

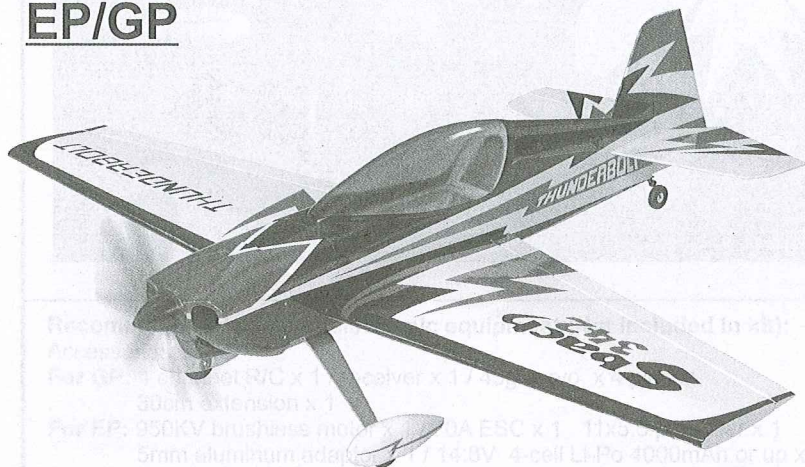


SUPER FLYING MODEL
MANUFACTURE

Sbach 342

THUNDERBOLT

EP/GP



INSTRUCTION MANUAL

No. 8620

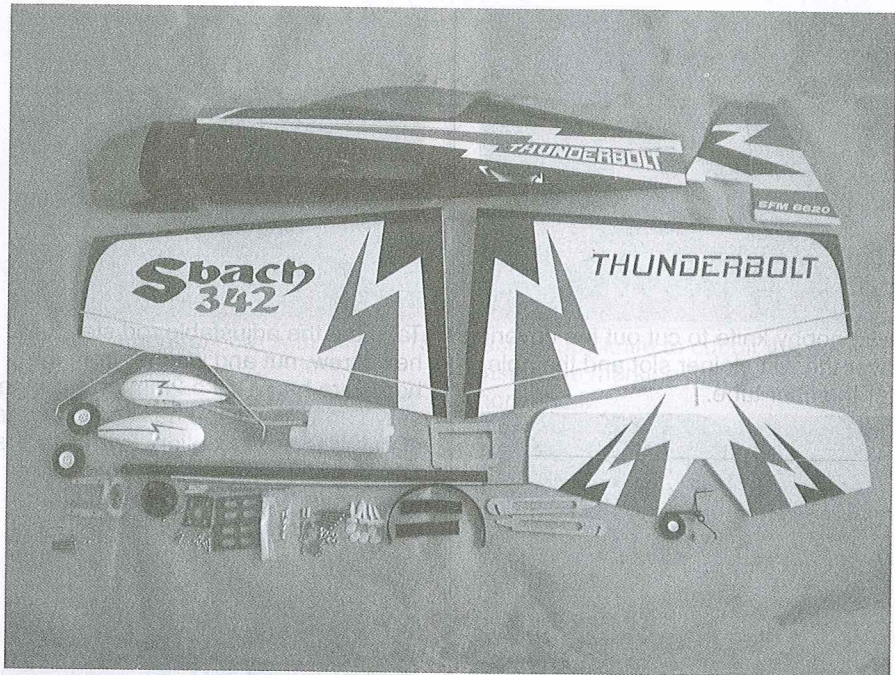
SPECIFICATIONS

WING SPAN: 1254 mm
WING AREA: 33.50 dm²
LENGTH: 1081mm
WEIGHT: 1800g
ENGINE: .46 (2C)
.46 - .56 (4C)
RADIO: 4 CHANNELS

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.

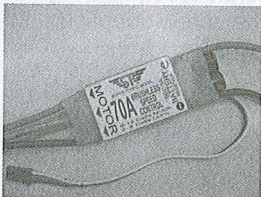


Recommended radio and electronic equipment (Not included in kit):

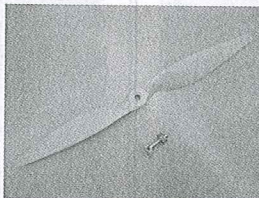
Accessories:

For GP: 4 channel R/C x 1 / receiver x 1 / 45g servo x 4 pieces
30cm extension x 1

For EP: 950KV brushless motor x 1 / 70A ESC x 1 11x5.5 propeller x 1
5mm aluminum adaptor x 1 / 14.8V 4-cell Li-Po 4000mAh or up x 1



