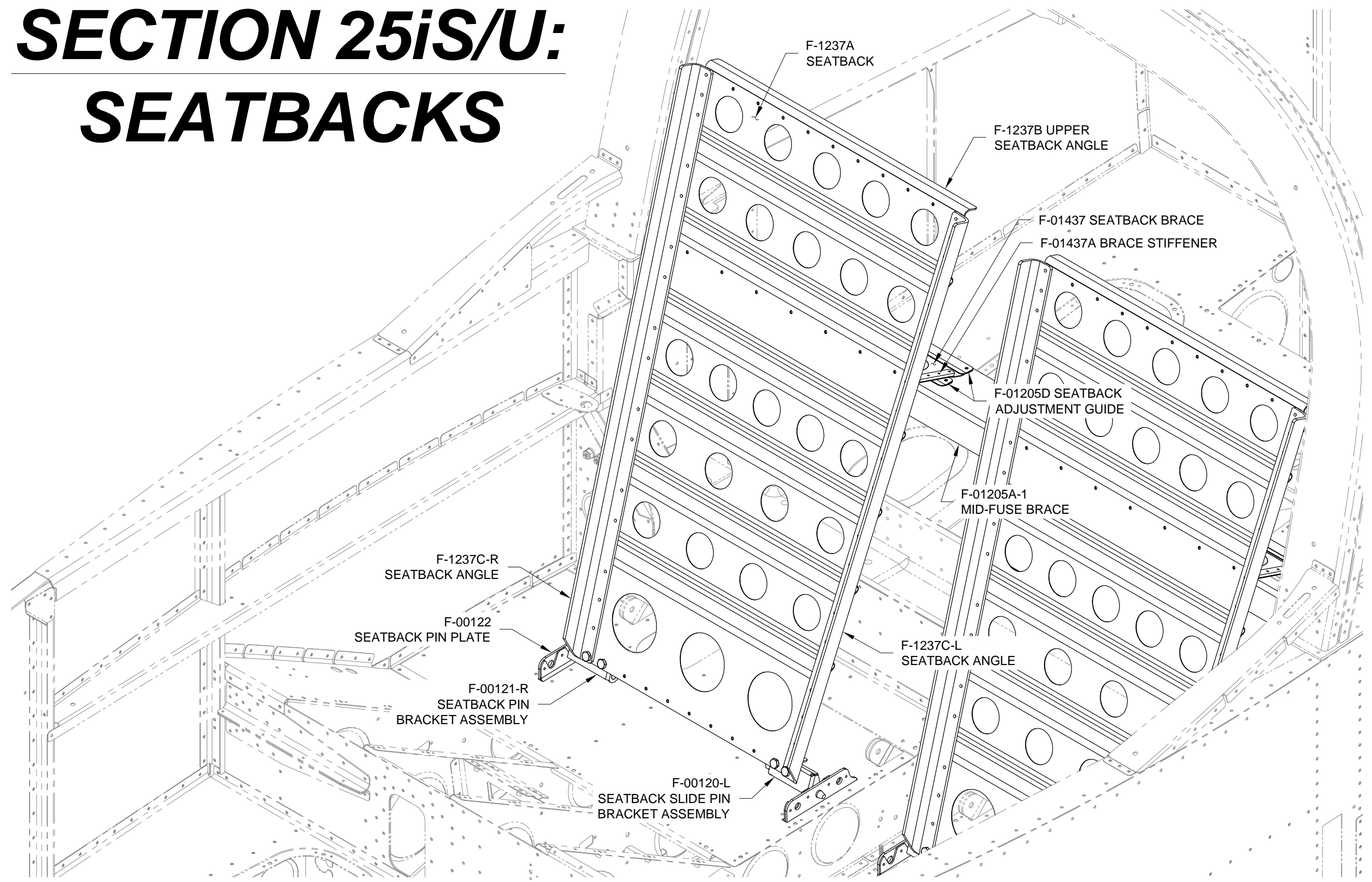


# SECTION 25iS/U: SEATBACKS



F-1237A  
SEATBACK

F-1237B UPPER  
SEATBACK ANGLE

F-01437 SEATBACK BRACE

F-01437A BRACE STIFFENER

F-01205D SEATBACK  
ADJUSTMENT GUIDE

F-01205A-1  
MID-FUSE BRACE

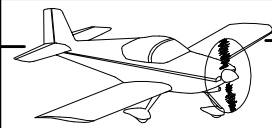
F-1237C-R  
SEATBACK ANGLE

F-00122  
SEATBACK PIN PLATE

