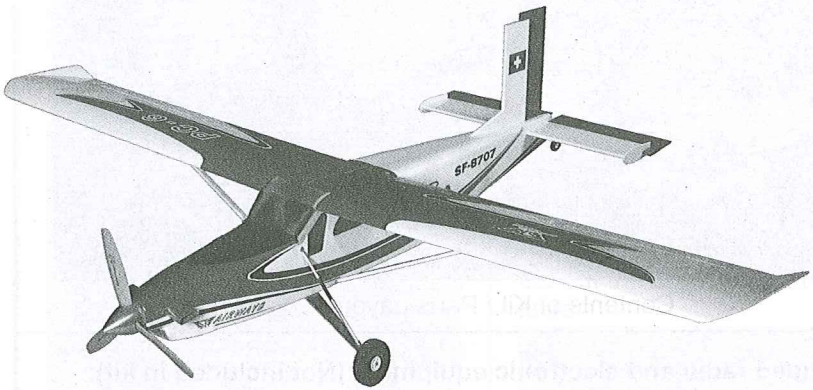
SUPER FLYING MODEL
MANUFACTURE

No.8707

Pilatus PC-6 Turbo-Porter

Scale 7:1



INSTRUCTION MANUAL

SPECIFICATIONS

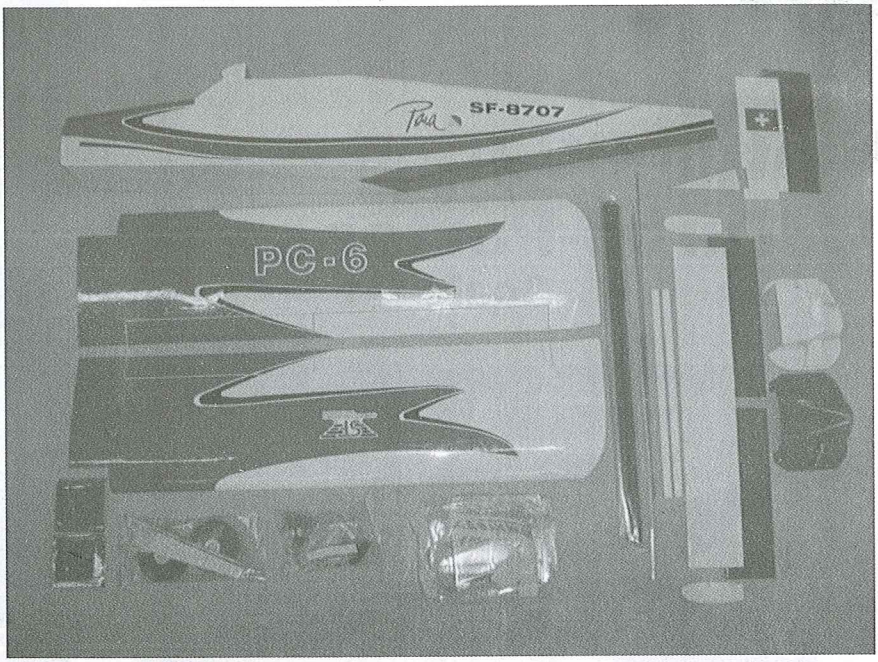
WING SPAN: 2112mm
LENGTH: 1580mm
WING AREA: 58 sq.dm^2
WEIGHT: 4000~4300g
RADIO: 4-5 CH
ENGINE: .60 - .90 (2C)
.90 - .120 (4C)

EP
THRUST POWER 4KGS AND UP
BATTERY: 5-6 CELLS 3500mAh AND UP
MOTOR: 500-600KV
ESC: 70-100A
SPINNER: 63mm

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

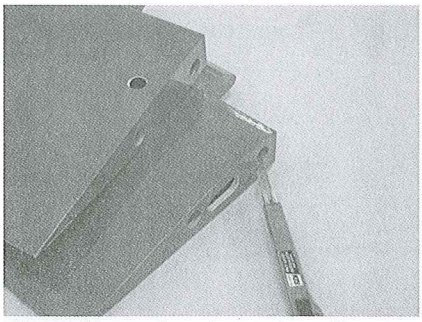
Recommended radio and electronic equipment (Not included in kit):

Accessories:
For GP: 45g servo x 7 / Receiver x 1 / Y-Harness x 2 / 30cm Extension x 2 60cm Extension x 2 / Engine .60 (2C) / .90 (4C) x1 / Receiver Battery 4.8V x 1 Switch x 1 piece

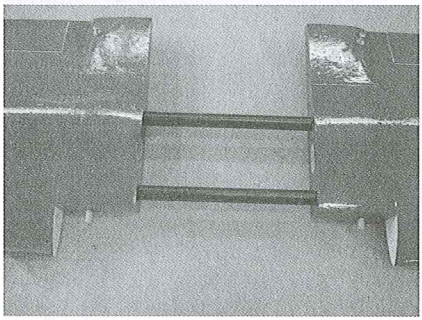
For EP: 45g servo x 6/.60 Motor KV500-600, thrust power 4 KGS / 70-100A Speed Control(SBEC 3-5A) Li-Po Battery 5-6 cells 3500mAh and up / Motor Stand

Tools and suppliers needed (not included in kit)

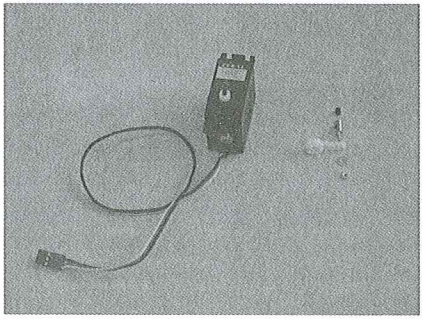
Phillips screwdriver #0, #1, #2
2mm/1.5mm/4.0mm drill
Curved scissors
1.5/2.0 Hex Wrench
Hobby knife
Ruller
Pliers
Z-bender
Epoxy 5-10 minutes
Pen
CA glue
UHU glue
Sanding paper
Cross wrench
Heat Gun
Solder Iron and Solder (for electronic power)



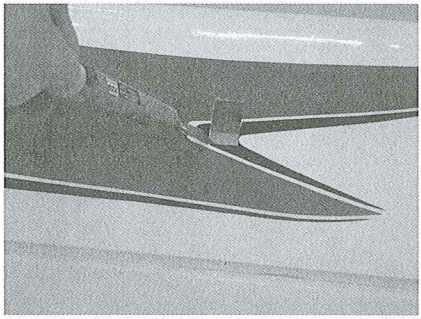
Place the main wing set on the working table. The bolt holes on each wing half are pre-drilled. Locate the holes that are under the covering and carefully cut-out the covering with the hobby knife.



