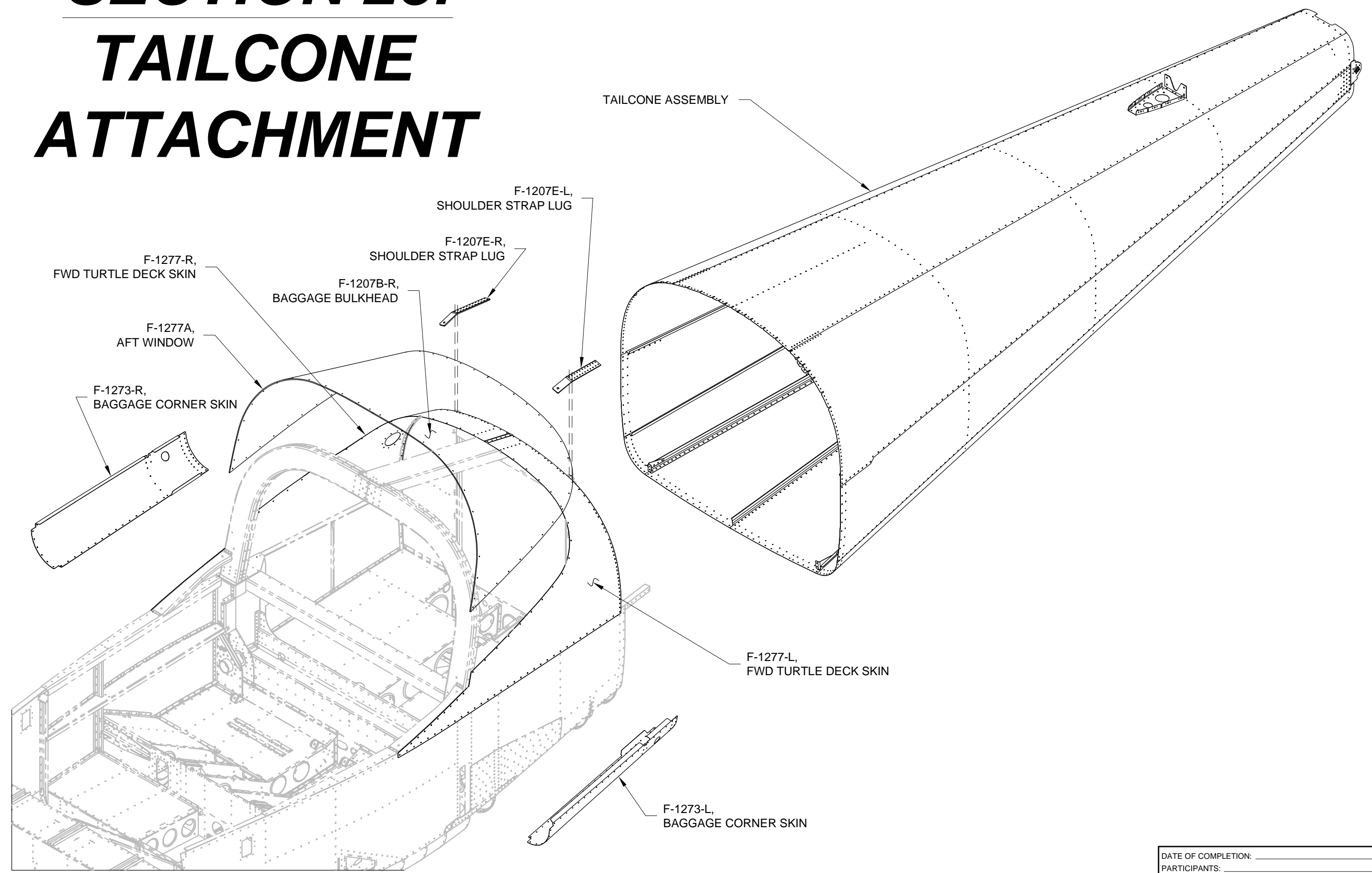


SECTION 25: TAILCONE ATTACHMENT



NOTE: Remove empennage assemblies from the Tailcone Assembly, refer to Section 11 - Empennage Attachment.

Step 1: Retrieve the bending tool that was fabricated on Page 17-06.

Step 2: Bend the forward tabs on the F-1278 Top Skin, F-1279-L & -R Upper Skins per the angular dimensions given in Figure 1. All tabs are bent outboard.

