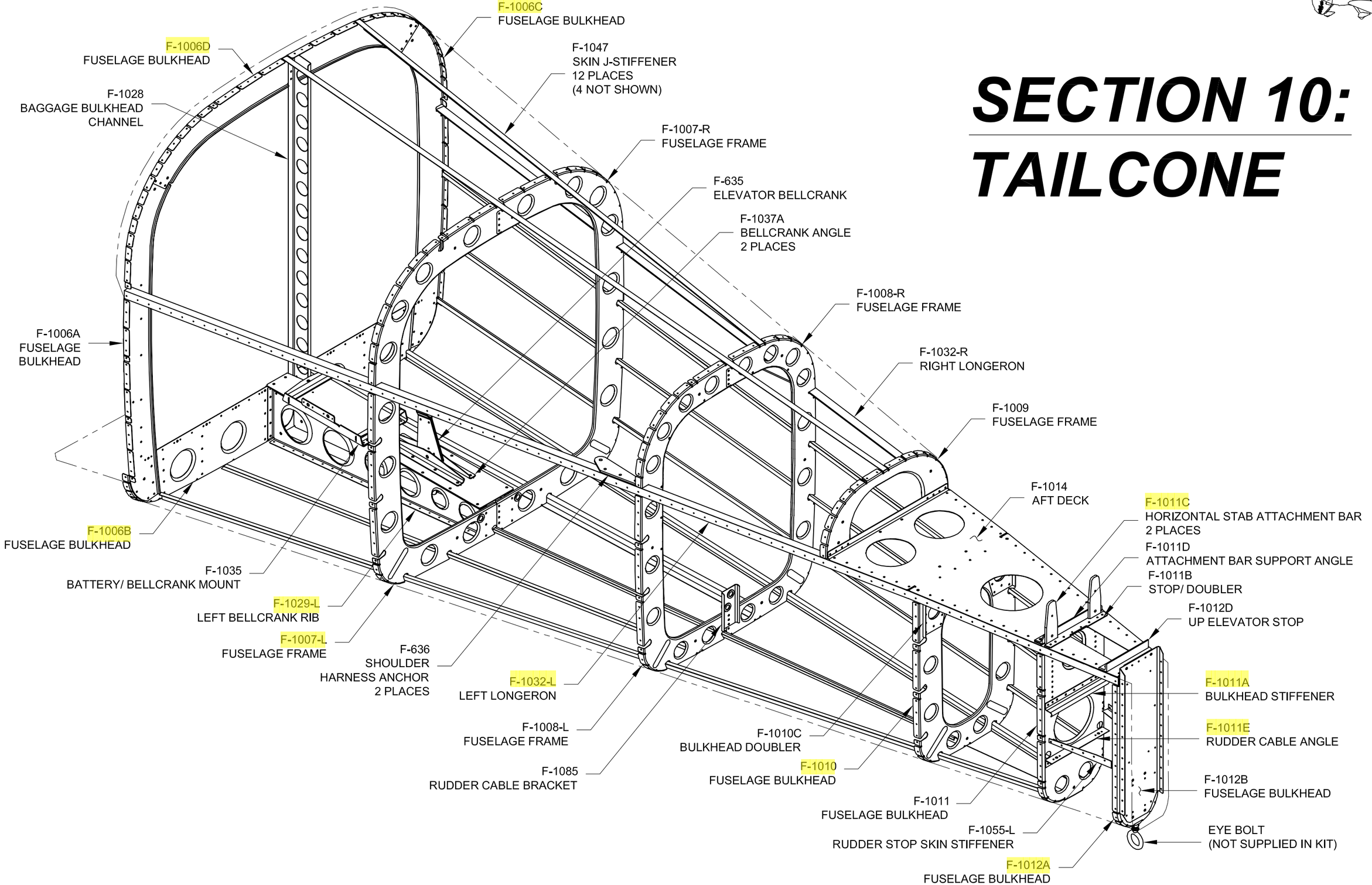
SECTION 10: TAILCONE



Step 1: Make the F-1012E Tie Down Bar from the length of AEX TIE DOWN X 7.500 provided in the kit. Trim to size, then tap as shown in Figure 1.

