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AUSTARS MODEL PTY LTD

120 INCH COMPOSITE CESSNA-182 TC SKYLANE ARF INSTRUCTION MANUAL

Technical data:
Wingspan: 120 inch (3050mm)
Length: 2400mm
RTF Weight: 14-17kg
Radio: 6-9 channels, 9 servos
Engine: 50cc-100cc petrol engine

Thank you for purchasing giant scale composite Cessna-182 TC ARF made by AUSTARS Model. This model plane was crafted by experienced designers and skilled craftsman. Many of its parts have been built in the factory and assembled for you. Be sure you have read and understand this entire manual before attempting to assemble, set up and fly this model aircraft.
This manual is intended for experienced ARF assemblers. If you have any questions or anything is not clear, please contact with the local dealers for clarification.

WARNING-THIS IS NOT A TOY!
Radio controlled model aircraft is capable of causing serious injury and property damage, if it is not properly assembled, operated and maintained in a safe manner. Please keep this model aircraft out of the reach of children. If you are not already an experienced radio controlled aircraft modeler, we strongly suggest that you find an experienced modeler to assist you. It is the buyer's responsibility to assemble this model aircraft correctly and to properly install the engine. As this Cessna-182TC ARF is a giant scale model aircraft, you should fly this model aircraft in the approved flying clubs or sites, using the frequencies specified for model aircraft. We strongly suggest all Users should be the members of your local official Model Aircraft Associations or relevant official organizations, which provide its members with liability insurance covering the use of model aircraft. Your local hobby shops should be able to provide you with their details. No liability is assumed or accepted for any damage resulting from the use of the model aircraft assembled or unassembled. By the acts of assembling and using the assembled model aircraft, the user accepts all the resulting liability.

WARRANTY

AUSTARS Model Pty Ltd. guaranties this kit to be free from defects in material and workmanship at the time of purchase. This warranty does not cover any component parts damaged by use, modification or deterioration resulting from the use of an engine larger than those specified in the instruction. In no case shall AUSTARS Model's liability exceed the original price of the kit. AUSTARS Model Pty Ltd. reserves the right to change or modify this warranty without notice. Please inspect the components of this kit as soon as you have received it, if you find any parts damaged or missing, call your local hobby shop that sold this kit to you. AUSTARS Model Pty Ltd. and the hobby shops can not accept the return of parts on which you have partially or completely assembled. In that AUSTARS Model has no control over the final assembly, the materials and accessories used in the final assembly of this kit, or the manner in which the assembled model is used, no liability is assumed or accepted for any damage resulting from the use of the assembled model aircraft. By the acts of assembling and using the assembled model aircraft, the user accepts all resulting liability. If the buyer is not prepared to accept the liability associated with the use of this model aircraft, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

Always operate this model aircraft in accordance with the safety code or the local official regulations.

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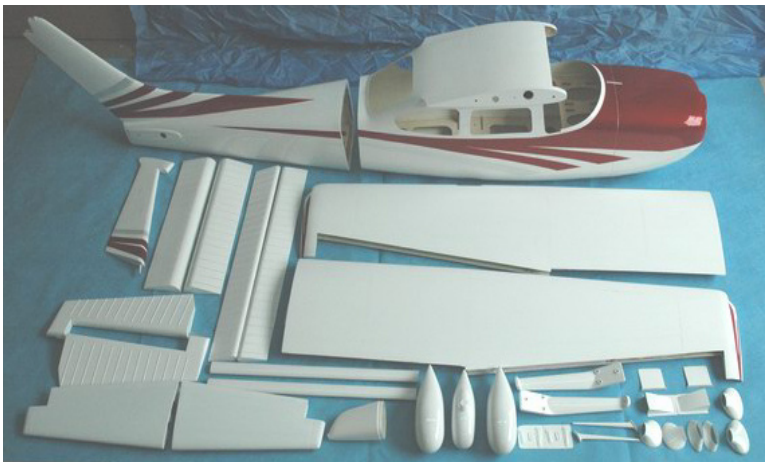
PARTS OF THIS KIT



