

The cowl has plywood tabs glued and fibreglasses to the inside face. The best glue for gluing near anything to epoxy fibreglass is Hysol 9462. The cheapest source I have found is

Altecare Inc.

6086 Leaside Crescent

Mississauga, Ontario L5M 5K6

CANADA

Email address: sales@altecure.com

<http://www.altecarerc.com/>.

I source all of my fibreglass supplies from

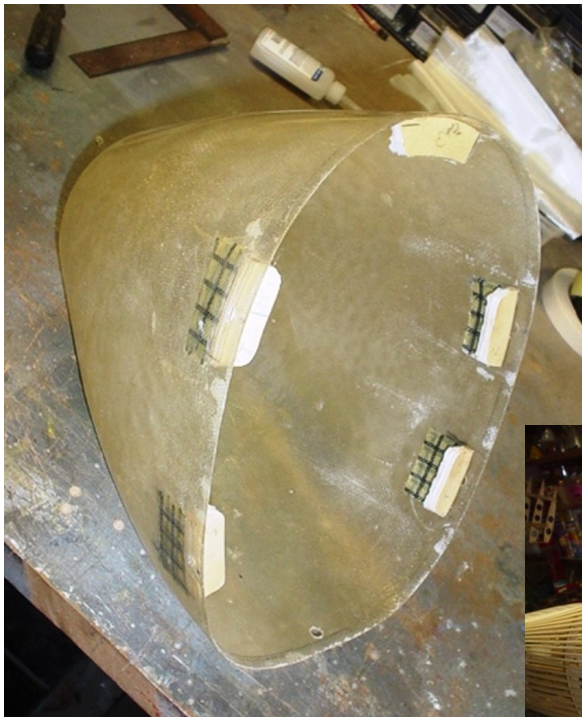
Fiberglas Australasia P/L

563 Willoughby Rd

Willoughby 2068

Phone 99583767

The tabs are drilled with a clearance hole for 5mm socket head screws. These screws will mate with a tapped hole in the firewall and will be accessed from the front of the cowl by long screwdriver handle Allen keys before fitting the spinner.



Fitting Engine

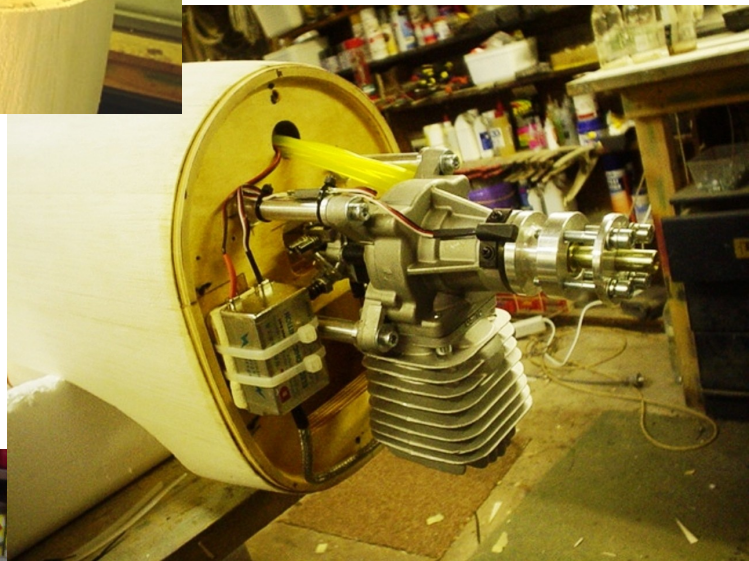
The engine has to be positioned on the correct thrust lines and it also has to align with the cowl when the spinner is fitted.

To do this I set the model up on its tail with the engine sitting loosely on the firewall, I then fit the cowl over the engine and fit the spinner back plate on the crankshaft. I will move the motor around until I have a perfect spinner to cowl alignment then carefully remove the spinner back plate and cowl to enable marking the position of the stand-offs on the firewall.



