

PIPER PA-25 PAWNEE

.120/26cc



SPECIFICATIONS

WING SPAN: 2205mm

LENGTH: 1528mm

WING AREA: 70.2 sq.dm

WEIGHT: 4880 g

RADIO: 5 ch

GP ENGINE: .90 (2C)

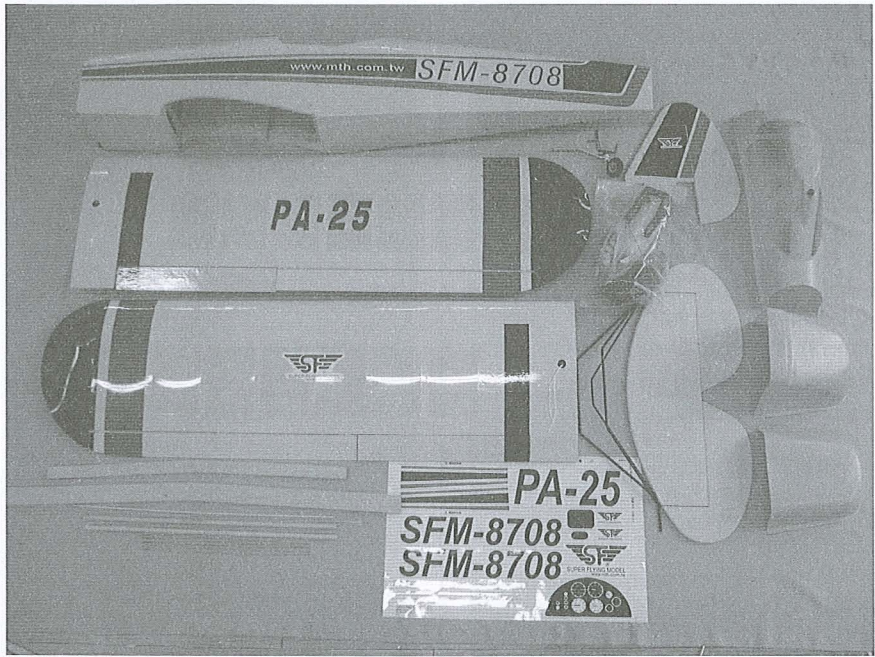
.120 (4C)

GAS ENGINE: 26-30 c.c.

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):

5 channels or up radio X 1 piece
 45g servo x 7 pieces
 Receiver x 1 piece
 Y-Harness x 2 pieces
 30cm Extension x 2 pieces
 60cm Extension x 2 pieces
 Engine .90 (2C) / .120 (4C) ;
 26CC GAS ENGINE
 Receiver Battery 4.8V x 1 piece
 Switch x 1 piece

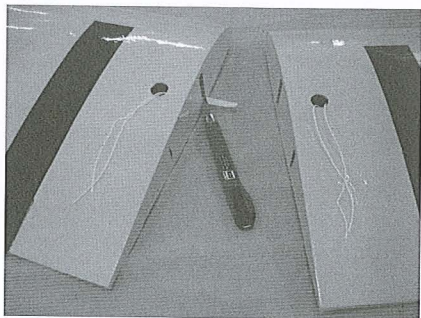
For Gas Engine:
 Fuel Tube for Gas engine
 \varnothing 2.5x 6x 1000 mm
 420cc Fuel Tank for Gas Engine
 Two-way filter valve
 M6 Anti-vibration screws, washers,
 Lock nuts

Tools and suppliers needed (not included in kit)

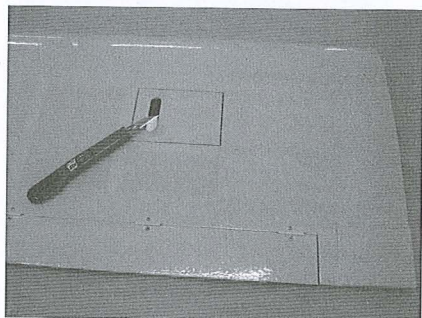
Phillips screwdriver #0, #1
 1.2mm/1.5mm/2.0mm/6.0mm drill
 Curved scissors
 1.5 Hex Wrench
 Hobby knife
 Ruler
 Pliers

Z-bender
 Epoxy 5-10 minutes
 Marker
 CA glue
 UHU foam glue
 Sanding paper
 Cross wrench

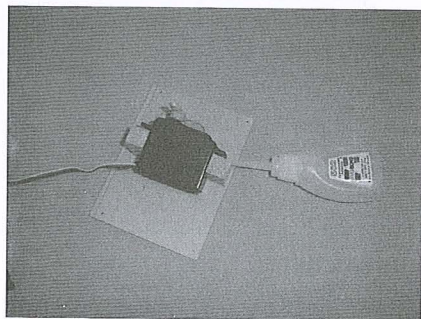
Tape
 Reamer
 Iron
 Heat-Gun
 Electric Driller



Try to find the holes for the wing joiners on the root of the main wing. Use hobby knife to cut-out the covering carefully.

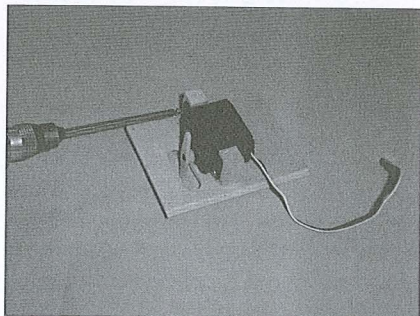


Use hobby knife to cut-out the covering over the hole for the servo arm (on the servo tray).

