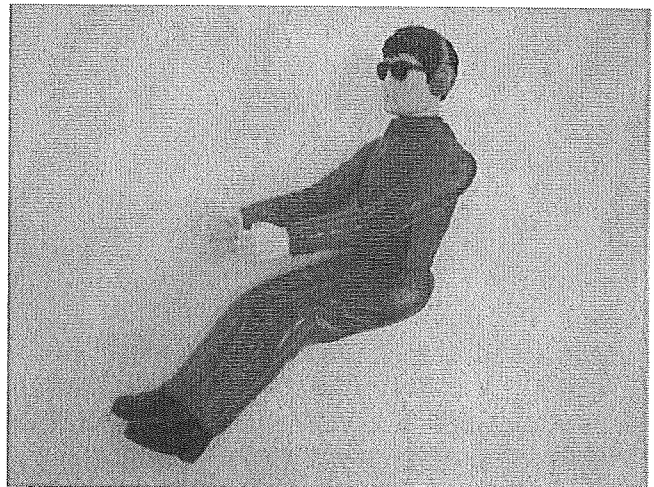
the fuel tube with fuel tank and carburetor. (P.S. If equipped with Nitro engine; it needs pump for adding pressure and connects the fuel tube to the muffler.)



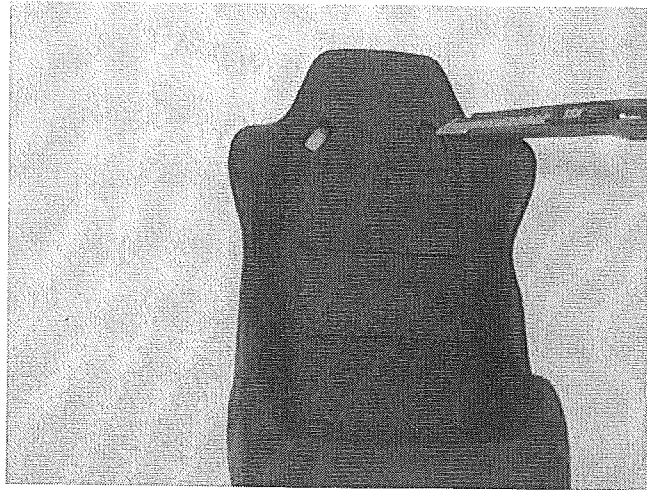
Prepare the paint, brushes and tapes. Color the pilot as you like.



Remove the head from the pilot. Apply the tape to cover the hand and shoes. Spray painting the body and the legs. When the painting is dry, remove the tapes.



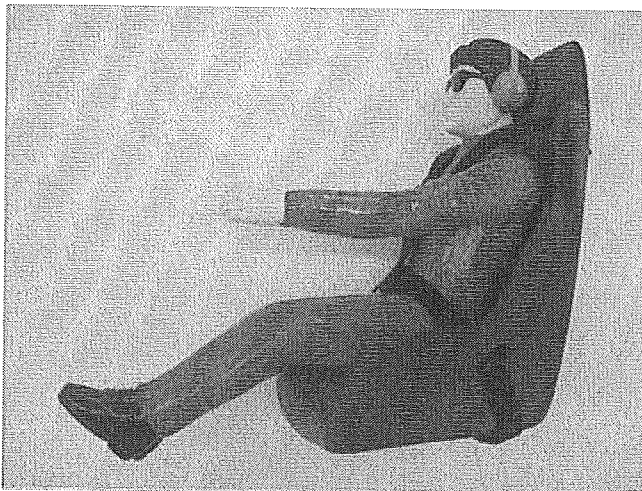
Use brush to paint the hair, ear-phone. When the painting is dry; assemble the head back to the pilot.