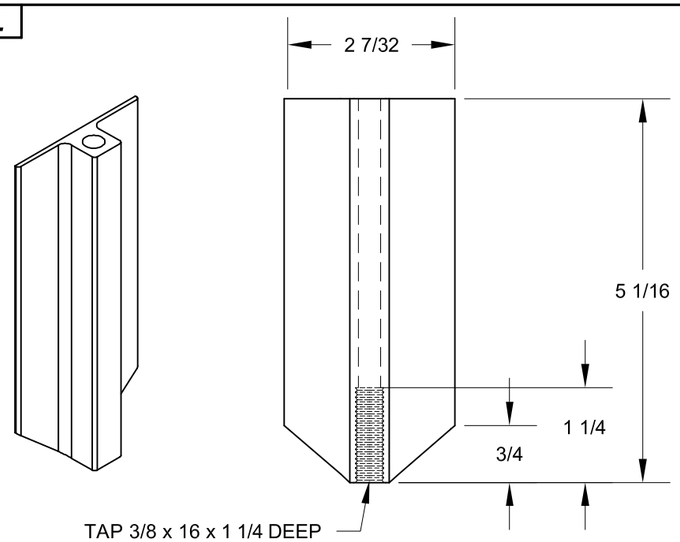


FIGURE 1: F-1012E TIE DOWN BAR

Step 2: Remove the vinyl from the F-1012A & B Fuselage Bulkheads, deburr, then cleco them together as shown in Figure 2. However, don't install any clecos in the holes that are associated with the F-1012E Tie Down Bar.

Step 3: Draw lines along the top and side of the aft face of the F-1012E Tie Down Bar using the dimensions in Figure 2.

Center these lines in the appropriate holes in the F-1012A & B Fuselage Bulkheads then clamp the tie down bar into position.

Match-Drill the four 3/32" holes of the bulkheads into the tie down bar with a #30 drill, cleco these holes, then match-drill the 3/16" holes with a 3/16" drill.

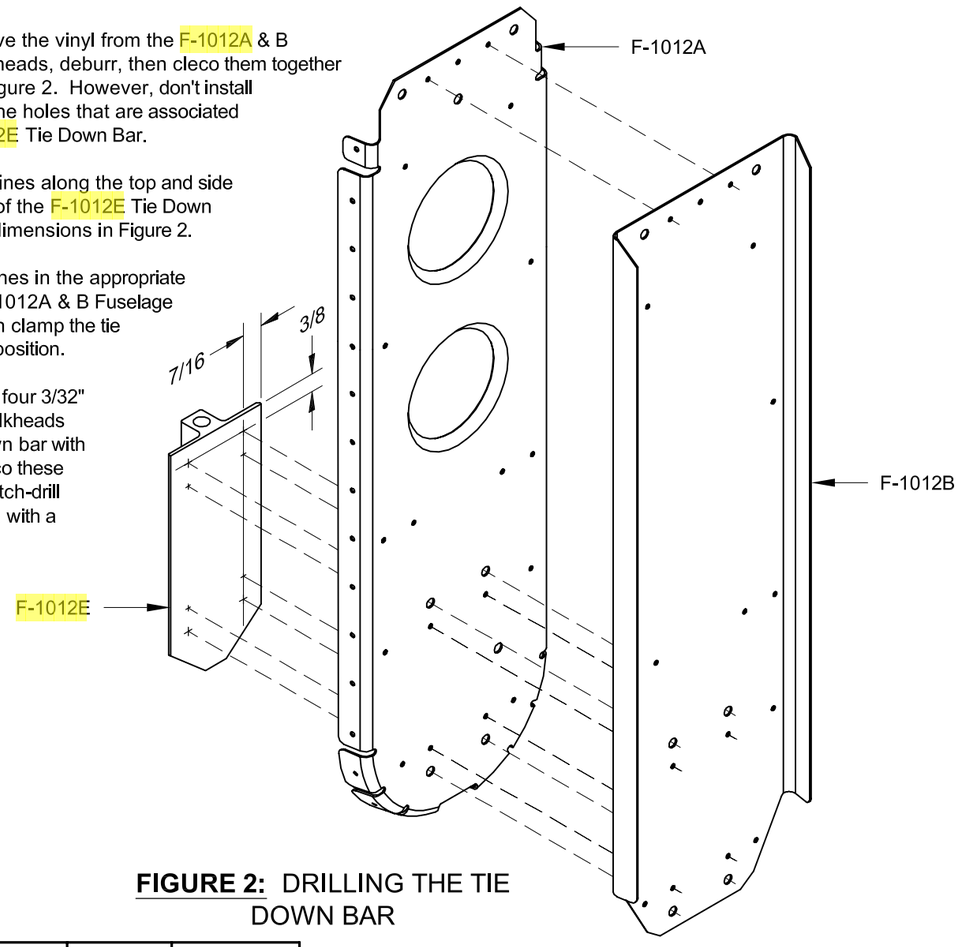


FIGURE 2: DRILLING THE TIE DOWN BAR

Step 4: Make the F-1011E Rudder Cable Angle, as shown in Figure 3, from the length of AA6-063 x 3/4 x 3/4 provided in the kit.