#2423 70A ESC



#1003-11x5.5W 11 x 5.5 propeller

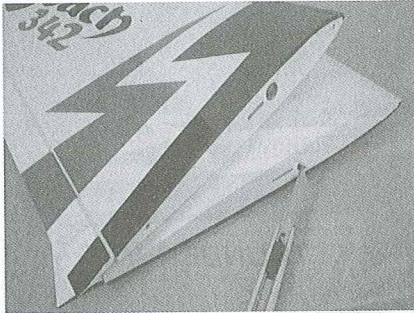


#2200-700-950 950kv
brushless motor

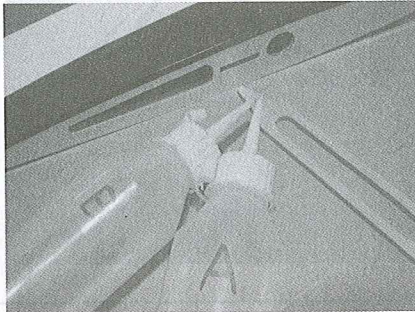
Tools and suppliers needed (not included in kit)

1.5mm hex wrench
Cross wrench
Curved scissors
Clip
Tissue
Nipple pliers

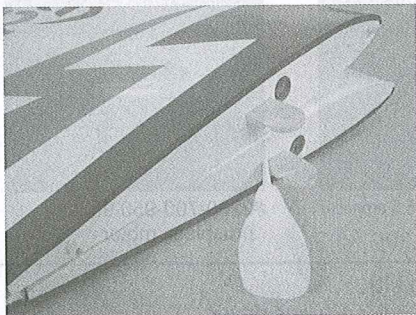
Phillips driver
1.3mm/1.5mm/ 2mm driller
Instant glue
Tap
Epoxy
Foam glue and Z-bender



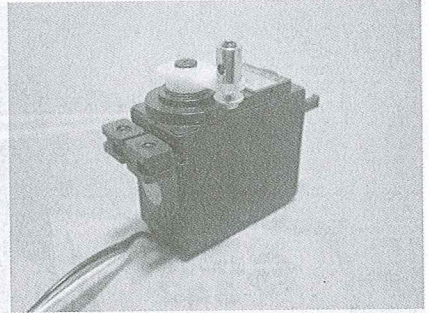
Use hobby knife to cut out the covering over the wing joiner slot and the hole for the fiber tube.



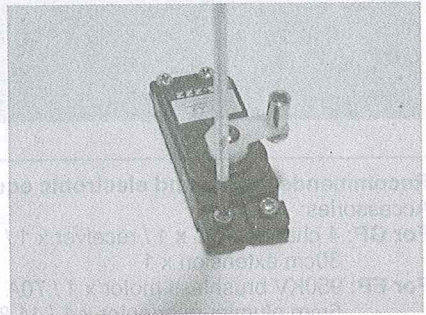
Take the wing joiners out of the hardware bag. Try to insert the wing joiners into the slot. If there is any flash, use sanding paper to remove it. Spread some epoxy on the wing joiner tip and secure it on place.



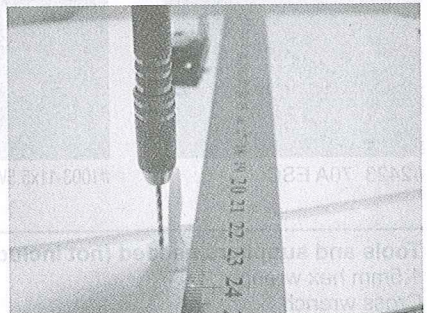
Insert the dowel (4 x 12mm) into the main wing. Use instant glue to secure it.



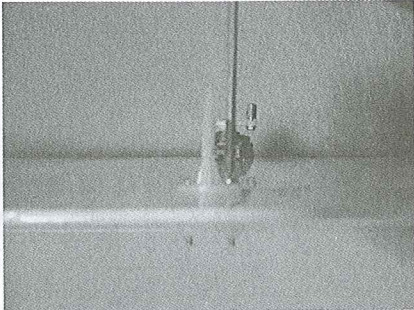
Take out the adjustable rod stand, M3 hex screw, nut and washer from the hardware bag. Drill a 2mm hole on the servo arm. Install the hex screw on the stand. Use 1.5 hex pliers to secure the nut and washer on the stand just like the picture. Make sure the rod stand can move freely.



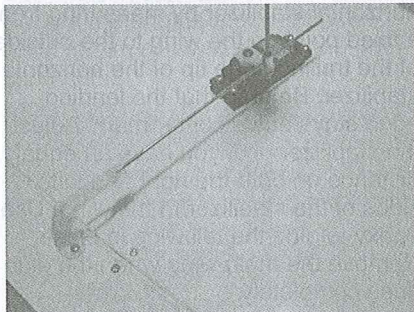
Install the servo on the main wing and secure it with the screw supplied.



