

Photo #117

Lay out the location of the rivet holes around the door with a felt tip pen. The rivets will be two inches apart and centered on the stiffener.

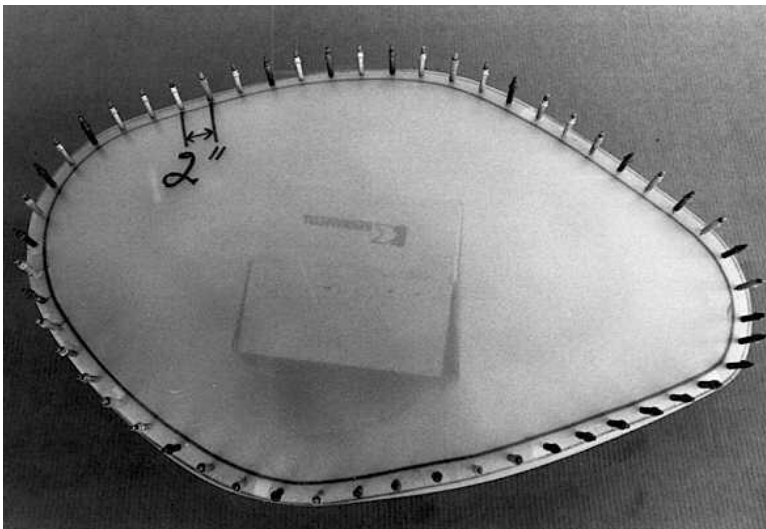


Photo #118

The 1/8" holes drilled and cleco installed.

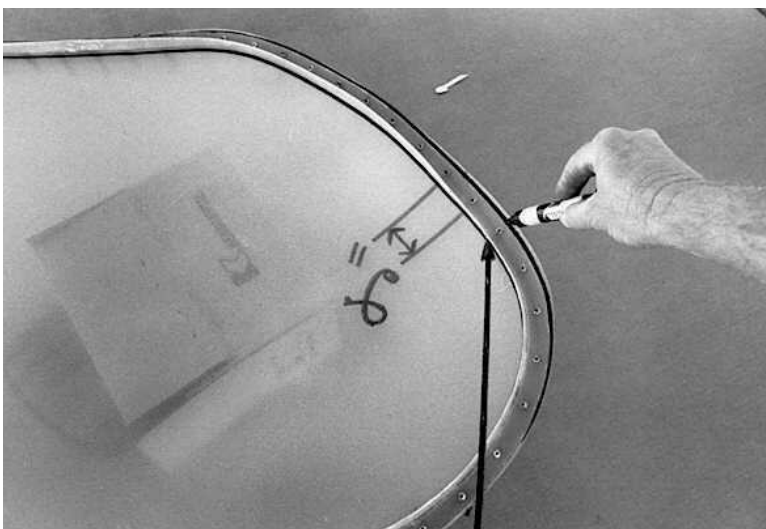


Photo #119

Using a felt tip pen, mark both sides of the stiffener.



Photo #120

Trim the plexiglass to the line and edge of the stiffener.

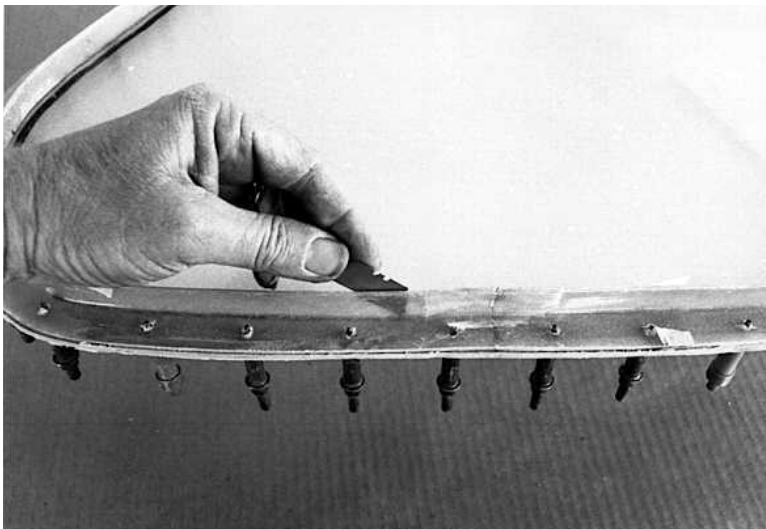


Photo #121

Use a razor knife blade to cut the protective film on the plexiglass even with the inside of the stiffener.

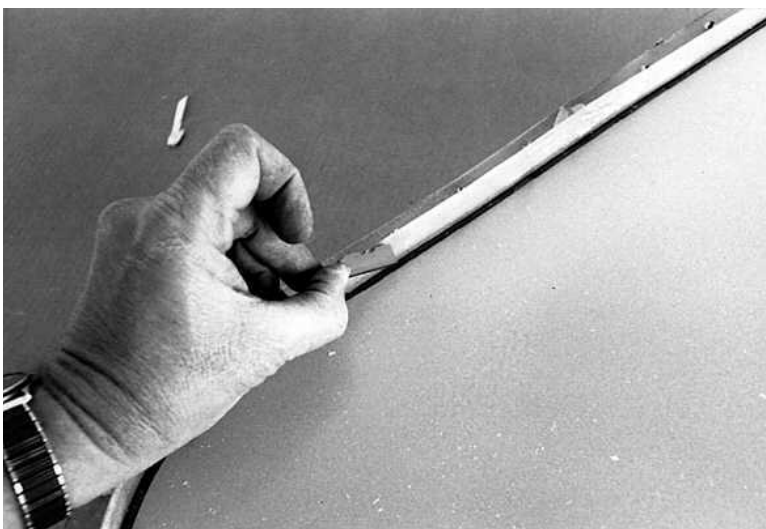


Photo #122

Another view of cutting the protective film. Be careful to cut only the film.