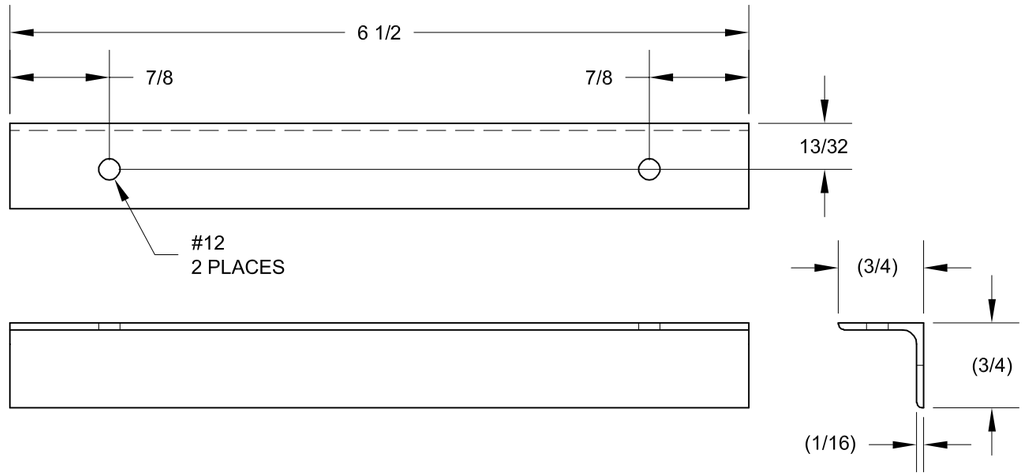


FIGURE 3: F-1011E RUDDER CABLE ANGLE

Step 5: Match-Drill the nutplate rivet holes into the F-1011E Rudder Cable Angle as shown in Figure 4. The nutplates can be temporarily held in place with AN3 bolts while the holes are drilled. Match-Drill one rivet hole and cleco it before drilling the second. This will prevent the nutplate from rotating before the second hole is match-drilled.

Machine countersink the rivet holes in the rudder cable angle for 3/32" flush rivets. Do not rivet the nutplates into place yet.

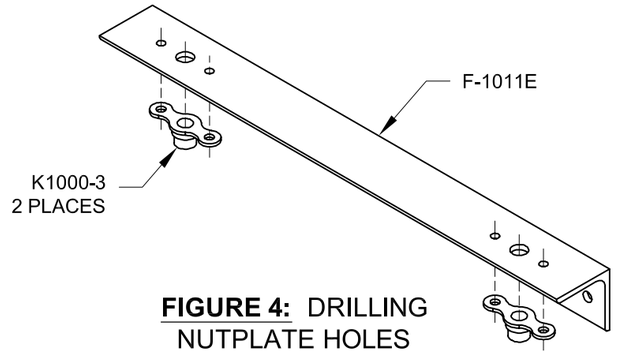


FIGURE 4: DRILLING NUTPLATE HOLES

Step 6: Cut the F-1011A Bulkhead Stiffener, using the dimension shown in Figure 5, from one of the six foot lengths of J-channel provided in the kit. Deburr the edges.

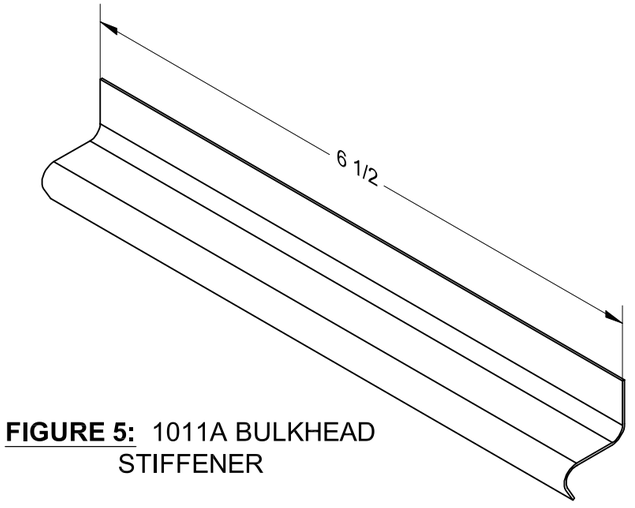


FIGURE 5: 1011A BULKHEAD STIFFENER

NOTE: The two F-1011C Horizontal Stabilizer Attachment Bars are most likely bowed due to the punching operation used during their manufacture. This bow will have to be removed.