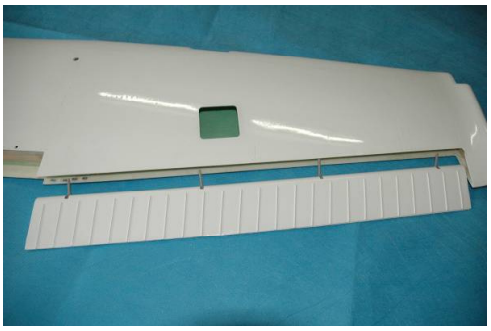
4 servo panels	1 Nose landing gear with wheel pant	1 Fuel tank (800CC)
1 FRP cowl	2 Main gear legs	1 pair of aerial
1 Fuselage (2 pieces)	2 Main wheels with 2 wheel pants	Screws
2 Main wings	1 Front windshield	Hinges
2 Elevators	1 Rear Windshield	Pushrod linkages
1 Rudder	4 Side windows	Control horns and hardware
1 Horizontal stabilizer	1 Tail cone	Clevis
1 Wing tube	2 Wing struts	4 seats
1 tube for elevator	4 Wing cuffs	1 dashboard sticker
3 navigation lights	2 Main gear cuffs	2 logo stickers
3 lights cover	1 engine mounting box	

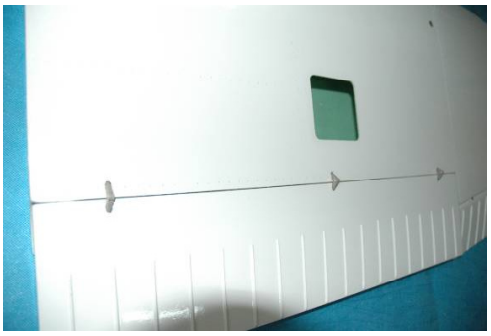
You need to purchase:

- 1 metal steering servo (over 10kg torque) suggested
- 7 metal geared servos for wings, flaps, rudder, elevator (over 8kg torque) suggested
- 19x11, 20x12, 21x13, 22x12 2-3 blades prop for 50cc, 53cc, 62cc, 80cc petrol engine
- 62cc by 19x11 and 53cc by 19x11 carbon fiber prop were tested by Austars Model and performance was approved!
- 1 50cc-62cc petrol engine for 2-3 blades propeller, 80cc-100cc petrol engine needs 3-blade propeller
- 1 spinner (3.5 inch or 89mm diameter)
- 1 radio system (6-9 channels)
- extension leads

Table of contents

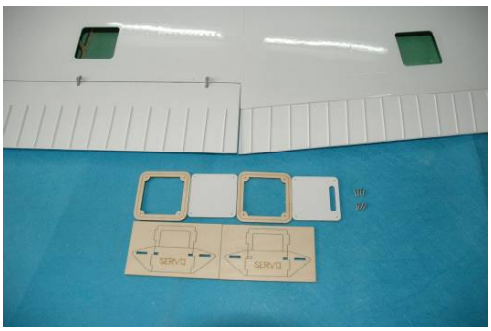
Section 1: Hinging the ailerons and flaps properly.

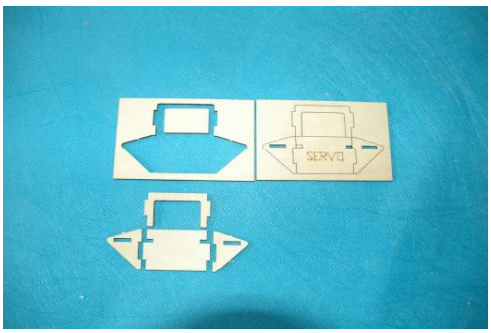
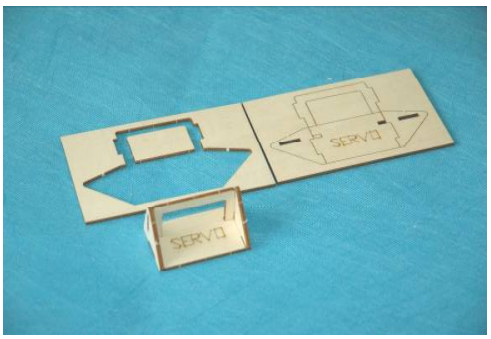




Locate the ailerons, flaps, and hinges (supplied in the package). Test fit the ailerons and flaps in place using the hinge point. Place a small amount of grease on hinge pivot point before gluing. Using a tooth pick to apply the epoxy, mixing 1/2 ounce of 30-mintue epoxy, working with one wing panel at a time, applying epoxy to the hinge pockets of the wing panel, and inserting the hinge points into the wing. In the same way, insert the hinge points into the other aileron and flaps one by one, make sure all hinges are vertical and ailerons can be moved up and down 25 degrees before epoxy sets. Make sure the flaps can be moved down 90 degrees. Recheck alignment before epoxy sets.