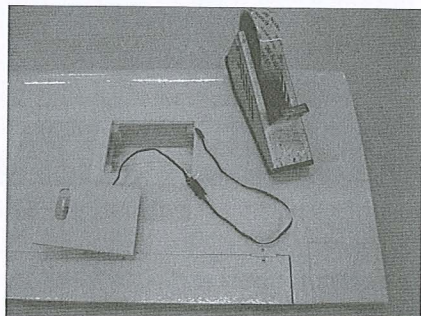


Take out 2 pieces of 12x12x22mm blocks for the hardware bag. Set the servo in the neutral position. Install the long servo arm in the servo. Place servo on the servo tray. Adjust the servo arm at the center position

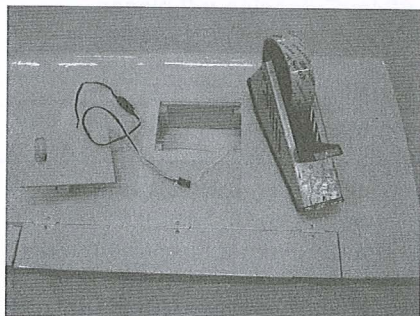
in the hole. Place blocks on both sides of the servo. Use instant glue to secure blocks in position.



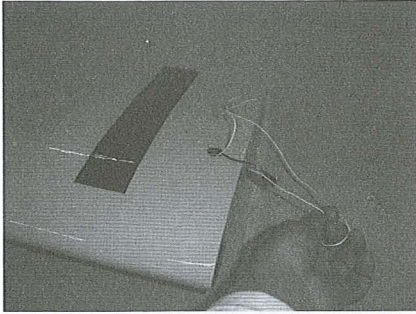
Secure the servo on the servo tray with the supplied screws.



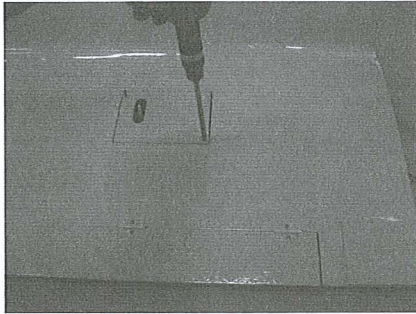
Connect the servo cable with 30cm extension. Applied a piece of tape around the conjunction for avoiding losing off during flying.



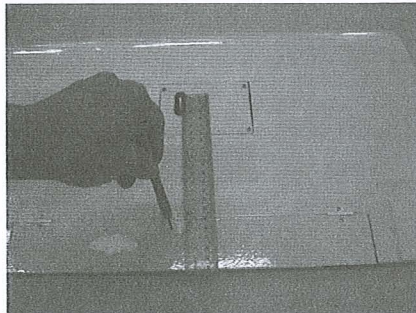
Tie a cotton line to the extension (male end). Apply the tape on the cotton line.



Route the cotton line through the main wing until the cable hole. Cut out the cotton line.



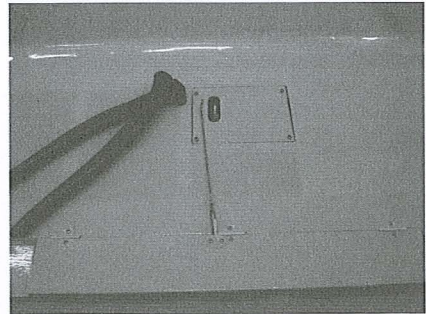
Use 1.5mm driller to drill 5mm hole on the corner of servo plank. Secure the plank in position with 2.6x10mm tapping screws.



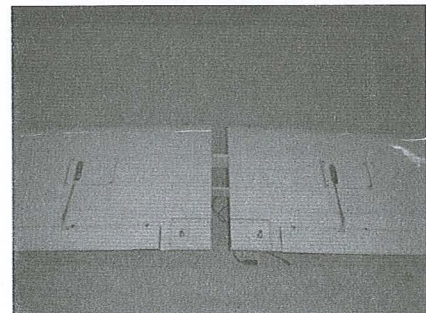
Try to place the control horn on the flap. It must be on the straight line to the servo arm. Use marker to mark the position for securing the control horn. Use 2.0mm driller drill the marking position.



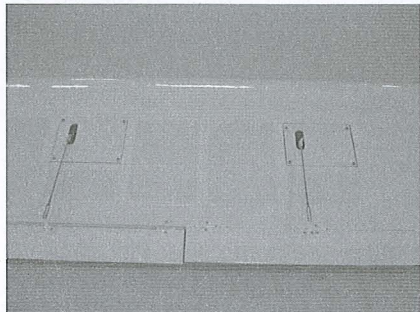
Secure the control horn in place with 2x25mm screws.



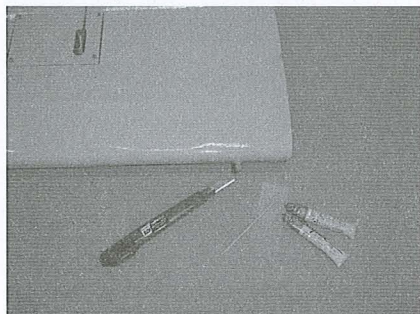
Screw a metal clevis onto the threaded end of rod. Connect the metal clevis with the control horn. Center the servo arm and find a position for making a Z-bend. Leave 5mm more length on the rod and cut out the extra rod with pliers. (Please connect to the receiver and turn on the radio. The angel of the flap can be adjusted from 0 degree to 35 degree.)



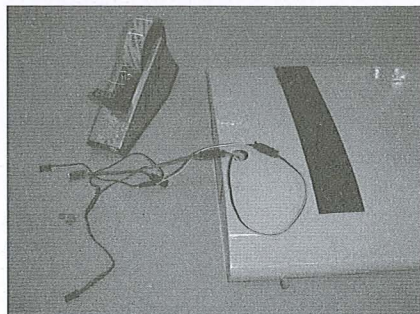
The exit for the flap servo arm is at the same direction. It's different from the aileron.