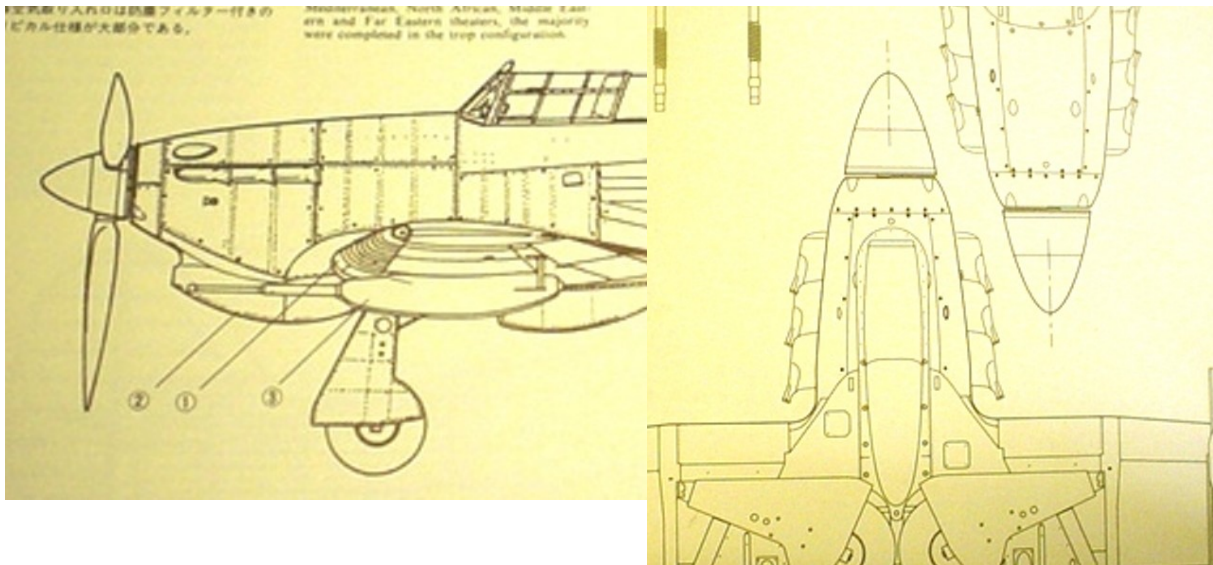
From the picture alongside you can see that the proximity of the carburettor to the firewall face is close and as I like to use a servo actuated choke and I need an access hole for the throttle push rod it was easier to cut out a large through hole in the firewall behind the carbie. Any hot air flowing from the engine area into the fuze will, hopefully, be extracted through the wing and out the radiator under the aeroplane's wing.

Engine bolted in position with EDI strapped to a padded standoff.



Engine bolted in position with crankshaft extenders fitted.

Making Vokes Filter and Finishing the Cowl



By using these two drawings I was able to transfer the profile and plan view of the filter onto the Vailly plans. I was then able to make a plug to the correct size and with the aid of the plastic model kit I was able to shape the correct cross sections.