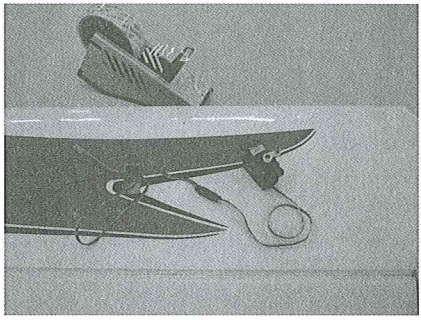
Take two pieces of fiber stick out of the hardware bag and apply some transparent tape on the middle of the sticks. Insert the sticks into the wing half. If the sticks are too loose for the hole, please adjust the transparent tape.



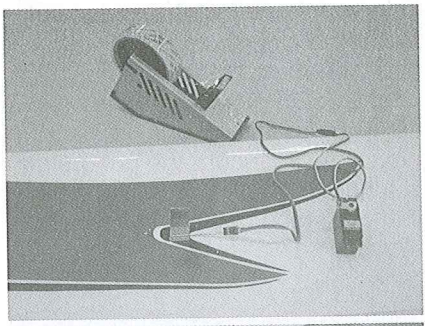
Take out the adjustable rod stand, M3 hex screw and nut from the hardware bag. Drill one 2mm hole on the servo arm. Install the hex screw on the stand and use 1.5mm hex pliers to secure the nut on the stand just like picture. Make sure that rod stand can move freely.

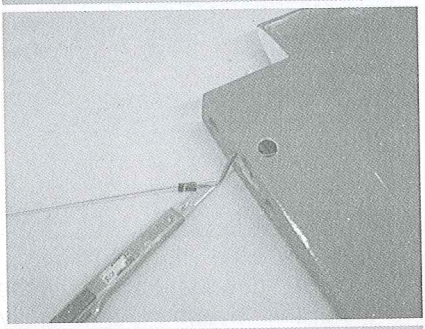


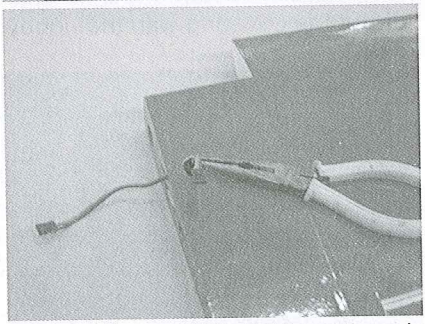
The servo holes on the main wing are pre-served. Locate the holes that are under the covering and carefully cut-out the covering with the hobby knife.



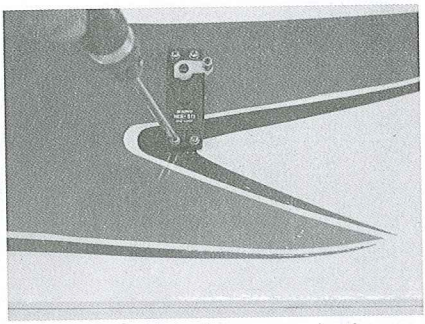
Connect the servo with 60 cm extension(flap is 30cm). Tape the extension connector and the servo lead connector together to insure that they will not become unplugged inside the wing.
(Flap is the same procedure as aileron)



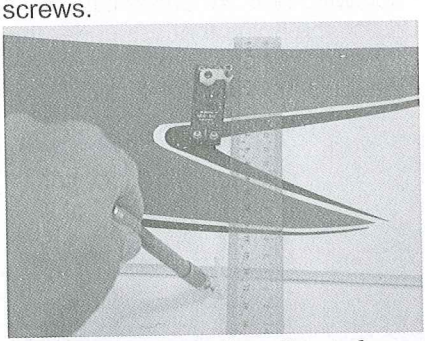




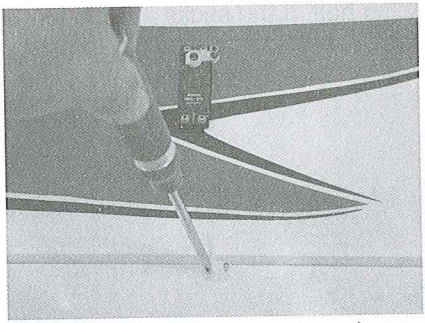
Insert 1.7mm x850 rod from the wing root to the aileron servo hole. Tape the end of the servo extension to the rod you installed onto the end that exits were the servo will be installed. Carefully pull the rod through the wing until you have the servo extension plug exit at the center of the wing at the wing root. Connect the exten-sion plug to the Y-harness.



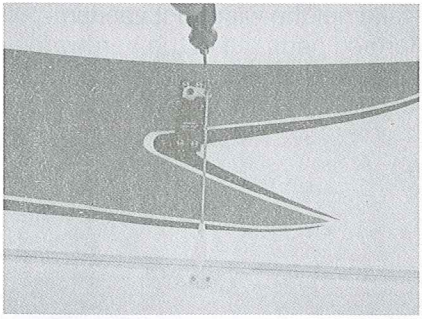
Securely fasten the servo in the aileron slot with servo mounting screws.



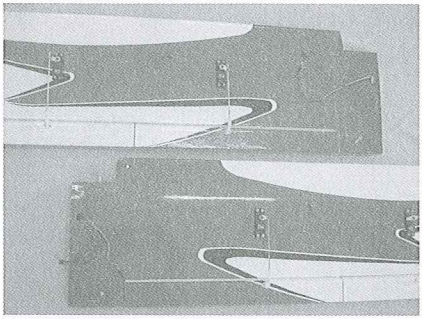
Drill 2mm hole on the aileron for installing control horns. When installing the control horns, it is important that the holes in the control horns where the pushrod attaches are directly in-line with the control surface hinge line.



