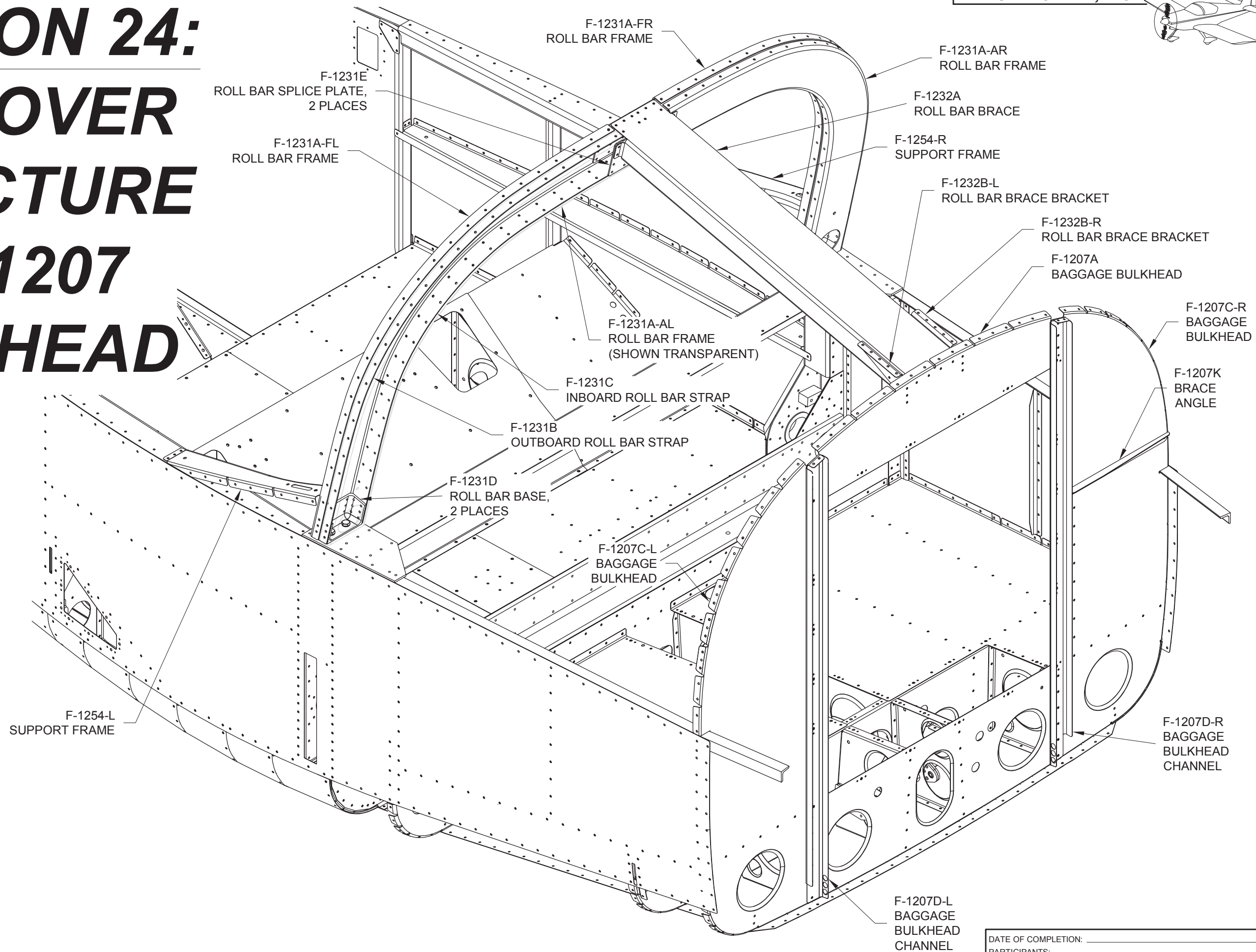


SECTION 24: ROLLOVER STRUCTURE & F-1207 BULKHEAD



DATE OF COMPLETION: _____			
PARTICIPANTS: _____			
DATE: 10/26/11	REVISION: 1	RV-12	PAGE 24-01



Step 1: Study Figure 1 to determine the forward edge, top and bottom of the F-1231B & C Roll Bar Straps. Run the roll bar straps back and forth over the edge of a table to add a curvature to the parts. Be careful not to let the parts kink across the rivet holes. The curve does not have to be the final installed shape but enough to allow easy assembly of the roll bar. Deburr the edges of all parts used to create the Roll Bar Assembly. Cleco all of the parts of the Roll Bar Assembly together as shown in Figure 1.

Step 2: Final-Drill #30 all #40 holes in the flanges of the F-1231A-FL, -FR, -AL & -AR Roll Bar Frames and F-1231B & C Roll Bar Straps.