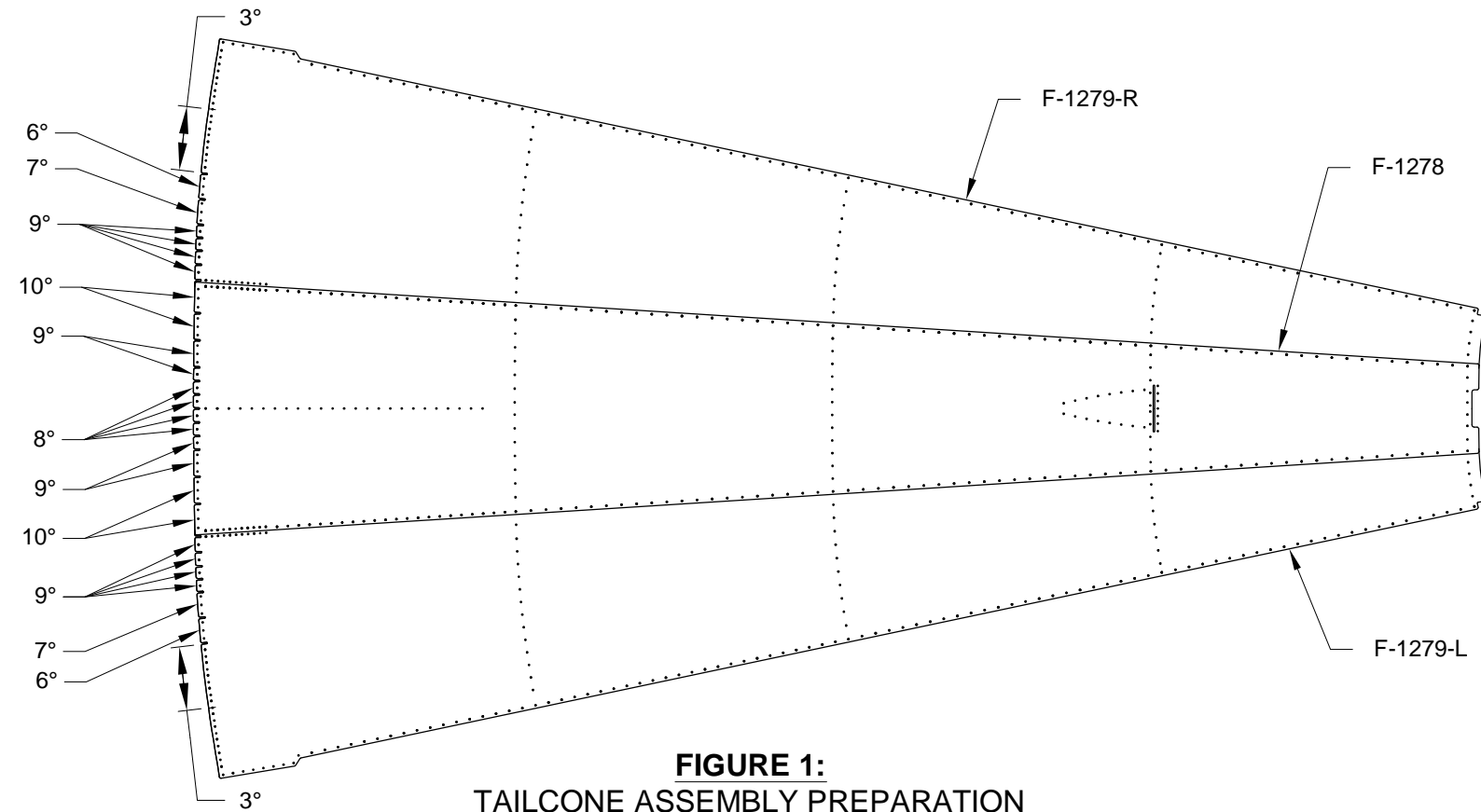


FIGURE 1:
TAILCONE ASSEMBLY PREPARATION

Step 3: Mark, then prepare the F-1207E-L & -R Shoulder Strap Lugs by removing the hatched areas called out in Figure 2.

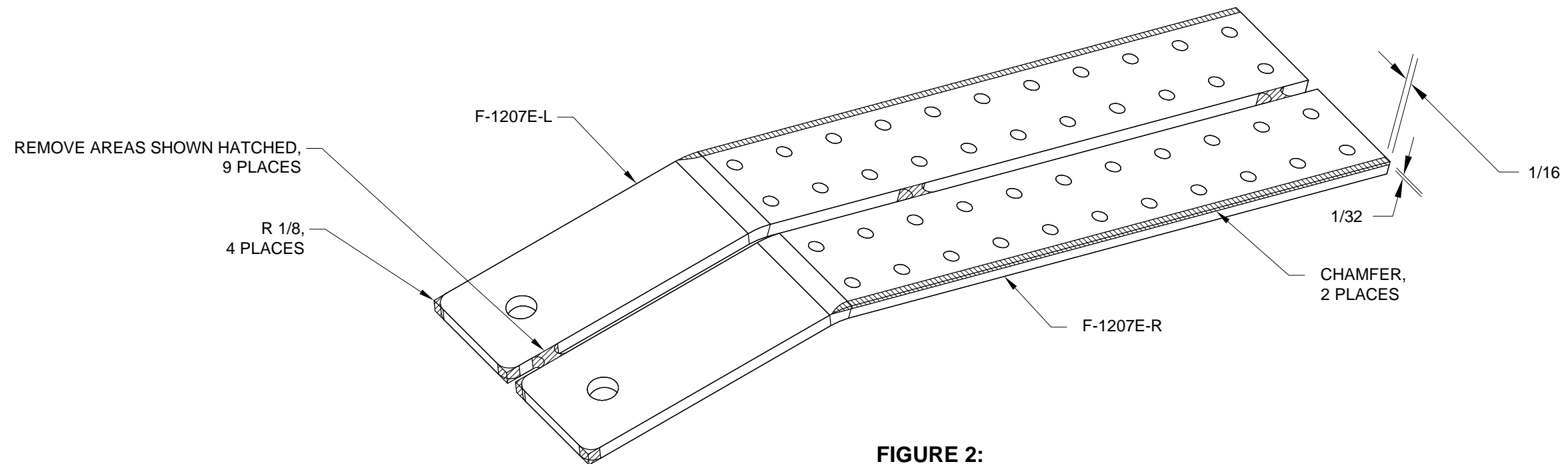
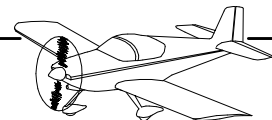


FIGURE 2:
F-1207E SHOULDER STRAP LUG



CAUTION: To avoid water penetration, upper skins need to overlap outboard of lower skins and forward skins need to overlap outboard of aft skins.

Step 1: Support the Fuselage and Tailcone Assemblies on saw horses. Bring the Tailcone Assembly to the aft of the Fuselage Assembly. Place the forward edge of the F-1282-L & -R Bottom Skins on the aft edge of the F-1276 Bottom Skin as shown in Figure 1. Insert the forward edge of the tailcone bottom skins between the F-1207B Baggage Bulkhead and the fuse bottom skin as shown in Figure 4. Cleco the tailcone bottom skins to the fuse bottom skins. Lift the aft end of the tailcone and guide the tailcone skins outboard of the F-1255-L & -R Longerons and inboard of the F-1270-L & -R Fuselage Side Skins. The F-1279-L & -R Upper Skins are outboard of the fuselage side skins, see Page 25-04, Figure 2. Cleco the lower half of the Tailcone Assembly to the Fuselage Assembly in about ten places. Shake the aft end of the Tailcone Assembly up, down, left and right to ensure that the clecoes are set completely.