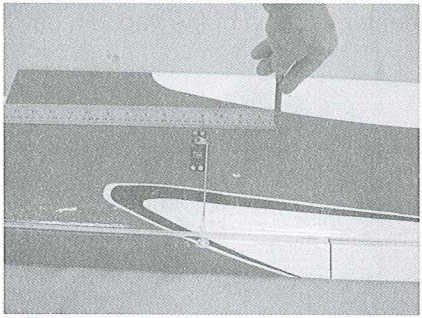
Install the control horn using the 2x20mm screws and backplate provided.



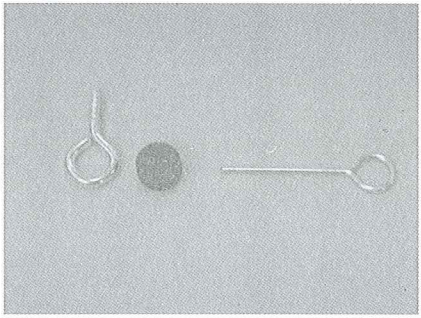
Screw a clevis onto the threaded end of rod. Insert through 5x5mm silicone tube. Insert the other end through the rod stand. Place the servo at neutral position and secure the rod with M3x4 hex wrench.



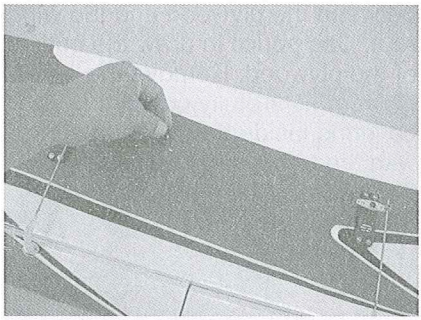
Please note the servo arm for flap must be the same direction as hown.



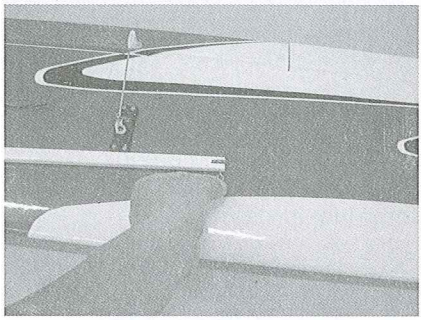
Place the ruler on the center of the main wing spar. Measure 460mm from the wing tip. Use pen to mark this location and drill a 1.5mm hole on this marking location.



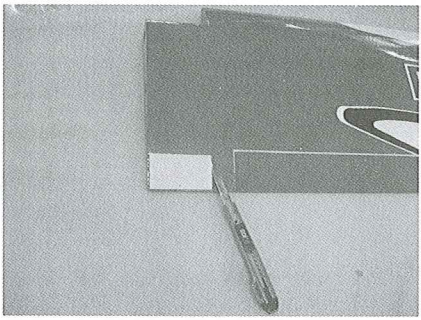
Take the eye screw, eye pin and black rubber out of the hardware bag.



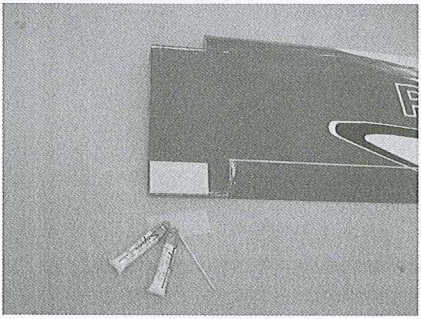
Place the black rubber plate on the hole and thread in the eye-screw.



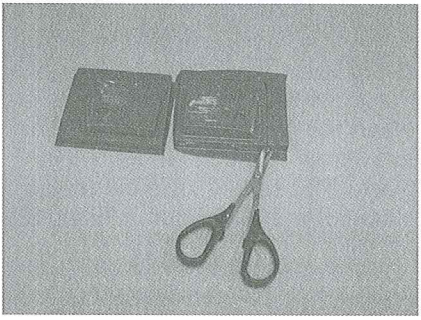
Place the main wing on the fuselage. Insert the slot of the struct into the eye screw and use pin to fix it in place. Please keep the pin on the black rubber for avoiding losing off.



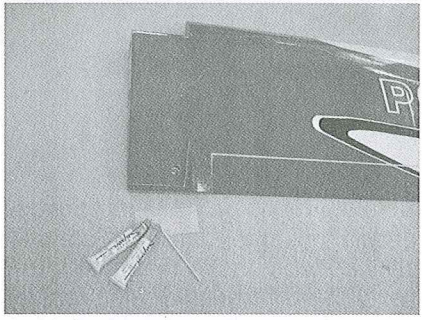
Take 3mm plywood out of the hardware bag and place it on the wing root. Leave 2mm space between the plywood and the wing root. Use pencil to draw the outline of the plywood. Remove the plywood. Carefully cut off the covering inside the marking area with the hobby knife. Don't cut into the wood.



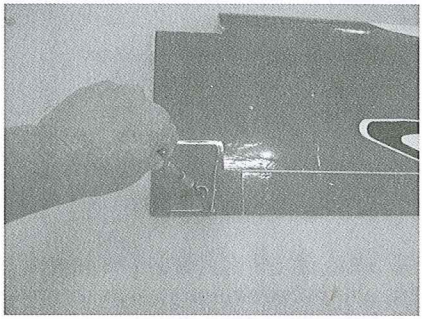
Apply some 5-minute epoxy over the 3mm plywood and secure it on the wing tip.



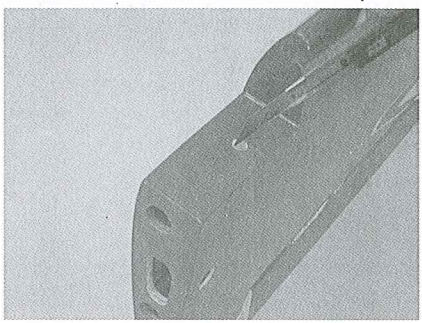
Take out the wing root vacuum-formed parts out of the hardware bag. Use scissors to trim the parts according to the vacuum line.



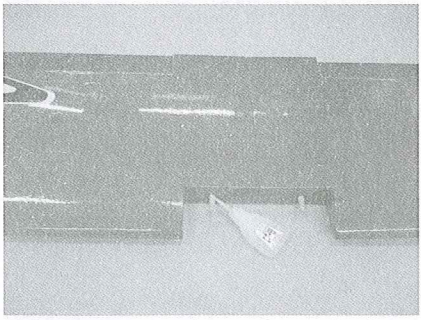
Apply some epoxy on the wing root vacuum parts and glue it on the wing root.