Step 3: Disassemble the roll bar parts, then machine countersink the **outer flanges** of the F-1231A-FL, -FR, -AL and -AR Roll Bar Frames for the head of the rivets that will eventually lay underneath the canopy except holes common to the F-1231D Roll Bar Bases. Machine countersink the two holes on the inside lower center face of the roll bar that will get flush blind rivets. See Figure 1.

Step 4: Cleco the F-1231F-1 Latch Plate to the F-1231A-AR Roll Bar Frame and aft F-1231E Splice Plate. Match-Drill #43 a hole in the roll bar frame and splice plate using the switch mounting hole as a guide. See the detail view in Figure 1.

Step 5: Uncleco the F-1231F-1 Latch Plate. Final-Drill #30 the hole just created in the F-1231A-AR Roll Bar Frame and F-1231E Splice Plate. Deburr the latch plate.

Step 6: Tap #4-40 the switch mounting hole in the F-1231F-1 Latch Plate.

Step 7: Curve the arm of the F-1231F-1 Latch Plate forward starting at the bend line shown in the detail view in Figure 1 until a 1/8 inch gap exists between the tip of the arm and a flat surface.

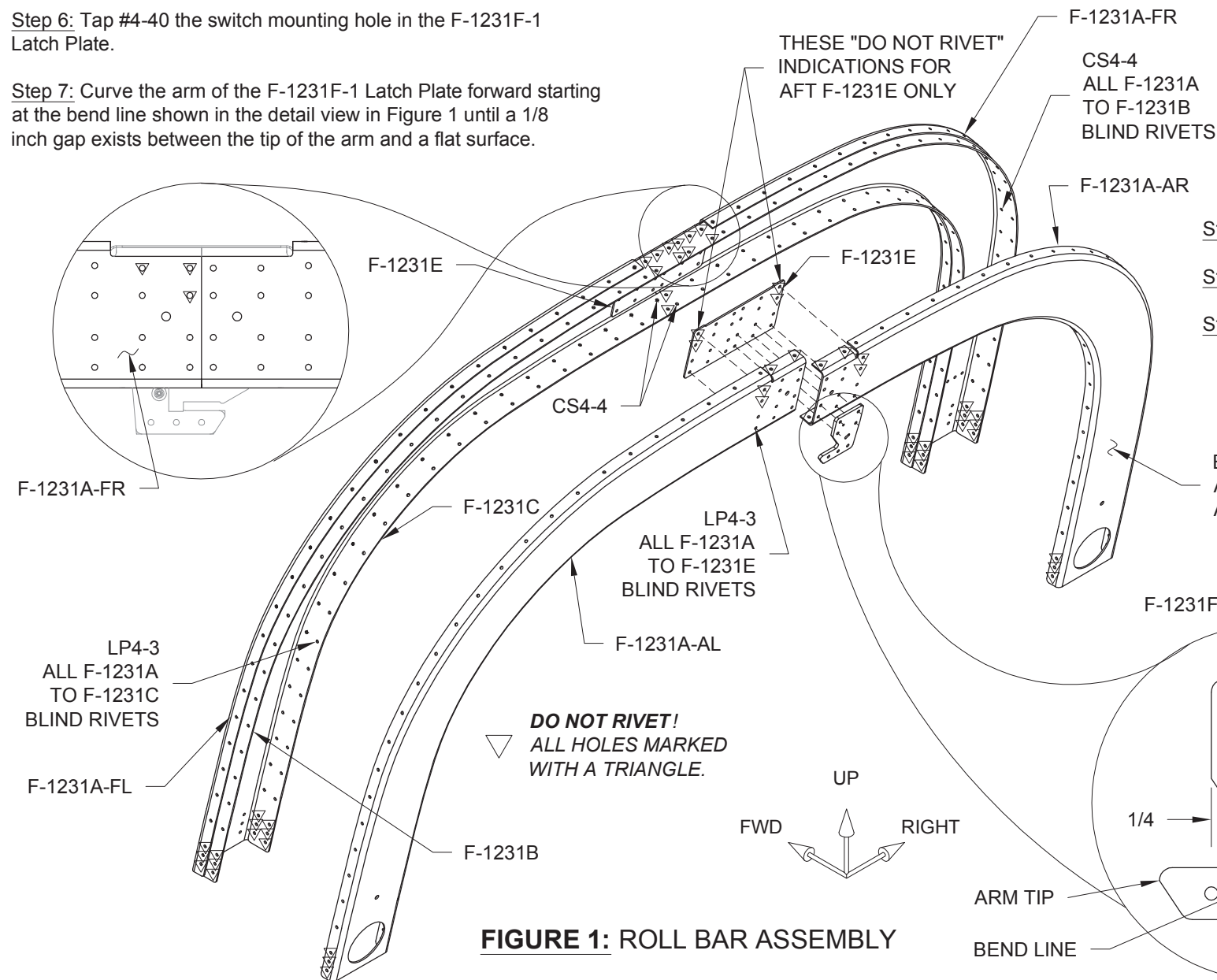


FIGURE 1: ROLL BAR ASSEMBLY

CAUTION: Do not rivet the locations marked with a triangle in Figure 1 until later in the assembly process!