F-00121-R  
SEATBACK PIN  
BRACKET ASSEMBLY

F-00120-L  
SEATBACK SLIDE PIN  
BRACKET ASSEMBLY

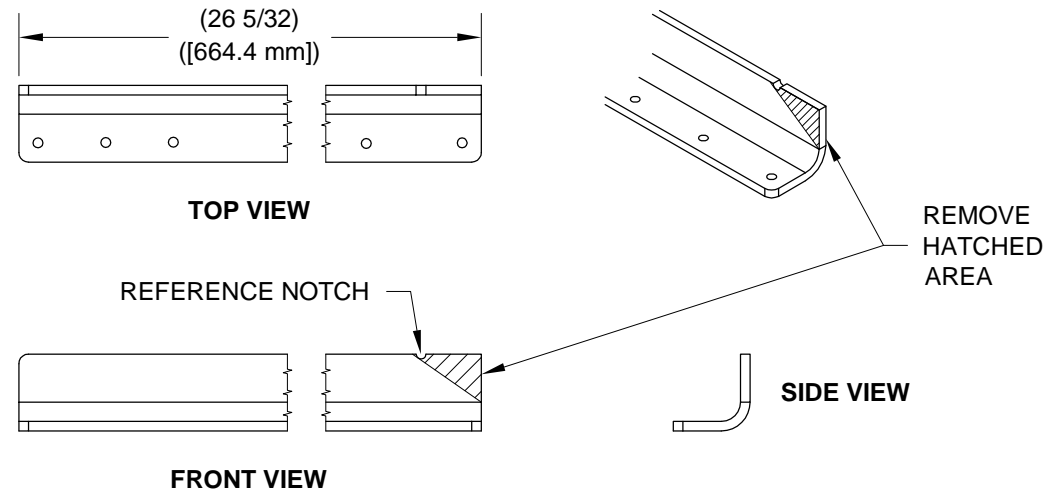
F-1237C-L  
SEATBACK ANGLE



**NOTE:** Except where separate instructions and/or figures exist for both left and right sides of the aircraft, only the left side parts, assemblies, or installations will be shown.