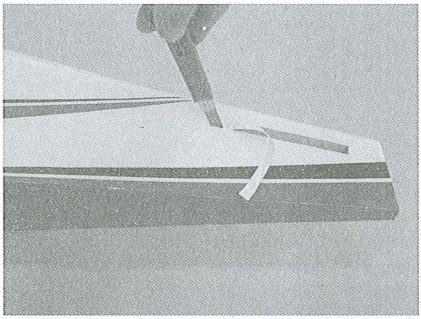
Make sure that the glue is dried enough. Drill a 4mm hole on the center location of the vacuum part.



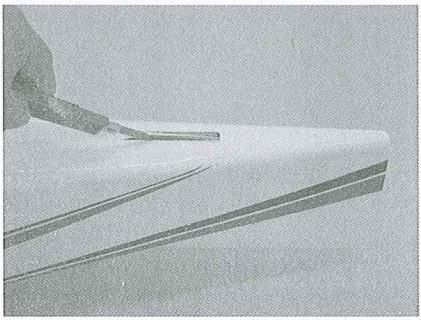
Use hobby knife to remove the covering over the pre-serving holes on the wing root.



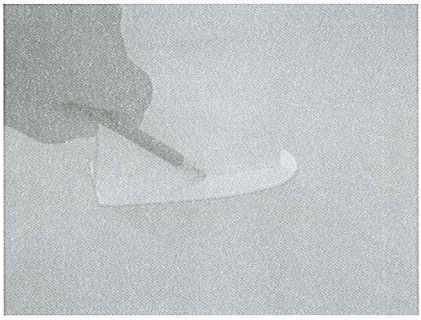
Take 2 pieces of wooden dowels out of the hardware bag. Sand the ends of the dowels. Insert one of the wooden dowels into each of the wing dowel holes. Drop some instant glue to secure the dowels in place.



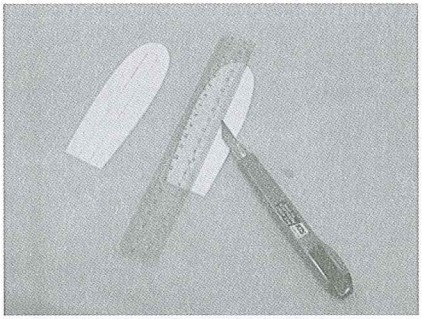
On the rear of the fuselage, slots are pre-cut in the wood structure for the horizontal. Carefully cut away the covering at the openings.



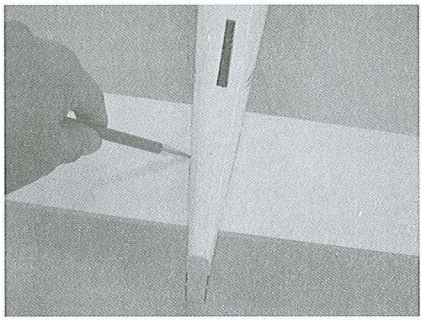
Carefully cut away the covering at the openings for the vertical stabilizers.



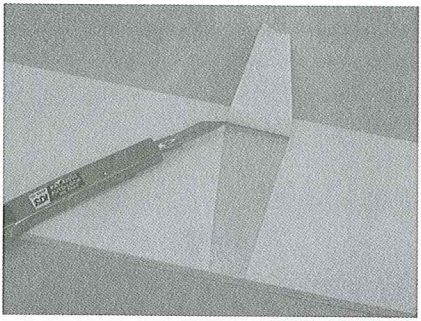
Place the wing tip for the horizontal on the working table. Try to place the horizontal on the center of the wing tip. Use pen to mark the outline of the horizontal on the wing tip. Please refer to the picture.



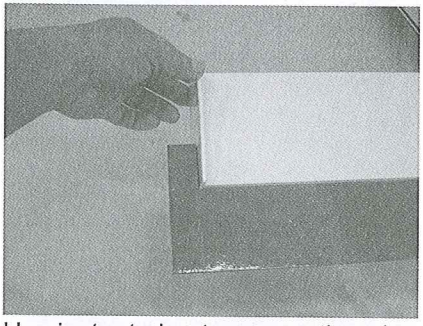
Use hobby knife to remove the covering inside the marking area carefully.



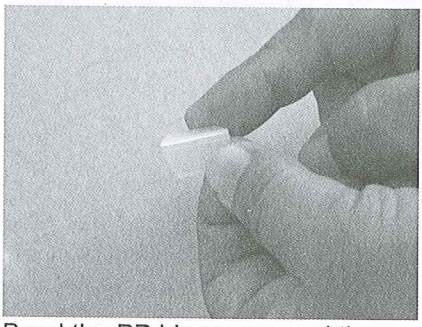
Try to fit the horizontal into the fuselage. Center the horizontal. Use pen to mark the outline of the fuselage on the horizontal.



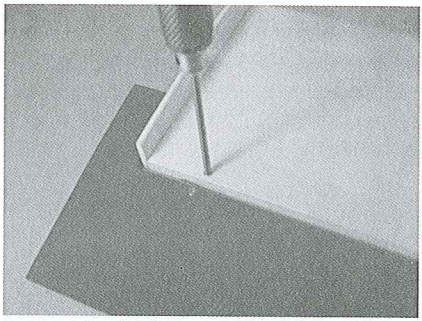
Remove the horizontal. Use hobby knife to cut away the covering inside the marking area carefully.
Spread some epoxy on the top and bottom of the horizontal where it comes into contact with the fuselage. Insert the horizontal into the fuselage. Please note the alignment with the main wing.



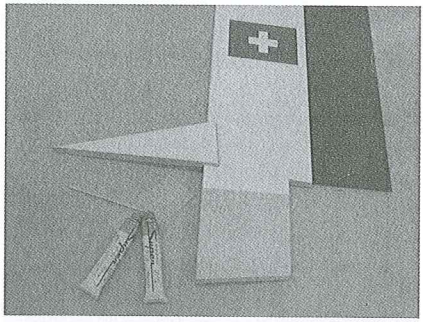
Use instant glue to secure the wing tip on the horizontal.