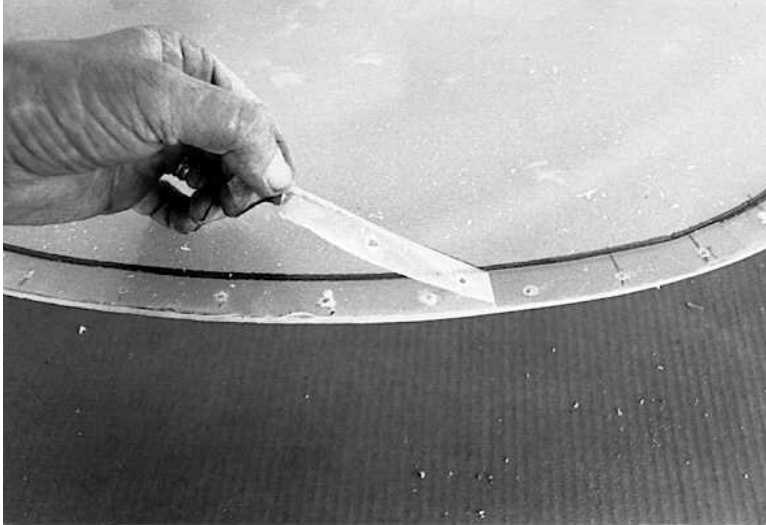


Photo #123

Remove the protective film from the edge of the plexiglass door.

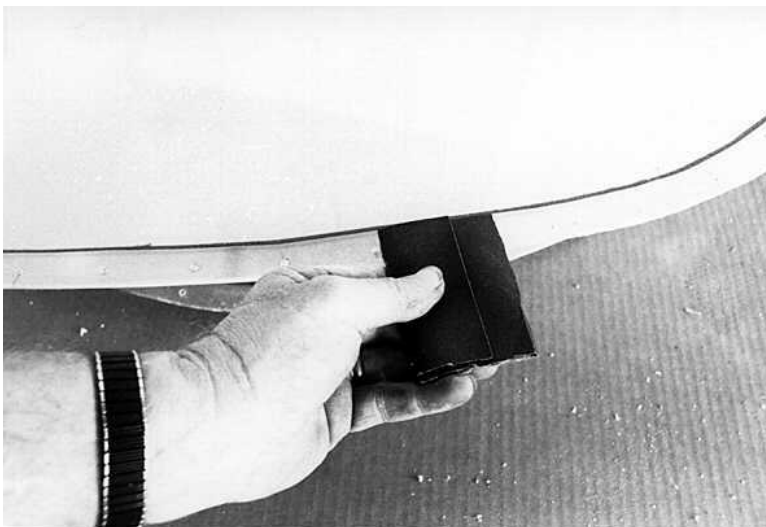


Photo #124

Use 220 grit sandpaper to sand the plexiglass that will be bonded to the stiffener. Wipe clean with acetone.



Photo #125

Use 220 grit sandpaper to sand the stiffener where it will be bonded to the plexiglass. Wipe clean with acetone.

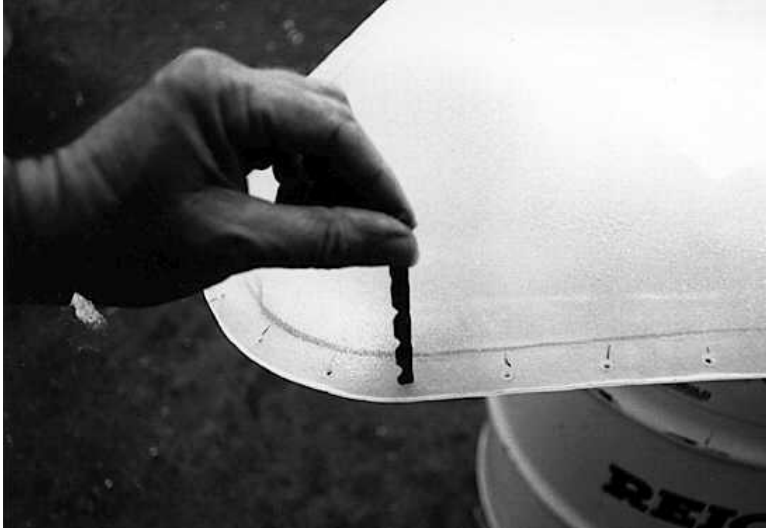


Photo #126

Countersink the holes in the plexiglass for the head of the pop rivets.



Photo #127

Mix some resin and catalyst and apply a coat on the edge of the plexiglass door where the stiffener is to be bonded.



Photo #128

Apply the resin to the stiffener where it is to be bonded to the plexiglass.



Photo #129

Place the stiffener on the plexiglass and install the pop rivets.

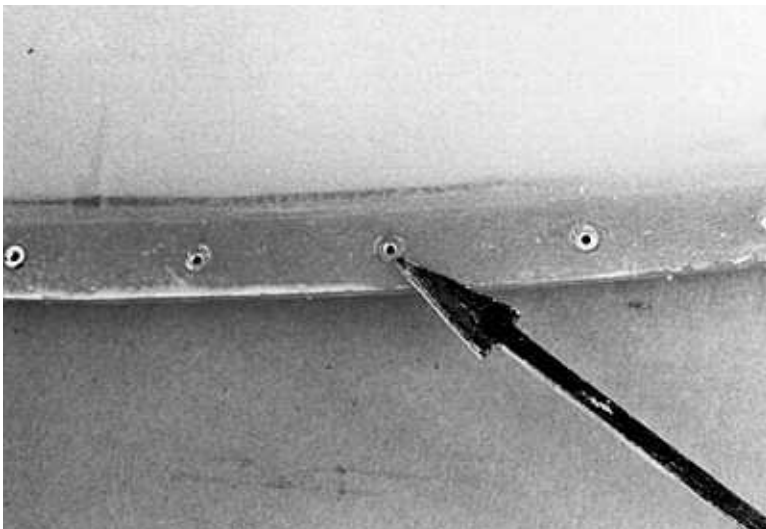


Photo #130

View of the head of the pop rivet installed.

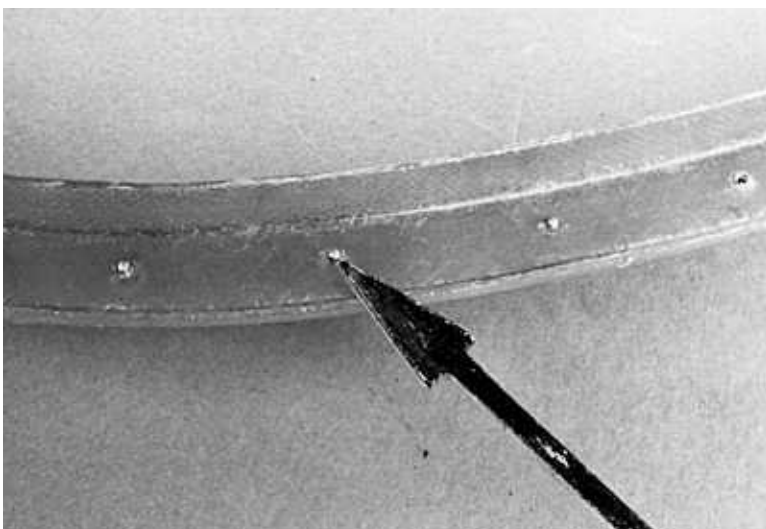


Photo #131

View of the bottom of the pop rivet installed.

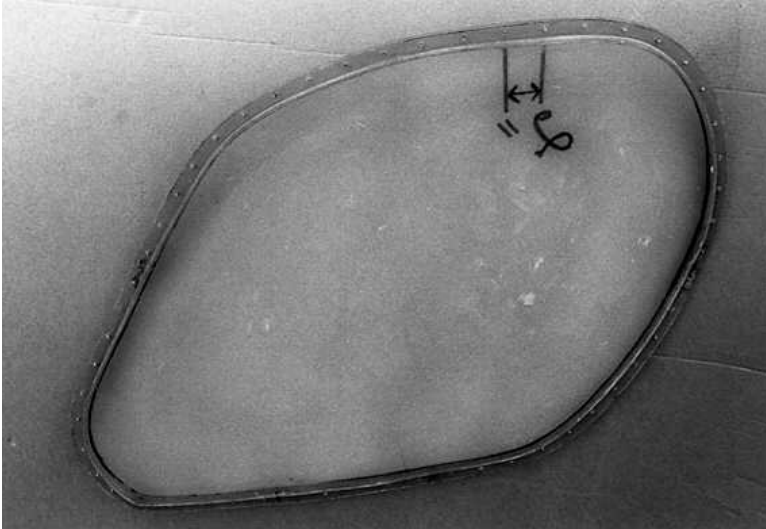


Photo #132

Overview of the door with the stiffener bonded and pop riveted together.

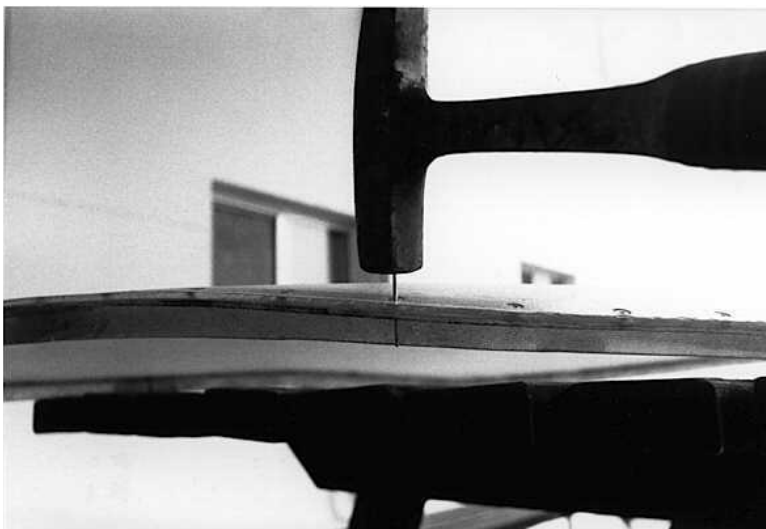


Photo #133

Use a pop rivet and a hammer to drive out the ball in the pop rivets.

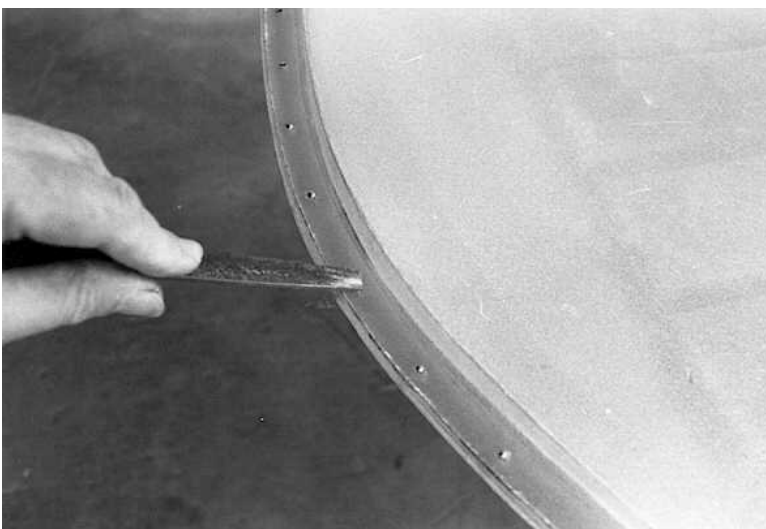


Photo #134

File the end of the pop rivets flush with the stiffener.



Photo #135

Sand the surface of the stiffener smooth with sandpaper.

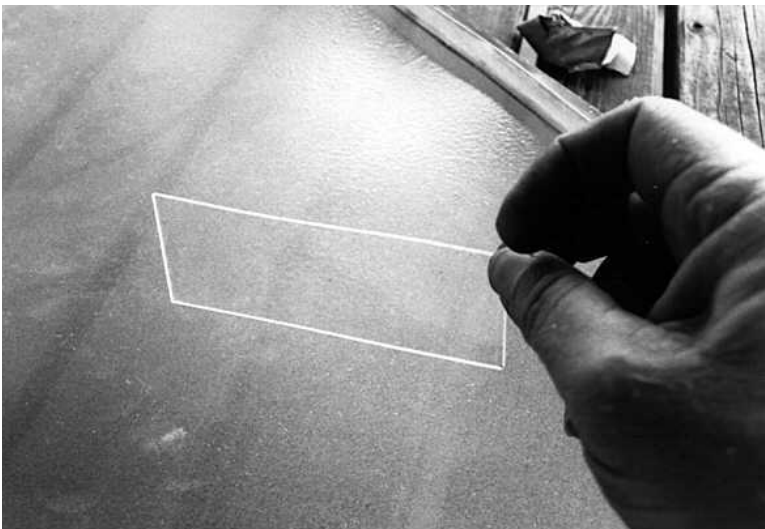


Photo #136

Cut a piece of plexiglass and smooth the edges to fit against the stiffener and door.

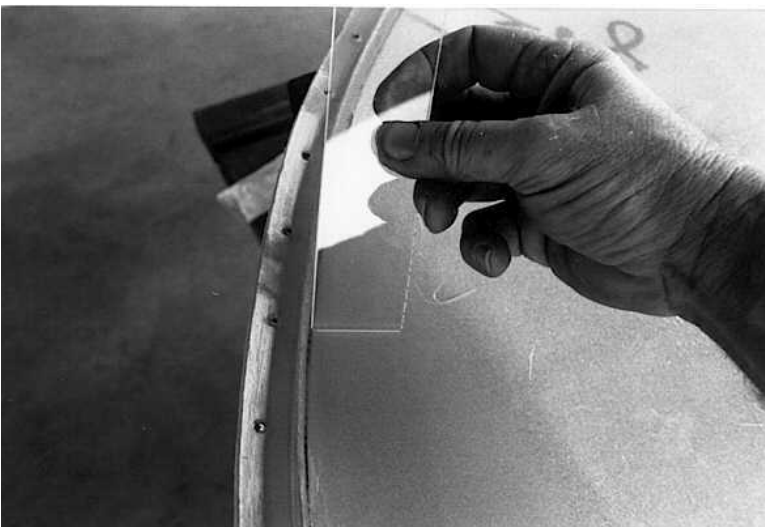


Photo #137

Use the piece of plexiglass to apply the bondo in the corner where the stiffener and door meet.

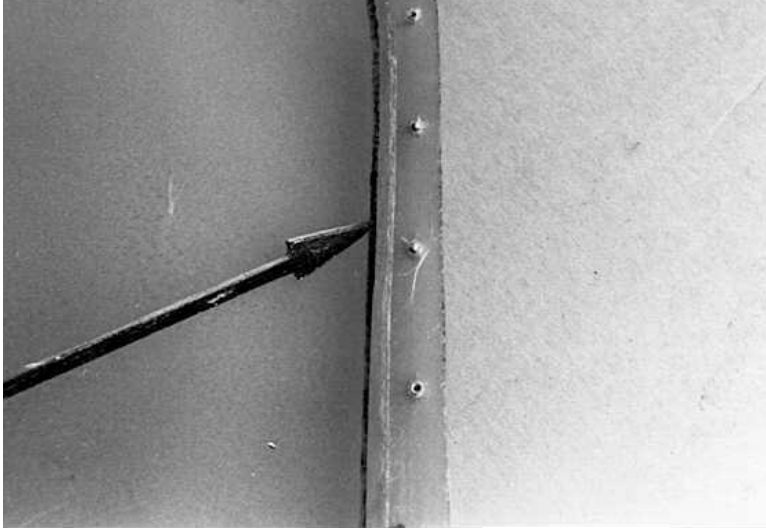


Photo #138

Arrow indicating where to apply the bondo.

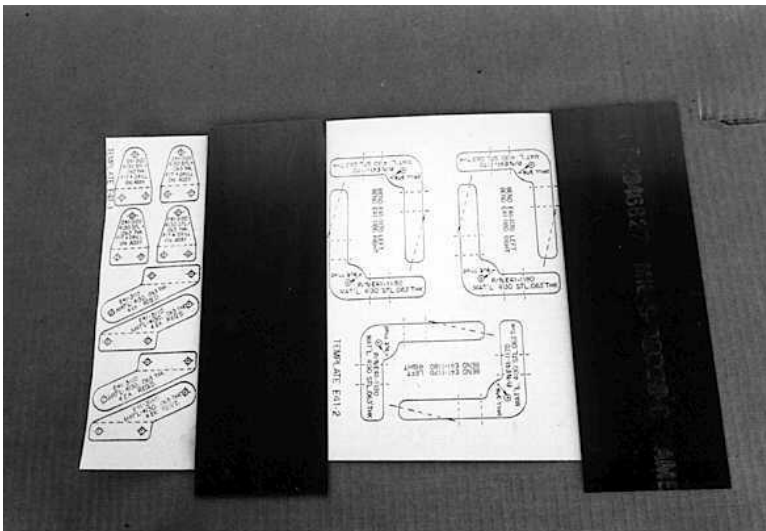


Photo #139

Door hinges and latches as received from RotorWay International.