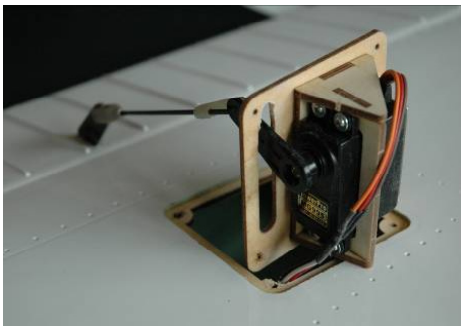
Section 2: Make and install the servo trays for the ailerons and flaps.

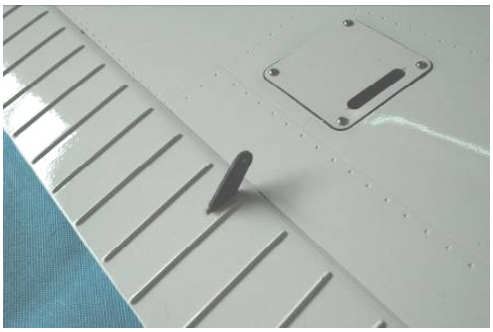


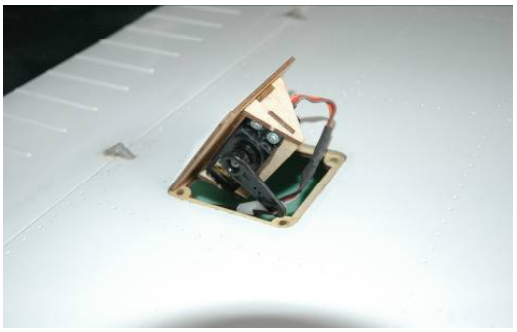
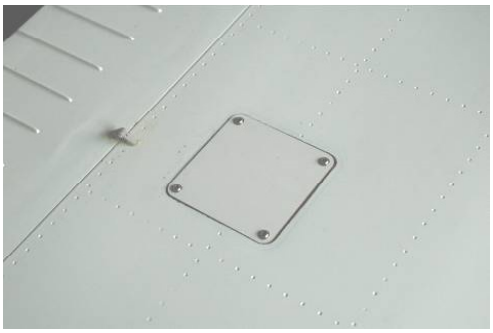





Cut and make the servo tray with plates supplied
Use 30-mintue epoxy or fast glue to make servo tray, double check if the servo trays has no problem

Section 3: Install the servos and push rods based on the following photos.



Install servos to supplied wing panels bolt into place to work out the control horn center. Once you have the center line marked you can cut your control horn slot then glue into place using 30min epoxy .Make sure the hole in the control horn where clevis goes is center of your hinge point

Section 4: Install the cover for navigation lights




Cut the cover along the contour and use the 1.5mm screws supplied to secure in place

Section 5: Install wing locating tubes

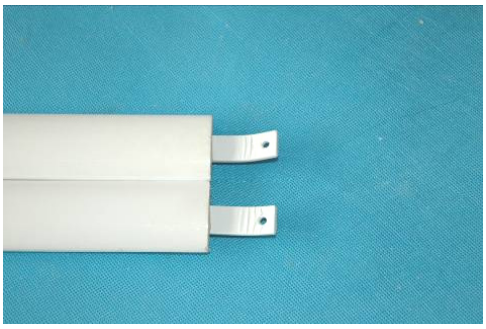



The package includes 4 aluminum locating tubes 8mm diameter
Glue the small tube and leave 20mm distance

Section 6: Install the wing struts and wing cuffs

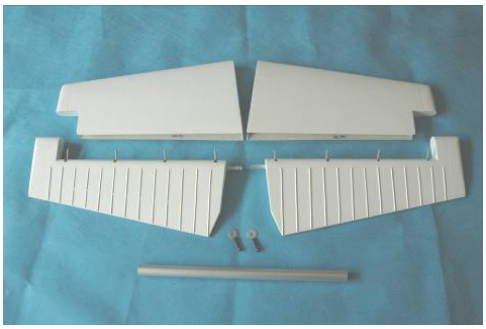
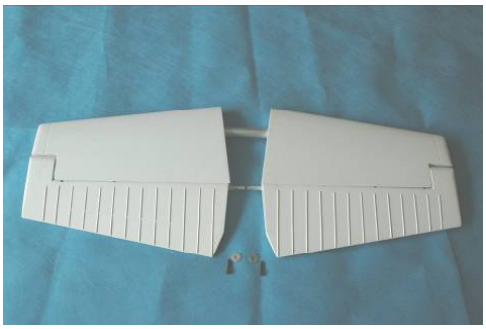