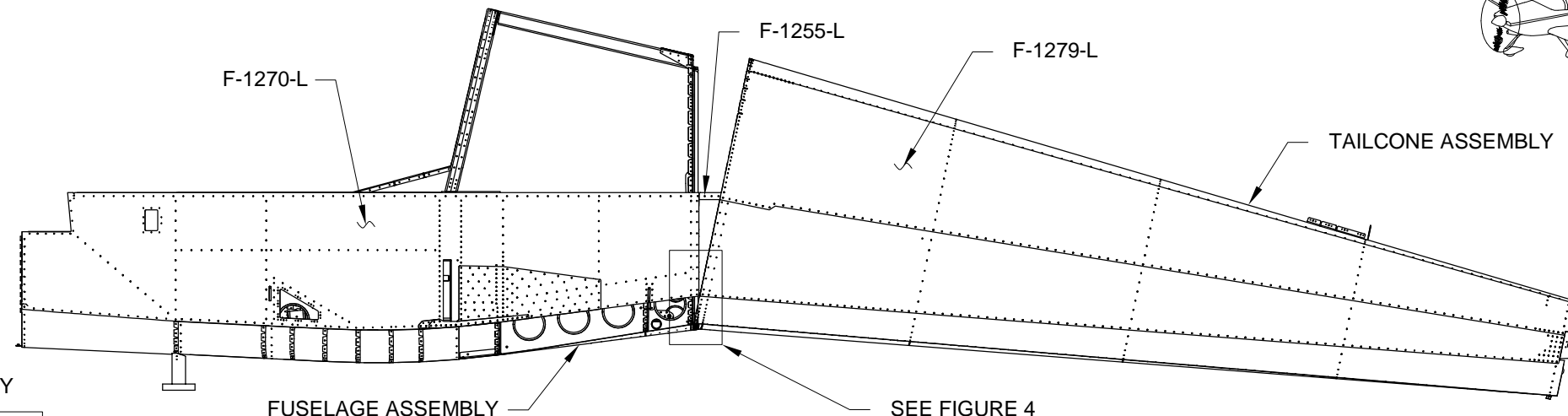


FIGURE 1:
TAILCONE ATTACH

Step 2: Cleco the F-1207E-L & -R Shoulder Strap Lugs to the inboard surface of the Tailcone Assembly skins as shown in Figure 2.

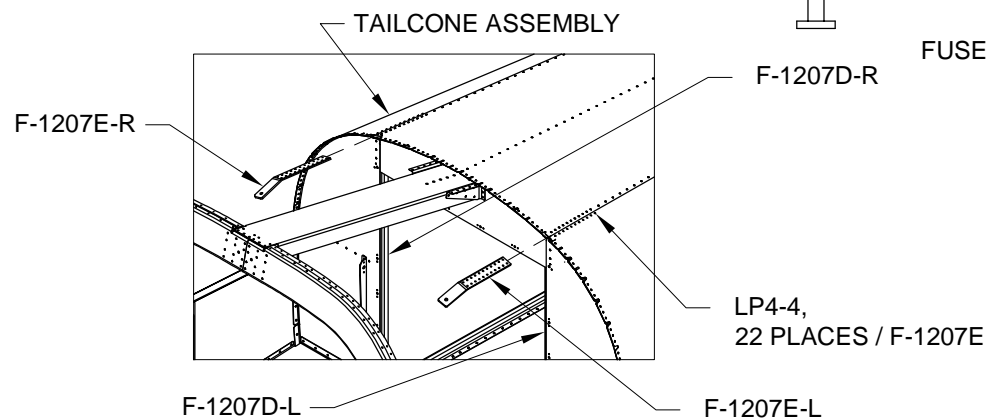


FIGURE 2:
SHOULDER STRAP LUGS

Step 3: Rivet the F-1207E-L & -R Shoulder Strap Lugs to the Tailcone Assembly skins using rivets called out in Figure 2. Capture the upper flange of the F-1207D-L & -R Baggage Bulkhead Channels when riveting the two forward holes of the shoulder strap lugs.

Step 4: Place masking tape over all of the forward holes in the upper tailcone skins as called out in Figure 3. Taped holes will be riveted later in this section.

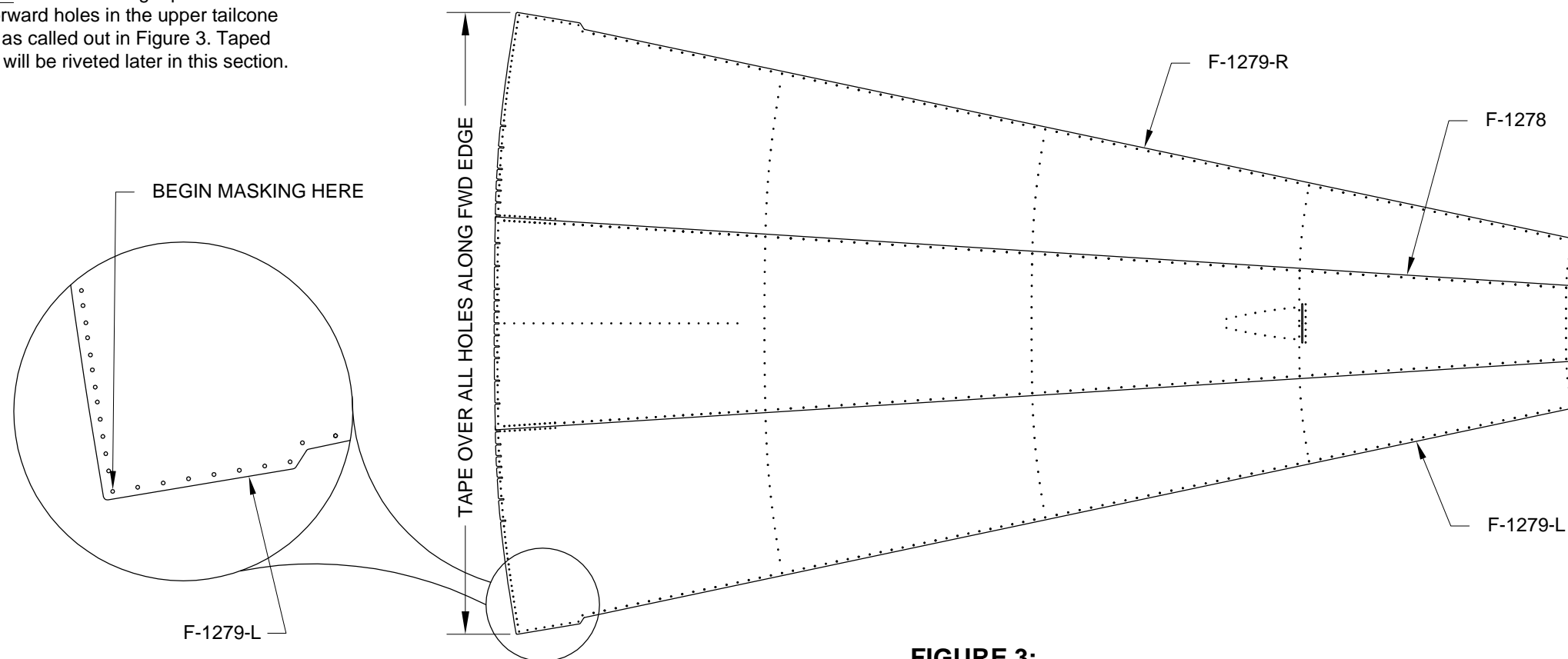


FIGURE 3:
TAILCONE ASSEMBLY PREPARATION

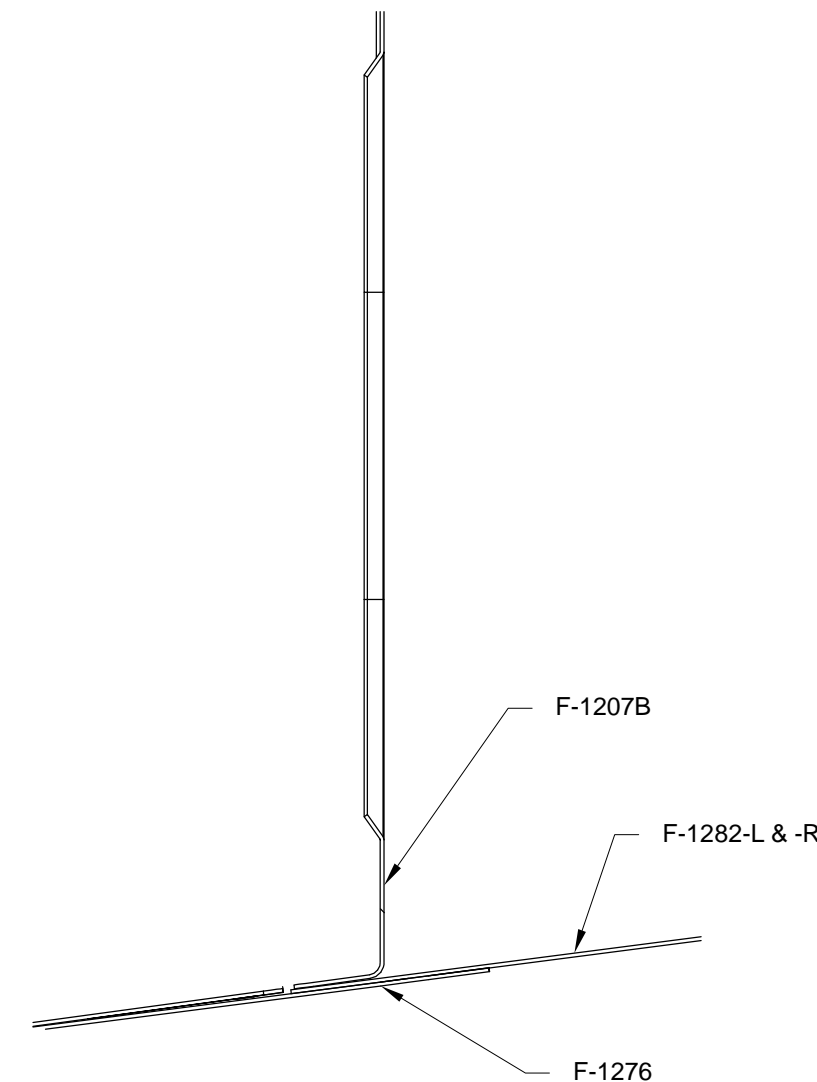


FIGURE 4:
SKIN AND BULKHEAD STACKUP



Step 1: Rivet the F-1284-L & -R Shear Clips to the F-1207C-L & -R Baggage Bulkheads as shown in Figure 1.

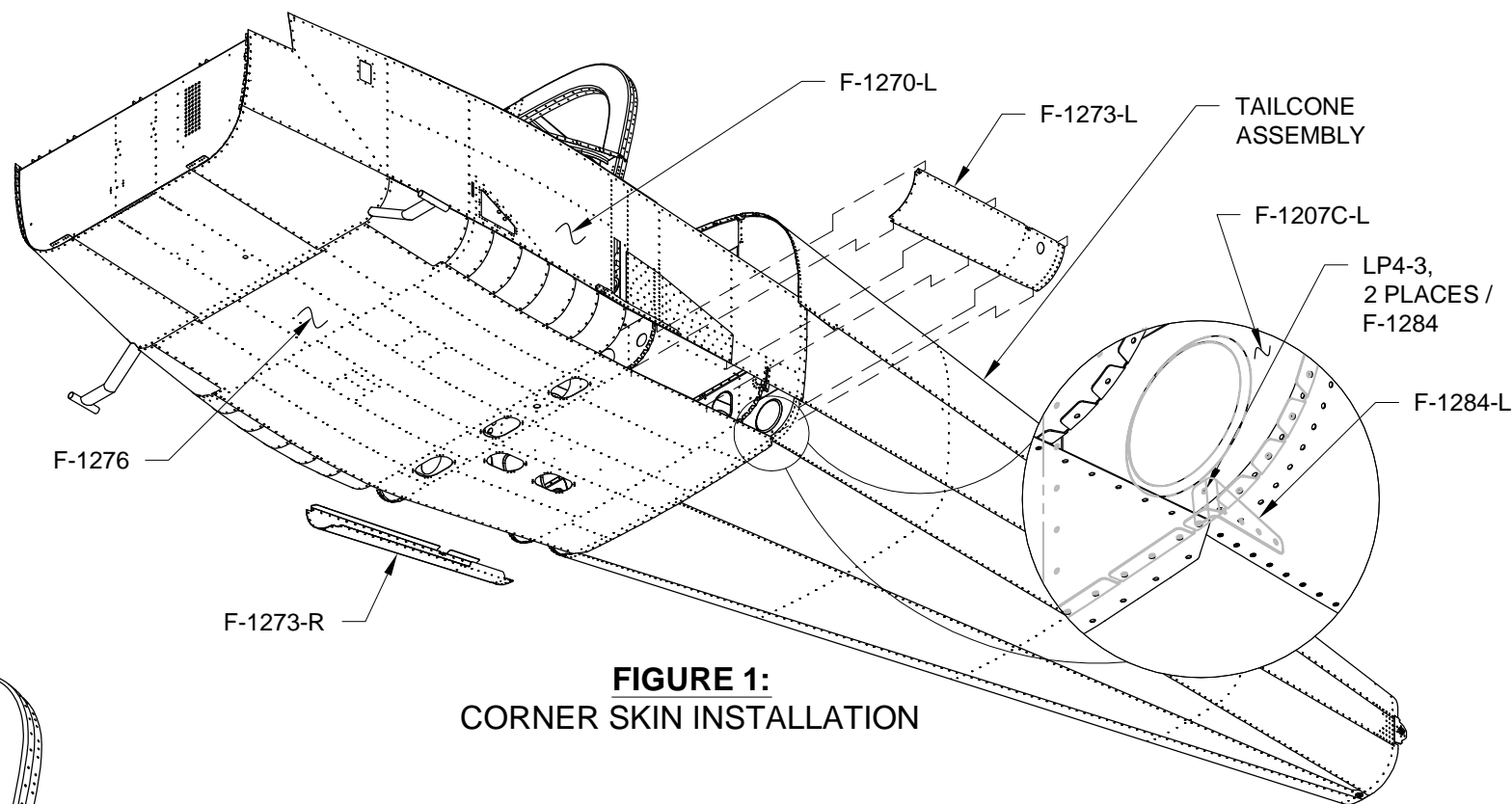
Step 2: Cleco the F-1273-L & -R Baggage Corner Skin in place. Underlap the F-1270-L & -R Left and Right Side Skins, F-1270A & F-1270B Side Skin Doublers and F-1276 Bottom Skins. Overlap the Tailcone Assembly skins as shown in Figure 1 and 2.

NOTE: The clecos in the F-1273-L & -R Baggage Corner Skins that are called out in Figure 2 mark holes that will be left open in this section.

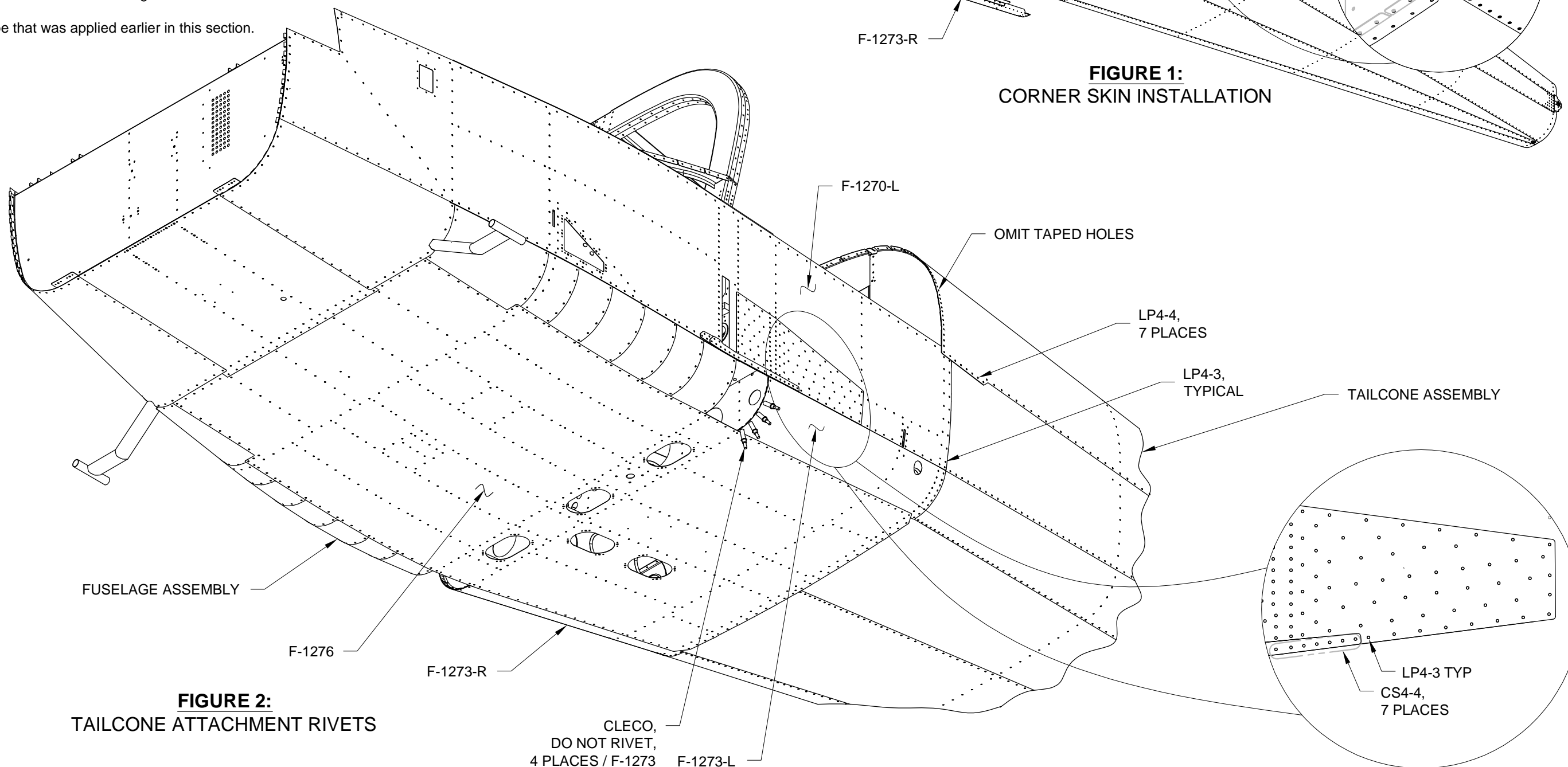
Step 3: Rivet the Tailcone Assembly skins, the holes common to the Tailcone and Fuselage Assembly and the F-1273-L & -R Baggage Corner Skins using rivets called out in Figure 2. Rivets on the right side are a mirror of the left. Omit the holes covered by tape.