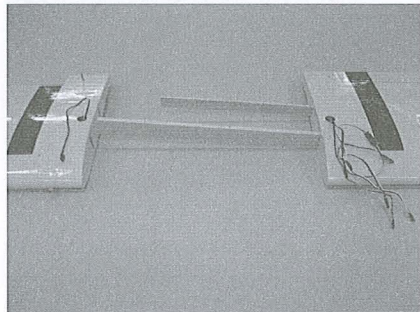
The procedure for installing aileron servo is same as installing flap servo only with 60cm extension.



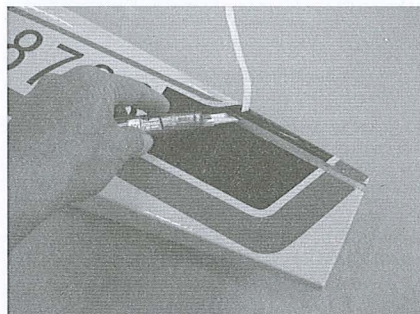
Try to find a round slot on the front edge of the main wing. Use hobby knife to cut out the covering over the slot. Take out 7x50mm dowel from the hardware bag. Use sanding paper to polish both ends. Spread some AB glue on the dowel. Insert the dowel into the hole.



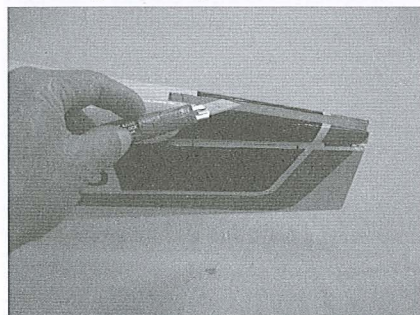
Connect the extension with Y-harness. After test, use tape to mark the correct connection.



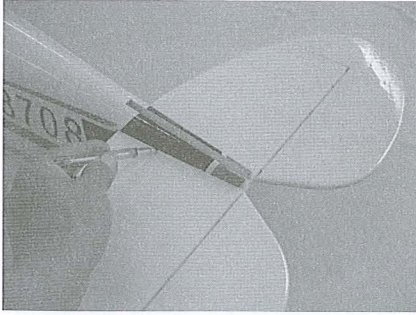
Insert wing joiners into the main wing. If too tight, use sanding paper to trim the joiners.



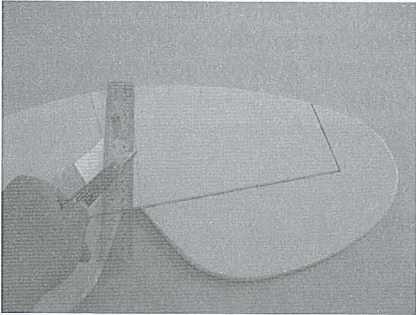
Try to find the slot for the horizontal. Use hobby knife to cut away the covering carefully.



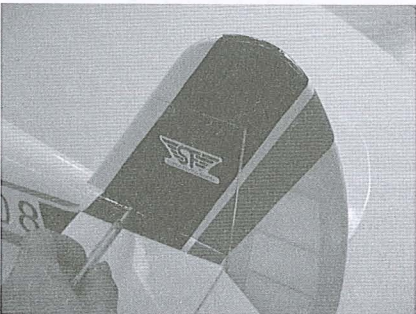
Try to find the slot for the vertical and horizontal. Use hobby knife to cut away the covering carefully.



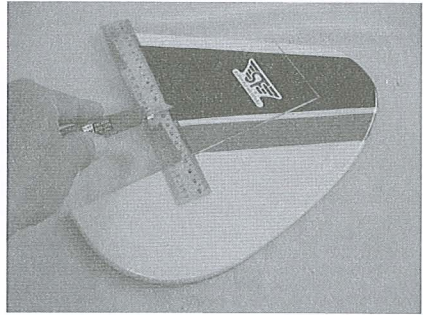
Try to fit the horizontal. Center the horizontal and use marker to mark the contacting area on the horizontal for both sides.



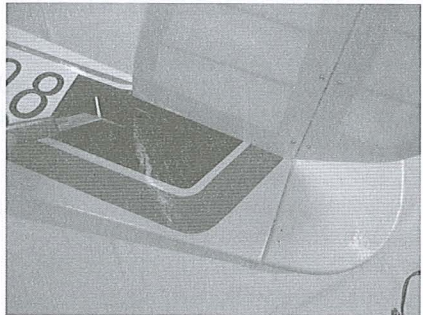
Use hobby knife to cut out the covering inside the marking area carefully. Please don't cut into the wood.



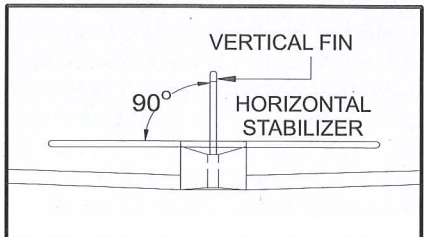
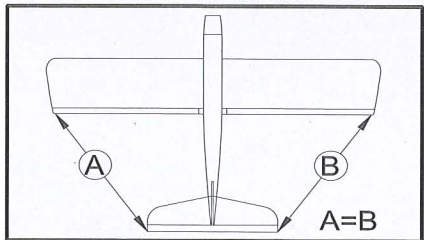
Try to fit the vertical and use marker to mark the contacting area on the vertical for both sides.



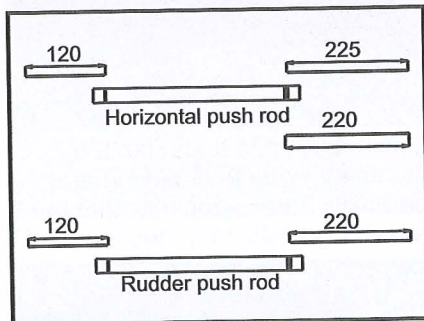
Use hobby knife to cut out the covering inside the marking area carefully. Please don't cut into the wood.



