

Shipped, being held together by a no residue masking tape, the parts of the door should be installed in the same position order as you receive them in.

I am assuming, in the next discussion, that you will only install the access door hinged so that it opens by swinging toward the front of the airplane. That way, no matter which side it is installed on, if it was to come open in flight, it would be kept shut by air flow across the fuselage.

The trim rings have a right and left side. They must be installed so that the hinge edge is toward the front of the airplane. The rear trim ring has the **SMALLEST** opening, and it is that size opening that you will be cutting in the fuselage. To install on either the right or left side, you simply need to turn the assembly upside down, that will shift the hinge to the proper location, toward the front of the airplane. The unit is completely symmetrical so will look the same on either side.

Using the REAR trim ring as a template, place it against the fuselage in the exact location where you are going to install the unit. **MAKE SURE YOU ARE REALLY USING THE REAR TRIM RING** before drilling the **FIRST HOLE**, and make sure the inside of the trim ring is facing you. Remember, it will be installed in the same prospective on the **INSIDE** of the fuselage.

Making sure it is level and plumb with the airplane, drill 4 holes thru the fuselage skin, using 4 corner holes in the trim ring as a template. Cleco in place as you drill, making sure the trim ring is flat against the fuselage skin. **BEFORE DRILLING**, make sure that the hinge mounting holes are on the side toward the front of the airplane.

Once you have the trim ring temporarily clecoed to the fuselage, and you are happy with the location and placement, you can drill the rest of the holes thru the skin, Clecoing as you go. It will be easier now than when the center opening is cut out. Please try to center the holes as exactly as possible as you drill through the air-plane skin. After you have the complete unit clecoed together, you can always run a drill bit through any holes that are not in perfect alignment. Hopefully there will not be too many, and they will not be off very far.

Next make a mark around the inside edge of the rear trim ring. This is going to be the portion of the skin that you need to remove. Using your favorite way of cutting skin, carefully remove the metal skin opening. You need to be very precise here.

Now the hard part is done, you can de-burr the hole you drilled on the inside of the fuselage. You have a nice opening to work through!

Installing access opening into an area with inside access: Now cleco the rear trim ring into place, against the **INSIDE** of the fuselage, keeping it in the right prospective. Put a few cle-cos around the ring on the **INSIDE** of the fuselage to hold it in place.

Installing access opening into a finished area without inside access: You can use the procedure outlined above, except you will be working from the outside, (finished side) of the airplane. The only difference is that you may not be able to get the Backing Plate thru the Cover Plate opening, depending on what access kit you have purchased. After you have finished cutting the opening and drilling the Backing Plate mounting holes, from the outside, if necessary, you then cut across the backing plate, making sure not to cut thru any holes, so that you can now insert one end of the cut Backing Plate into the opening and then turn it as you work the rest of the Backing Plate thru the Cover Plate opening. NOTE: DO NOT CUT THE BACKING PLATE INTO TWO PIECES, JUST CUT ACROSS IN ONE PLACE

If a rubber seal is provided, trim so that it does not mount under the hinge on either end. It is cut slightly long! The seal can be notched at the corners to make it easier to fit if your wish. You can also use some contact cement to hold the grommet in place where it rounds a corner. Make sure that the wide side of the flexible grommet faces toward the outside of the airplane.

Cleco the front trim ring into place.

Now slip the door hinge between the airplane skin and the front trim ring. Put three or four clecos in place to hold the door hinge, again from the rear. The round part of the hinge will fit into a machined recess in the front trim ring. The hinge pin should not be able to fall out, as it is captured by the thickness of the skin. If all has gone well, you are now having a look at the almost finished product. The more clecos you use the stiffer and flatter the overall job will be.

When you are satisfied that everything looks good, you can rivet the “sandwich” together. If installing a flexible rubber seal, make sure it is pushed fully on to the rear trim ring and your fuselage skin.