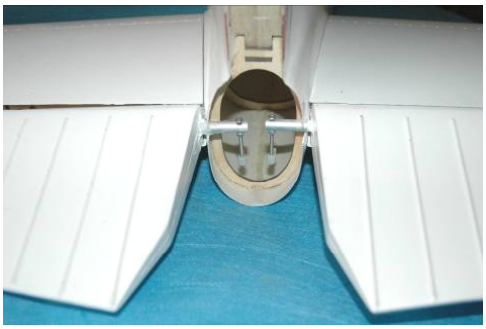





Put nylon screws into the pre-drilled holes
Bend the aluminum part and insert into the wing strut, after check the angle, glue it
Put the wing cuff on the proper position, glue it and lock it by 3*10 screws

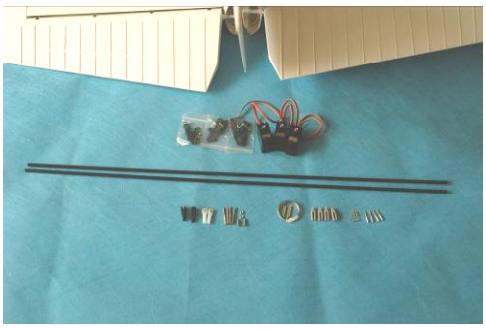
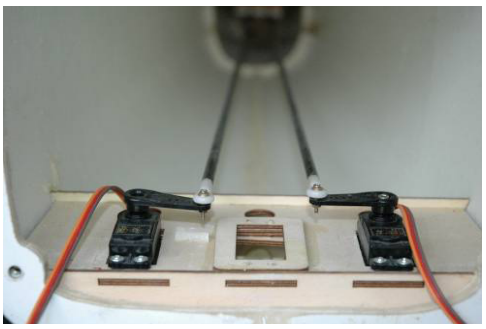
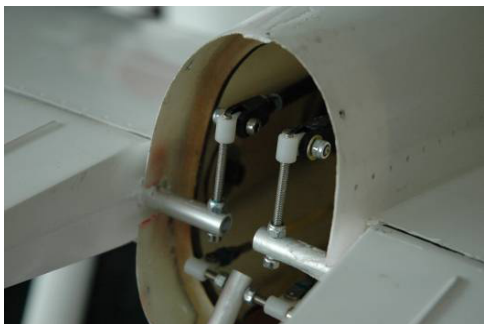
Section 7: Install the elevator half's and tail cone

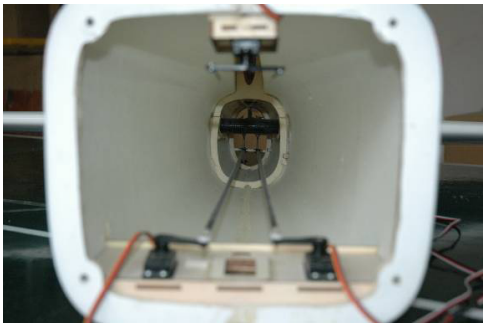




Insert the aluminum stab tube (22mm diameter) into the elevator, use 5*25mm screws into the fixed elevator
Install the push rod and check if it can be moved up and down properly.

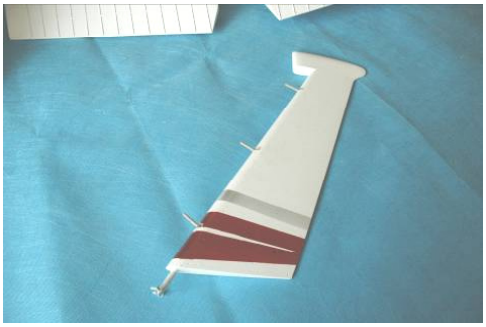
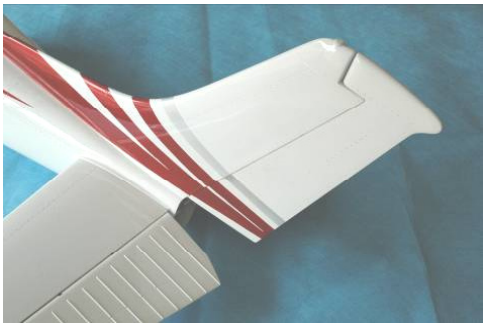
Section 8: linkage installation for the elevator

