

Pre-Paint>Fuselage>Fit door gutters

Objectives of this task:

This task shows how to fit the optional door gutters. The gutters are fitted during the *Pre-Paint* stage in a **normal build**, however they can be **retrofitted** to existing aircraft with little more than minor paint touch ups to the tops of the doors. Both options are described here.

This task will show fitting the pilot's door gutter, however the same procedure applies to all doors. Each gutter is labelled for its respective door (circled at right).



The gutters are not painted: in the case of a **normal build** the gutters will be pre-fitted and the doors adjusted in *Pre-paint* and then the gutters will be painted and finally fitted later as part of the normal build sequence.

In the case of a **retrofit** the gutters should be pre-fitted and the doors adjusted and then the gutters removed and the gutters and door tops painted before final fitting.

Materials required:

Dow Corning silicone sealer

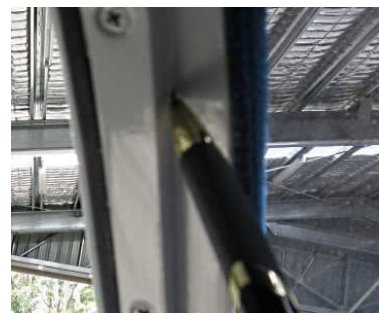
Pre-fit the gutter



Unscrew the top and front of the top sections of the door jamb – leave the rear of the jamb screwed in place to keep the alignment. Slide the gutter in place between the fuselage and the jamb and push it in so that there is the absolute minimum of gutter exposed to the airflow.

Push and hold the jamb up against the gutter and drill through the gutter and into the existing screw holes in 2 or 3 places then screw the jamb back into place.

Run a pen around the inside of the jamb to mark the gutter as shown at right, remove the gutter and trim along the line. Sand the cut edge and the back of the gutter to a smooth finish. Refit the gutter, using all of the screws this time.



Carefully close the door and mark where any adjustments will need to be made.

Typically 3 to 4mm will need to be removed from the top and front of each front door and from the top of the rear door to allow for the thickness of the gutter. Use an 80-grit sanding disc to make the required adjustments, working slowly and rechecking the fit often.

In a **retrofit** the white door seal may need to be moved slightly for clearance.

When the door can close easily and shut securely, drill the ½” hole through the gutter for the top door lock and test the fit and the pre-fitting step is complete.

Final fit the gutter

This step would normally be part of the *Post-paint* section, however it is included here for the benefit of builders who are retrofitting gutters to existing aircraft.



The photo above shows a completed gutter. Note that the gutter only protrudes very slightly outside the fuselage. Note also that the fuselage, doors and gutters are all painted separately prior to the gutter being final fitted.

Once painting is complete the gutter is fitted at the same time as the door jamb.

Apply a generous bead of Dow Corning silicone sealer just inside of the door opening then fit the gutter up to it and fix the gutter in place with the door jamb, using the door jamb screws to fix both the jamb and the gutter in place. Use a clean cloth on the end of a mixing stick to smooth out any excess silicone sealer that squeezes out into the bottom of the gutter.

This completes the *Pre-Paint>Fuselage>Fit door gutters* task.