Bend the PP hinges several times for moving freely.



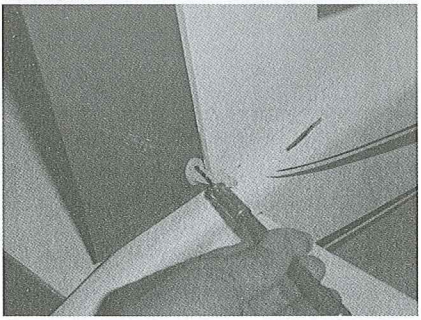
Insert the hinges into the elevator and secure them in place with 2x8 tapping screws.



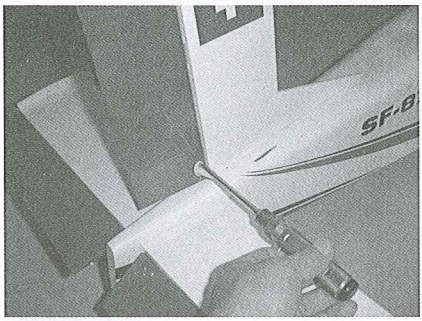
Use epoxy to glue the vertical fin into the slot on the front of the vertical.

Insert the vertical into the fuselage, ensuring that it is seated properly on the fuselage. Using a 90-degree triangle, check to make sure that the vertical is perpendicular to the horizontal. Use pen to mark the area that vertical meets the fuselage. Use hobby knife to cut out the covering inside the marking area.

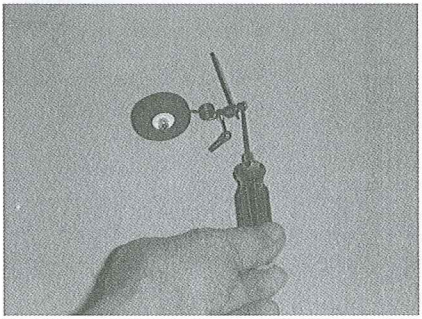
Spread epoxy onto this area (bottom and side of fuselage) and secure the vertical in position. Make sure that the epoxy is cured completely. Hobby knife to cut away the covering at the preserving rod holes on the vertical.



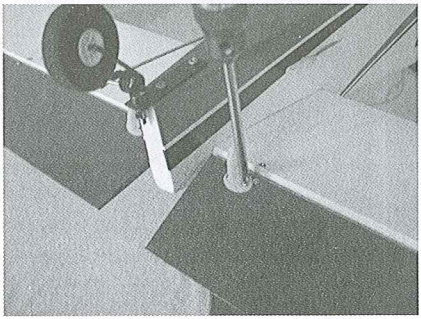
Place a control horn on the rudder in-line with the rod exit. Use pen to mark the position and drill 2mm hole on this marking position.



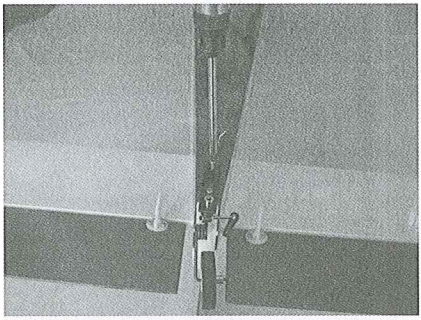
Secure the control horn with 2x12 mm screw and backplate.



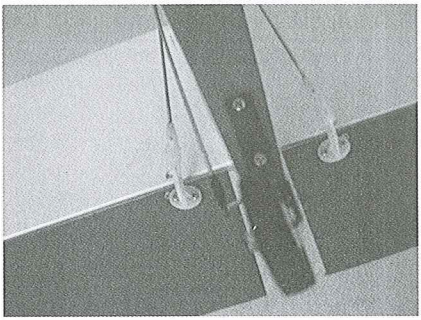
Take the tail gear, tail wheel, control arm, ball link, collar and 3x4 hex screws(2 pieces) out of the hardware bag. Assemble the tail wheel assembly.



Install the control horn on the elevator with 2x20mm screw.

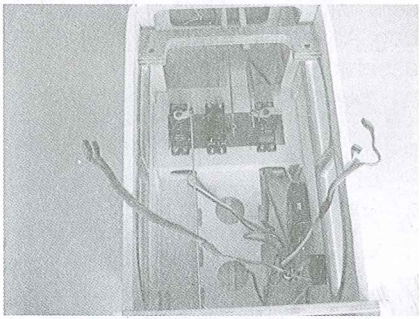


Use 3x10mm tapping screw to secure the tail wheel assembly.

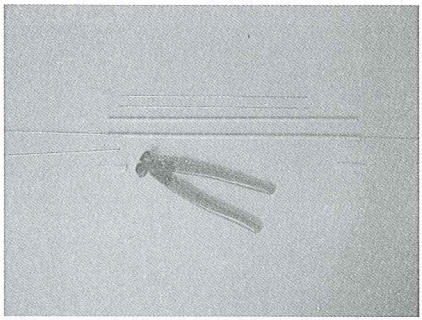


Connect the wire with the clevis. Please refer to the picture. Place a piece of fuel tubing over the clevises for providing extra insurance against

the clevises accidentally coming open.



Position the servos in the fuselage servo tray as shown. Set the servos at neutral position. Secure the servos in place using 3x4mm screws.



Take the dowels, heat shrink tubing and M2 rods. Use Z-bender or pliers to assemble the pushrods.
As indicated in the picture.

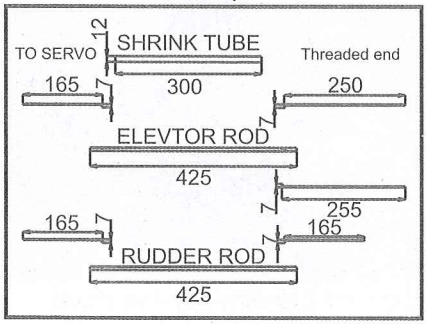
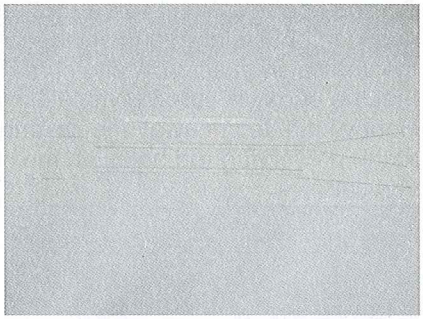
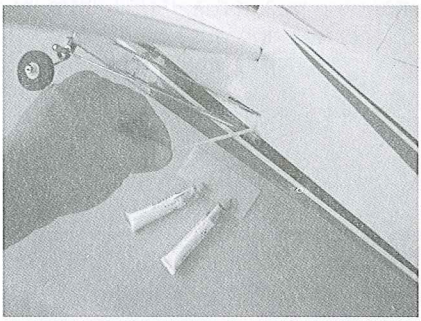


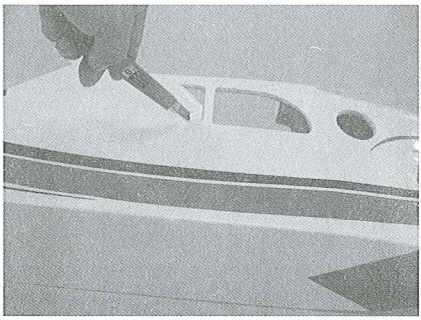
Diagram for assembling rods.



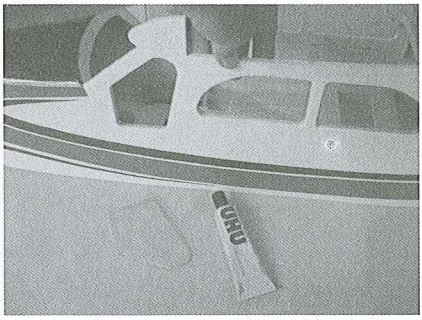
Make a 90 degree bend on the non-threaded rod. Insert the 90 degree bend into the hole of the wood dowel and saturate the balsa with CA glue where the rod contacts the wood. Slide a piece of heat shrink tubing over each end of the wood dowel and shrink it in place using a heat gun.



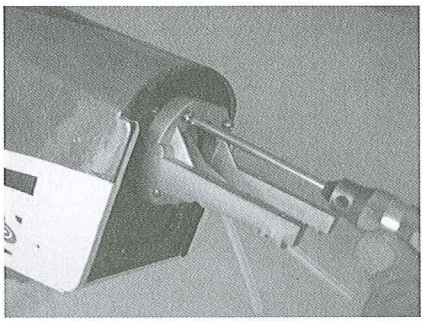
Find the out-tubing for the tail gear linkage. Pull the out-tubing straight and secure it with epoxy.



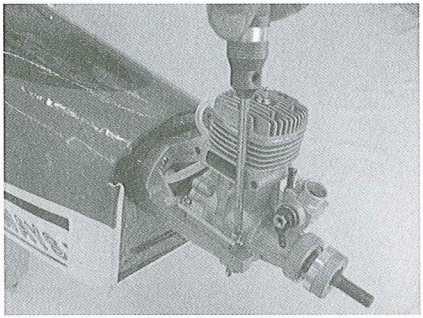
Use hobby knife to remove the covering insides the side windows.



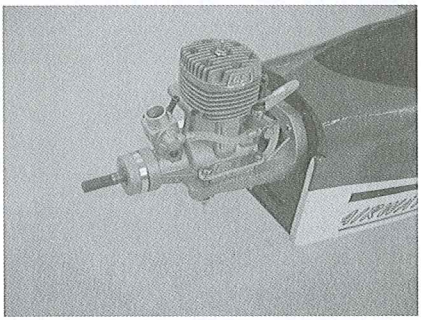
Use scissors to trim the side windows. Please leave 5mm space on the windows for applying the UHU glue and securing on the fuselage.



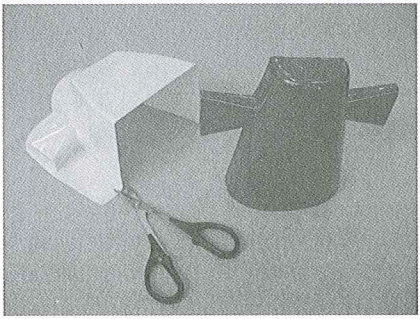
Place the engine mount on the firewall. Note there are some pre-serving holes for the screws to securing the engine mount. Place the engine mount at the hole and secure it in place with M4x20 screws.



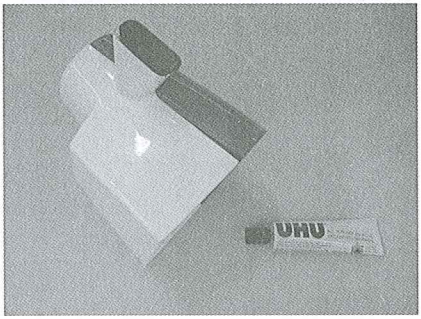
Position the engine on the engine mount. Secure the engine with the engine mounting bracket and4x30 mm screws supplied with the engine.



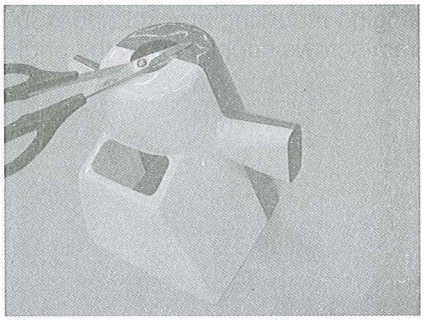
Install the fuel tube from the fuel tank pickup line to the carburetor fuel nipple. The vent line will be installed onto the pressure nipple after the muffler is installed. Attach the clevis to the throttle lever of the carburetor.



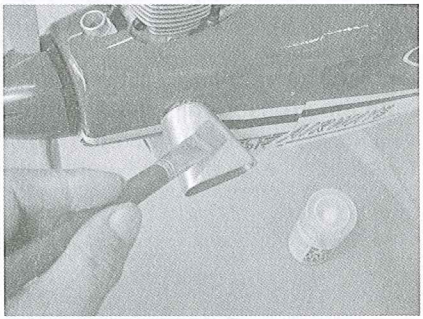
Use scissors to trim the two pieces of cowling.