Rivet the holes common to the F-1270-L & -R Skins, F-1280A & F-1270B Side Skin Doublers and F-1273-L & -R Baggage Corner Skins as shown in Figure 2.

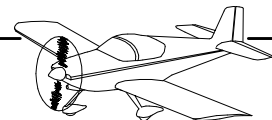
Remove the tape that was applied earlier in this section.



**FIGURE 1:
CORNER SKIN INSTALLATION**



**FIGURE 2:
TAILCONE ATTACHMENT RIVETS**



Step 1: Cleco the F-1277-L & -R Fwd Turtle Deck Skins to the Fuselage and Tailcone Assembly as shown in Figure 1.

Step 2: Cleco the F-1277A Aft Window underneath of the F-1277-L & -R Fwd Turtle Deck Skins.

Step 3: Match-Drill #40, beginning at either top inboard hole, the 3/32" holes from the F-1277A Aft Window into the F-1231A-AL & -AR Roll Bar Frames. Cleco each hole before drilling the next.

Step 4: Rivet the F-1277-L & -R Fwd Turtle Deck Skins to the Fuselage and Tailcone Assemblies.

Remove the F-1277A Aft Window. Open all holes in the aft window using a #27 plexi drill bit.

NOTE: Optionally, now is a good time to paint the interior of the airframe.

Step 5: Final-Drill #36 and tap 6-32 all of the match-drilled holes in the F-1231A-AL & -AR Roll Bar Frames.

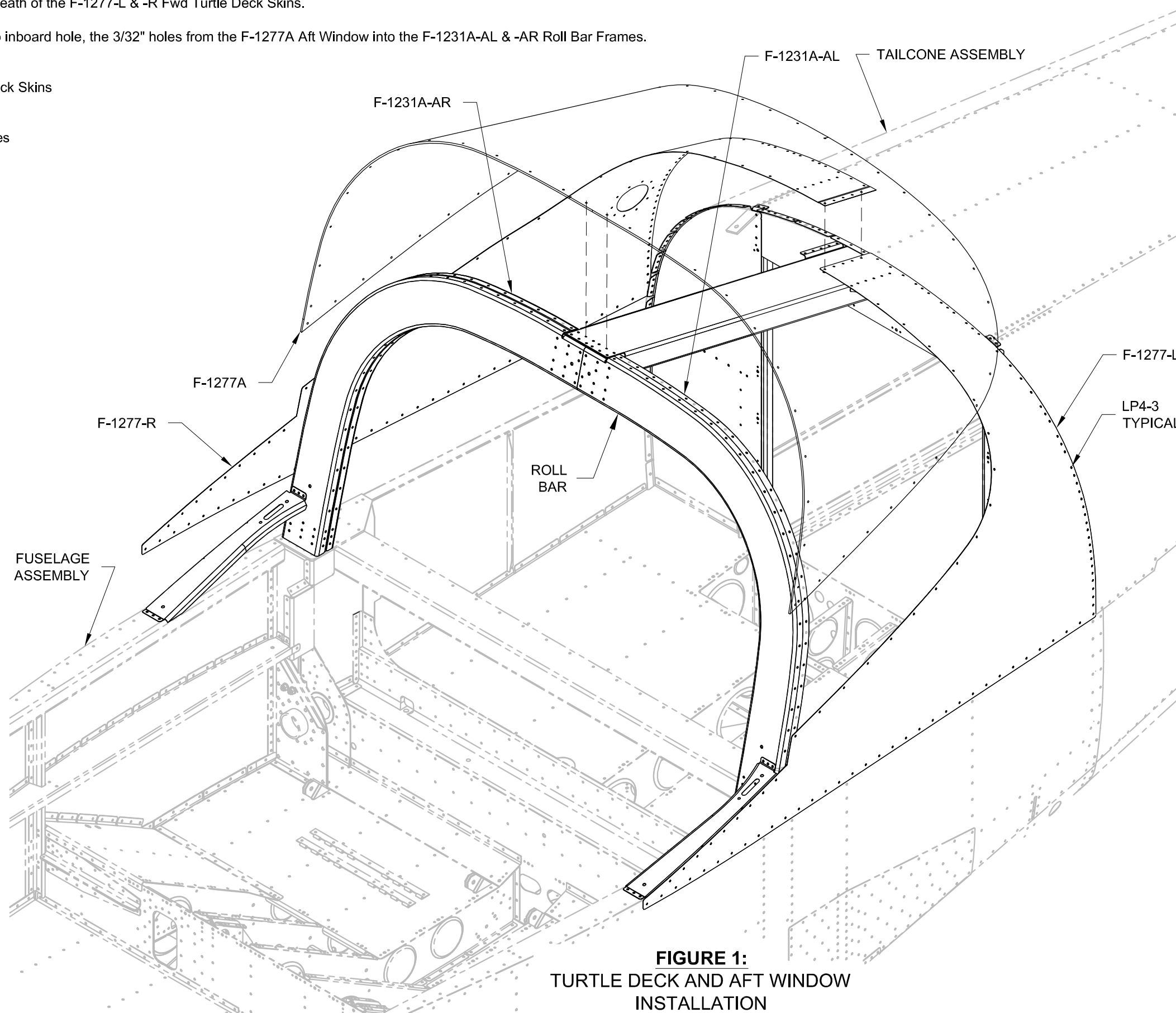
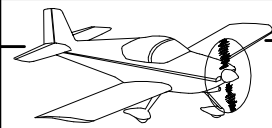


FIGURE 1:
TURTLE DECK AND AFT WINDOW
INSTALLATION



NOTE: The F-1277A Aft Window may be final installed at a later time for better access to the fuselage during construction.

The F-1277A Aft Window must be sealed properly to prevent fuel from contacting cut or drilled edges. See Section 5S Fuel Tank Sealant and Section 5U Acrylic Canopy and Lexan Window Hints for specific cleaning instructions.

Step 1: Align the F-1277A Aft Window by installing every third or fourth screw around the perimeter.

Outside the fuselage mask the aft window using electrical tape offset from the edge of the F-1277-L & -R Fwd Turtle Deck Skins per the dimension given in Figure 5. Add tape along the edge of the turtle deck skins with cutouts at screw locations.

Inside the fuselage add electrical tape to the fwd turtle deck skins following the lower edge of the aft window. See Figure 4.

Install the two screws common to the roll bar and aft window specified in Figure 1.

Cover the remaining exposed skin, window and baggage area as required for easier cleanup after sealing the aft window to the fuselage.

Step 2: Make a popsicle tool as shown in Figure 6.

Add fuel tank sealant to a sealed plastic bag then cut a small portion from the corner from the bag for dispensing.

Press the F-1277A Aft Window in then squeeze an 1/8 inch bead of fuel tank sealant between the aft window and the F-1277-L & -R Fwd Turtle Deck Skins. Where this is difficult insert a popsicle stick to create a temporary gap.

Use the hardware called out in Figure 2 to install the aft window to the turtle deck skins. Spin the screws to be used on the right side in fuel tank sealant.

Use the radiused corner of the popsicle stick tool to fillet the sealant that extrudes out between the turtle deck skins and the aft window. When satisfied with the appearance remove the tape as soon as possible before the sealant sets up leaving a crisp edge.