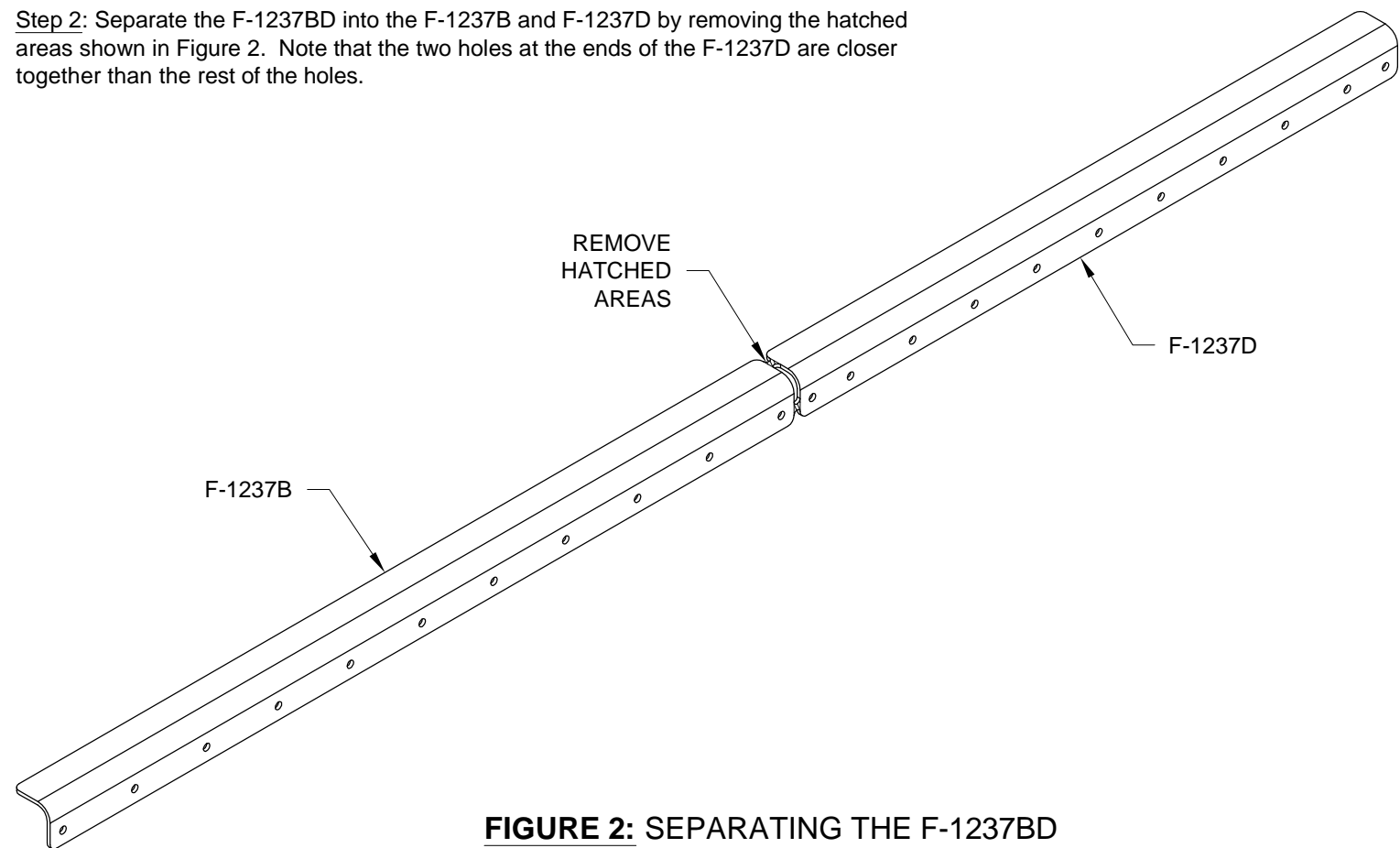
It is the builder's choice as to whether to complete all steps for the left side before repeating those steps for the right side, or to complete each step for both left and right sides before moving to the next step.

**Step 1:** Remove the hatched area from lower end of the F-1237C-L and F-1237C-R as shown in Figure 1. Deburr the edges.