Step 8: Rivet the F-1231F-1 Latch Plate to the F-1231A-AR Roll Bar Frame and aft F-1231E Splice Plate as shown in the detail view in Figure 1.

Step 9: Rivet the F-1231A-FL, -FR, -AL & -AR Roll Bar Frames to the F-1231B & C Roll Bar Straps and F-1231E Splice Plates per the callouts in Figure 1 to create the Roll Bar Assembly.

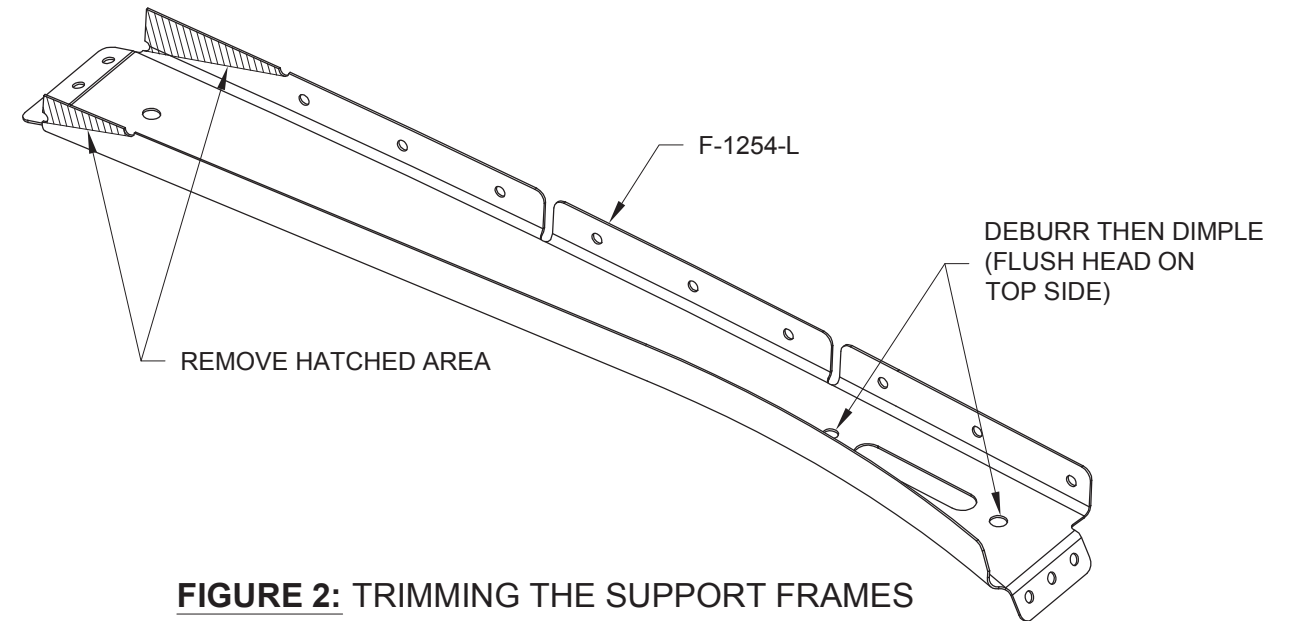


FIGURE 2: TRIMMING THE SUPPORT FRAMES

Step 10: Remove the hatched areas shown in Figure 2 from the flanges of both the F-1254-L & -R Support Frames.

Step 11: Deburr then dimple both holes indicated in Figure 2 for the head of a #8 screw.

Step 12: Remove the hatched areas shown in Figure 3 to separate the F-1232B Roll Bar Brace Bracket into left and right parts.