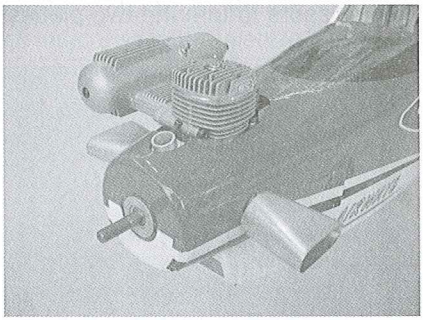
Use UHU glue to secure two pieces of cowling together.



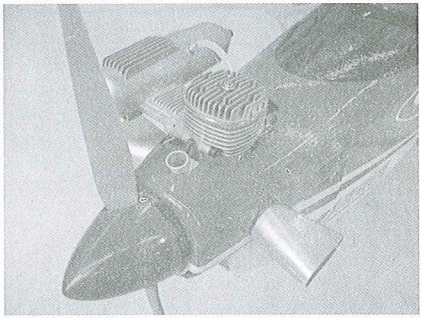
Use curved scissors to open the hole for the vent and engine shaft.



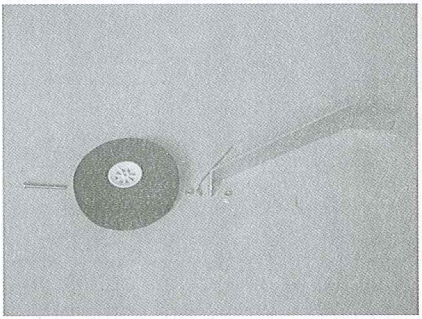
Spread silver model paint onto the engine shaft.
(If the muffler of 4 cycle or 2 cycle can avoid the firewall or use other special muffler, the engine can be side thrust.)



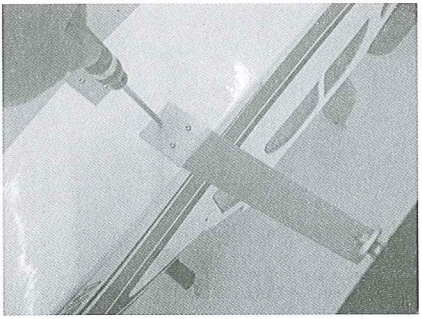
Use hobby knife to open the hole for the muffler and carburetor.



Assemble the propeller and spinner. Secure the spinner with 3x12 mm tapping screw. Please leave 1mm empty space between spinner and enigne. Secure nose on the sides of fuselage with 2x6 mm tapping screws.

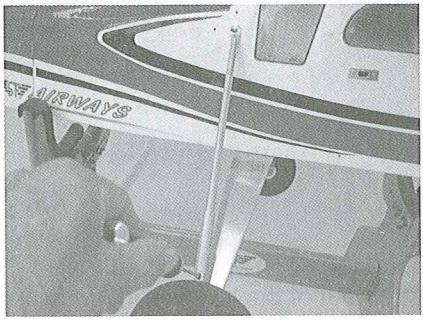


Place the aluminum main gear, M4 screws, nuts and anti-vibration rod on the working table.
Assemble the main gear with wheels.

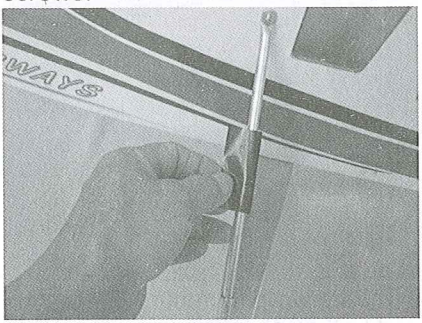


Find the pre-serving holes on the bottom of the fuselage. Secure the

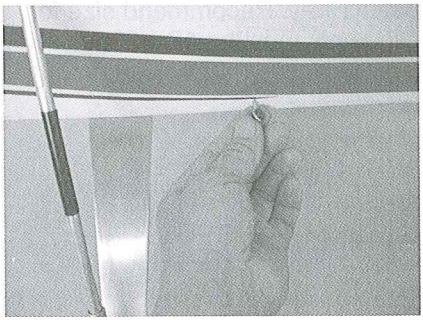
main gear in place with 3x12mm tapping screws.



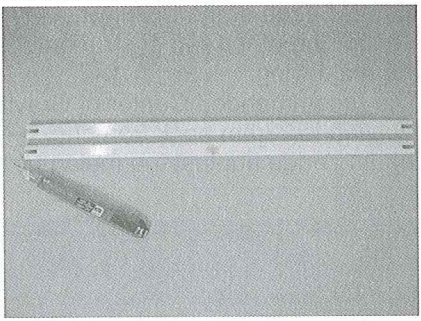
Connect the vibration absorbing strut with the rod using 4x4mm hex screws. Secure the other end on the reinforcing block located front window using 3x12mm tapping screws.



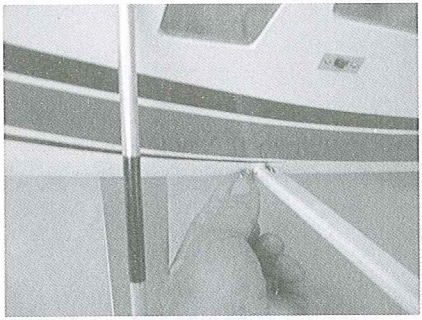
Apply the black trim decal on the vibration absorbing strut. Please note the position for applying the decal.



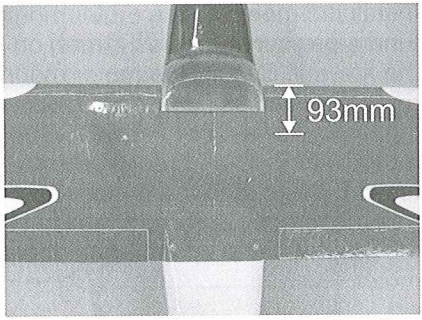
Insert the eye-screw into the rubber plate and screw into the side of the fuselage which you can find reinforcement on it.



Place the struts on the table. Use hobby knife to trim the slot on both ends.



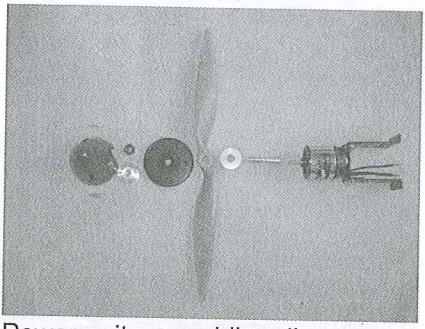
Place the main wing on the fuselage. Insert the slot of the strut into the eye screw and use pin to fix it in place. Please keep the pin on the black rubber for avoiding losing off.