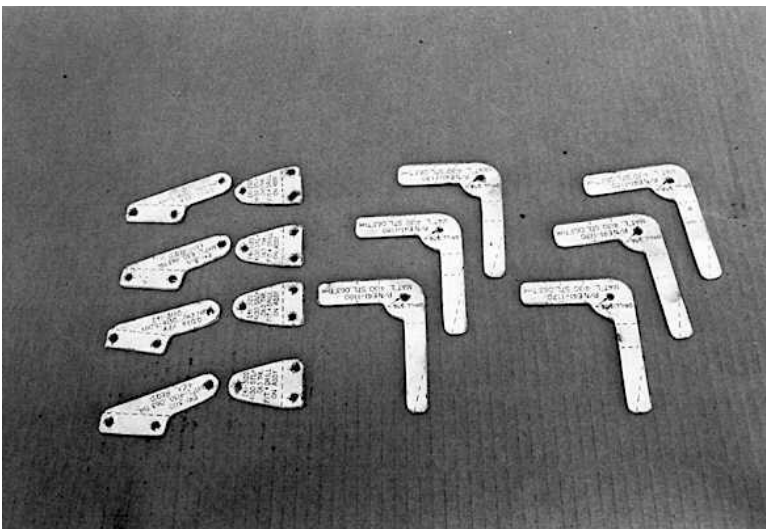


Photo #140

Clean the 4130 steel with acetone and apply the templates to it. Drill the holes where indicated on the templates, then cut out the parts.

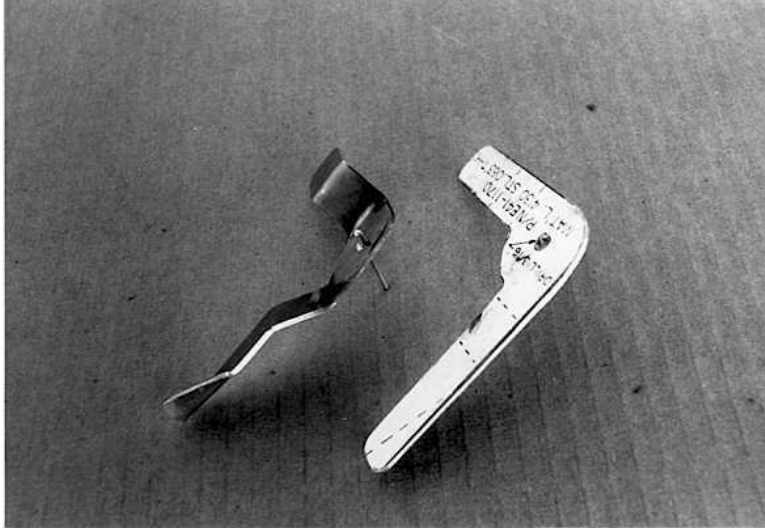


Photo #141

Bend the door latches where indicated on the templates.
Note: The bends will be opposite on the opposite sides of the ship.

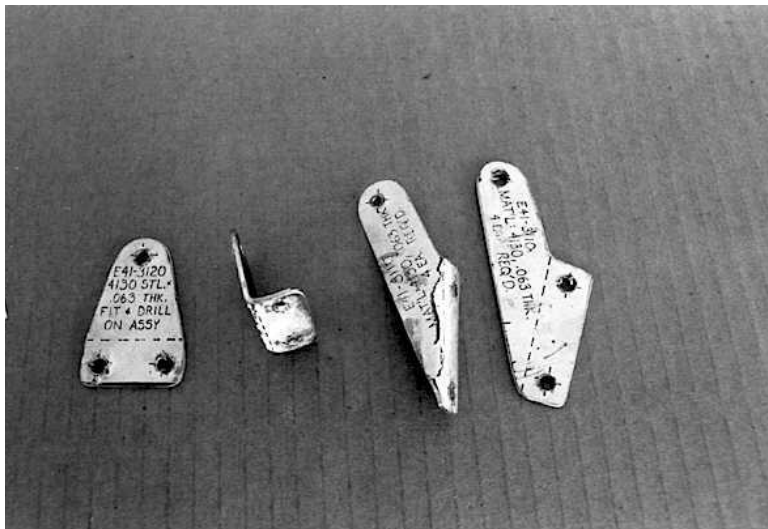


Photo #142

Bend the door hinges where indicated on the templates.

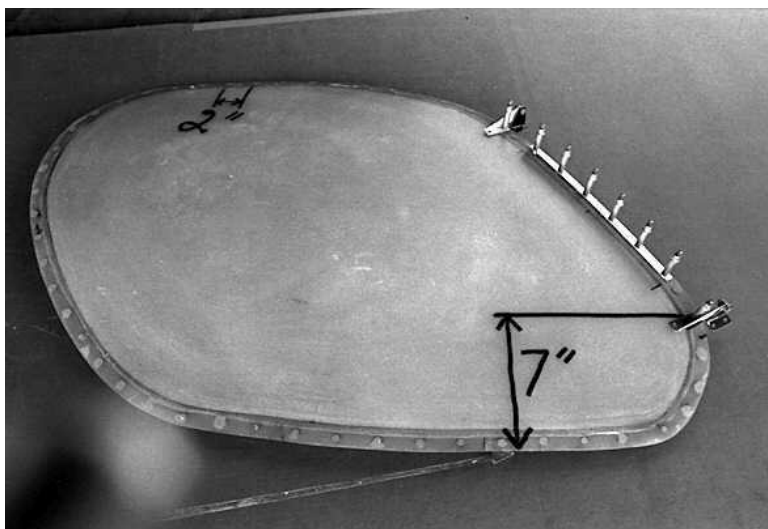


Photo #143

Draw a line parallel to the bottom of the door seven inches from the bottom. This will be the location of the bolt to hold the hinge to the door.

