

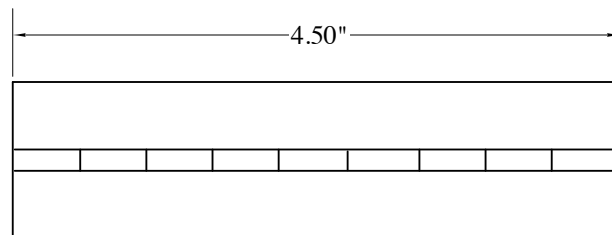
Falco Construction Note 61007-1  
**Access Doors**

This Falco Construction Note replaces Advanced Builder Memo "Chapter 44 Access Doors"

**Introduction**

The purpose of this memo is to get down on paper the details of the access doors for the fuel tank, battery compartment, etc. At this time, we are including the access door for the front fuel tank only.

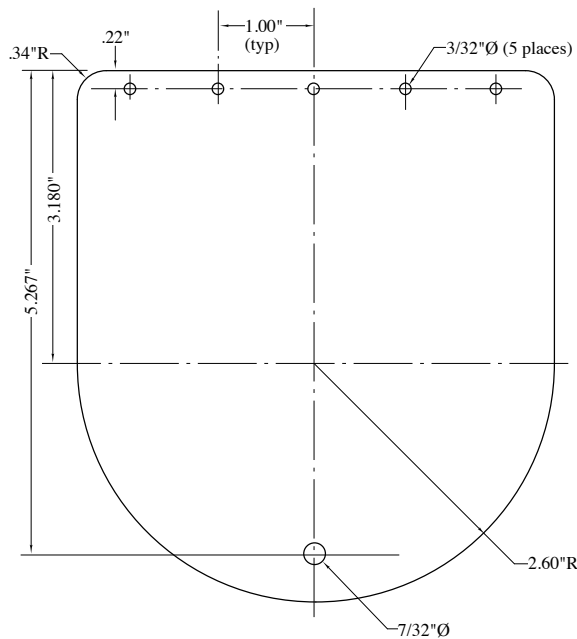
**Front Fuel Tank Access Door**



Material: MS20001-P3 or MS20257-P3 aluminum piano hinge

Figure 1

- Make a hinge per Figure 1. Stake the hinge pin in place.



Material: .040" 2024T3 aluminum

Figure 2

- Make the access door per Figure 2.

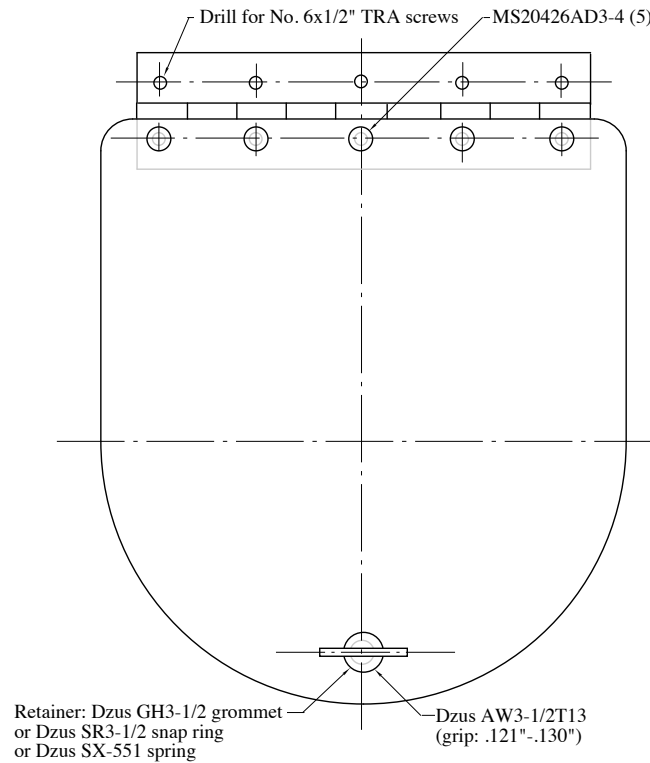


Figure 3

- ❑ Install the hinge on the door. See Figure 3.
- ❑ Cut the opening in the plywood skin. The door is installed on the upper center longeron. If you want to have the door flush, use a router to cut a recessed area. The door is designed so that a 1/4" back rabbet bit will cut along the sides. At the large radiused end, you will have to mark out the outline of the door and work carefully!
- ❑ Screw the door in place with five No. 6x1/2" TRA screws.
- ❑ Using the access door as a guide, drill a 7/32"Ø hole through the plywood to determine the center of the receptacle for the Dzus fastener.

