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 vise (plastic, aluminum, plastic, ... ) near one of the ends. Pre-bend 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 vise. Slide the bar further into the vise, pre-load, and strike the bar again. Repeat this sequence until the bar is straight within a 1/16" along its entire length.

Step 2: Finish the edges of the two F-1011C Horizontal Stabilizer Attachment Bars, then chase 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), finish-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.

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.
Step 1: Make the F-1010A Horizontal Stabilizer Attachment Angle from the length of A46-129X1X1 angle supplied in the kit and the dimensions in Figure 1.

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

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-1019 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.

Step 5: Match-Drill the top row of holes (thirteen holes) in the bulkhead and bulkhead doubler into the angle with a #30 drill. Install clecos while drilling.

Step 6: Final-Drill #30 the remaining holes common between the F-1010 Bulkhead and F-1010C-L & -R Bulkhead Doublers.

Step 3: Deburr and flute (if necessary) the F-1008L & -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 1: F-1010A HORIZONTAL STABILIZER ATTACHMENT ANGLE

FIGURE 2: SEPARATING THE F-1010C BULKHEAD DOUBLER

FIGURE 3: DRILLING THE HORIZONTAL STABILIZER ATTACHMENT ANGLE

FIGURE 4: ASSEMBLING THE F-1008 FRAME

FIGURE 5: ASSEMBLING THE F-1007 FRAME