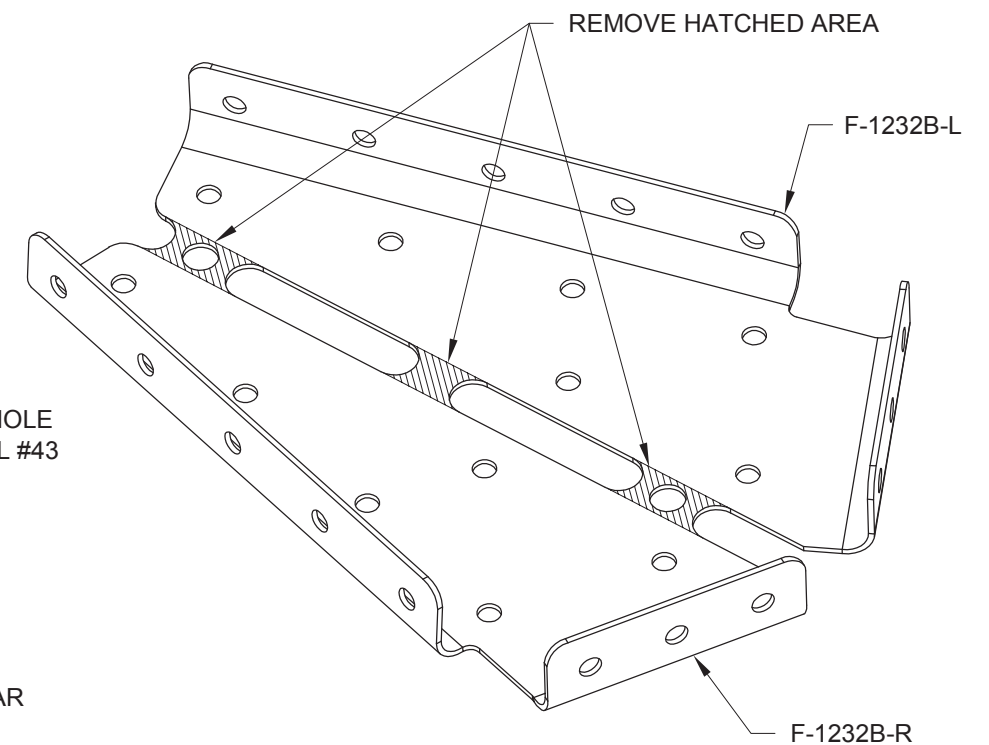


FIGURE 3: BREAKING APART THE ROLL BAR BRACE BRACKETS



Step 1: Bolt the F-1231D Roll Bar Bases to the F-1205B-L & -R Roll Bar Attach Plates using the hardware called out in Figure 1.

Step 2: Cleco the Roll Bar Assembly to the forward face of the F-1231D Roll Bar Bases. Cleco the F-1254-L & -R Support Frames to the Roll Bar Assembly and F-1234-L & -R Canopy Decks as shown in Figure 1.

Step 3: Match-Drill #30 the twelve holes in the sides of the Roll Bar Assembly into the F-1231D Roll Bar Bases.

Step 4: Remove, deburr, prime and reinstall the F-1231D Roll Bar Bases to the F-1205B-L & -R Roll Bar Attach Plates.

Step 5: Rivet the Roll Bar Assembly to the F-1231D Roll Bar Bases per the callouts in Figure 1.

Step 6: Separate the F-1207C Baggage Bulkhead into left and right parts as shown in Figure 2.