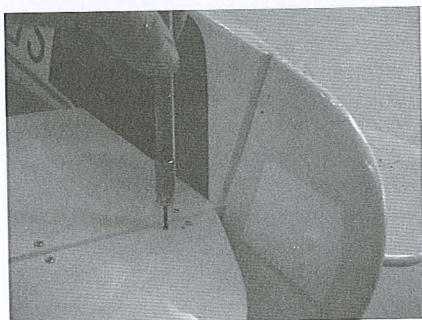
Try to find the pre-serving holes for the rods on the tail. Use hobby knife to cut out the covering.



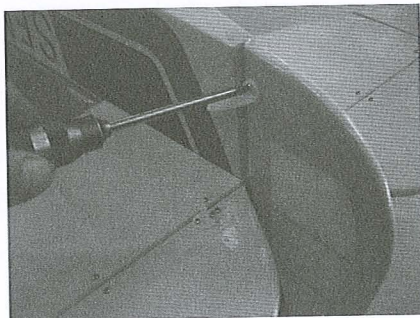
Before securing the vertical and horizontal; use ruler to measure the length of A and B. Both must be the same. Using a 90 degree triangle, make sure the vertical is perpendicular to the horizontal.



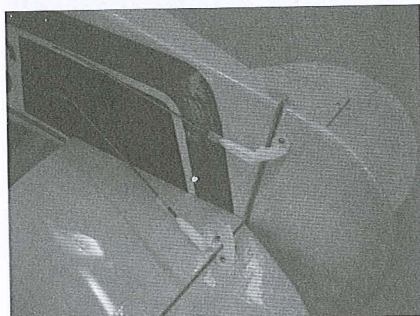
Using needle nose pliers, bend a 90° angle on the threaded rod. Insert the 90° bend into the hole of the wood dowel and saturate the wood with thick CA glue where the rod contacts the balsa. Slide a piece of heat shrink tubing over the end of the dowel and shrink it in place using a heat gun.



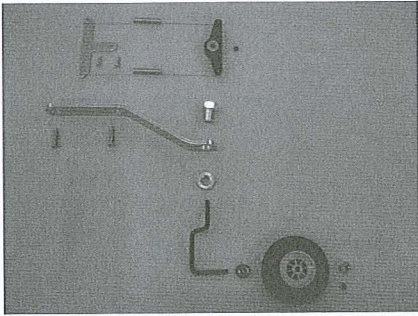
Insert the elevator pushrod assembly to the fuselage so the threaded rod exits the elevator pushrod hole. Try to mark the position for the control horn. Use 2mm driller to drill the hole on the marking position and secure the control horn on the elevator.



Insert the rudder pushrod assembly to the fuselage so the threaded rod exits the rudder pushrod hole. Try to mark the position for the control horn. Use 2mm driller to drill the hole on the marking position and secure the control horn on the rudder.



Slide a small piece of silicone tube (around 5mm) and screw on a metal clevis. Fasten the metal clevis on the control horn. Set the servo in neutral position. Move the silicone tube over the clevis as extra insurance to prevent the clevis from accidentally coming open.



Take out the following accessories from the hardware bag:

Tail gear

T-stand

Wire

Aluminum blot w/nut

Control Arm

Suspension (2 pieces)

Tail wheel

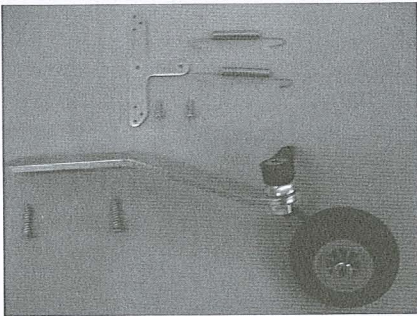
3x16 Tapping screws (2 pieces)

2x12 Tapping screws (2 pieces)

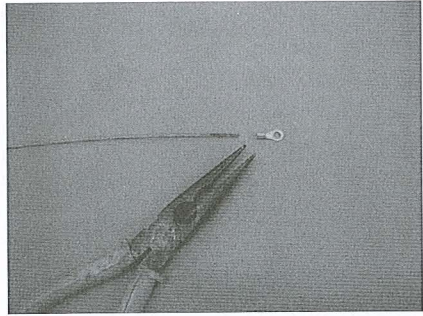
3mm Collar

Aluminum Collar

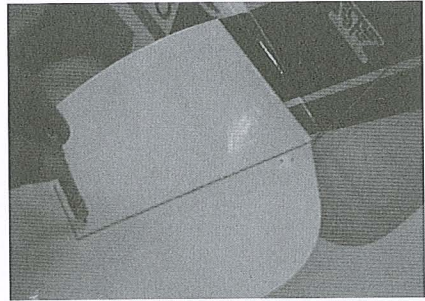
3x4 Hex screws (2 pieces)



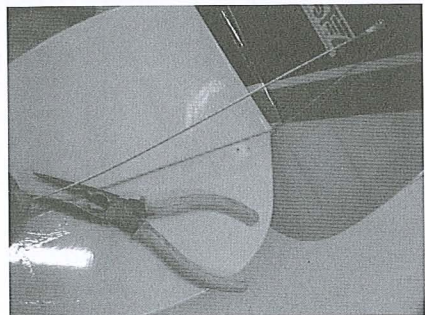
Assembling tail gear with stand and secure it with the screws. Insert the aluminum collar, tail wheel and 3mm collar into the tail wire. Secure the assembly with 3x4mm hex screw. Fasten the tail wheel assembly on the tail gear w/ aluminum blot and nut. Secure the control arm on the bolt with 3mm hex screw.