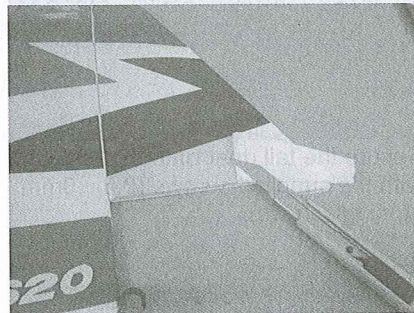
Set up the position for the control horn. Control horn and servo arm must on the straight line. Use 2mm driller to drill holes for securing the control horn.



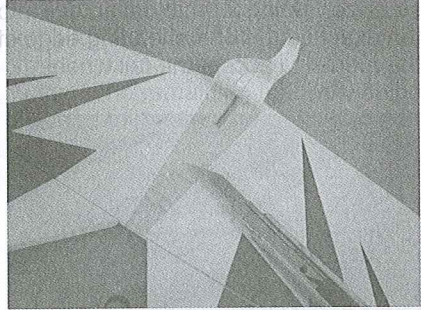
Secure the control horn with 2mm x 15 screws.



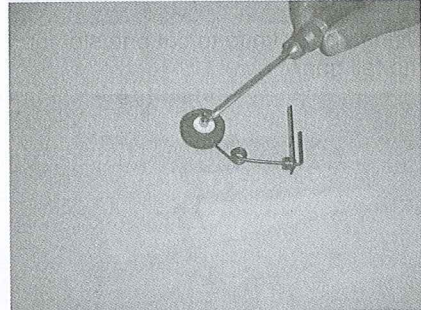
Screw a clevis onto the threaded end of rod. Insert through 5mm x 5mm silicone tube. Insert the other end through the rod stand. Place the servo at neutral position and secure the rod with M3x4 hex wrench.



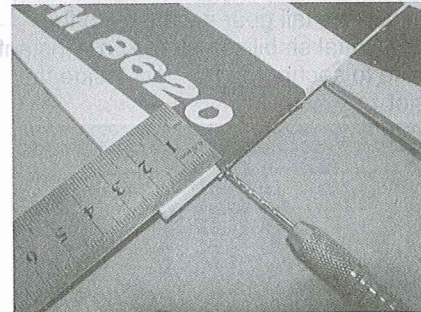
Try to locate the vertical and horizontal in place. Use pencil to mark the contacting area. Use hobby knife to cut off the covering inside the marking area on the vertical. Don't cut into the wood.



Use hobby knife to cut off the covering inside the marking area on the horizontal.

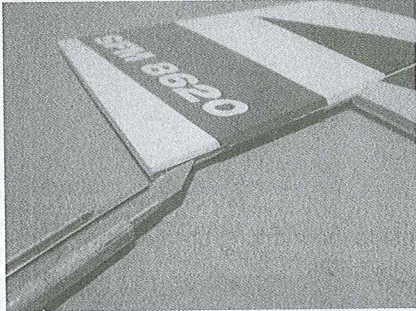


Install the tail wheel onto the tail gear and secure it with the supplied tail wheel collar and screw.

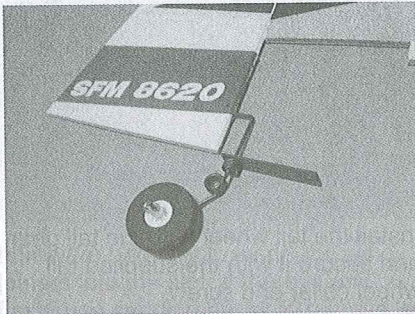


Take the tail wheel assembly and place it in the location to be installed on the bottom side of horizontal stabilizer. The tail wheel's guide wire will be installed into the rudder. Mark the position where the hole is to be drilled into the leading edge of the rudder for the steering rod. Remove the horizontal

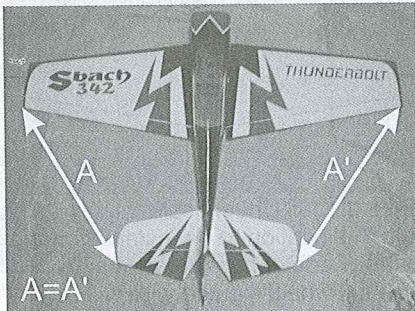
stabilizer. Using 2.0mm drill, drill into the exact center of the leading edge of the rudder to accept the tail wheel guide wire.



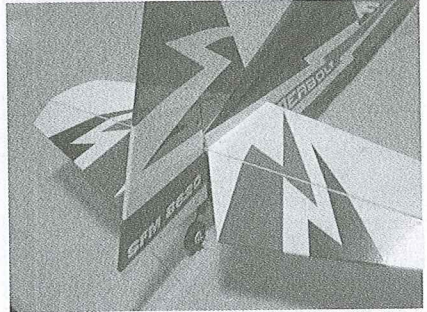
Using hobby knife to cut one slot for the tail gear.