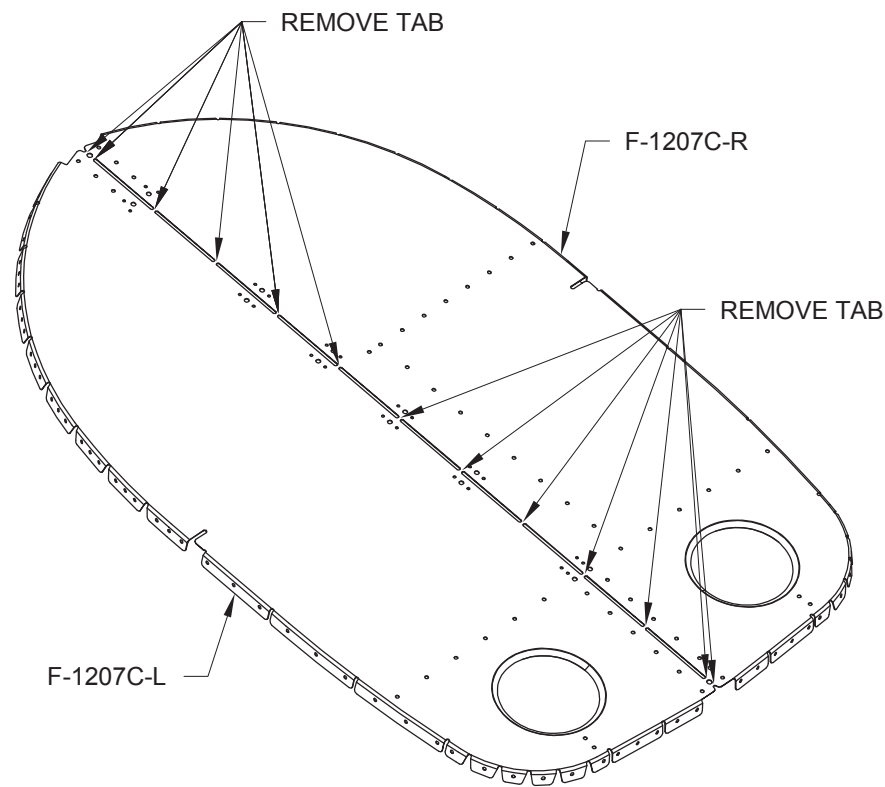


FIGURE 2: SEPARATING F-1207C

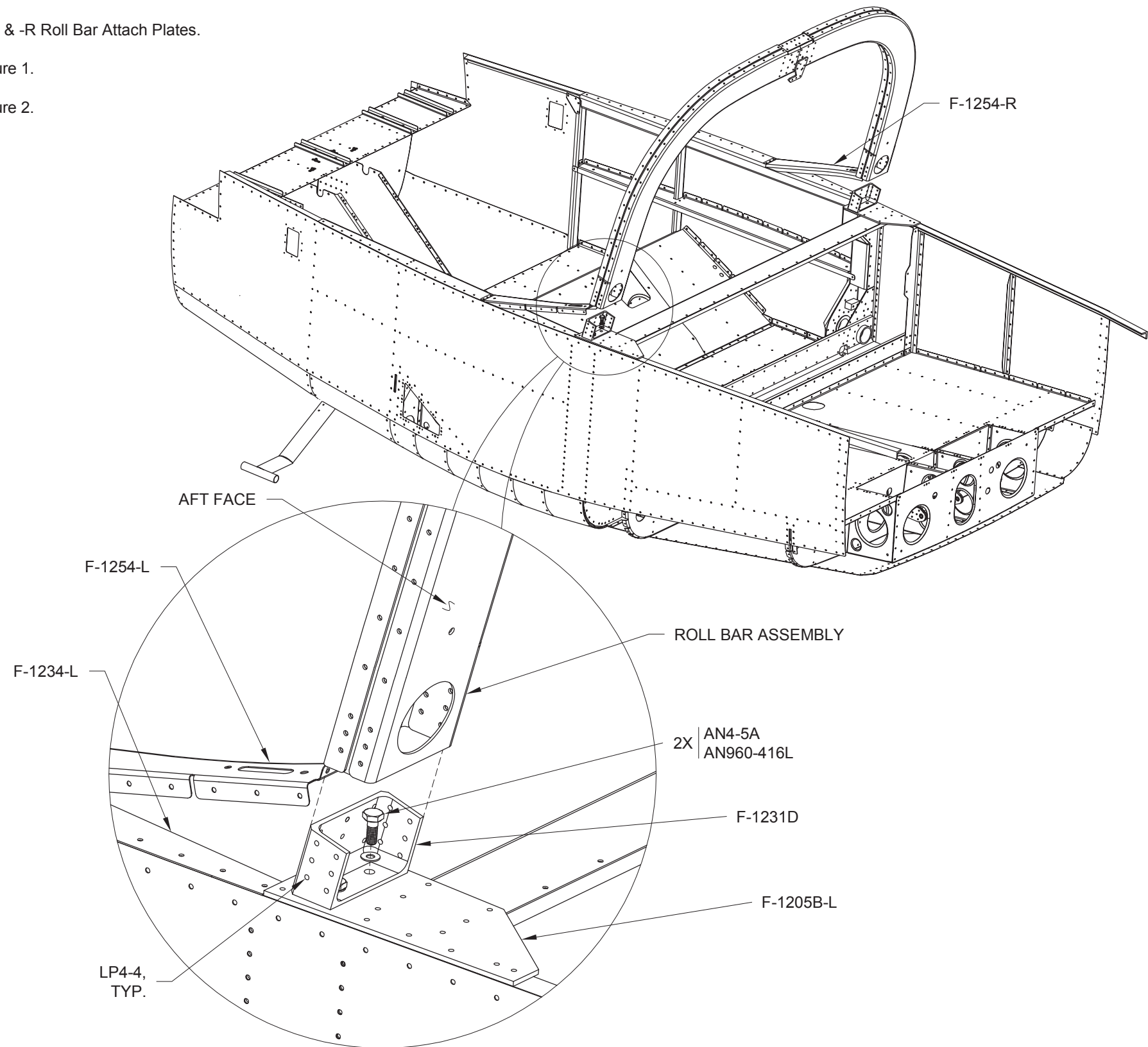


FIGURE 1: INSTALLING THE ROLL BAR ASSEMBLY



Step 1: Cleco the F-1207C-L & -R Baggage Bulkheads to the Tailcone Assembly as shown in Figure 1.

Step 2: Mark a centerline in the forward face of the F-1284-L & -R Shear Clips.

Step 3: Match-Drill #30 the two holes from the F-1207C-L & -R Baggage Bulkheads into the corresponding F-1284-L & -R Shear Clips as called out in Figure 1 (double check that the centerline drawn in Step 2 is centered in the two holes before match-drilling). Remove the bulkheads, clean and deburr holes.