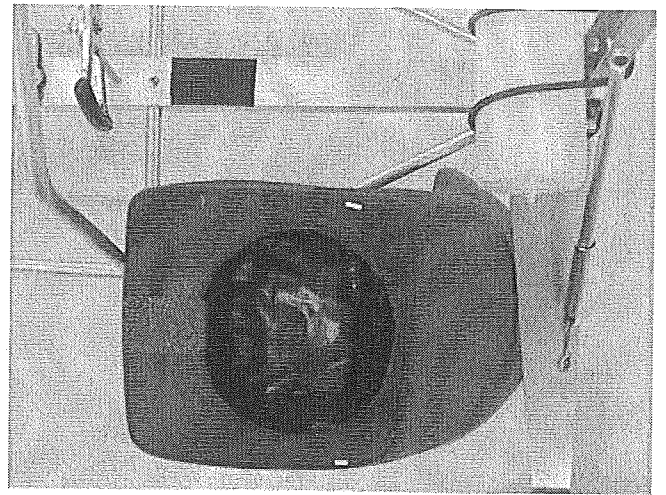
Place the pilot seat on the working table. Use sharp hobby knife to open the holes on the recess.



Place the pilot on the seat. Attach two Velcro strap and insert the strap through the holes on the sides. Pull the straps tight and attach on the back of the seat.



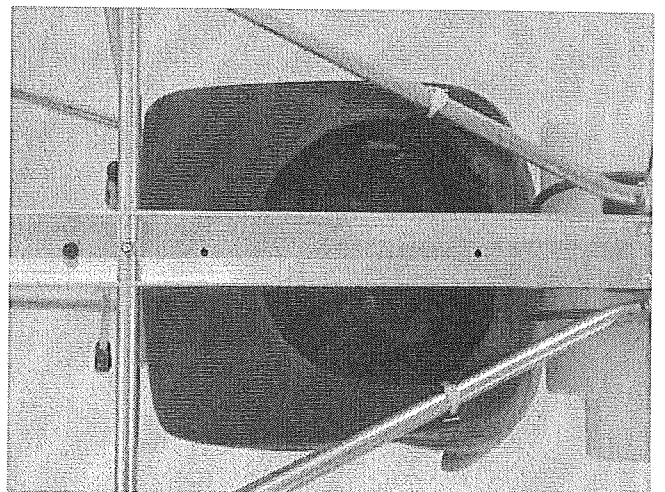
Insert the Velcro straps from the top holes and attach on the center position. Attach the Velcro straps on the back of the seat. (Use Velcro strap as the seat belt and secure the pilot on the seat.)



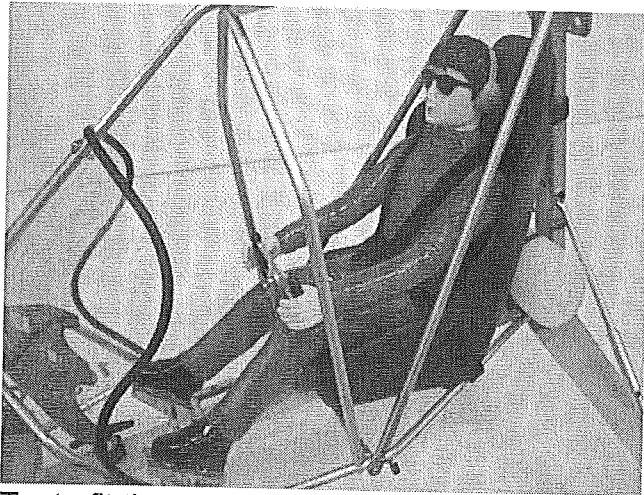
Loose the screw on the left top of the F12. Take one piece of 30mm adhesive Velcro tape. Apply one side on the bottom of the pilot seat and another side on the U tube F8. (P.S. You can place the receiver inside the seat.)



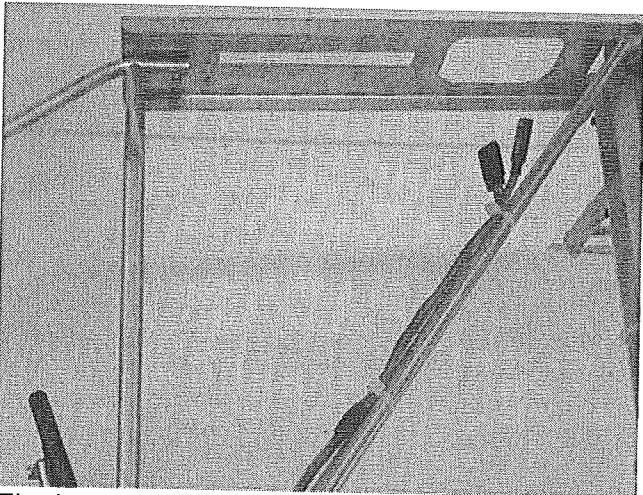
Use sharp hobby knife to open 5mm hole on two sides of the seat.