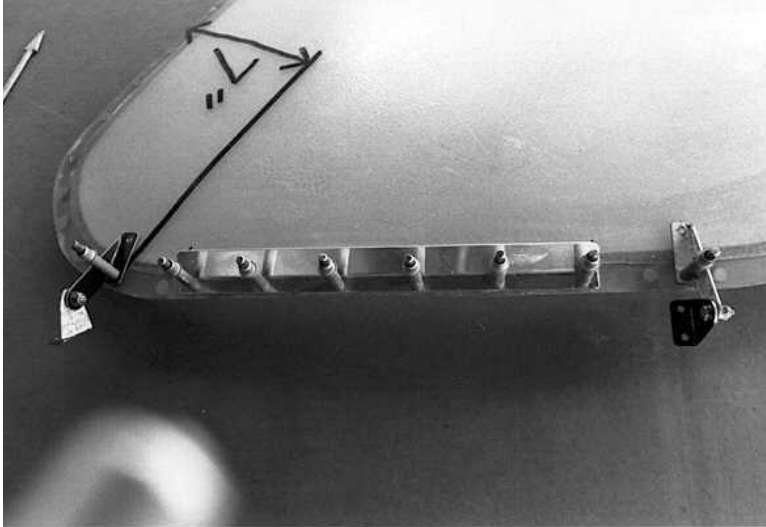


Photo #144

Install only one cleco in each hinge. Refer to print E41-2000 for hinge and stall strip location.

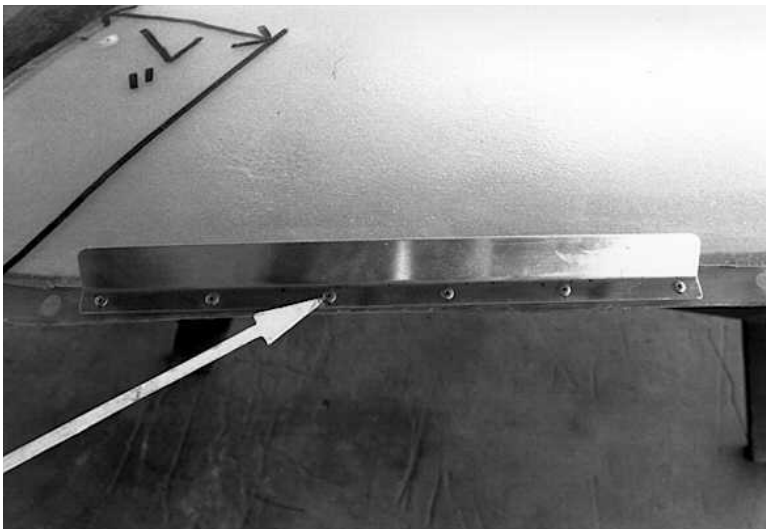


Photo #145

Install the pop rivets that hold the stall strip to the front of the door.



Photo #146

Apply the bondo between the stiffener and the plexiglass door and sand it to a smooth finish.

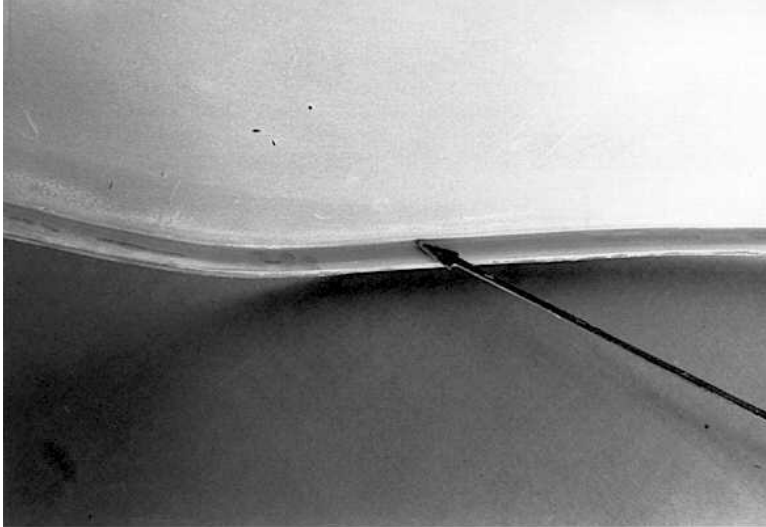


Photo #147

Another view of the area where bondo is applied around the stiffener and door.

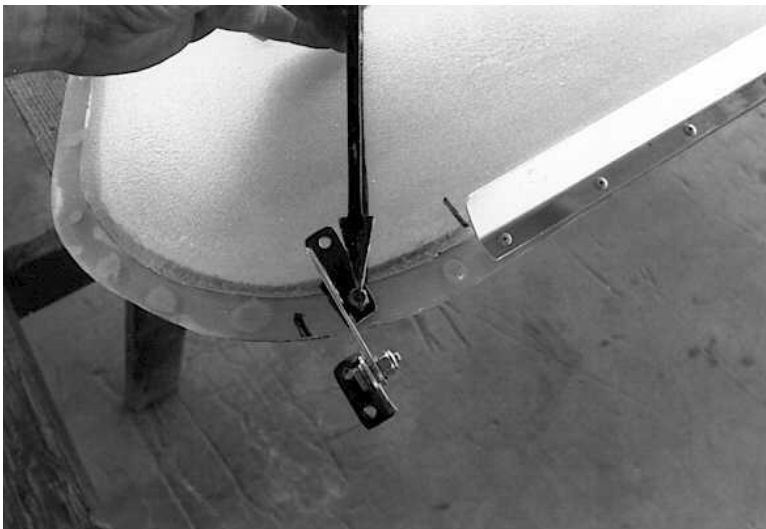


Photo #148

Bolt the two parts of the hinge together. Install one bolt in each hinge holding the hinge to the door.