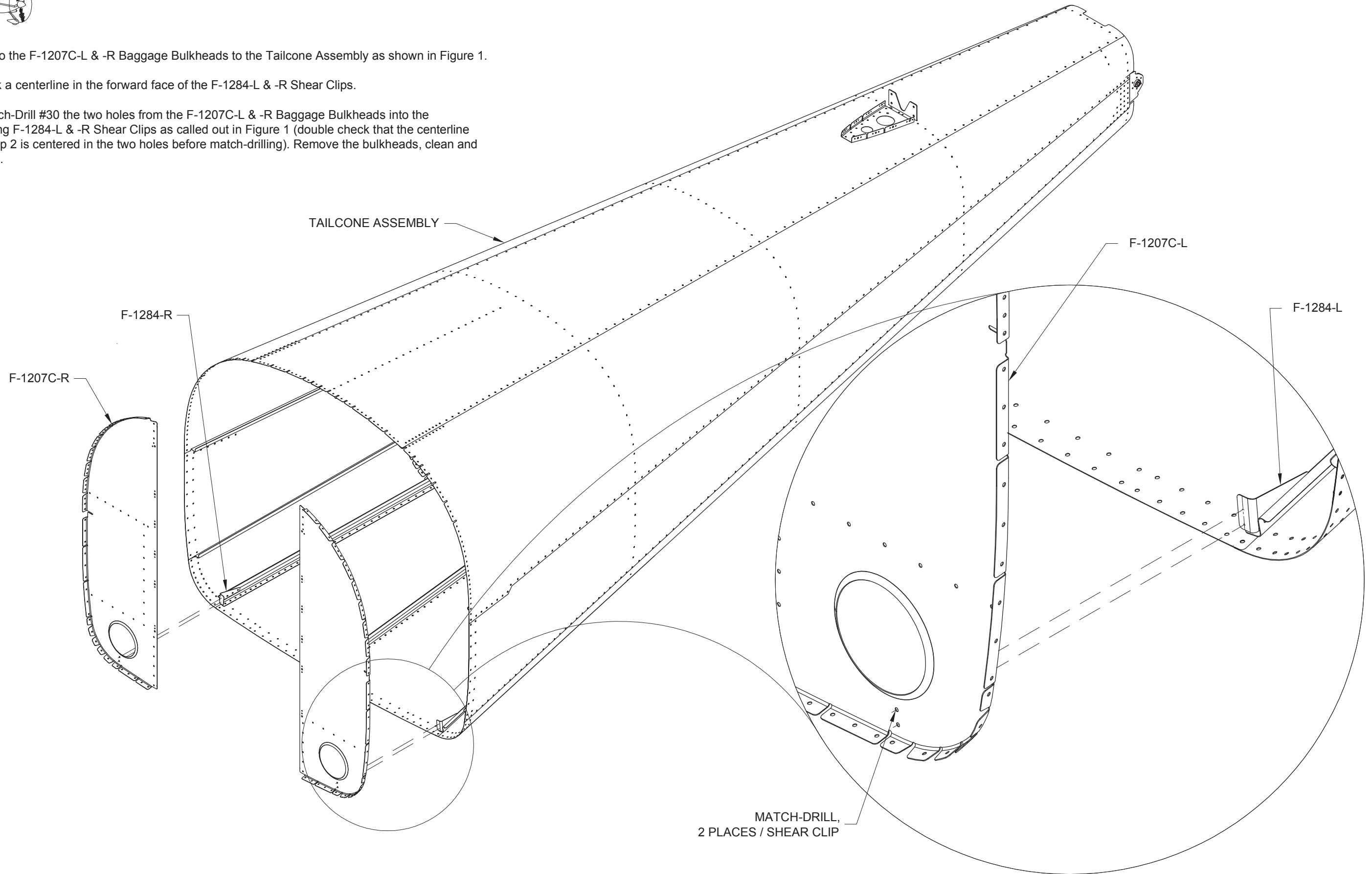
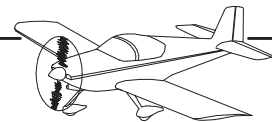


FIGURE 1:
MATCH-DRILLING SHEAR CLIPS



CAUTION: Do not rivet any parts to the fuselage skins in this section!

Step 1: Dimple the nutplate attach holes (flush forward side) in the F-1207A Baggage Bulkhead, F-1207C-L & -R Baggage Bulkheads and F-1207D-L & -R Baggage Bulkhead Channels. See Figure 1.

Step 2: Flute the F-1207C-L & -R Baggage Bulkheads along the three long flanges below the longeron cutout to align the holes in the flanges with the holes in the F-1270 Fuselage Side Skins.

Step 3: Dimple the nutplates used in Figure 1.