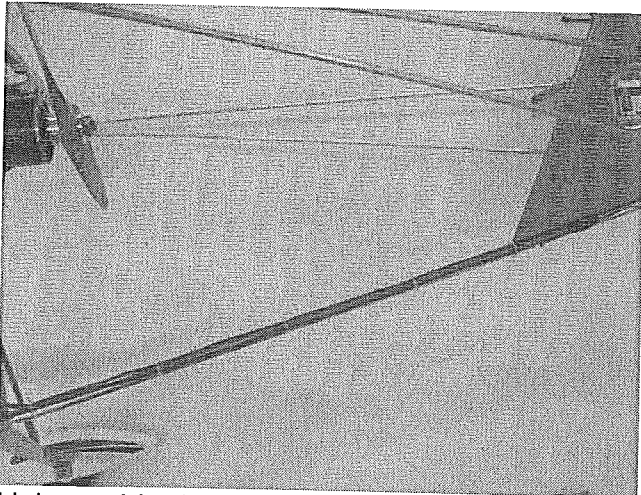
Try to fit the seat onto the fuselage with cable tie, but don't pull the cable tie.



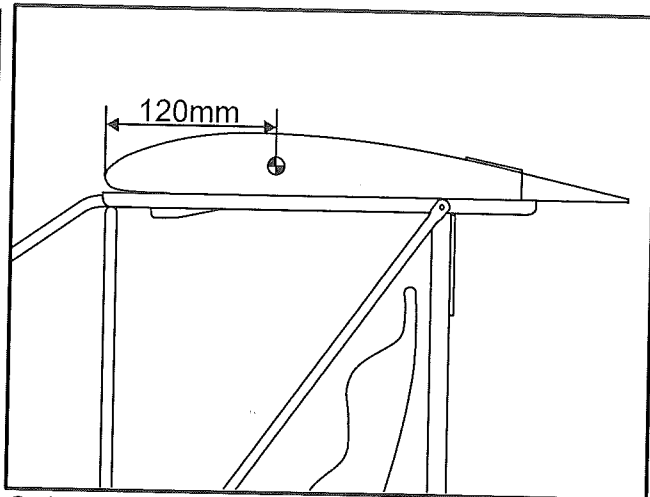
Try to fit the pilot into the seat with the shoes on the footboard, hands on the operating lever. When satisfy the position, pull the cable tie tight to secure the seat in location. Secure the screw and nut on the top of F12.



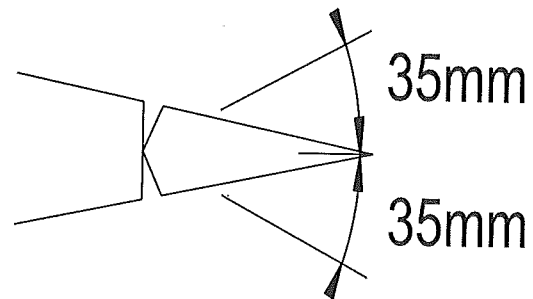
Fix the extension on the tube using cable tie.



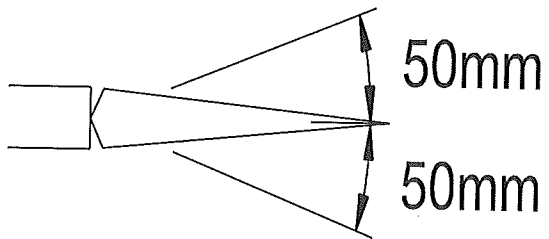
Using cable ties or tapes to secure the tail extension on tube.



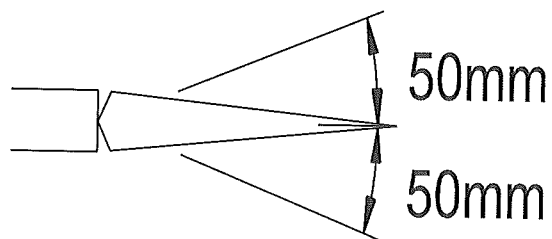
C.G. Location is 120mm from the leading edge of main wing.