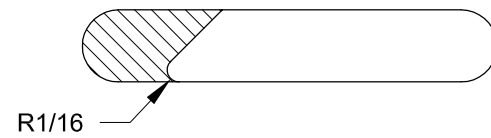


FIGURE 6: POPSICLE STICK TOOL

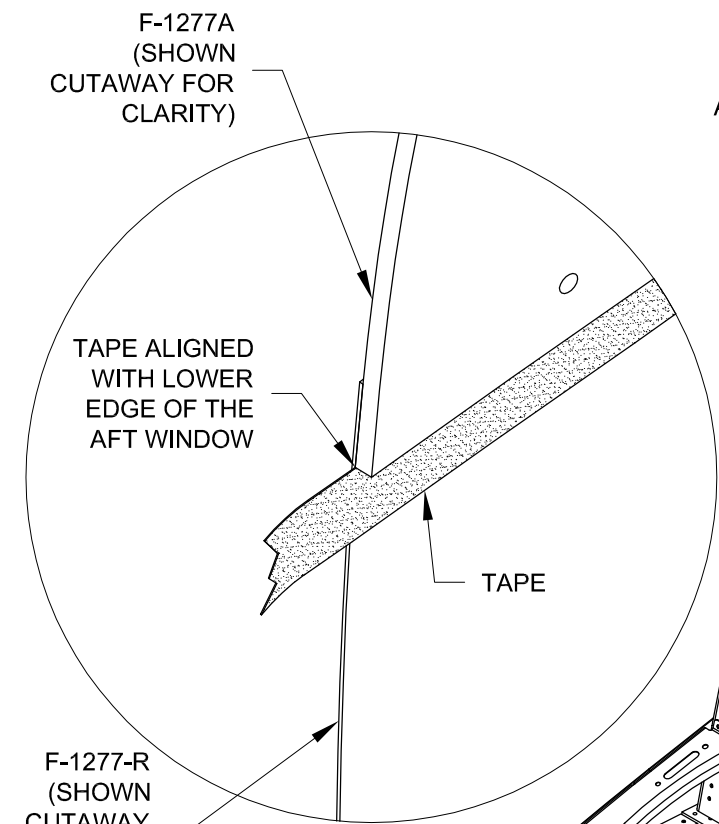


FIGURE 4: INSIDE MASKING

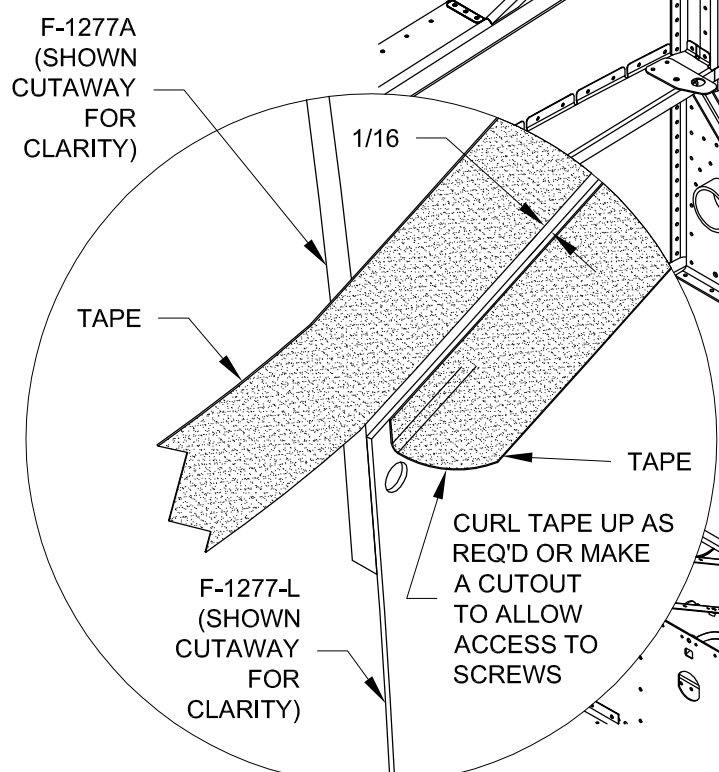


FIGURE 5: OUTSIDE MASKING

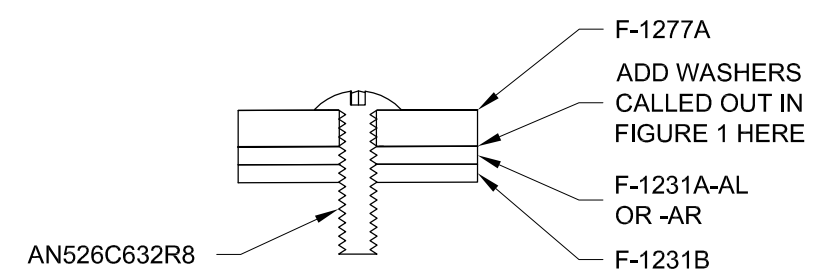


FIGURE 3: WINDOW TO ROLL BAR

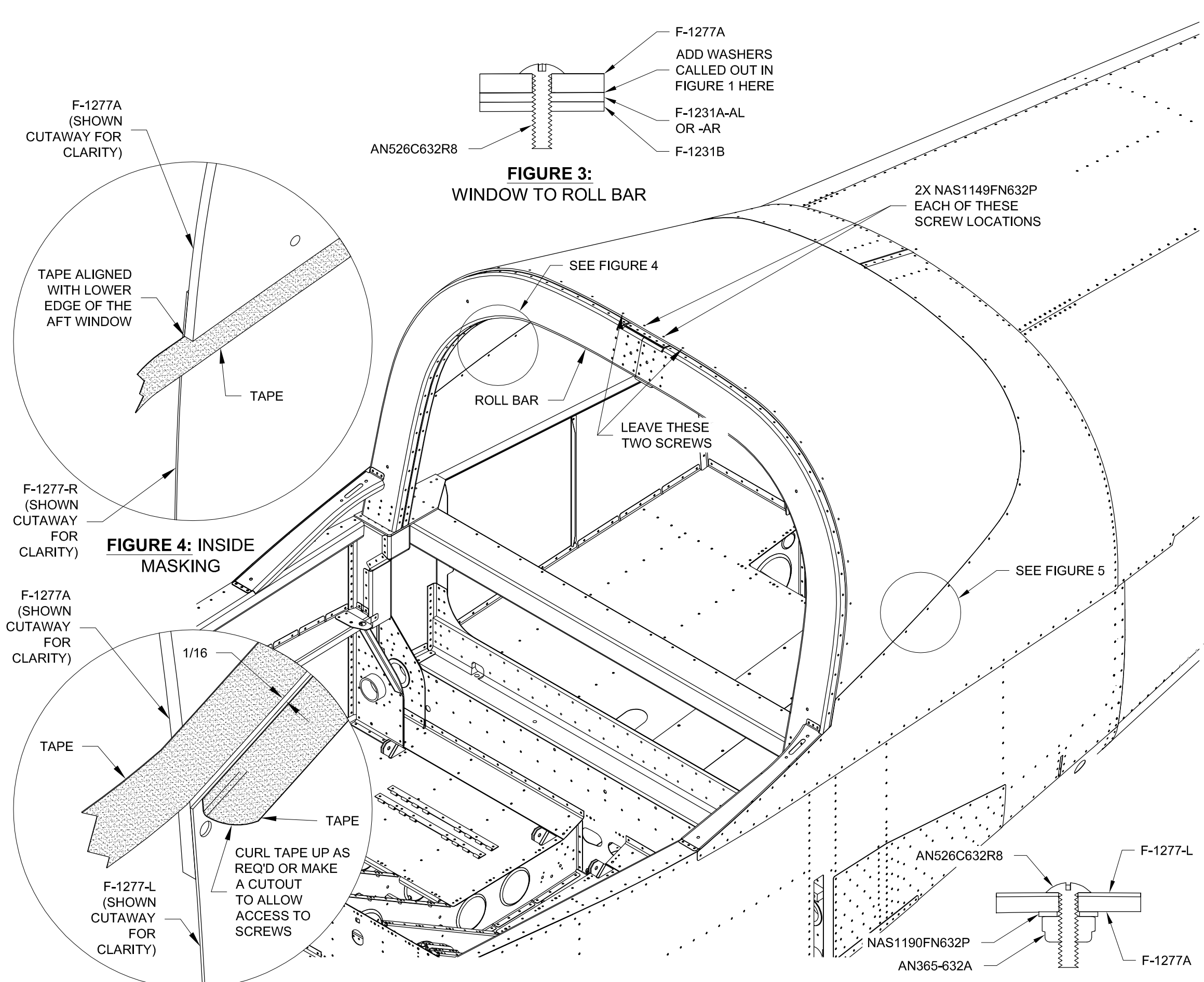


FIGURE 1: WINDOW INSTALLATION

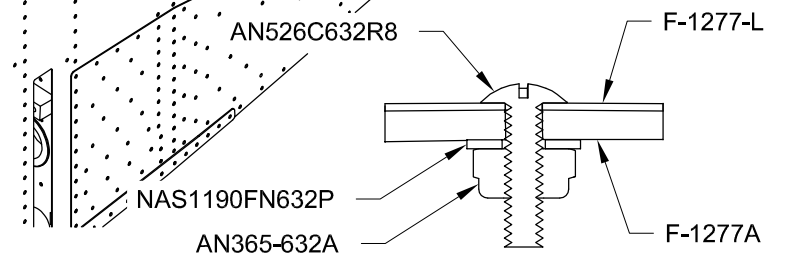


FIGURE 2: WINDOW TO SKIN