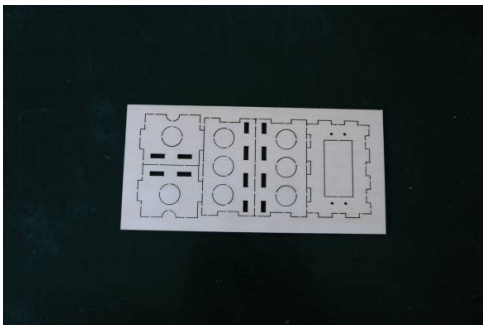
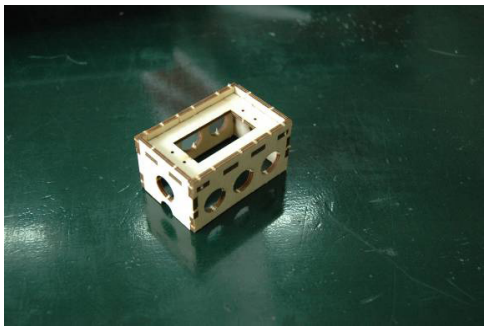
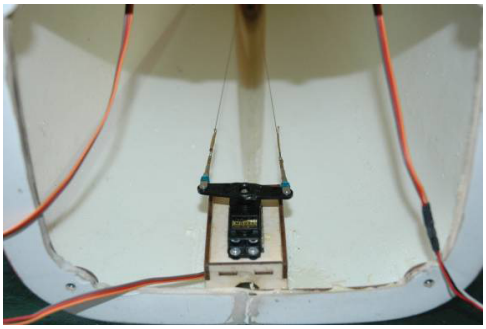
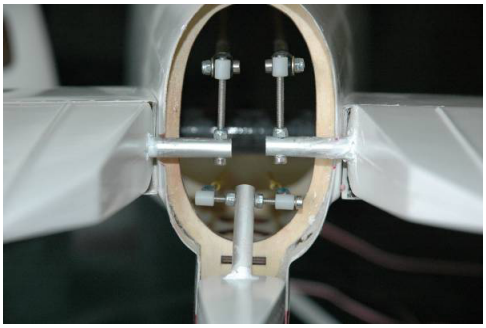







Put 2 linkages for elevator into the connection rod (3mm diameter), and glue the connection rod properly
Connect the push rods with servos
Install the metal geared servos

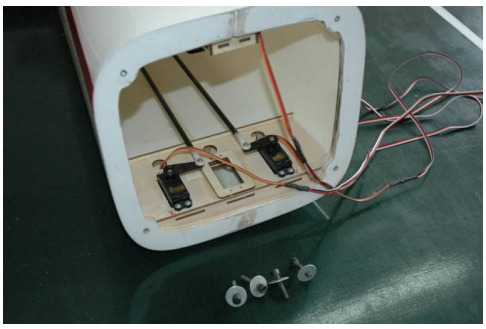
Section 9: Rudder and servo installation


There are two ways of doing the rudder servo, 1st way is to use supplied servo tray pre installed in plane or build supplied servo box & fit above the elevator servos

Section 10: Lock the fuselage

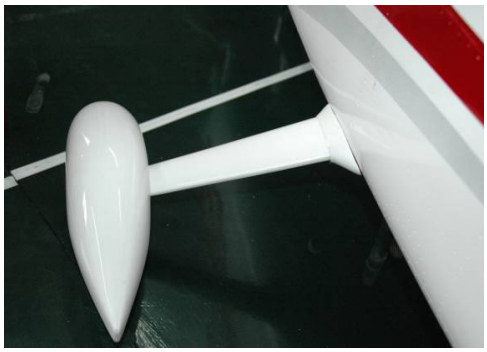




Using 4x5*25mm screws to properly lock front and rear fuselage. MAKE SURE THESE ARE SECURE BEFORE FLYING