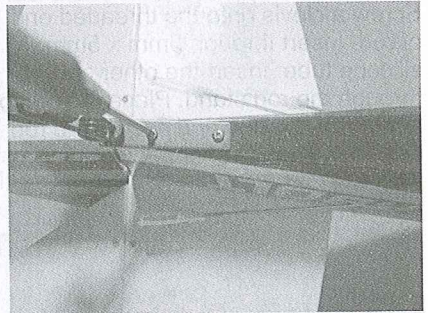
Install the tail gear assembly to the horizontal stabilizer. Drop some instant glue to secure the tail gear inside the slot.



Place the wing onto the wing saddle of the fuselage, approximately aligning the wing center with the centerline of fuselage.

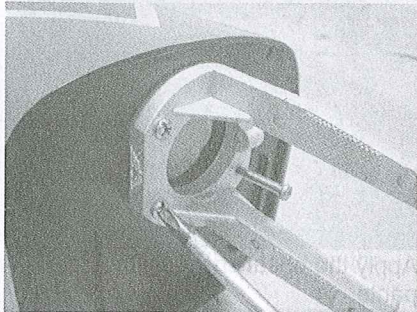


Place vertical stabilizer and horizontal stabilizer on the fuselage. Align the horizontal stabilizer by measuring from a fixed point on the wing to the outside of the trailing edge tip of the horizontal stabilizer. Be sure that the leading edge stays on its center mark. Adjust the stabilizer until you have an equal distance on both the right and left sides of the stabilizer to the wing. Use epoxy to glue the tail wing in place. Remove the main wing when the glue dries completely.

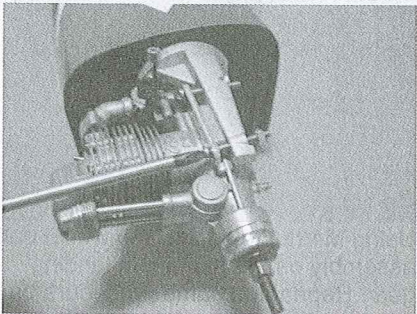


Secure the tail gear onto the fuselage with the supplied screws (2.6x10mm tapping screws).

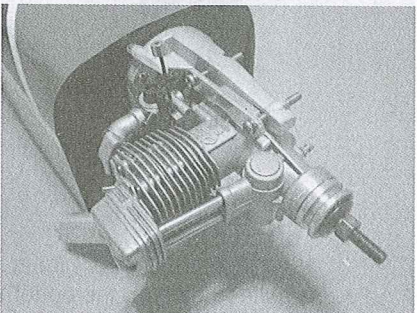
FOR THE GP VERSION, 4 CYCLE ENGINE



Secure the engine mount with the M4 x 25mm screws, plates and 4mm blind nuts.

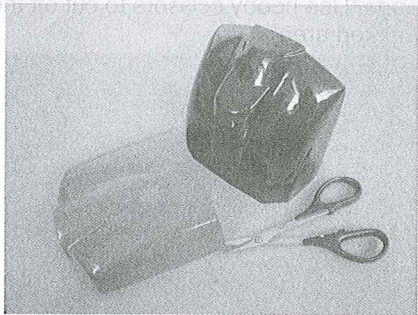


Secure the engine on the engine mount with plates, M4 x 30mm screws and nuts.

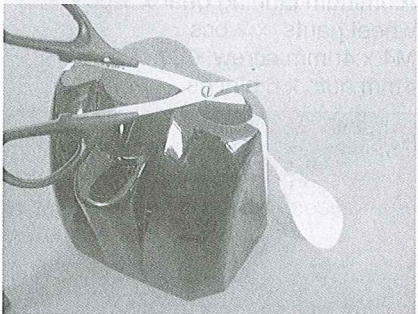


Use Z-bend pliers; make a Z-bend at one end of the throttle rod and insert into carburetor. Attached the clevis to the throttle lever of the carburetor. Place the silicone tube inside the carburetor. Install the muffler per the instructions included with the engine.

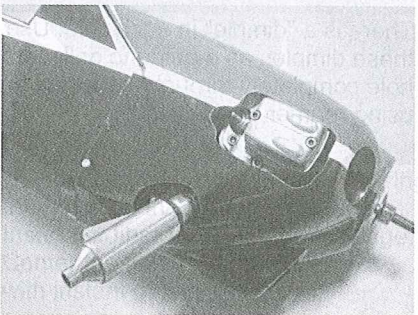
Connect the fuel tube. Connect the vent tube from the fuel tank to the pressure fitting, or nipple, on the muffler. The remaining tube should be attached to the carburetor fuel inlet nipple.



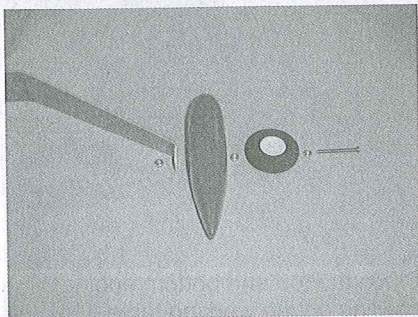
Place the top and bottom engine cowling on the working table. Use hobby scissors to trim the cowl according to the molding line.