Take the wire and terminal out of the hardware bag. Insert the wire to the end of the ring. Use pliers to clamp down on the end of the terminal. Spread some instant glue to secure it



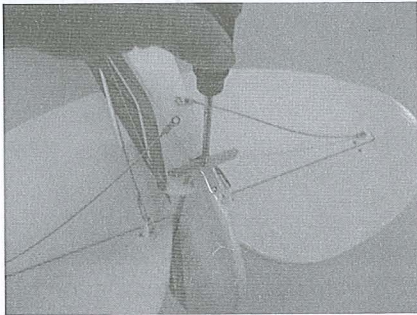
The wiring assembly for the top is 230mm, 225mm is for the bottom. Try to locate the top or bottom wire assembly in location. When satisfy the location, use marker to mark the location. Use 2mm driller to drill hole on the marking locations.



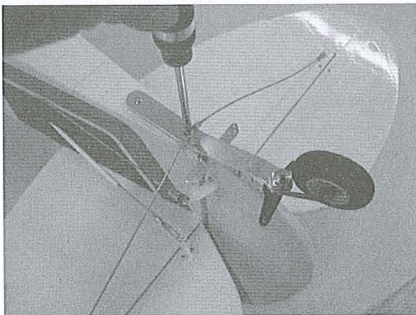
Try to install the wiring assembly on the tail. Use pliers to make a small turn on the end of wiring assembly.



Securing the wiring assembly on the tail with 2mmx15 screws, washers and nuts.

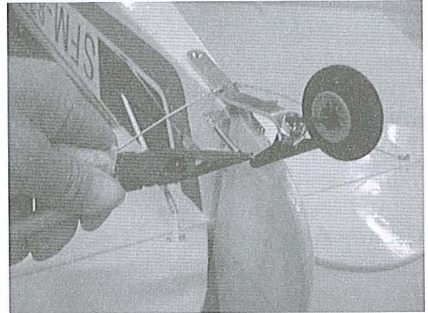


Try to locate the T-stand on the bottom of the rudder. Center its position and secure it with 2x12mm tapping screws.

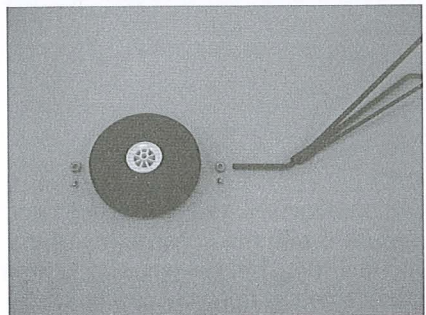


Place the tail gear assembly on the bottom of tail gear. Please note the

direction. The bend end is facing the T-stand. Secure the front end of tail gear assembly with one piece of 3x16mm tapping screw on the fuselage. Place the bottom wiring assemblies on the tail gear. Secure the both ends with tail gear on the end of fuselage with 3x16mm screws.

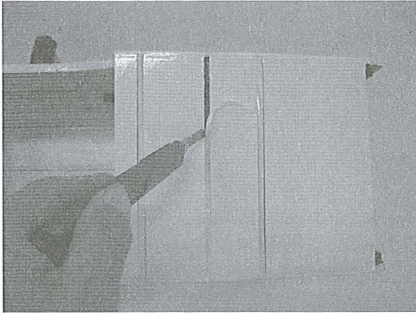


Take the springs out of the hardware bag. Use pliers to bend one end for installing on the T-stand. Pull another end to lock into control arm. Please note that the strength on both springs must be the same or the tail wheel and rudder will be affected. Cut off the extra length on the springs.

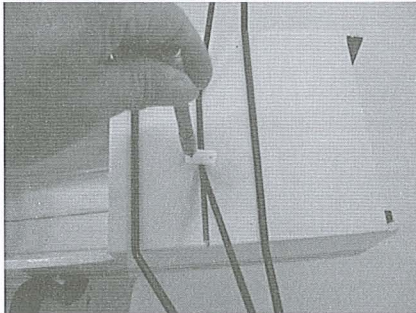


Take out 5mm collars (2 pieces) , M3x6 screws (2 pieces), wheel and main gear out of hardware bag. Install one collar into the main gear and secure the collar with M3x6

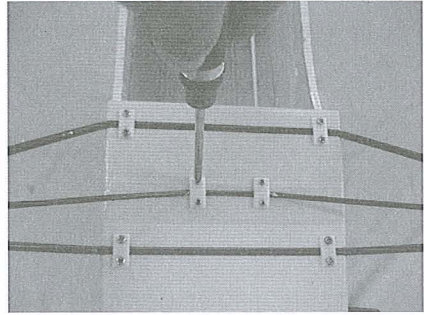
screw. Install the wheel afterwards. Secure the wheel with 5mm collar and M3x6 screw.



Find the pre-serving slots on the bottom of the fuselage for installing the main gear. Use hobby knife cut out the covering over the slot carefully.

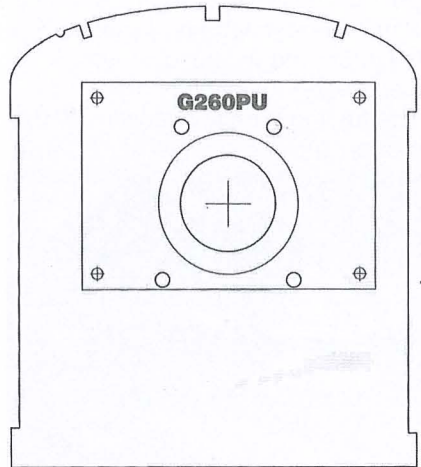


Take out 6 pieces of plates and 12 pieces of 3x10 tapping screws from the hardware bag. Try to fit the main gear into the slot. When satisfy the location, use pen to mark the position for securing the plates. Use 2mm driller to drill the hole.

