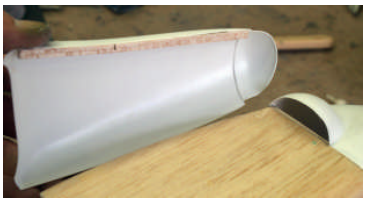
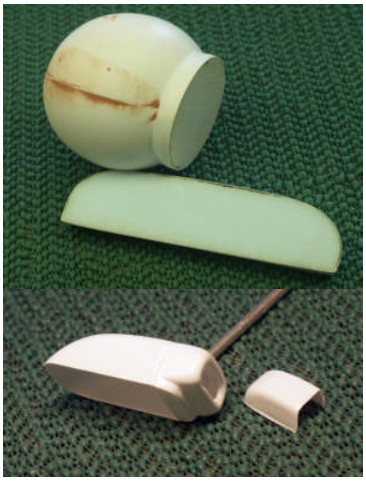
YO 3A PLASTIC INSTRUCTIONS



To attach the cowl, install the magnets in the provided holes on the firewall with thin CA. Wrap the fuselage with sandwich wrap and install the cowl ring. Let the magnets "jump" into the cowl ring holes, It's the best way to be sure they go in right. Test fit the cowl then rough up the inside surface of the cowl near the edge. Apply epoxy to the ring and the inside edge of the cowl. Slide the cowl in place. Allow it to cure completely before removing it. The epoxy I used is JB weld. Note I left the flange material on the cowl sides, This supports the sides and keeps them from spreading during the bond.
Your cowl might have a small wrinkle Just aft of the scoop. This is the cost of having a one piece cowl and can't be helped. After the cowl is removed apply epoxy to the inside to form a fillet between the ring and the cowl, this will secure the plastic so you can trim the flange and sand the wrinkle away

Cowl cheeks: (work both sides at the same time) use epoxy to attach a balsa strip to the upper inside edge of the cowl cheek. Note the relief cut in the balsa to allow the slight curve. Slide the tip of the cheek into the cowl and mark the bottom of the fuselage where the cheek overlaps. Sand away enough balsa sheeting to allow the plastic to be flush. The cheeks will align the cowl's position so be sure its right, (test fit) then use epoxy to attach the cheeks. Muffler fairing, I found that using foam strips as a spacer very useful while clamping the balsa strips to the inside. Allow the strips to overhang the edge then sand them flush. The bond area has a contour. Before you install the fairing cut a hole in the fuselage skin to allow cooling air to pass out the back of the fairing.



Small parts: Trimming the small parts can be done accurately by sanding them free from the parts sheet. Place a sheet of 180 grit sandpaper on a flat surface and wet sand the components until the edges become thin. You progress can be checked by holding the sheet up to a bright light. If you break through, stop sanding or you might ruin the part. Light pressure with a hobby knife is all that is needed to free the parts. To attach the forward instrument panel I sanded foam to a tight fit and used epoxy to attach it to the inside. Once sanded flush I had a good surface to bond it in place in the fuselage. The star light globe has it's base filled the same way. I used magnets to attach it to the belly of the fuselage incase a belly landing is necessary. Note the use of Bondo and automotive filler in the globe seam. The two small scoops are attached to the fuselage in the same manor as the muffler fairing to eliminate the need for a flange. Holes can be made in the fuselage to make them functional but are not necessary.

Pilots, Sand the heads free from the sheet, be careful not to mix the pairs up, they have been matched perfectly. Use model cement to bond the two halves together. Model cement makes a solvent type bond so it must be applied sparingly and allowed to dry overnight before the seam can be sanded. When the heads are ready cut a neck hole in the torso and position them where you want. Note that some of the collar may need to be removed for a good fit. Use model cement to tack the head in place then use epoxy to complete the bond from the inside.

The target designator is simply bits of painted balsa attached to the base plate. The base plate pattern is on the plans. Don't use CA to attach the plate to the lens, chances are it will fog the clear portion. I used a little epoxy.

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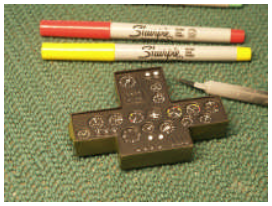
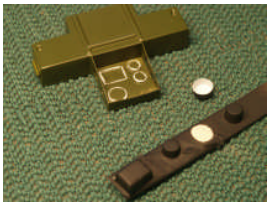
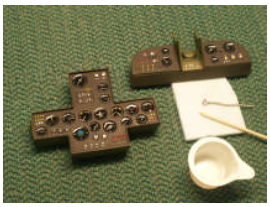
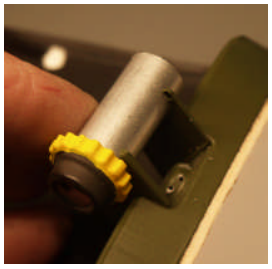
Pilots panel. Cut a small flange around the face of the panel. Use model cement to bond it in place inside the panel "box". Cut the upper portion of the box out to expose the back of the panel face. Use scrap plastic to fill the hole and complete the lower portion of the box. Paint the back of the box green and allow to dry over night. Carefully wet sand the face of the panel until the flange is gone then paint the face of the panel black. On the back side, where the instrument backs will be bonded scrape the paint away and install the details. Use the tip of a hobby knife to add the detail to the face of the panel. Practice on a scrap piece first to learn how to hold the knife and how much pressure to apply. (a broken tip makes wider lines) Add some color with felt tip pens. Use just enough 30 min epoxy to fill the instrument faces, a stirring motion with a tooth pick will help spread it around. The twisted wire will distribute one drop at a time. Small gauges used one drop while the larger ones used two.



The forward panel has two moon shaped parts that attach to the center of the panel. This is the cradle for the scope tube during takeoff and landing. I have placed mine in the flight mode. Epoxy holds the aluminum tube in place Note the holes drilled in the mount bump


Final assembly. To bond the crew and panels in place I use a sharpened wire to poke holes in the balsa cockpit floor. This insures a good surface for the epoxy to attach to. Trace the pilots position with a pencil and make the holes. Apply epoxy to the inside of the pilots body close to the edge. Apply enough epoxy so the epoxy will run down and fill the holes. For the pilots panel I drilled holes in the bottom of the panel and scuffed it up with 90 grit as well.

To attach the canopy to the cockpit frame I carefully trimmed the canopy to fit the frame. 100 grit paper was used to scratch up the bond area. Sandwich wrap protected the fuselage from the epoxy used to attach the canopy. A sand bag was used for clamp pressure. I used tape to clamp the sides.