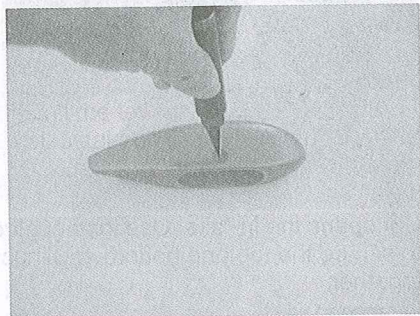
Cut opens the in-take. Use instant glue to secure the top and bottom cowlings together.



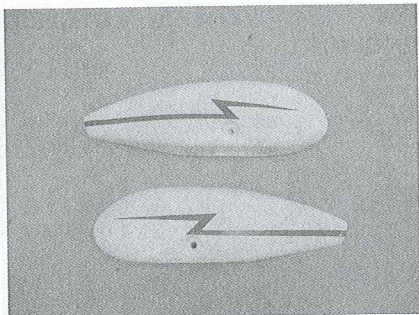
Secure the cowling on the nose with 2 x 6 mm screws. Please leave 1mm space between the cowling and spinner back plate. Try to fit the cowling over the engine. Then mark the openings for the engine parts. Use hobby scissors to cut off the marked area.



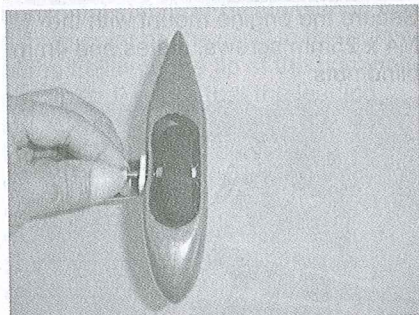
The out the landing gear accessories (as following) from the hardware bag:
 Aluminum landing gear x 1 pc
 wheel pants x 2 pcs
 M4 x 40mm screw x 2 pcs
 4mm nuts x 6 pieces



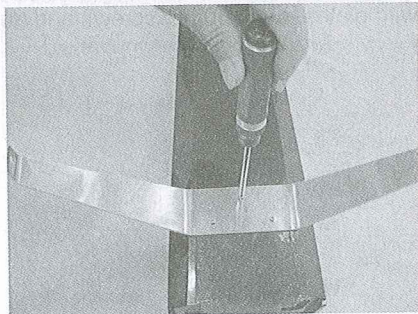
There is a "dimple" in each side. Use these dimples as a guide to drill a 4mm hole completely through the wheel pant using reamer.



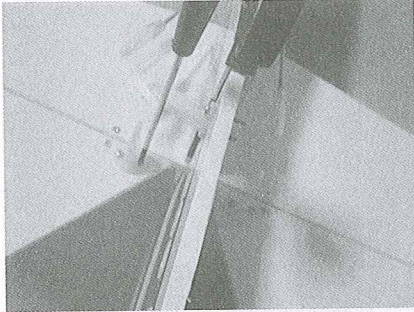
Apply the decal sheet on the wheel pants.



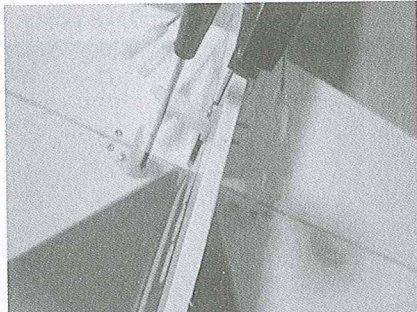
Using M4 nut to secure the wheel pant assembly on the aluminum landing gear. Repeat the same procedure on another side of wheel pant assembly.



Find 3 pre-drilled holes on the bottom of fuselage. Try to locate the aluminum landing gear over it and use 3 x 12mm tapping screws to secure the aluminum landing gear on the bottom of the fuselage.



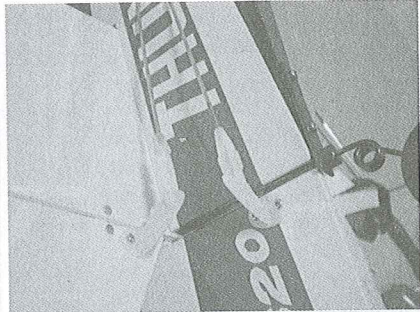
Use drill to drill 2mm hole on the elevator.



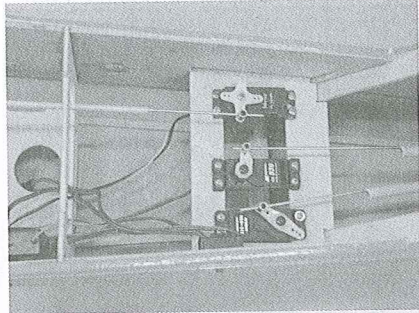
Place the center of the control horn on the elevator at the hole drilled in the previous step. Attached the elevator control horn using the hardware provided (M2 x 12mm screws x 2 pcs) and fasten in place using a Phillips screwdriver.