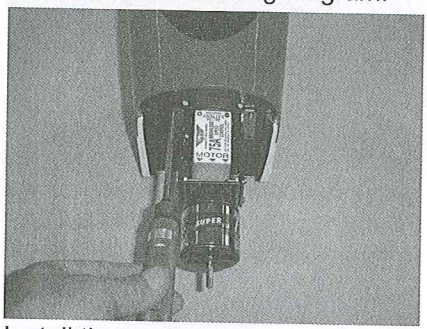
Use curved scissors to trim the front window. Secure window in place with

M2x6 tapping screws. Try to locate the main wing on the fuselage. Use M4x45 screws and washer to secure the rear edge of the main wing. Secure the other end of strut onto the main wing.
The recommended Center of Gravity location is 93mm back from the leading edge against the fuelage.

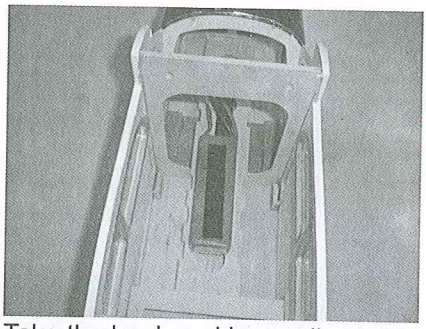
For EP



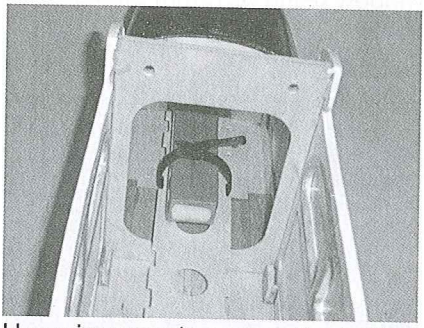
Power unit assembling diagram.



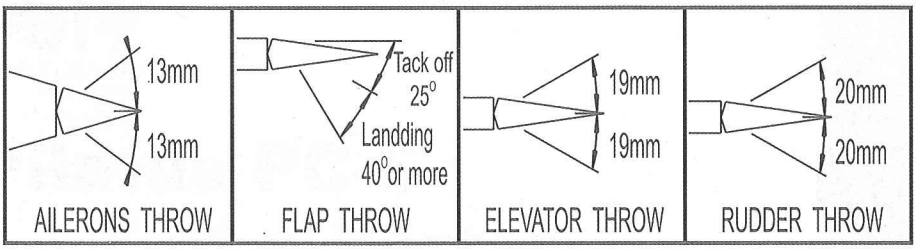
Install the motor on the motor mount. Find 4 pre-serving holes (1mm) on the firewall. Secure the motor mount on the firewall using 3x12mm tapping screws. Try to contact the motor with ESC and receiver for testing. Make sure the motor's rotating directly is correct. Assemble the propeller and spinner onto the motor.



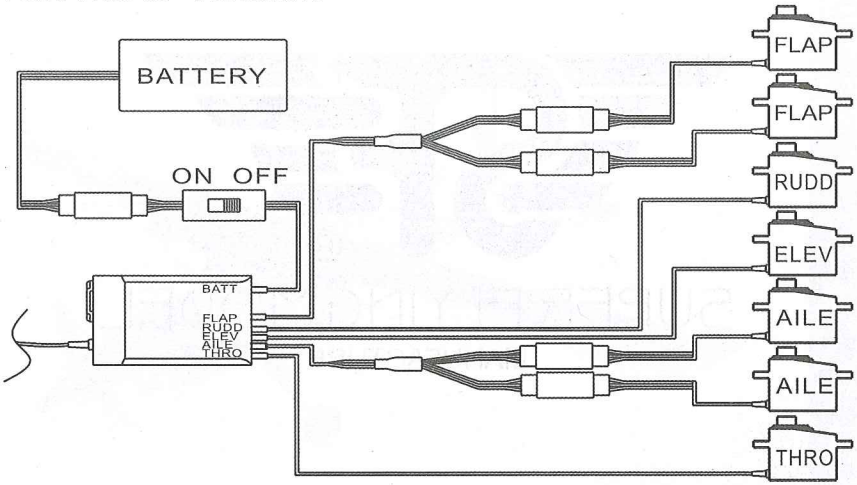
Take the hook and loop adhesive strap out of the hardware. Apply one piece of hook and loop on the battery and another piece on the battery pack. Try to adjust the location of the battery for the correct C.G. Point.



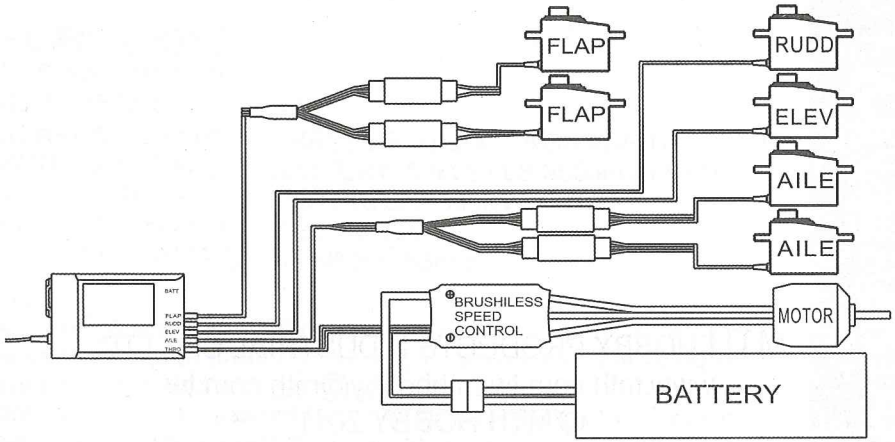
Use wire wrap to secure the battery and battery tray together. The assembly of cowling is the same as GP version. There are vents under the nose, on the firewall, under the battery tray. Recommend size for two vents must be 12 x 35mm.



FOR THE GP VERSION



FOR THE EP VERSION



SUPER FLYING MODEL

MANUFACTURE

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