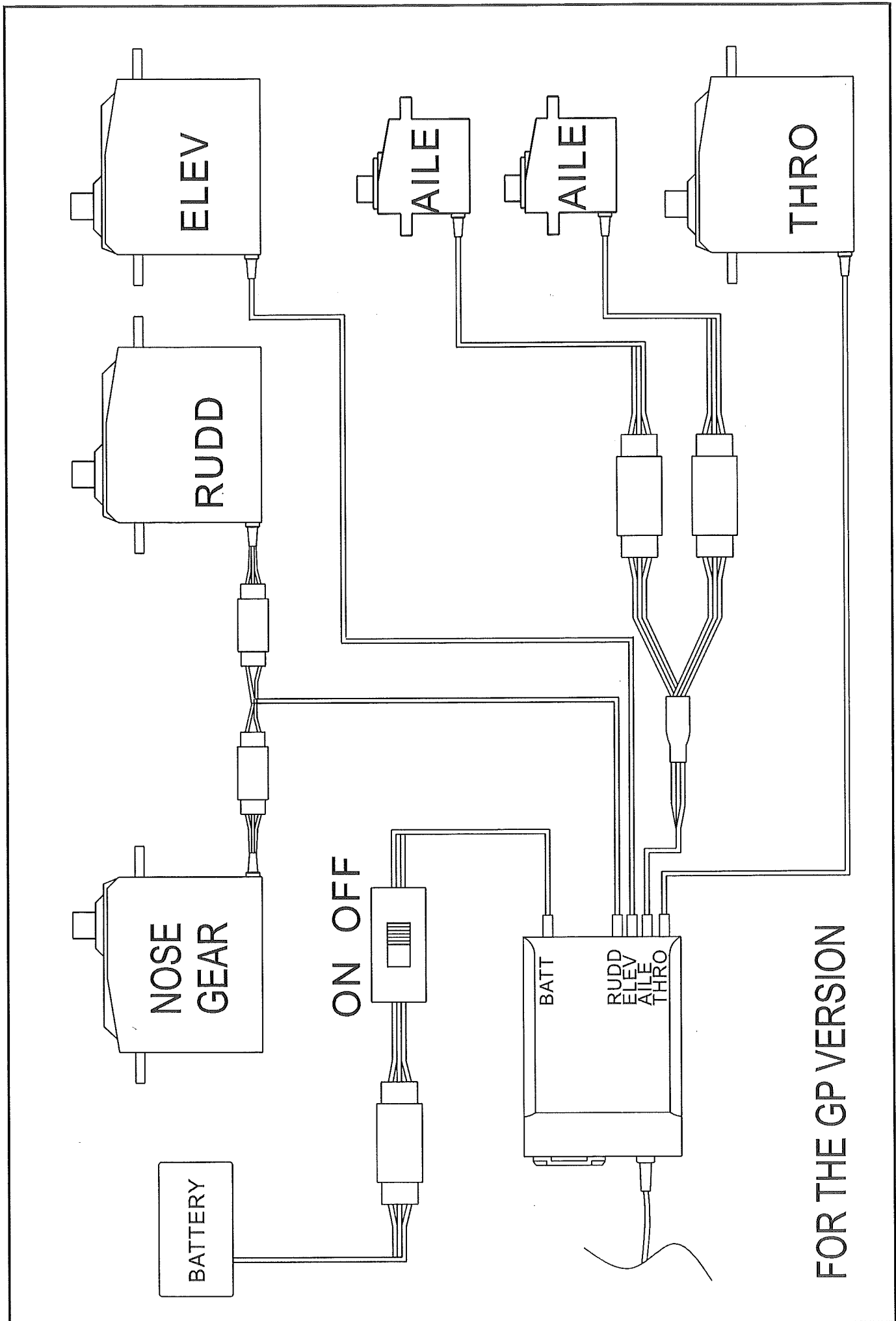
AILERONS THROW

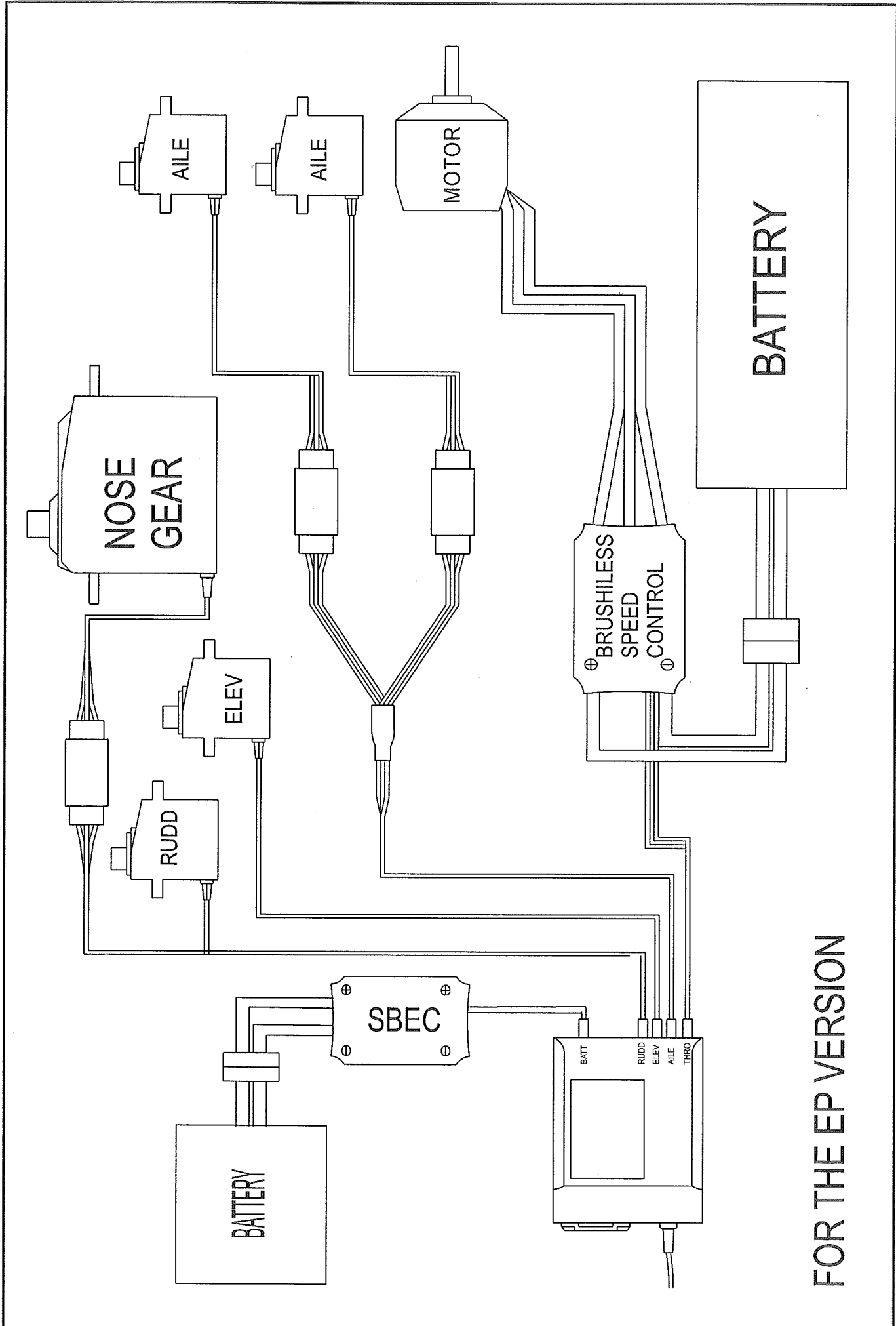


ELEVATOR THROW



RUDDER THROW





FOR THE EP VERSION



SUPER FLYING MODEL
MANUFACTURE

MTH HOBBY PRODUCTS INDUSTRIAL CO., LTD.
www.mth.com.tw mthhobby@mth.com.tw
© MTH HOBBY 2014