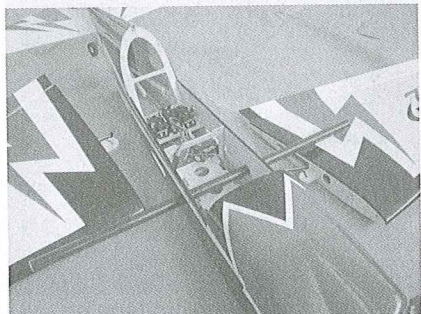
Drill 2mm holes on the rudder. Repeat the same procedure to attach the rudder control horn on the rudder.



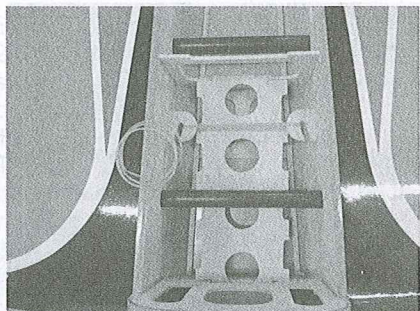
Place a piece of silicone tubing over the clevis as extra insurance to prevent the clevis from accidentally coming open.



Install the servos for rudder, elevator and throttle. Please note that the servos must be in neutral position. Install the battery pack.

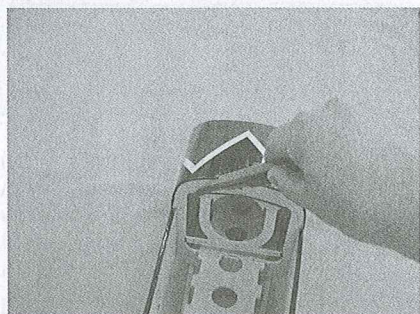


Use hobby knife to cut off the covering the holes on the sides of fuselage. Insert the fiber tube into the fuselage. Center the fiber tube and secure it with instant glue.

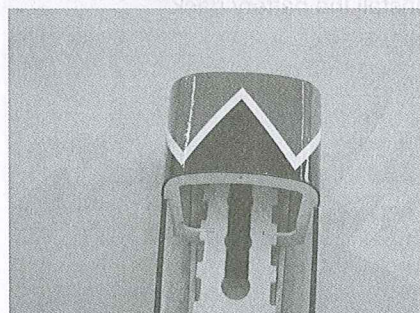


Install the wing halves. Use rubber band (1.5-2.0mm, 40-50mm length) to secure the wing halves together.

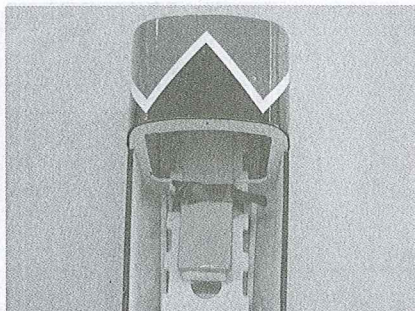
FOR THE EP VERSION



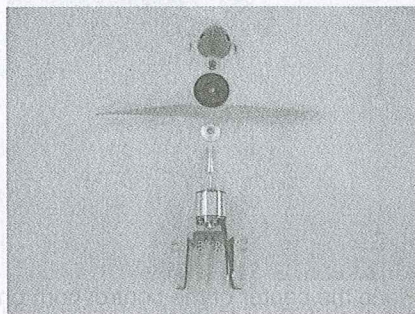
Use hobby knife to cut off the planking according to laser-cutting line for installing the fuel tank.



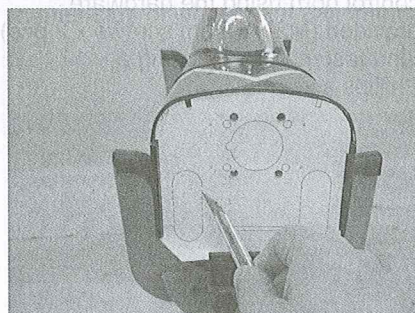
Glue one piece of velcro tape on the battery tray and one piece on the battery pack.



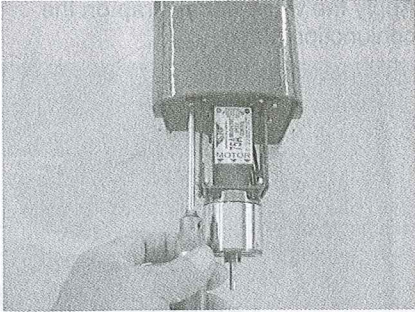
Secure the battery using the hook and loop strap.