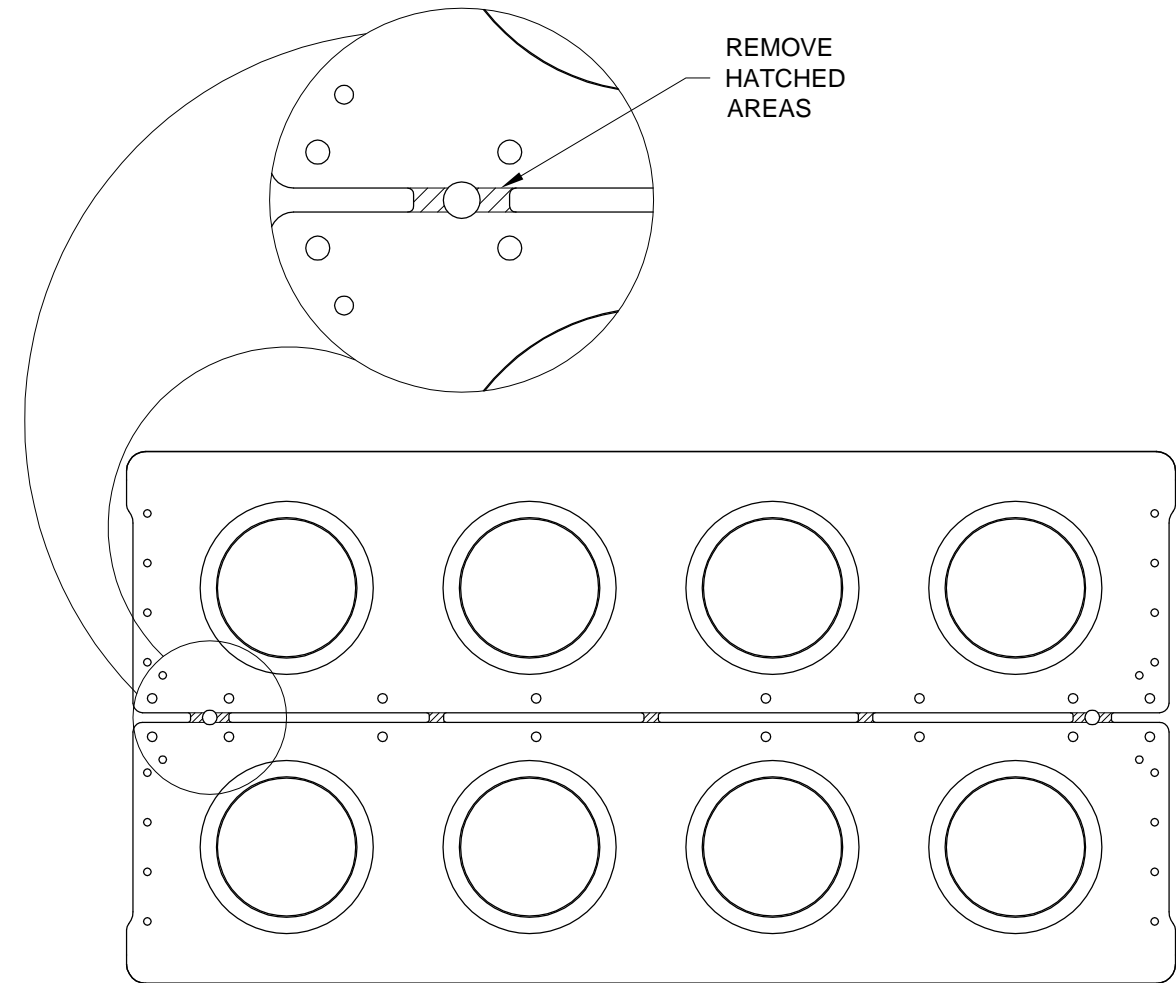
**FIGURE 1:** TRIMMING THE F-1237C-L & -R  
(F-1237C-L SHOWN)

**Step 2:** Separate the F-1237BD into the F-1237B and F-1237D by removing the hatched areas shown in Figure 2. Note that the two holes at the ends of the F-1237D are closer together than the rest of the holes.