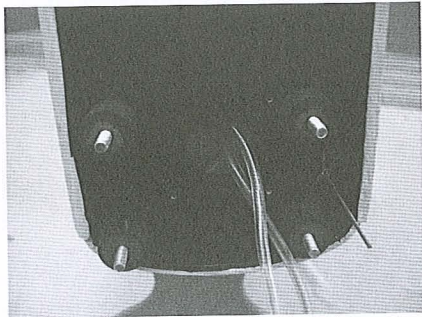


Place the main gear into the slot again and secure it in place w/plates and 3x10 tapping screws.

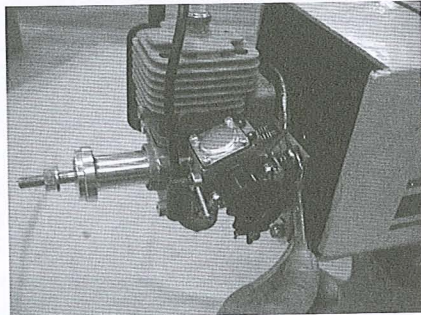
Installing the Gas Engine (specially for ZENOAH)



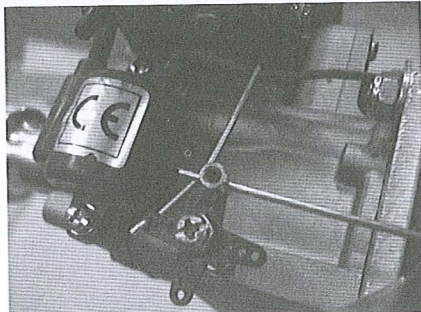
Place the firewall template in position on the firewall. Drill the locations for your particular engine. If it is G260PU ZENOAH Gas Engine, there are pre-setting holes on the back of firewall.



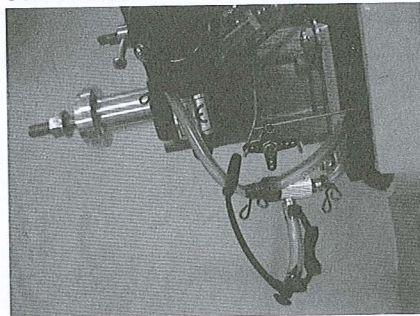
Prepare 4 pieces of anti-vibration M6 screws, washers, wheel lock nuts, Gas Engine fueling tube, Gas Engine fuel tank (not included in this kit). Place the engine mount on the firewall. Use pen to mark the center position. Use driller to drill 6mm hole. Place the anti-vibration screws, washers and wheel lock nuts. Secure the nuts tightly. The fueling tube is specially for the gas engine.



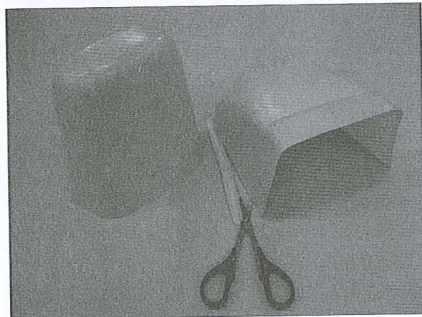
Install the engine. Secure the engine with washers and wheel lock nuts.



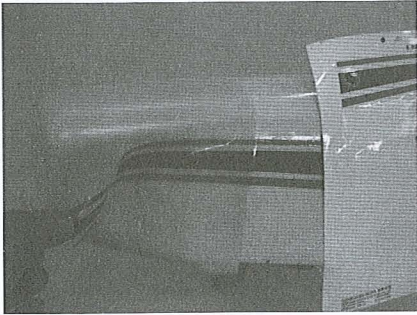
Prepare ball-end rod, ball link, cross-type servo arm, 4mm screws and nuts, 2mmx10 screws, adjustable rod stand and 3x4 hex screws. Drill a 4mm hole on the center of servo arm. Attached the engine and accessories to the firewall as shown in the photos. Secure the throttle servo in the fuselage using the hardware provided with the servo. Thread a clevis onto the threaded rod and attached the clevis to the servo arm.



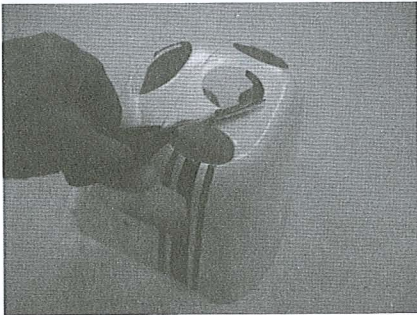
Connect the fuel tube with filter and valve.



Use scissors to trim the cowlings according to the mold lines.



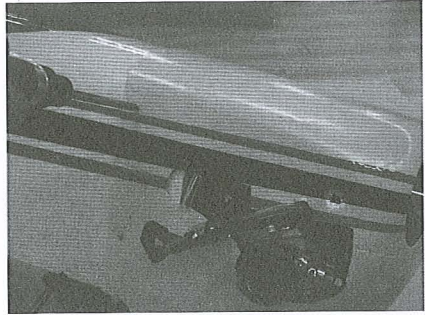
Try to fit the cowling on the fuselage. When satisfy the location, apply the decorative decal on both sides of cowling.



Mark the position for vent and engine shaft. Use reamer and curved scissors to open the holes.



Install the cowling and try to keep 1.5mm space between the shaft and the bottom of the cowling.

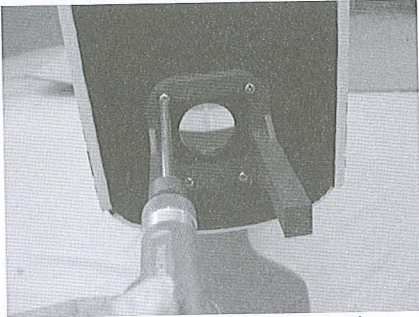


Secure the cowling with 2x6 tapping screws.