Step 1: Place one of the F-1011C Horizontal Stabilizer Attachment Bars in a padded vice (padded with wood, aluminum, plastic, ...) near one of the ends. Pre load the free end of the attachment bar in the direction required to straighten it and, using a rubber mallet, firmly strike the bar one time near the vice. Slide the bar further into the vice, pre load, and strike the bar again. Repeat this sequence until the bar is straight within a 1/16" along its entire length.

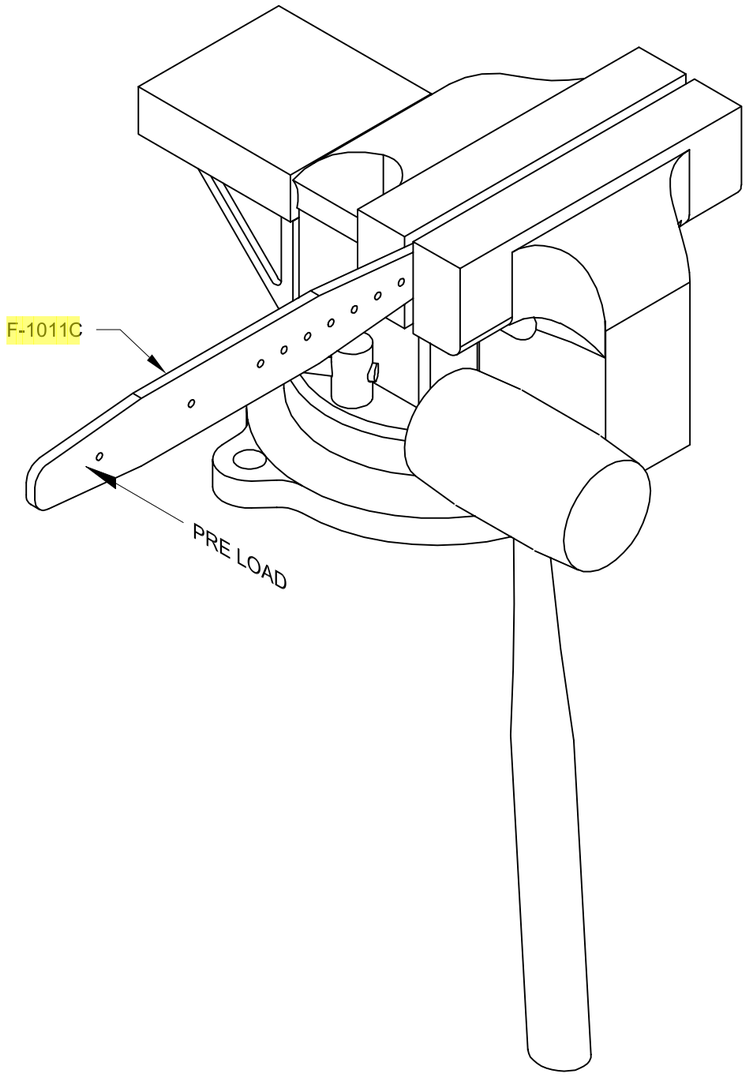


FIGURE 1: STRAIGHTENING THE HORIZONTAL STABILIZER ATTACHMENT BARS

Step 2: Finish the edges of the two F-1011C Horizontal Stabilizer Attachment Bars, then cleco them to the front of the F-1011 Bulkhead as shown in Figure 2. Except for the bottom hole in each attachment bar (the hole shared with the F-1011A Bulkhead Stiffener), final-drill the holes common to the attachment bar and bulkhead using a #30 drill.

Step 3: Place the F-1011A Bulkhead Stiffener on the back of the F-1011 Bulkhead as shown in Figure 2. Center the stiffener between the sides of the bulkhead with the top of the stiffener flange a quarter inch above the holes in the bulkhead as depicted in Figure 3.

Clamp the stiffener in place, then match-drill the holes of the bulkhead (and the bottom hole in the F-1011C Attachment Bars) into the stiffener with a #30 drill. Install clecos while drilling.

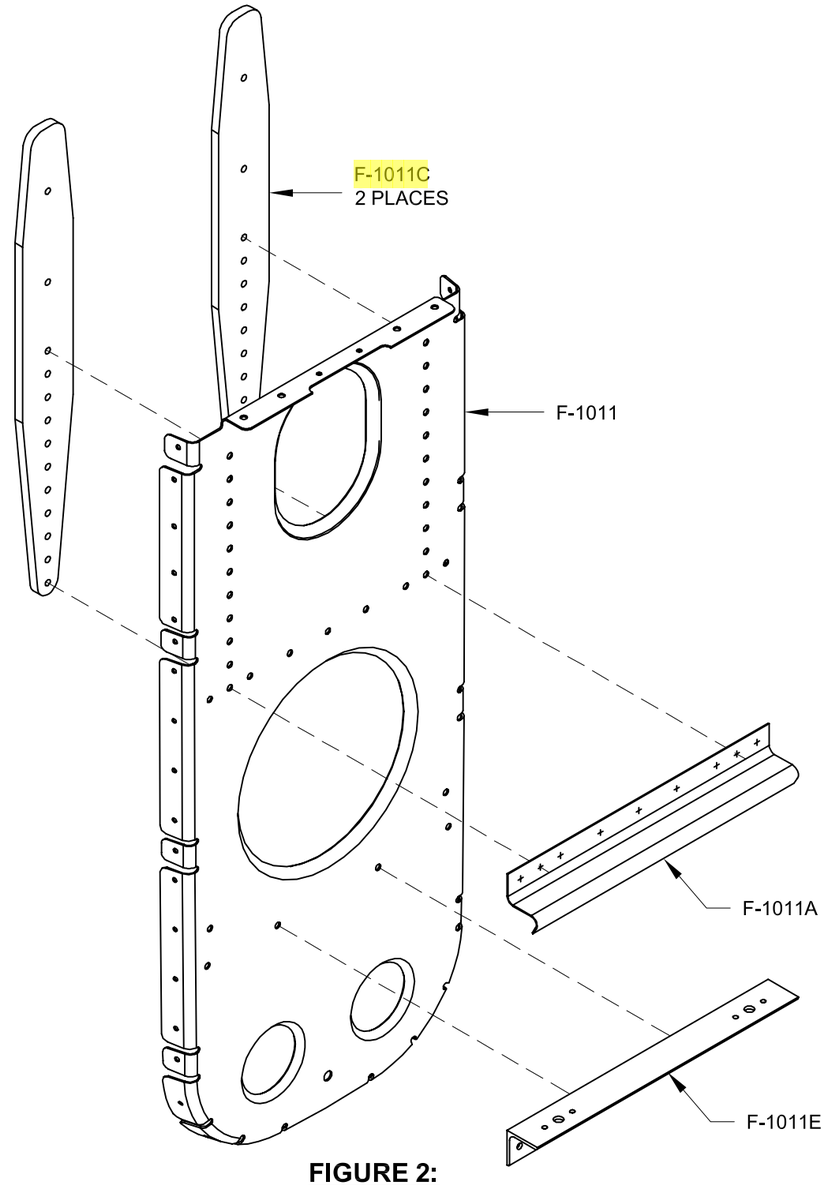


FIGURE 2:
POSITIONING F-1011 BULKHEAD PARTS

Step 4: Drill the two 1/8" holes indicated in Figure 3 to 5/8" using a Unibit step drill.

Step 5: Repeat Step 3 for locating and drilling the four holes used to attach the F-1011E Rudder Cable Angle. The top of the rudder cable angle is located 7/16" above the holes in the F-1011 Bulkhead as shown in Figure 3.

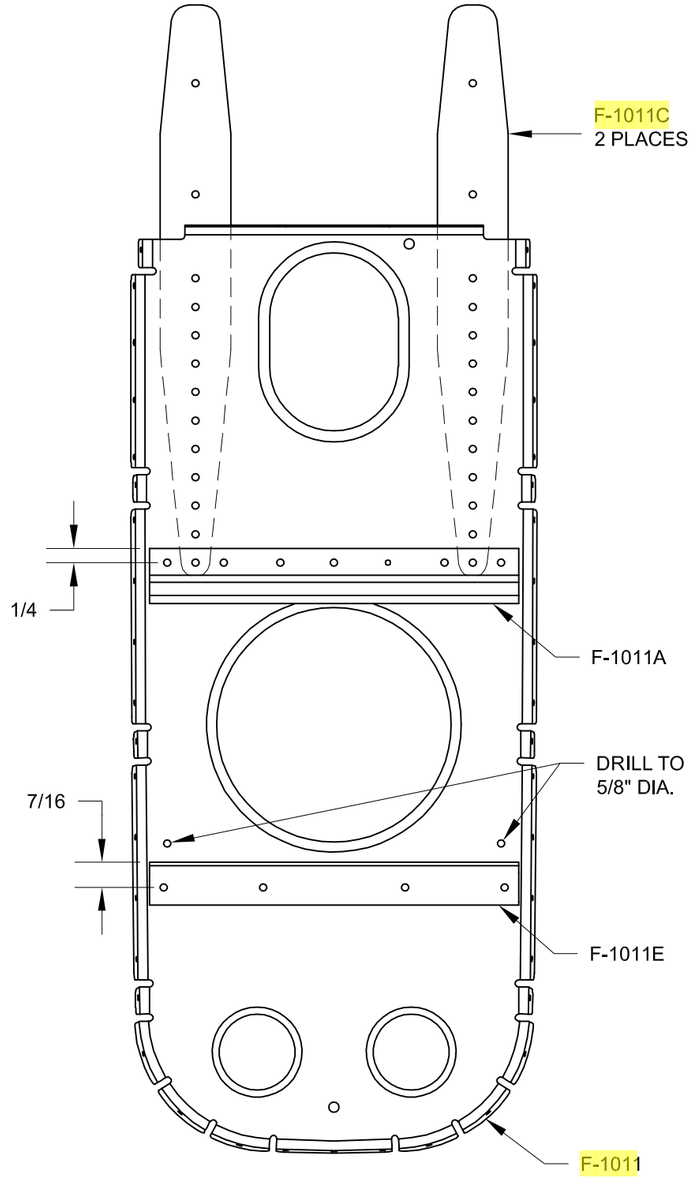


FIGURE 3: POSITIONING F-1011 BULKHEAD PARTS

Step 1: Make the F-1010A Horizontal Stabilizer Attachment Angle from the length of AA6-125X1X1 angle supplied in the kit and the dimensions in Figure 1.

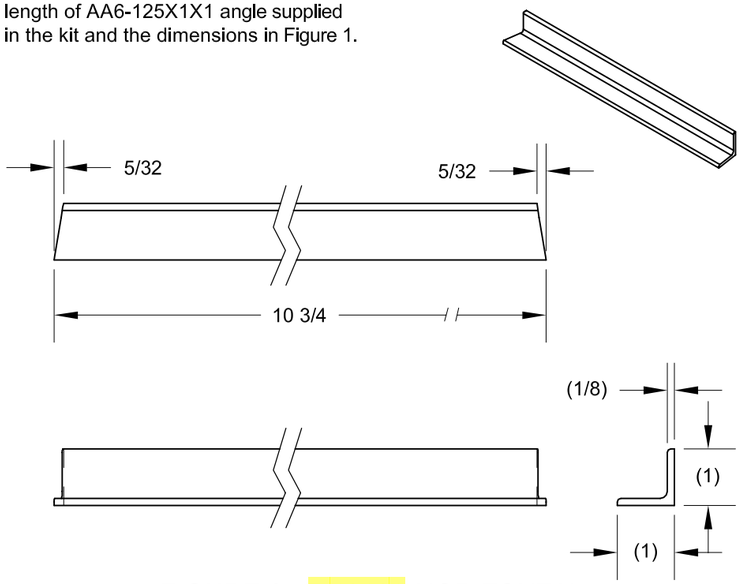


FIGURE 1: F-1010A HORIZONTAL STABILIZER ATTACHMENT ANGLE

Step 2: Separate the F-1010C Bulkhead Doubler into left and right parts by removing the shaded areas shown in Figure 2.

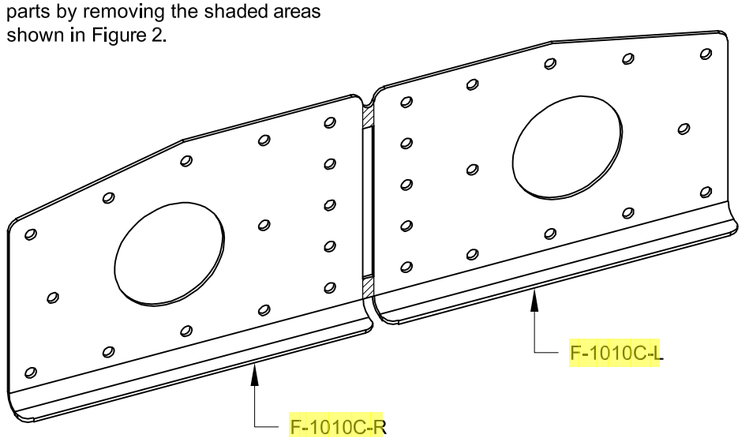


FIGURE 2: SEPARATING THE F-1010C BULKHEAD DOUBLER

Step 3: Deburr the F-1010 Bulkhead, then cleco in place the F-1010C-L & -R Bulkhead Doublers as shown in Figure 3. Do not place any clecos in the top row of holes.

Step 4: Position the F-1010A Horizontal Stabilizer Attachment Angle on the front side of the F-1010 Bulkhead as shown in Figure 3. Center the angle between the side flanges of the bulkhead, place the top flange of the angle an 1/8" above the top edge of the bulkhead as shown in the blowup, then clamp the angle to the bulkhead and to the F-1010C-L & -R Bulkhead Doublers.

Match-Drill the top row of holes (thirteen holes) in the bulkhead and bulkhead doublers into the angle with a #30 drill. Install clecos while drilling.

Step 5: Final-Drill #30 the remaining holes common between the F-1010 Bulkhead and F-1010C-L & -R Bulkhead Doublers.

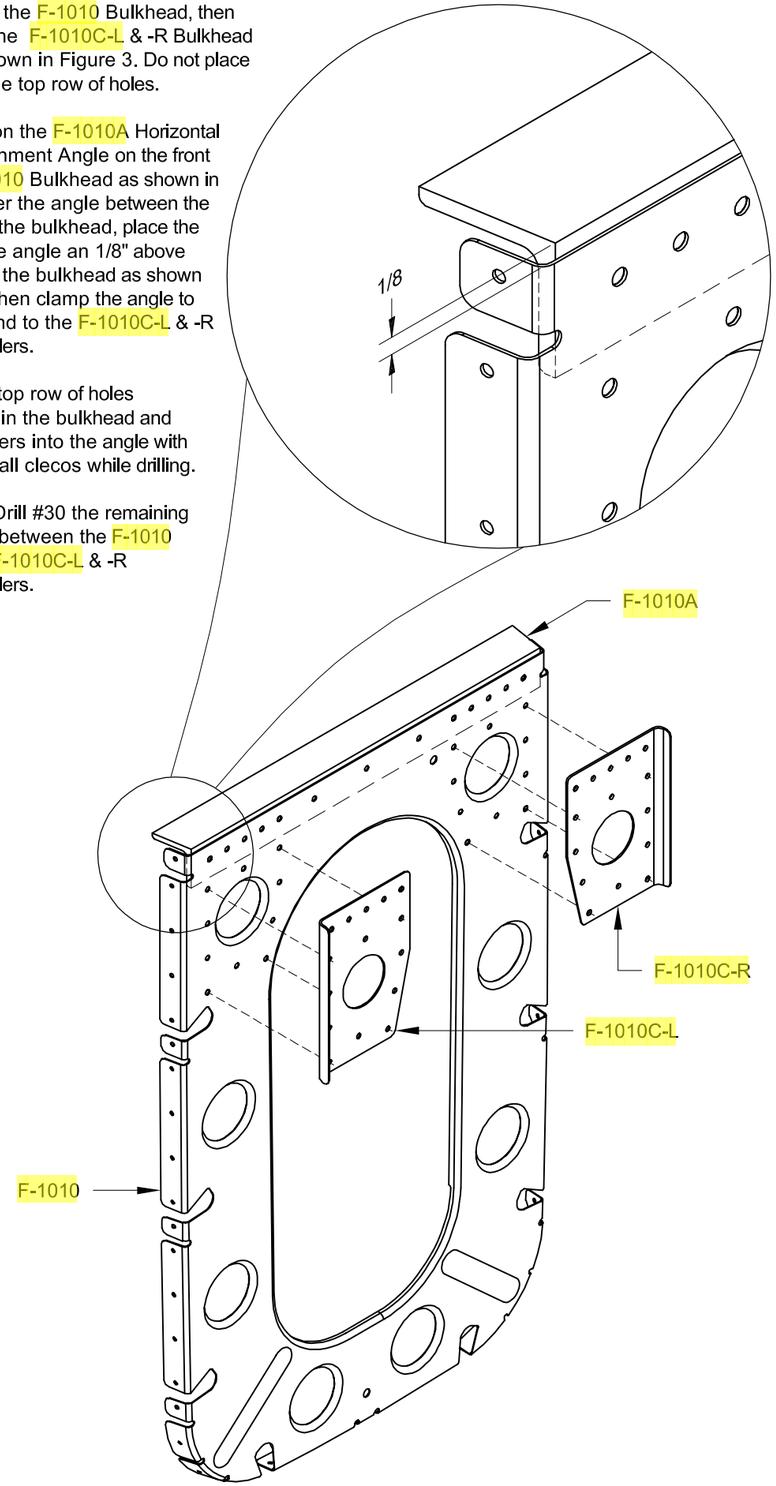


FIGURE 3: DRILLING THE HORIZONTAL STABILIZER ATTACHMENT ANGLE