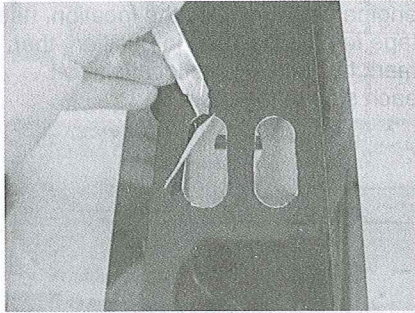
Assemble the power unit as indicated in the picture.



Use hobby knife to open the in-take on the firewall.

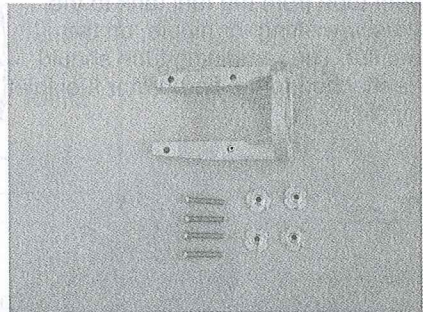


Find 4 holes (1.5mm) on the firewall. Secure the motor mount on the firewall using 3x10mm tapping screw. Assembling the power unit on the motor mount.



Use hobby to cut off the in-take and cooling hole on the bottom of fuselage.

For the 2-stroke GP version

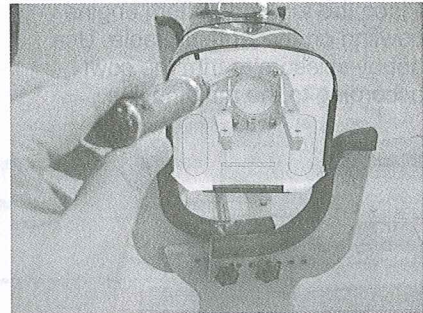


Take the following accessories out of the hardware:

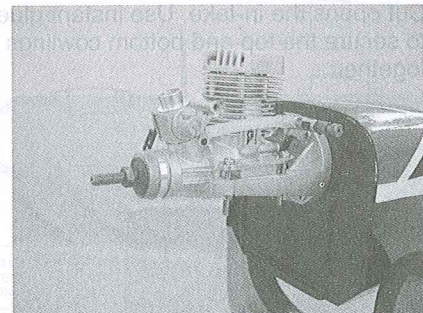
M4 x 20 screw x 4 pcs

Aluminum engine mount x 1 pc

Blind Nuts x 4 pcs



Place the engine mount on the firewall as indicated on the picture and secure it in place with the screws and nuts supplied.

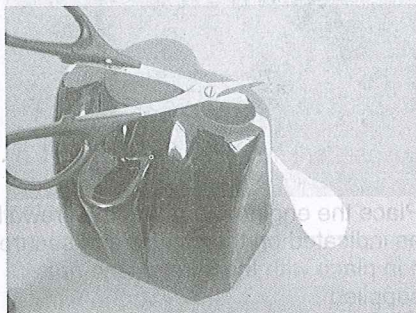


Secure the engine on the engine mount with engine plate, M4x30 screw and 4mm nut. Install the muffler per the instructions included with the engine.

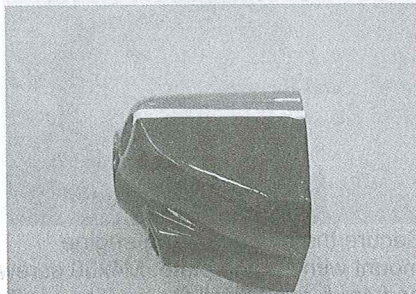
Connect the fuel tube. Connect the vent tube from the fuel tank to the pressure fitting, or nipple, on the muffler. The remaining tube should be attached to the carburetor fuel inlet nipple.



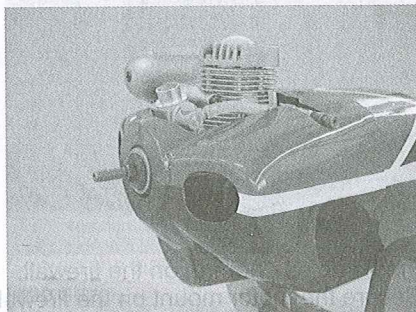
Place the top and bottom engine cowl on the working table. Use hobby scissors to trim the cowl according to the molding line.



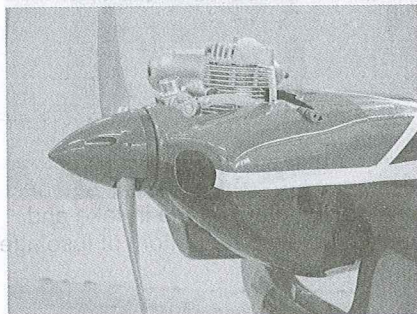
Cut opens the in-take. Use instant glue to secure the top and bottom cowlings together.