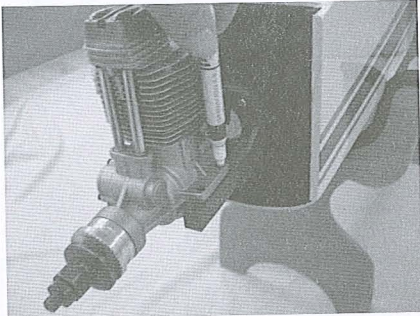


Install the APC 16x6 propeller. Please use hobby knife to trim the exits on the spinner for securing the screws.

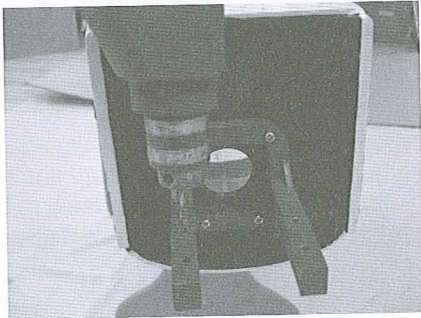
Installing the 4-stroke Engine



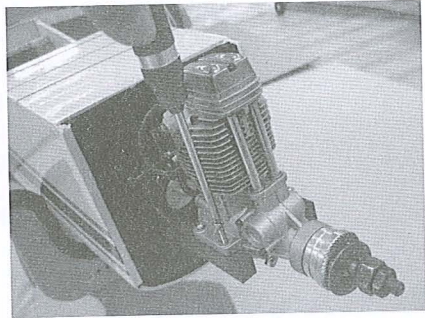
Secure the engine mount on the firewall with M4x30mm screws.



Place the engine on the engine mount. Use marker to mark the screw location on the engine mount.



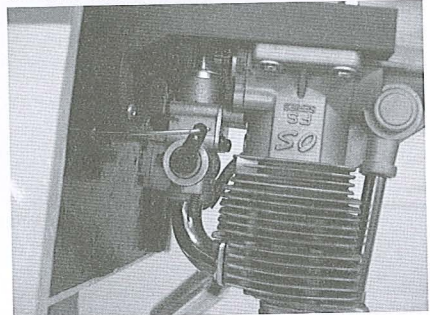
Remove the engine and use driller to drill 4mm hole on the marking location. Please note the driller must be perpendicular to the engine mount.



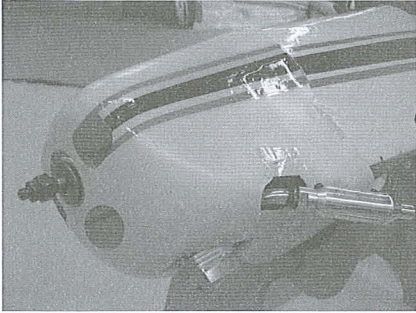
Secure the engine on engine mount with M4x30mm screws, washers and 4mm nuts.



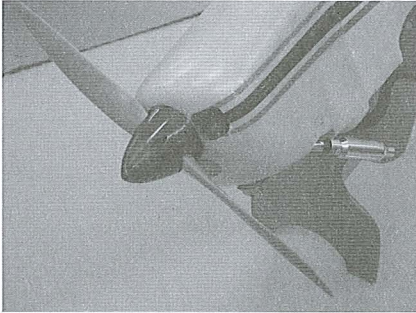
Install the muffer per the instructions included with the engine. Connect the vent tube from the fuel tank to the pressure fitting, or nipple, on the muffer.



The remaining tube should be attached to the carburetor fuel inlet nipple.



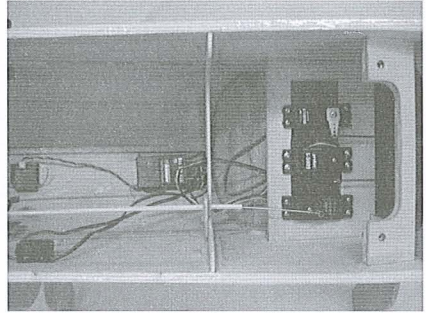
Install the cowling and try to keep 1.5mm space between the shaft and the bottom of the cowling. Secure the cowling with 2x6 tapping screws.



Use cross wrench to secure the spinner mount and propeller in place. Use hobby knife to trim the flange of the spinner. Secure the spinner with 3 x 12 tapping screws.



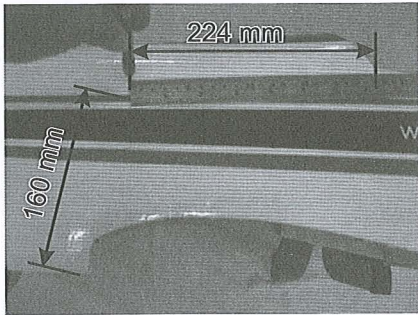
Use curved scissors to trim the outline of the canopy.



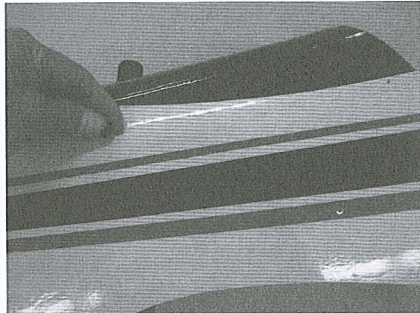
Install the elevator servo, rudder servo; throttle servo, switch, battery and receiver as shown in the photo. Turn on the radio and set the servo in neutral position. Angle for elevator and rudder is 0 degree. Use marker to make position the rod will connect the servo arm. Use Z-bender to make a Z bend on the marking position. Connect the Z end on the rod and secure with screw.



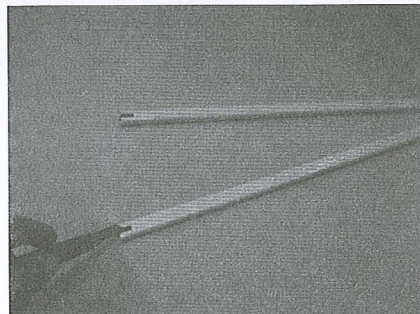
Take eye-screw (6 pieces) and rubber ring out of the hardware bag. Try to press the eye-screw into the slot on the rubber ring.