Cleco then rivet the nutplates, F-1207A Baggage Bulkhead, F-1207C-L & -R Baggage Bulkheads and F-1207D-L & -R Baggage Bulkhead Channels together then cleco and rivet these parts to the F-1207B Baggage Bulkhead and F-1224-L & -R Baggage Floor as shown in Figure 1.

Step 4: Install the snap bushings into the F-1207D-L Baggage Bulkhead Channel per the callout in Figure 1.

Step 5: Cleco then rivet the F-1232A Roll Bar Brace to the F-1232B-L & -R Roll Bar Brace Brackets.

Cleco this assembly to the Roll Bar Assembly and the F-1207A Baggage Bulkhead.

Machine countersink the rivet holes in the upper side of the roll bar brace that attach to the Roll Bar Assembly.

Rivet the assembly to the Roll Bar Assembly and the baggage bulkhead per the callouts in Figure 1.

Step 6: Cleco then rivet the F-1207K Brace Angle to the F-1207C-R Baggage Bulkhead except the second hole from the inboard end that is also common to the F-1207J Attach Angle as shown in Figure 1 and Page 24-06, Figure 1.

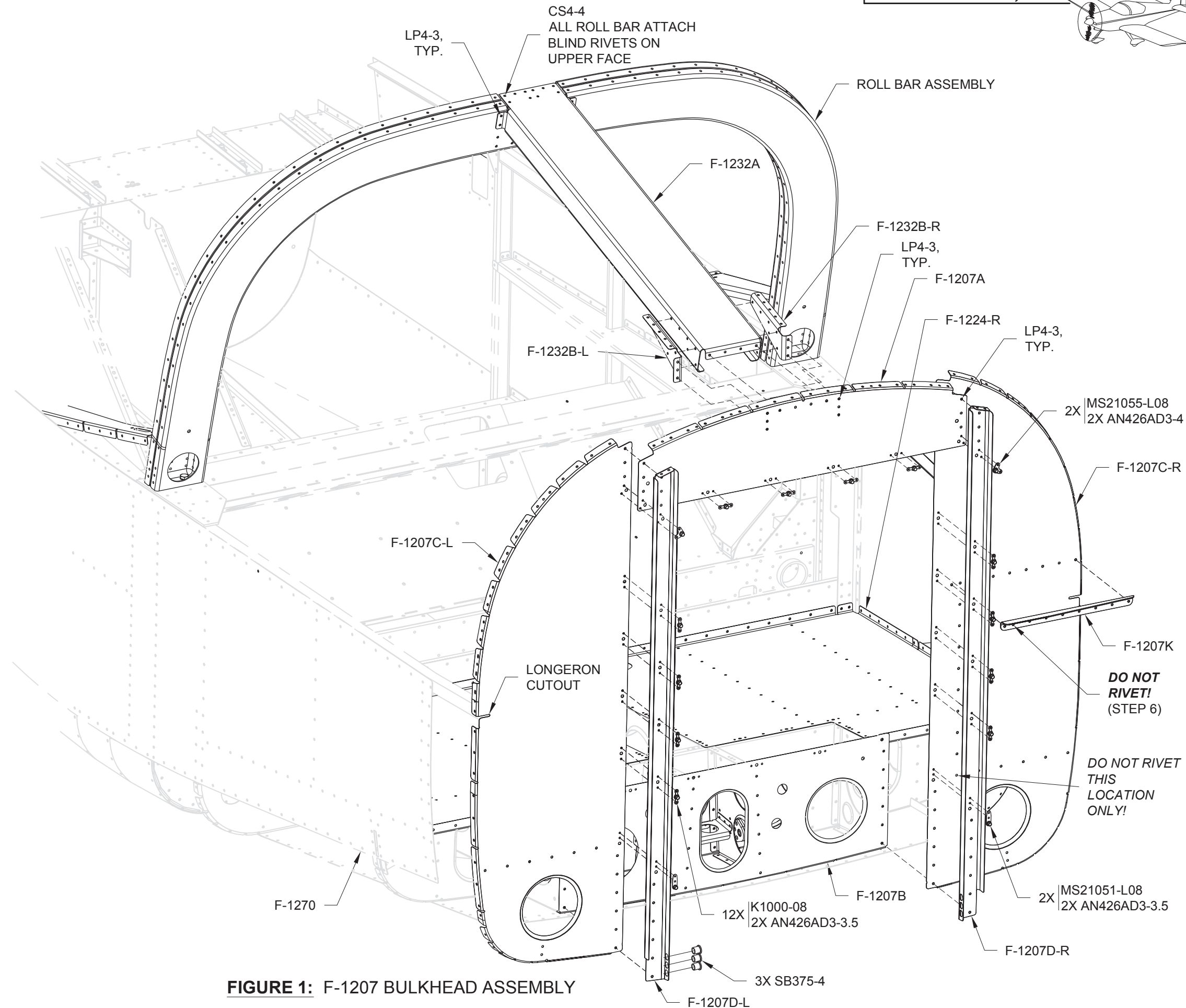


FIGURE 1: F-1207 BULKHEAD ASSEMBLY



Step 1: Machine countersink the nutplate attach holes in the top of the F-1207J Attach Angle.