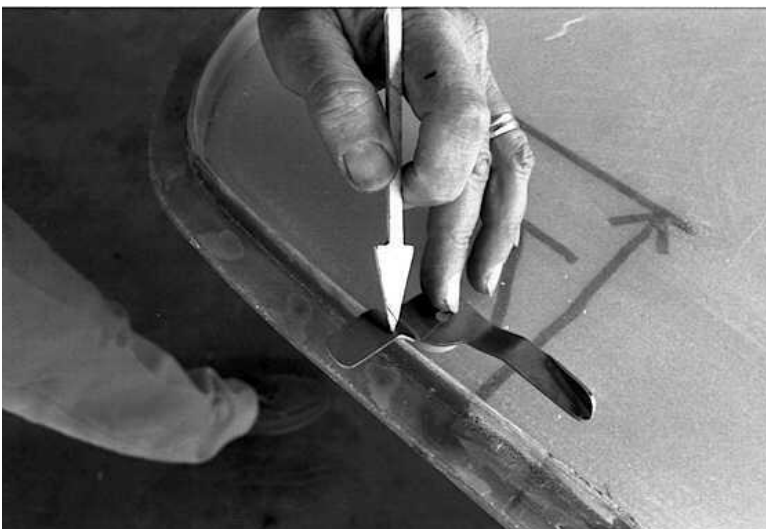


Photo #149

Place the bent latch on the spacer. Position the latch so the bend clears the door stiffener and is at the location called for on print E41-2000.

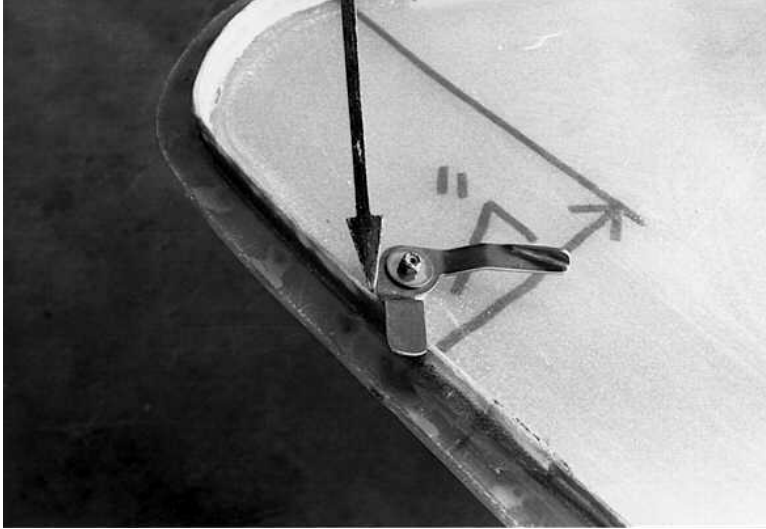


Photo #150

Before drilling the hole for the bolt, rotate the latch to check the clearance between the latch and stiffener.

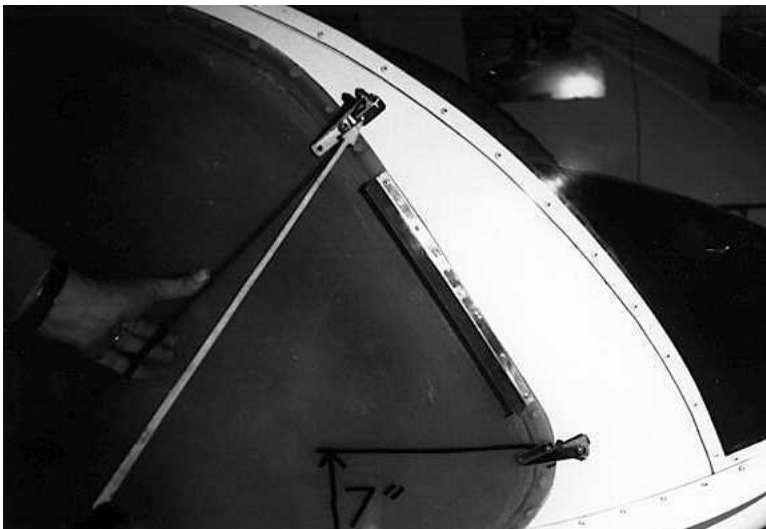


Photo #151

Place the cardboard around the door opening. Hold the door in the opening and drill one hole in the part of the hinge on the door post. Open the door. If the hinges do not try to move, drill the remaining hole and install the bolts.