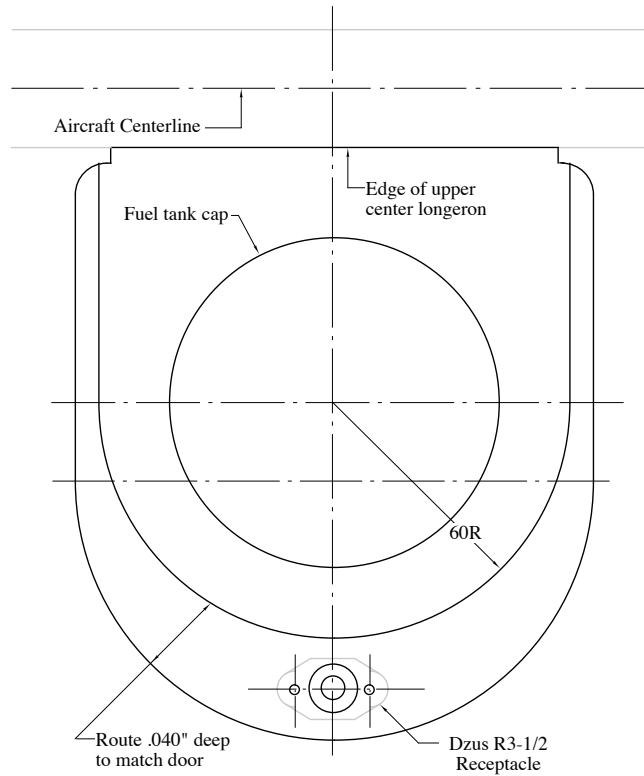


Figure 4

□ Install the Dzus receptacle under the plywood. See Figure 4. The receptacle may be installed with soft MS20426A3-5 rivets or with flat head screws. Some epoxy on the receptacle is probably also a good idea. Before you do this, check the grip of the Dzus fastener and add plywood on the lower surface as necessary. The grip length of the fastener is shown on Figure 3.

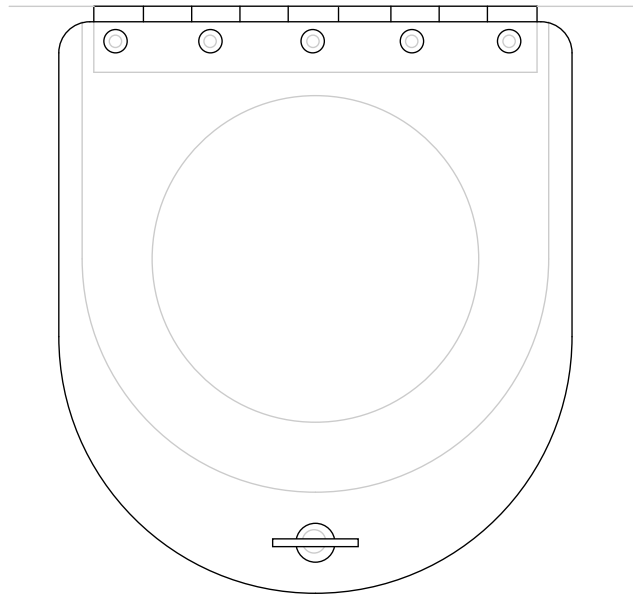


Figure 5

❑ Install a Dzus fastener on the door using a grommet, snap ring or spring. See Figure 3. The final installation is shown in Figure 5.

❑ A fence of spruce may be made on the lower surface of the plywood and sanded to fit the tank. When the tank is finally installed, the inside may be coated with a layer of RTV silicone rubber compound. It is not necessary to install a scupper drain line since any fuel that is caught in the scupper is easily flipped out with your finger.

This same access door is used in the canopy skirt fairing of the Nustrini canopy installation. The canopy skirt fairing is already made for this access door. With the Nustrini canopy, no handle is required to open the canopy, since the access door may be opened and the canopy pulled by reaching in the opening.

A similar door is used for the aft fuel tank with the standard canopy installation. The door must be smaller and the fastener may not be a wing-type since the canopy skirt would catch on it. We are presently looking into a number of flush Cam-Loc latches for this application. These are similar to Hartwell latches.