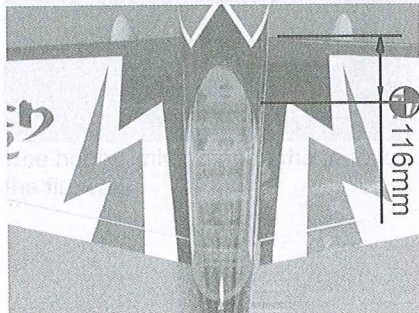
Apply the white decal strap on the conjunction place.



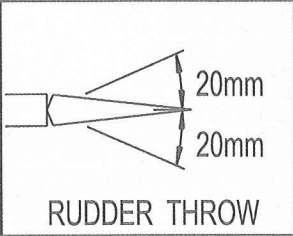
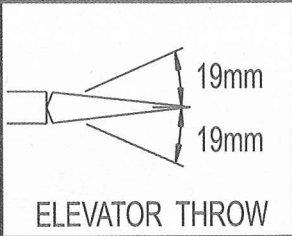
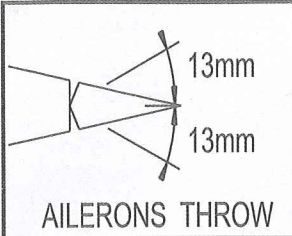
Use curved scissors to cut the openings according to the engine. Try to fit the cowl over the engine. When satisfied with the location, use tape to hold the cowl in position, then mark two screw hole locations on each side of the cowl.



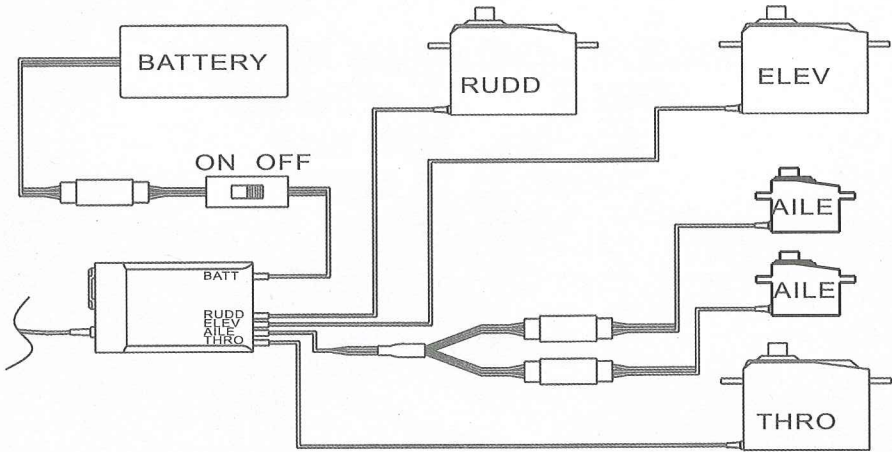
Install the spinner set w/propeller. Secure the spinner with 3 x 10 screw



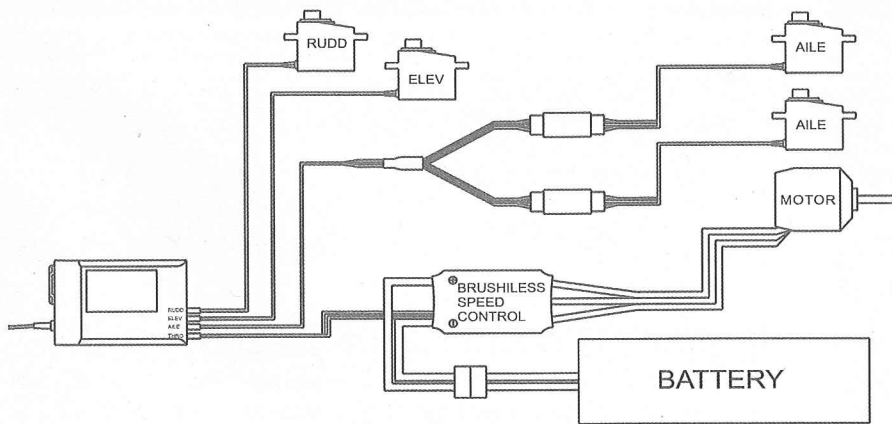
The recommended Center of Gravity location is 116mm back from the leading edge against the fuselage.

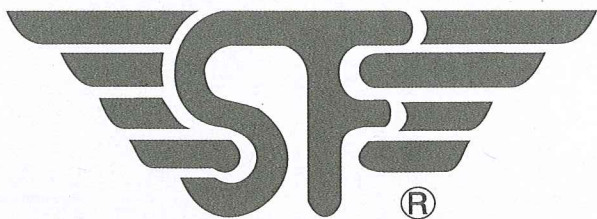


FOR THE GP VERSION



FOR THE EP VERSION





SUPER FLYING MODEL
MANUFACTURE

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