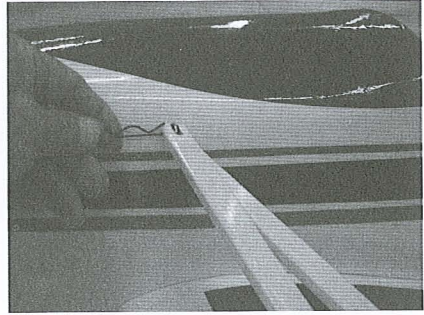
Use ruler to measure the location for securing the eye-screw as shown in the photo. Use marker to mark the location and use 1.2mm drill to drill a hole on the marking location.



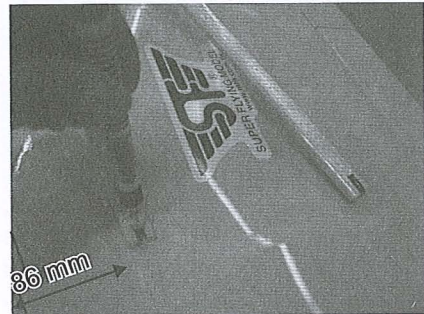
Screw in the eye-screw into the hole.



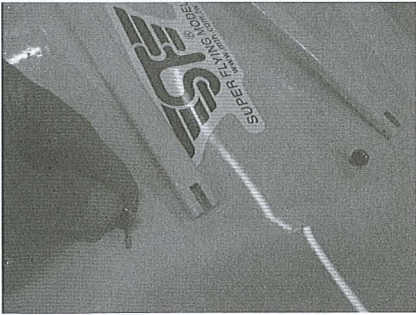
Take out the main wing struts from the hardware bag. Use hobby knife to remove the covering on the ends.



Use M4x45mm bolts and washers to secure the main wing in place. The short strut goes toward the leading edge, the long strut toward the trailing edge. Insert the end of the strut into the eye-screw on the fuselage and secure it in place with pin.



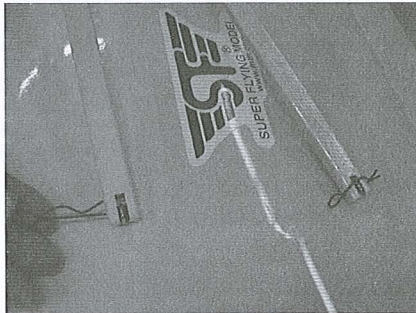
Let the struts contact the main wing naturally. The front one will be on the 86mm back from the leading edge. Use marker to mark the location. The rear one will be located on one block. Use marker to mark this location, too.



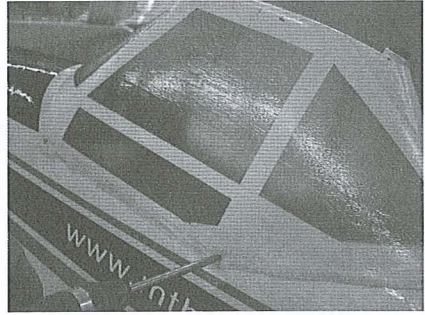
Screw in the eye-screw into the holes.



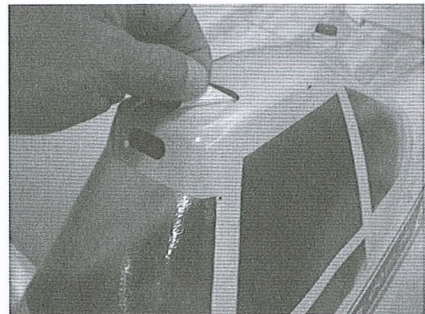
Use 1.2mm driller to drill hole on the marked locations.



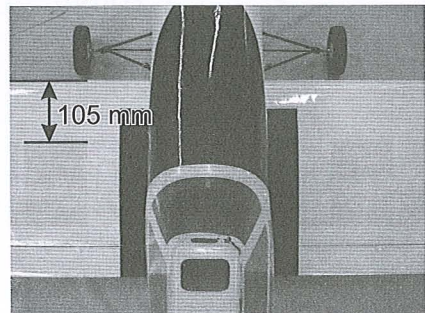
Secure the other end of struts on the eye-screws with pins.



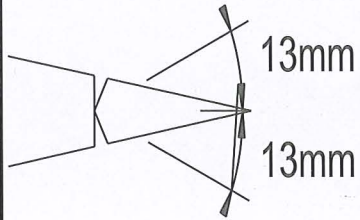
Try to fit the canopy on the fuselage. When satisfy the location, use 1.2mm driller to drill 4 holes for securing 2x6 tapping screws.



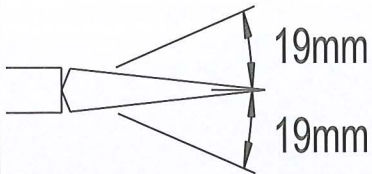
Apply the windows decals on the canopy.



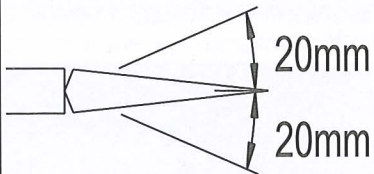
The recommended Center of Gravity location is 105mm back from the leading edge against the fuelage.



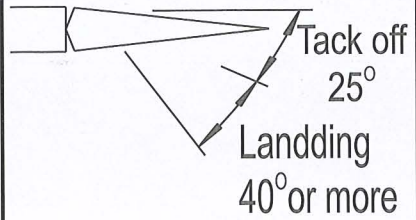
AILERONS THROW



ELEVATOR THROW



RUDDER THROW



FLAP THROW