Step 2: Rivet the nutplate shown in Figure 1 to the top of the F-1207J Attach Angle.

Step 3: Cleco then rivet the F-1207J Attach Angle to the F-1207C-R Baggage Bulkhead, F-1207K Brace Angle and F-1224-R Baggage Floor except as shown in Figure 1.

Step 4: Rivet the F-1254-L & -R Support Frames to the Roll Bar Assembly and F-1234-L & -R Canopy Decks.

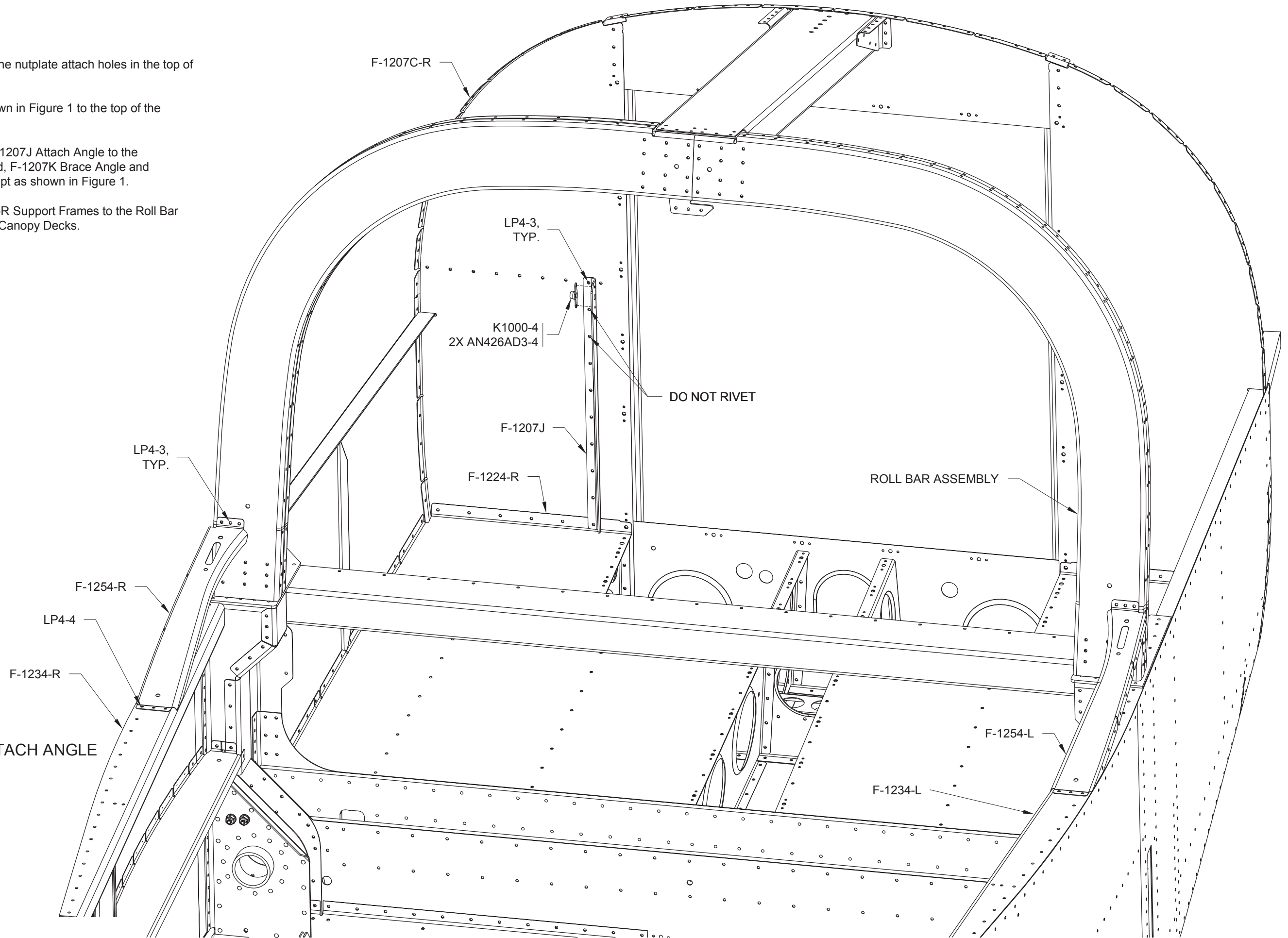


FIGURE 1: TANK ATTACH ANGLE