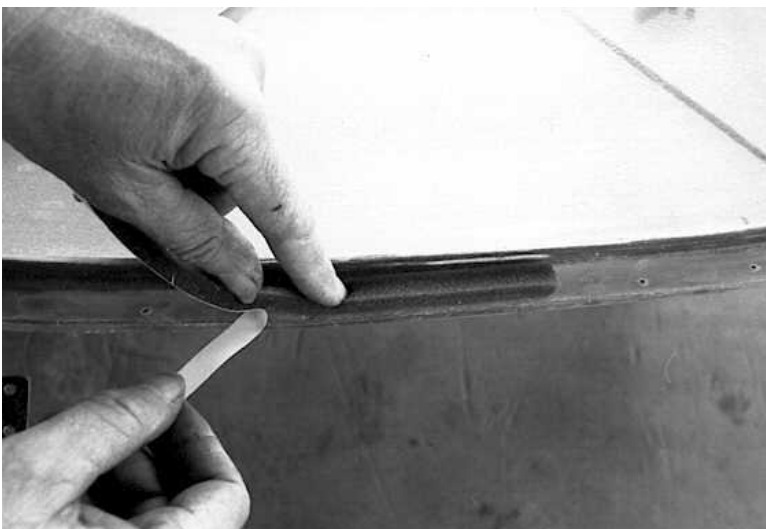


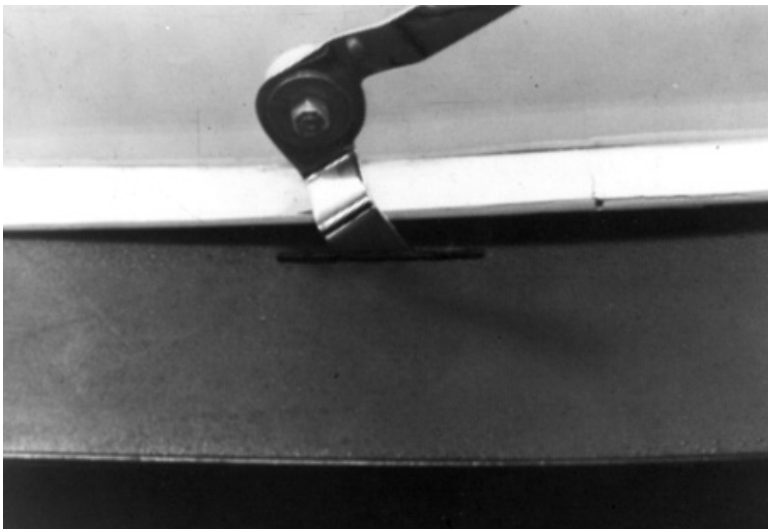
Photo #152

Remove the door and cardboard. Install the weather stripping to the door stiffener as shown. Note: It may be necessary to trim the fiberglass around the door opening to achieve the desired fit around the latches. Locate and cut the slot in the floor pan for the bottom latch. Cut out and rivet a piece of .050" aluminum around the slot as a wear plate for best results.



Photo #153

Photo showing position of slots that will need to be cut in the floor pan for the door latches.



FRESH AIR COLLECTOR

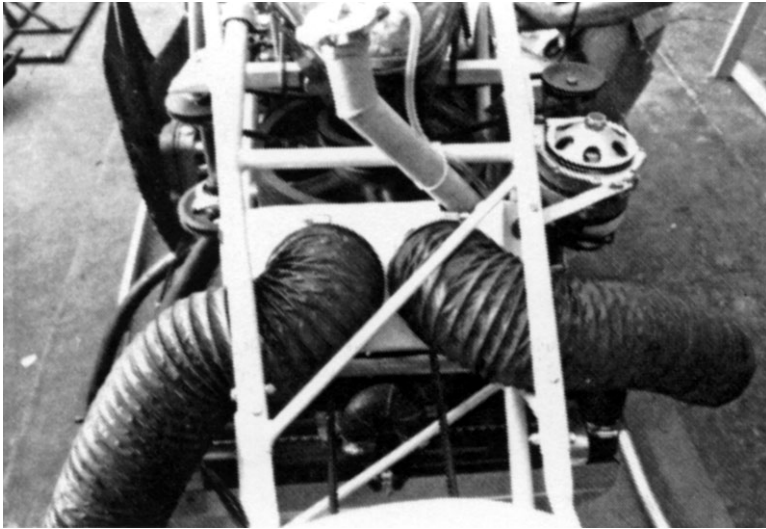


Photo #154

The fresh air collector cannot be fitted until the end of section 18; however, the scoop areas must be located and removed now prior to painting the body.

Note: The scoops on the body panels may be different than shown here.

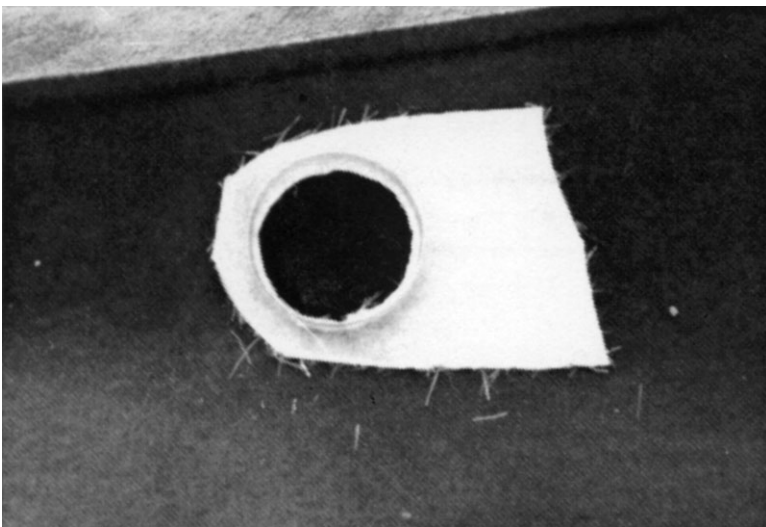


Photo #155

Cut out the forward facing area of the air scoop in the upper body panel, leaving a 1/4" lip around the curved area to provide stiffness. Cut the fiberglass mat to fit between the upper body panel and the air hose adapter. The hole in the adapter should be at the rear of the scoop.



Photo #156

Prepare the fiberglass surfaces and bond them together as described in the standard construction procedures. The picture shows the parts fibreglassed together and the hose ready to be attached.

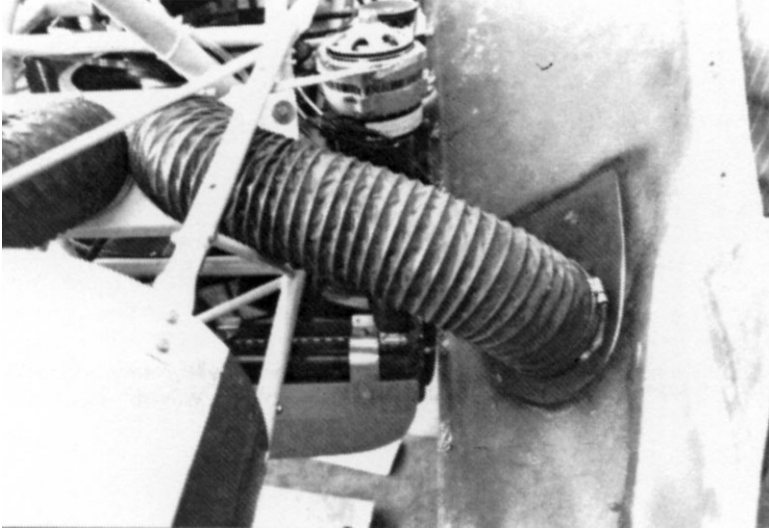


Photo #157

After section 18, connect the hose to the panel. The finished assembly should look like this.

CABIN INTERIOR

Installation is left up to the customer. Some options are:

A:Glue

B:Velcro

C:Snaps