Step 3: Deburr and flute (if necessary) the F-1008-L & -R Frames, then cleco them and the F-1085 Rudder Cable Bracket together as shown in Figure 3. Note that the left frame is positioned in front of the right.

Final-Drill the common holes of the three parts using a #30 drill.

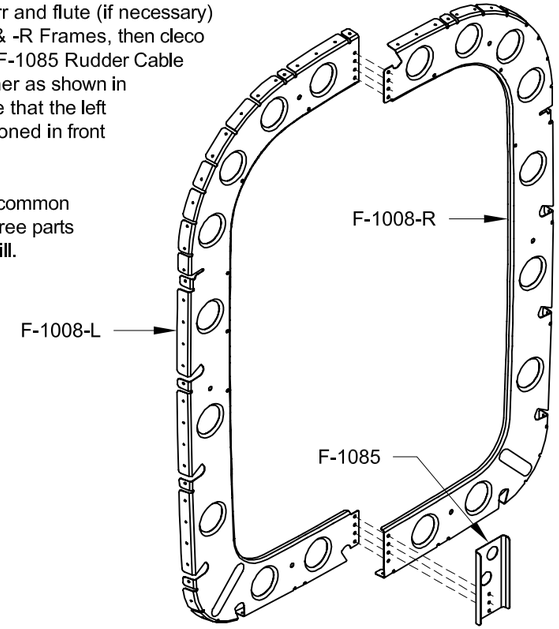


FIGURE 4: ASSEMBLING THE F-1008 FRAME

Step 4: Deburr and flute the F-1007-L & -R Frames, then cleco them together as shown in Figure 4. Again, the left frame is positioned in front of the right.

Final-Drill the common holes using a #30 drill.

Step 5: Final-Drill the two 3/16" holes, indicated in Figure 4, to 5/8" using a Unibit step drill.

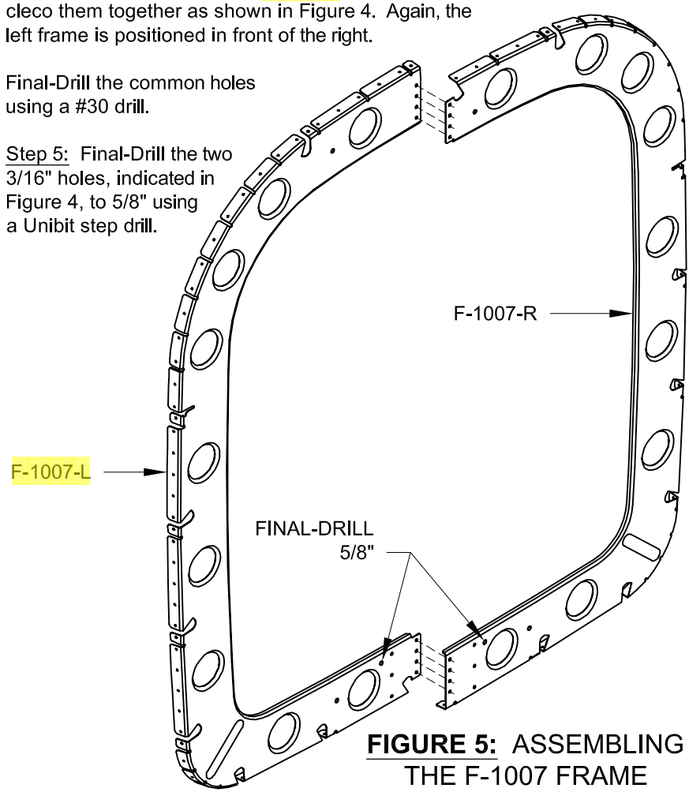


FIGURE 5: ASSEMBLING THE F-1007 FRAME