Section 11: Install the main landing legs

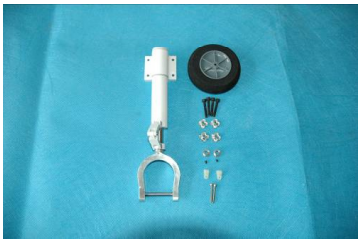


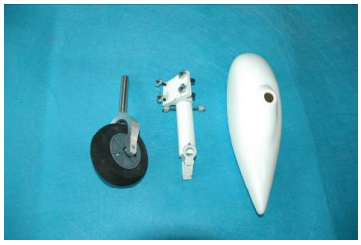


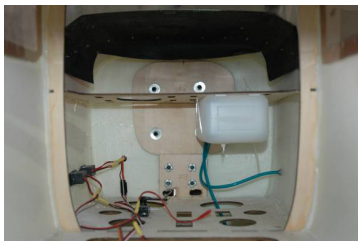
Install your wheel pants before you fit the legs to plane , cut slots the same as picture above make sure you fit the cuffs on the legs before you fit wheel pants on .Bolt landing gear on with the supplied Allen key bolts

Section 12: Installation of nose strut



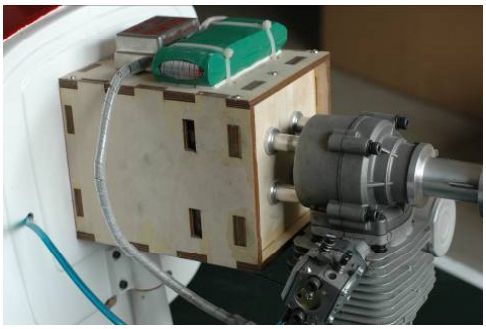


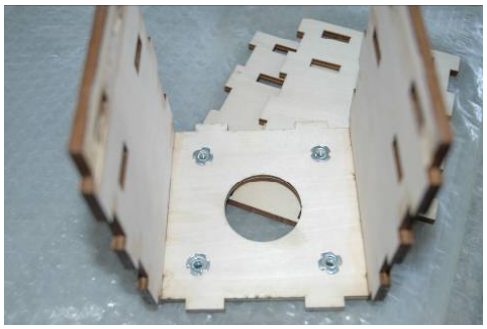
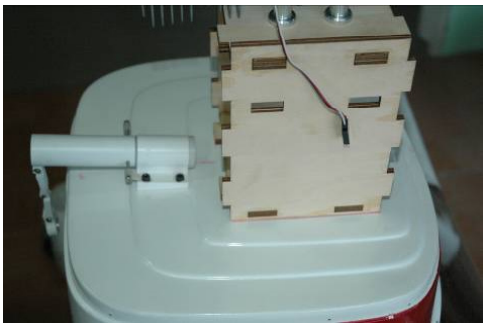
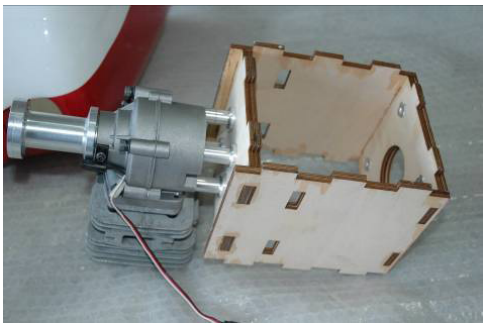




Mark the centre line on the firewall, drill 4 holes on the firewall by 5mm diameter, use 5mm blind nut and screws to lock the nose strut. Install the linkage for steering servo.

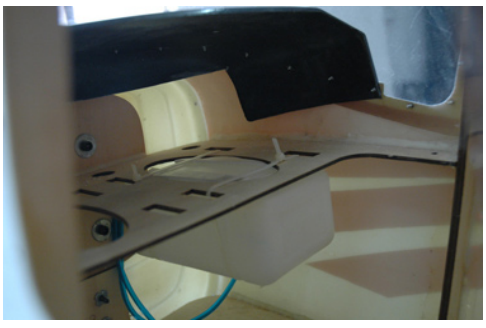
Section 13: Install the engine

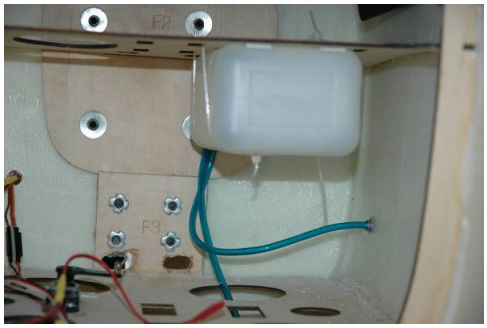



For best results build motor box with no top or bottom fitted. Place fuse upright then fit motor & box to plane
Then place the cowl over motor , work out where the motor will fit so the crank is center to the cowl , remove cowl
Make a few marks where the motor & box are fitted to fuse , remove then drill your four hole & bolt motor to fuse