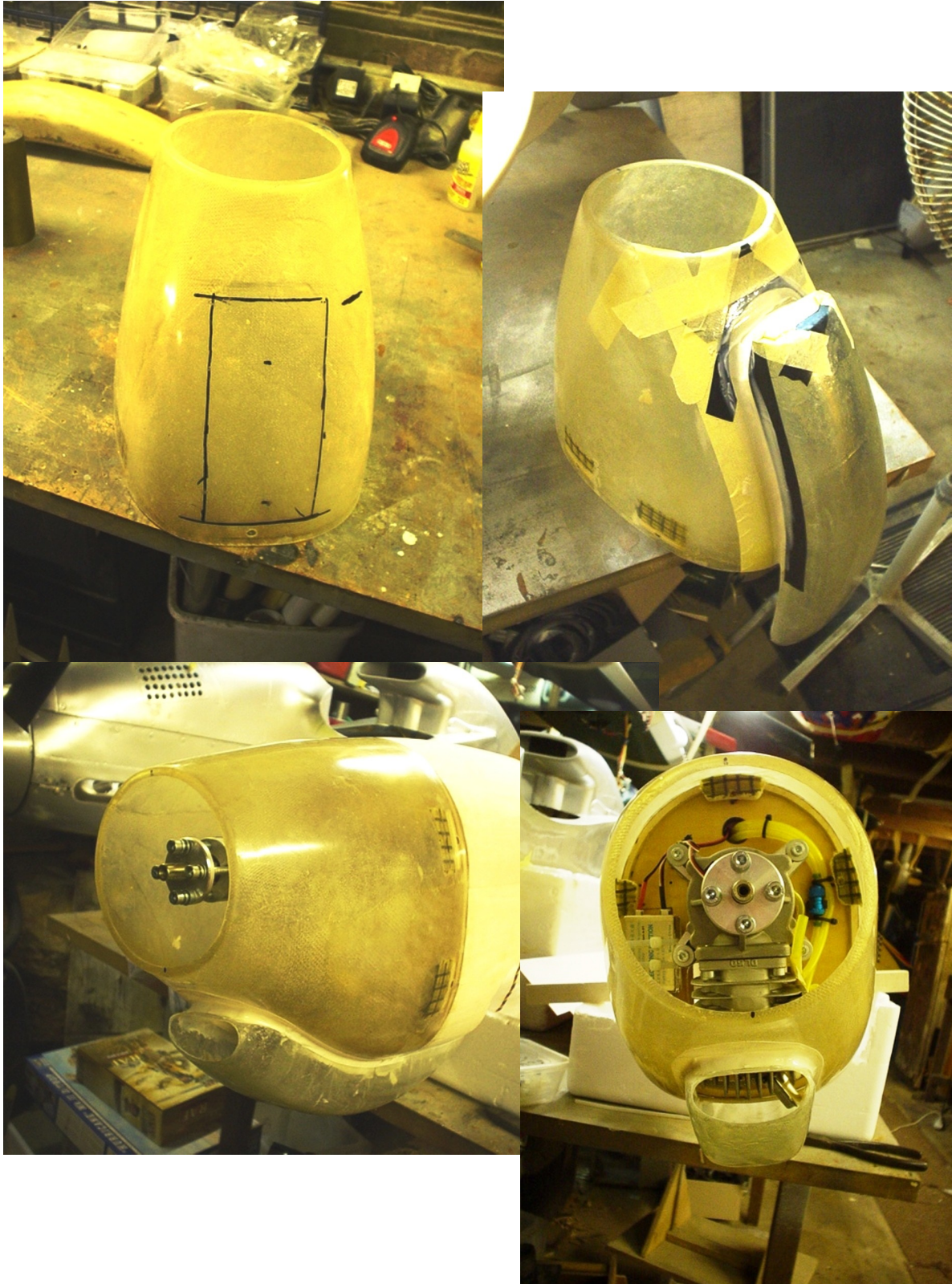


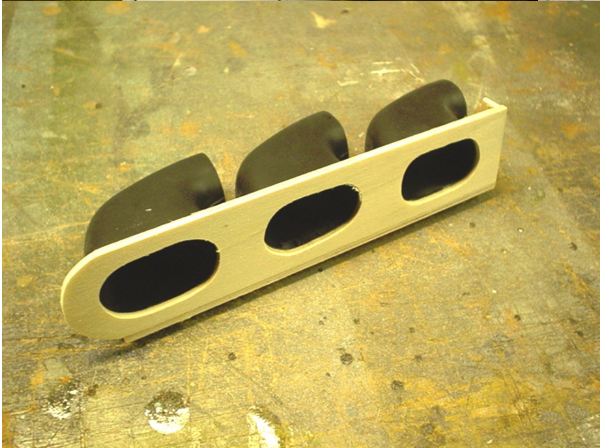
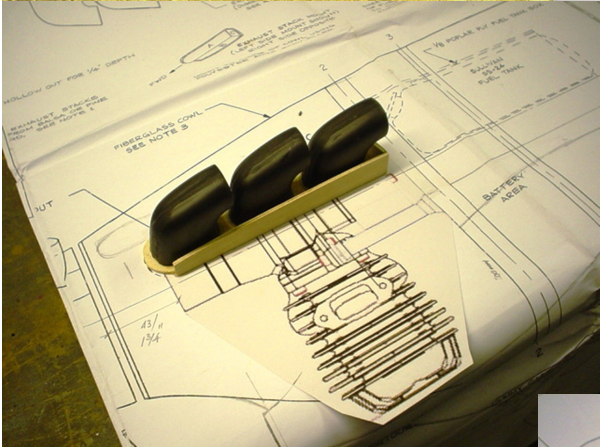
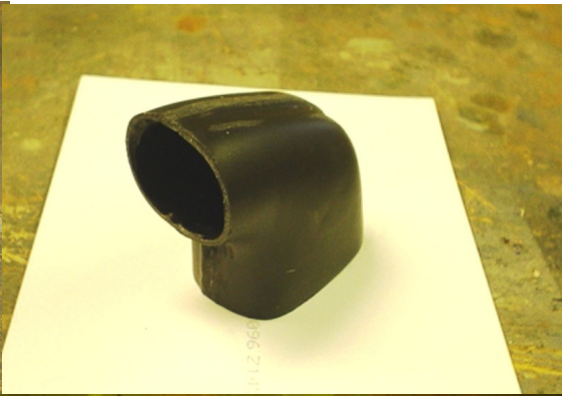
The plug was then used to make a mould



A lay up of a mixture of 3/4oz and 2oz cloth was used to make the final filter shape that is to be glued and faired to the cowl.

The cowl had then to be marked and cut out using a hot saw in a Dremel for the filter to be glued in position, once again, I used Hysol for the bond. After the Hysol had gone off a fillet made up with micro balloons and 30min epoxy was blended into the join for the scale look we are after. A tip here is to mask the panel outlines before adding bog to create the fillet and remove the masking tape when the bog is green (starting to go off). A finger wetted with metho makes a lovely fillet tool.



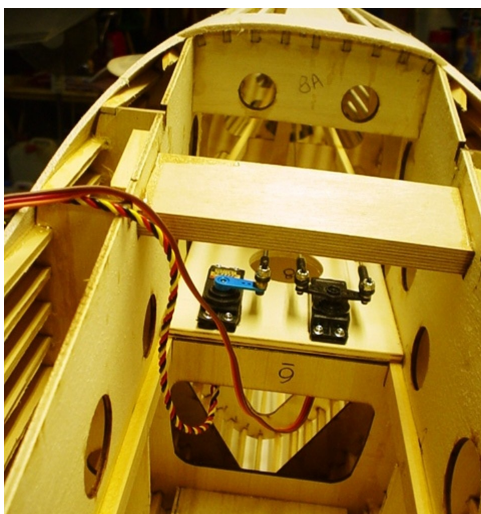




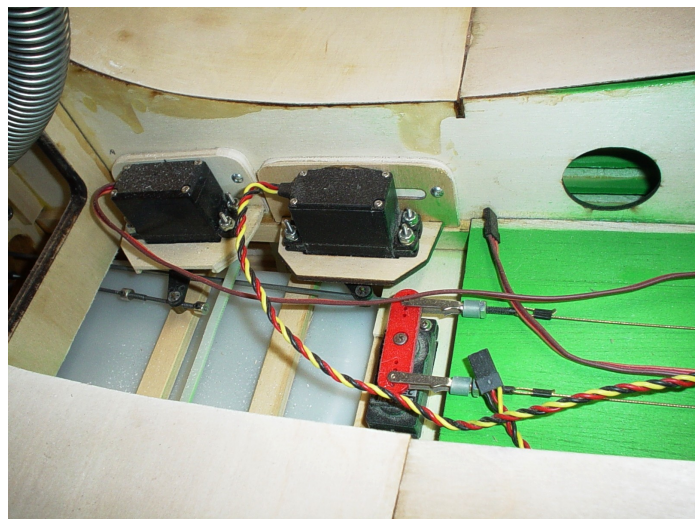
The previous page is all about making and fitting the all important exhaust stubs to the cowl. I am going to hide my tank fill tube in one of the stubs but their main purpose is to aid cooling. I am hoping that these stubs with the help of the radiator under the wing will draw enough cool air through the front of the Vokes filter to cool the motor. I have glued an air flow deflector inside the front of the filter to deflect cold air onto the engine. Hot air will exhaust through the stubs and through the fuze and wing and out the rear of the radiator under the plane.

Before we get started on the flying surfaces we need some servos fitted and we might as well fit the tank. Petrol engines are more economical than glow engines so we don't need a huge tank, 24oz Dubro is about 15 minutes of flying time. I use a three tube setup, one to the carbie, one to fill and one as an overflow.

Elevator and tail wheel servos



Rudder, choke and throttle servos



We will put the fuselage aside for awhile and get on to making the flying surfaces.
Cheers
Stan