

Step 27.

The sponson templates created are exact matches to the boss on the sponson. Using a pencil or a fine marker, trace the template onto the fuselage. Remove the template and the axle. Carefully sand or scrape through the gelcoat surface to the bare fiberglass, staying 1/8" inside the guideline. (As we have added to the template to make it functional, only remove material that is inside the airfoil shape). Use the template to fine-tune the fit. Locate and rough cut the vacuum formed upper strut mount. To prepare for gluing later, compare to the detailed area on the side of the fuselage and mark with a pencil. Repeat the same procedure to remove the inside gelcoat surface where the part will be bonded to the fuselage (this may only be a thin line around the outside edge of the clear part). Also find the shaped fiberglass strut, this needs to be cut in half and then trimmed to fit.

Step 28.

Using white glue or similar non-permanent adhesive, temporarily attach both sponsons and upper strut mounts to the side of the fuselage in their final position and angle. Having cut the strut in half previously, start by cutting a high angle to meet the fuselage and be flush to the inside of the vacuum-formed part. The strut is only for show and will not contribute any strength to the sponson but must be well attached to endure the vibration of the helicopter. The bottom end of the strut is to be shaped to meet the sponson. Once satisfied with the position, mark and scrape the gelcoat surface where the strut meets the sponson. It is worth the effort at this time to permanently mount the top of the strut to the clear plastic mount and to blend the surfaces to form a single component. This will alleviate tedious work when the strut is attached to the fuselage. After painting this will be assembled.

Step 29.

Once all the sponson preparation is completed, remove all pencil and marker lines with rubbing alcohol, followed by acetone. Once dry. Tape over the areas that have had the gelcoat surfaces removed and cut away the extra material using a hobby knife. This will allow painting without disturbing the bonding surface.

Step 30.

There are 24 pieces of 3/8" square plywood screw mounts and 24 M3x8 self tapping screws. These are to attach the front fuselage section, the top hatch and the tail cover to the main fuselage body. There is no set rule for using all of these pieces to attach the hatches. Start by taping the front fuselage section and the top hatch to the main fuselage using masking tape. Using a ruler, mark lines that are 3 to 4 inches apart, that overlap both the front section and main fuselage, and the top hatch and the main fuselage. At each of these marks, measuring 1/8" in from the edge of the hatch, mark and drill through the hatch and the main fuselage using a 3/32" drill bit. Once all the holes are made, remove the mating parts and roughen the surface on the inside at each drilled hole location using sandpaper. One at a time, bond the 3/8" plywood squares centered over each hole from the inside using slow CA or Epoxy. Let completely dry and drill through the wood using the 3/32" drill bit. Using one self tapping screw, form the threads in all the plywood blocks. Finally, apply one drop of the fast CA glue to each hole to harden the wood.

Repeat this process to mount the tail cap to the elevated tail section.

Step 31. (photo#10)

Carefully inspect the windshield and the cheek windows, there is a fine trim line on each clear window. The windshield section that is included in the fuselage may fit into the front section without separating the different windows, if this course is followed it is imperative that an exact method of bonding the windshield in place is religiously followed. Using a marker, follow the trim line to improve the visibility. For extra precaution, draw a second line 1/4" on the outside of the first line and trim each part. This preliminary step allows test fitting of the slightly oversized window to see exactly how much additional trimming is necessary. In some instances, the clear part can be bonded in place as without further trimming. Once each part is test fitted, use rubbing alcohol to remove any residual marker from the clear part. Stop here until after the fuselage has been painted to install the clear parts.

Final installation of clear parts: