

7 Surface Treatment and Painting

This section describes the following steps for painting the aircraft:

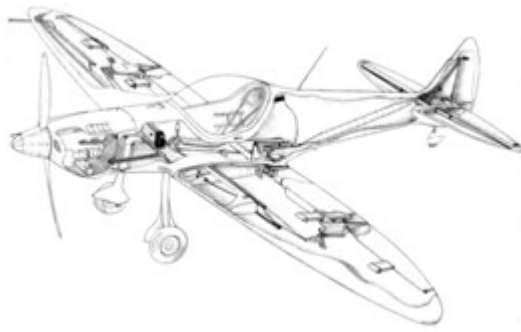
- 7.1 Filling and sanding the surface
- 7.2 Filling and sanding the seams
- 7.3 Priming
- 7.4 Wet sanding
- 7.5 Painting/paint selection

7.1 Filling and Sanding the Surface

1. Fill all surfaces with 2-component automotive filler before sanding. (Use a rubber or plastic spatula.) This closes the needle holes.



Fig. 7.1.1
Applying filler to the surface

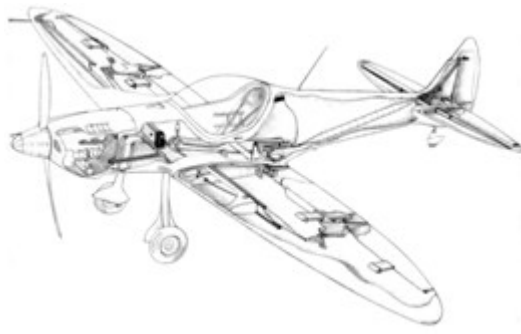


2. Sand the applied filler with 220 sandpaper or finer. Only sand the surface until it has a matt finish.

Important: If the sandpaper is too coarse or if you sand too long in one place, the structure might be damaged.



Fig. 7.1.2
Sanding the surface



7.2 Filling and Sanding the Seams

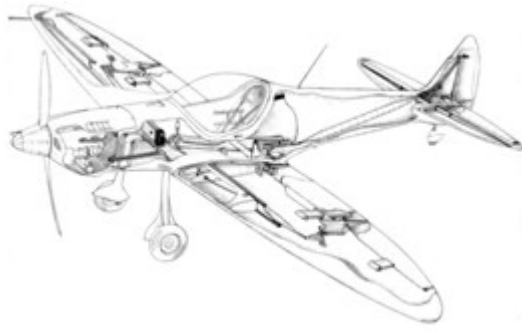
The following section describes how to create the seams between removable parts, using the rudder and the rudder fin as an example. Repeat the process for all other removable parts.

1. Apply light filler to the upper surface of the rudder fin.
2. Apply mold-release wax to a 2mm (0.08") aluminum panel or a similar material, press the panel onto the filler and align it.
3. Press the aluminum panel down with a weight.
4. After the filler has cured, remove the aluminum panel and sand off excess filler, so that no sharp edge remains.



Fig. 7.2.1
Applying light filler to the
upper surface of the rudder fin

5. Place the waxed aluminum panel on the rudder fin again.



6. Apply light filler to the rudder.
7. Mount the rudder.
8. Let the filler cure and demount the rudder.
9. Remove the aluminum panel.
10. Re-mount the rudder.
11. Sand off excess filler at the joint of rudder and fin

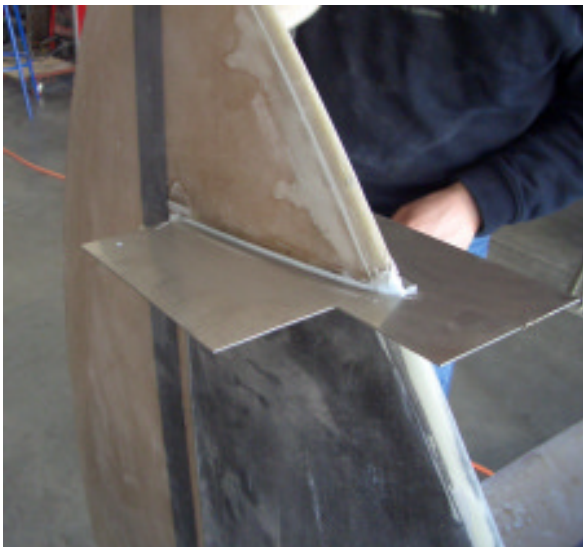


Fig. 7.2.2
Applying light filler to the
surface of the rudder

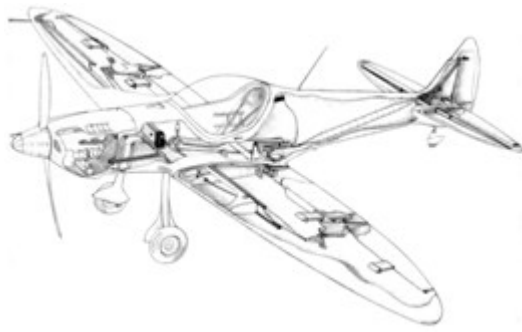


Fig. 7.2.3
Sanding the tail and
fuselage seam

Apply CF to the open honeycomb edges as shown in figure 7.2.4. To enable easy separation of the wing from the fuselage, mask the root rib on the fuselage with smooth adhesive tape. Move the wing to the fuselage as shown in figure 7.2.5 and remove excess CF.

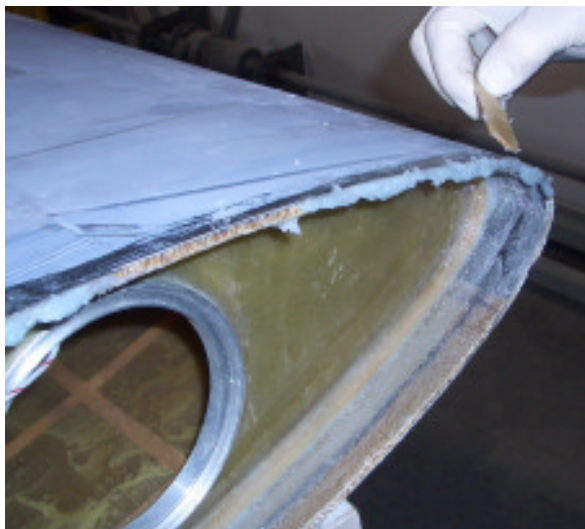
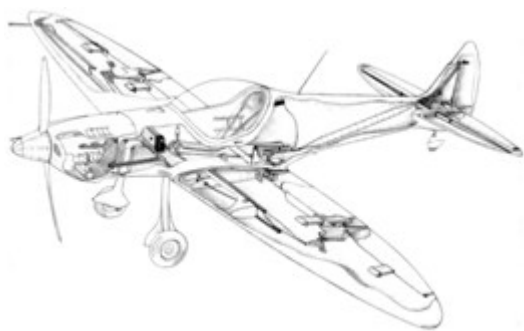


Fig. 7.2.4
Closing the open honeycomb edges

Revision 1.5



Painting

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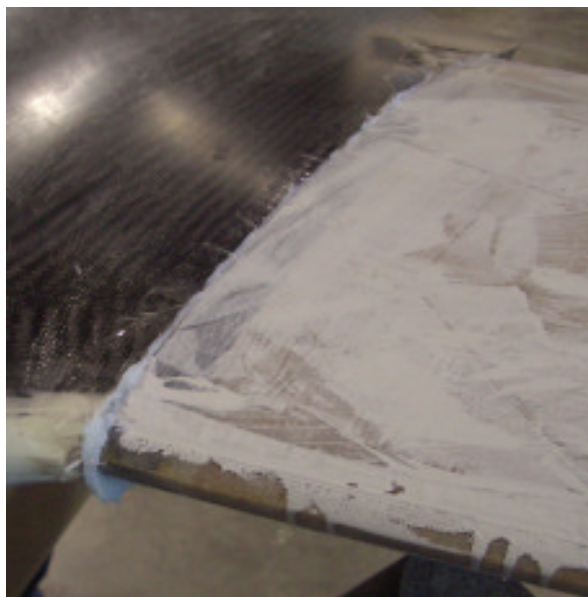
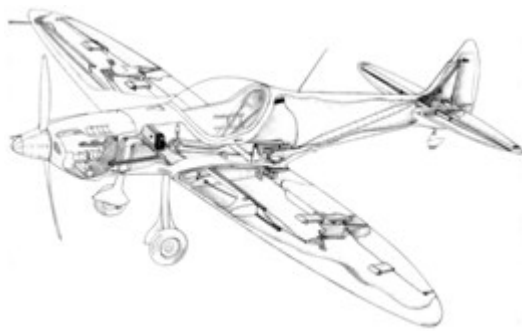


Fig. 7.2.5
Adjustment with CF



7.3 Priming

Prime the surfaces by spraying on a 2-component automotive primer. Contact a professional automotive painter for more information. Observe the instructions and safety instructions for the primer.

Important: Apply the primer as thinly as possible, because otherwise the mass of the aircraft will increase considerably. Particularly the flaps, ailerons, rudders and elevators need a very thin primer coat, because the mass of the counterweights needs to be increased when the rudders become too heavy.

7.4 Wet sanding

After the primer has cured, systematically sand the surface with 600 wet-sanding paper. Take care not to sand through the primer.

7.5 Painting/Paint Selection

Paint the aircraft by spraying on a 2-component automotive paint. Contact a professional automotive painter for more information. Observe the instructions and safety notices of the paints used.

Important: Like the primer, apply the paint as thinly as possible, because otherwise the mass of the aircraft will increase considerably. Particularly the flaps, ailerons, rudders and elevators need a very thin coat of paint, because the mass of the counterweights needs to be increased when the rudders become too heavy.

The colors for structural parts such as wings, fuselage and tail must be as light as possible (white, light silver or light yellow).

Do not use colors which heat up in sunlight. If you plan a specific paint scheme, consult the manufacturer or the aircraft registration authorities.