

The Basic plastic kit contains the cowls, spinners, nose and tail cones, canopy, two pilots and their instrument panels as well as their seats. What good is having all those windows with out something inside? If you intend to paint the parts, take care not to apply heavy coats to the white plastic. . Some paint types will soften the plastic.

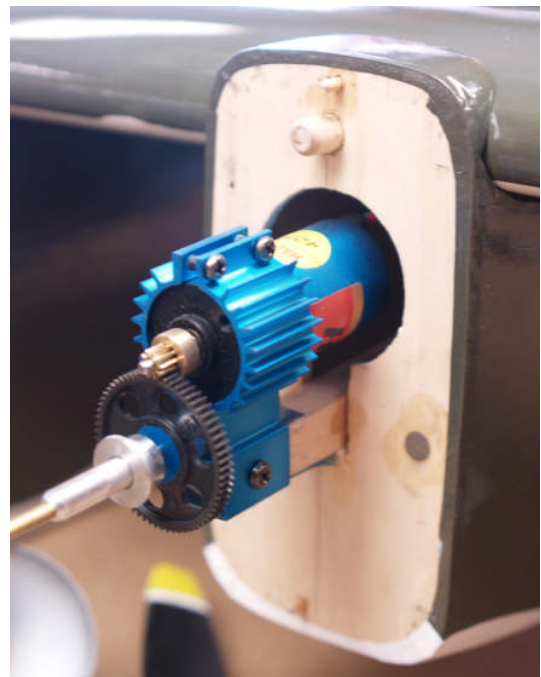
I will start with the cones... I found that on the three models that I built the cones fit a bit different in each case. So a little work is required for a good fit. I found that the easiest procedure was to add ¼-inch soft balsa to the fuselage ends and sand them to match the rest of the fuselage shape. With the flange cut off the cones, they are happy to conform to the shape of the balsa.

Once the fit looks good, mark the balsa where the plastic stops. Use the handle of your hobby knife to make a slight dent in the wood along this mark so the balsa will be flush with the plastic when it is installed. Scuff up the inside of the plastic with sand paper and epoxy the cone in place.

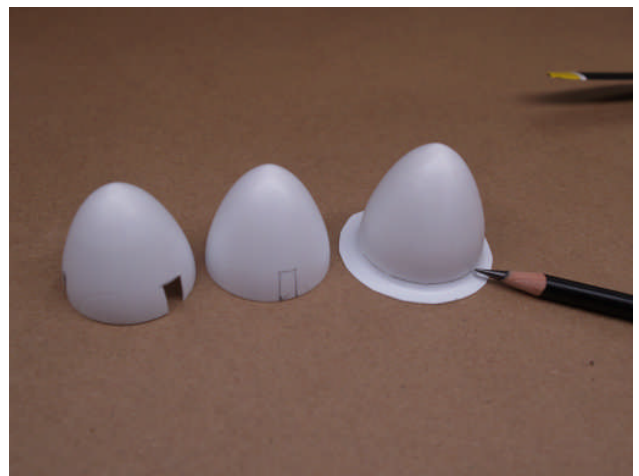
### Cowl

There are many ways to attach the cowl; screws would be the easiest method however, this puts stress on the plastic so I use magnets from radio shack. They are very strong and do a fine job but are much harder to install. A mount plate is bonded to the inside of the cowl then used to attach the assembly to the boom firewall. It is best to cut the firewall and cowl mount plate at the same time for a good fit. The holes that hold the magnets in place must be drilled with the mount plate and firewall together for proper alignment. (Shown to the left of the motor mount stick) Small pins (top and bottom) help with the alignment. To bond the mount plate to the plastic cowl do several test fits. If any material must be removed do it from the top, this area of the firewall is easier to adjust. To bond the parts together evenly use a shim

(Should be about 1/8 inch) to hold the mount plate above a flat surface. Apply epoxy to the inside of the cowl then push it down over the mount plate until it is flat on the work surface. Allow it to set then sand the plastic flush with the mount plate. It is now ready to install on the model. To make the cowl lighter material can now be removed from the mount plate to make installation easier. I removed all the material around the wing mount pin and maintained about ¼ inch of material from the edge. With the exception of the area around the magnets. Note: the magnets are held in place with CA adhesive.



### Spinner.



Depending which motor assembly and prop you use will change how the spinner will be installed. The faint marks on the spinner are for a two blade propellers. For three blade props, you will need to carefully mark where the spinner will be trimmed. Use a pencil laying flat on the work surface and mark a trim line then cut. Center the spinner on the prop and make the marks where they contact the spinner and cut the slots.

Vacuum hose from the automotive store is used to attach the spinner to the propeller. Slide a length of the hose over the motor shaft and do several test fits trimming the hose until the length is right. Apply a dab of silicone to the tube and the inside of the spinner then install the spinner. Place in a stand allowing the weight of the prop to hold it until it



dries. (Give it a whole day. For prop adapters that have no shaft, an extension can be made by drilling a small hole and bonding a brass pin in place.



#### The cockpit:

Let's build the crew first. Take the pilot head halves and cut them free from the part sheet leavening a flange around it about 1/2 inch. In a circular motion, sand the flange away on a flat surface until the plastic around the head gets thin.

You can check your progress by holding it up to a light. If it breaks through, stop. Use a hobby knife to trim away the flange, it should be very easy.

Use model cement to bond the head halves together. You can try thin CA but I have not had much luck with it. The parts are small and I usually make a mess of it. The model cement will buy you time to align the halves properly. Allow the heads to dry completely before sanding the bond joint smooth. Drill a hole in the pilot bodies large enough to accept the heads. You have the option to have either pilot looking in any direction so do not bond them in place until the cockpit is nearly finished. Note: the pilots are slightly different; the guy with the bigger hand is taller and goes in the front. If you put him in the back, his head will touch the window.



Seats: what can I say? Trim the halves to fit then bond. There is a front and back seat.



The instrument panels are fairly straightforward. Scuff up the bottoms so the epoxy will hold better. Just a few tips: Spray paint them black then use something sharp to scratch the dial markings on the instruments. Apply a drop of epoxy in the instrument holes to simulate glass. Add a little paint and you are done.

Note: Doug Cohen did the cockpit details shown. He added more details than was provided in the plastic kit but is a fine example of what can be done.

Completing the cockpit:

When you complete the cockpit floor/ hatch. Install the magnets that will hold it down. This method has never failed me yet. Quick and easy battery replacement and has not blown off in flight. Alignment here is important. If you use another method, an alignment pin is suggested.



Paint the cockpit floor black then use a pencil to mark the locations of the crew, seats and panels. Use a sharp object to puncher the balsa on the inside of the pencil line. I used a throwing dart. This will help make a better bond. After the canopy is in place, there is no access to the crew. Apply epoxy then bond them in place.

Use plastic wrap to protect the fuselage from the epoxy that will hold the canopy to the hatch/ cockpit floor. Only the front and back is necessary at this point.



I prefer using JB weld for this job. It is thicker than most epoxies and will bond any thing. However, don't get lazy, scuffing up the plastic is still suggested. The bond is done installed on the model to make sure the hatch keeps it's shape and ensures a good fit. I found that bonding the front and back only was enough to keep a person busy without trying to do the whole bond. After the JB weld has set, tape off the bottom of the hatch along the uncompleted bond then push epoxy into the side bonds. Use your hands and a stick to apply even pressure to the cockpit sides while the epoxy sets. ( do one side at a time.) Trim the plastic that overhangs the hatch and you are ready to paint the canopy frame to match the fuselage.