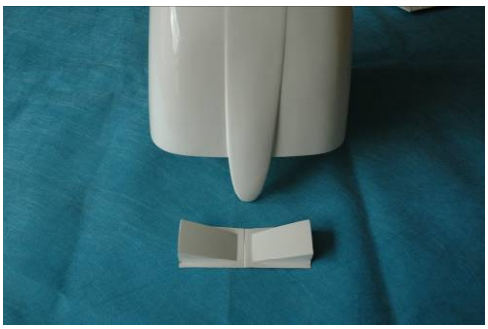
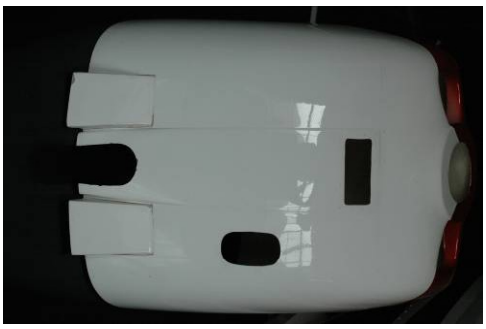
Section 14: Installation of Fuel Tank





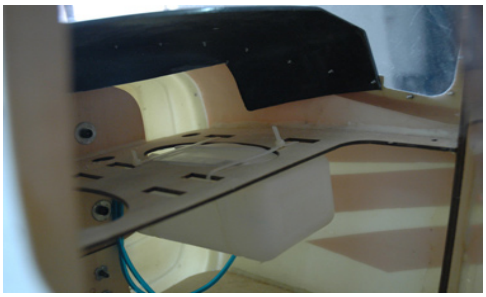
The fuel tank is included in the package, use cable ties or Velcro to secure in place

Section 15: Install the cowl and exhaust pipe


The scale exhaust pipes are included in the package; glue it in the position shown above. Using 2.8mm screws to mount the cowl

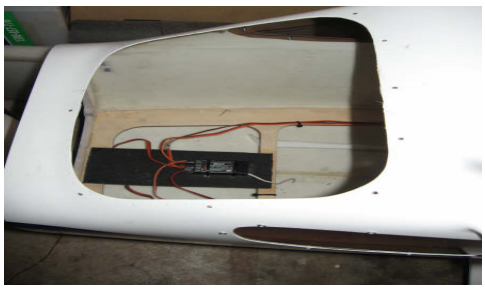
Section 16: Install the windows



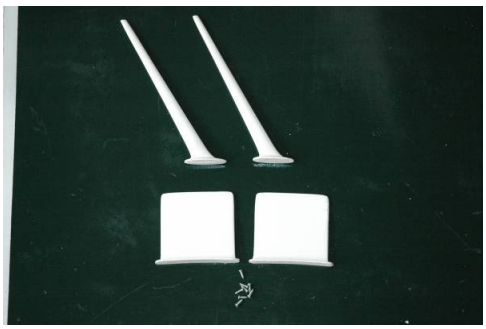


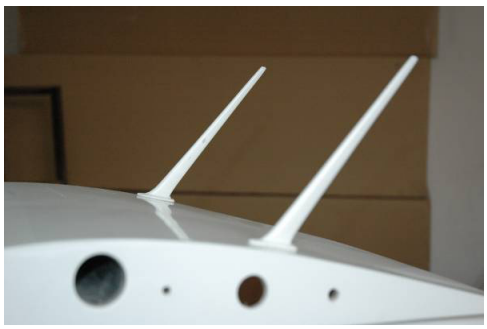




First install the front windscreen, 1 side front window, 2 rear side windows with this procedure.
Using 1.5mm screws supplied. We suggest making the rear & one side window removable with 2 5/6 bolts, blind nuts for easy access to rear of plane.

Section 17: Install the aerials, and small wing on the rudder





To fit the supplied scale aerials & stabilizers you can either bolt or screw them to your plane

Section 18: Balance the CG

130mm from the top point to the front edge

CG: START WITH CG LOCATION AT 28-30% FROM LEADING EDGE OF WING

HAVE A FUN TIME!

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