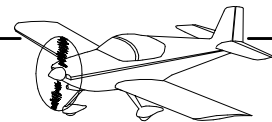


**FIGURE 2:** SEPARATING THE F-1237BD

**Step 3:** Separate the F-01437 into individual parts by removing the hatched areas shown in Figure 3.



**FIGURE 3:** SEPARATING THE F-01437

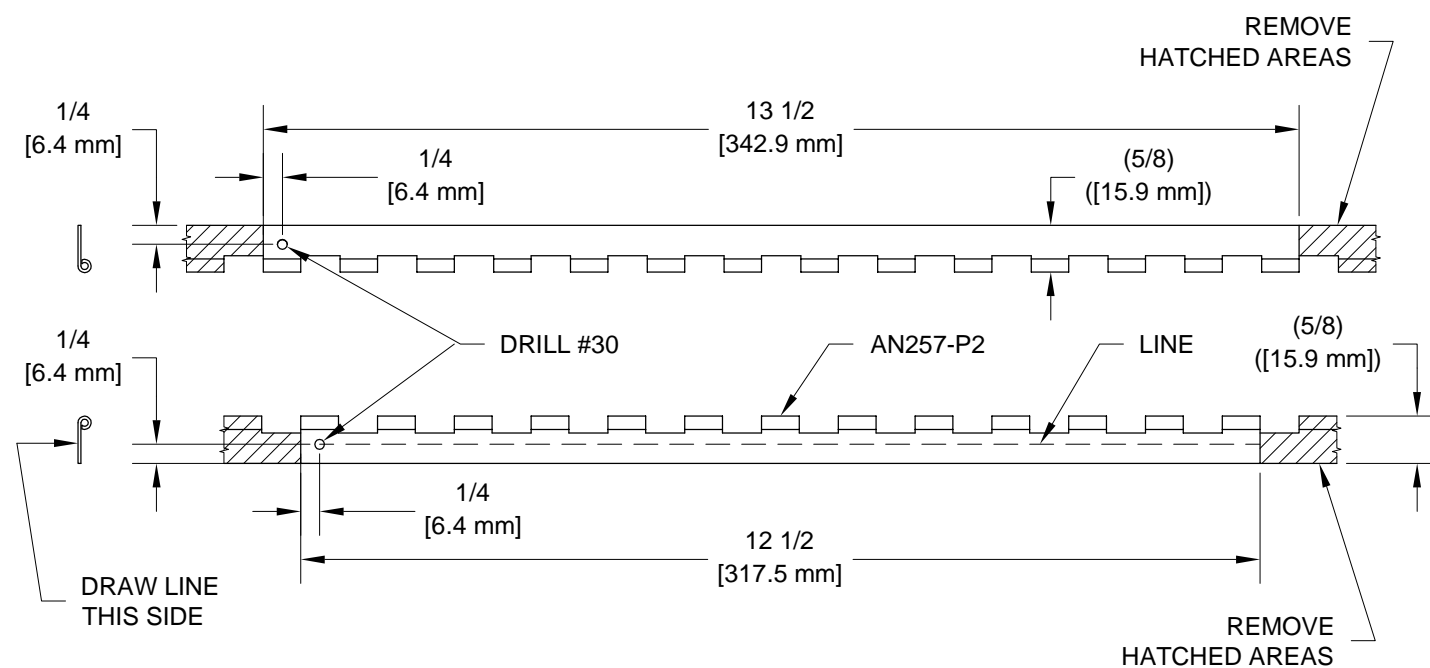


Step 1: Remove the hinge pin from an AN257-P2 hinge. Retain the hinge pin for use later in this section.

Step 2: Fabricate the F-1237F from the two AN257-P2 hinge halves using the dimensions given in Figure 1.

Step 3: Drill #30 one locating hole in each half of the F-1237F using the dimensions given in Figure 1.

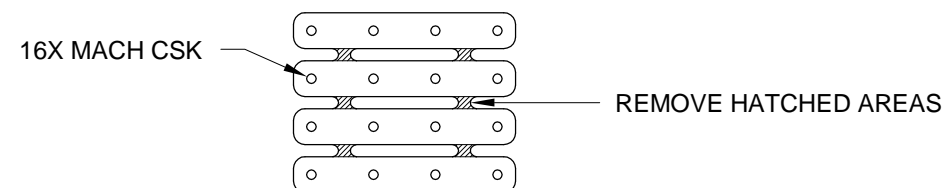
Step 4: Draw a line on the 12 1/2 [317.5 mm] half of the F-1237F as shown in Figure 1.



**FIGURE 1: FABRICATING THE F-1237F**

Step 5: Machine countersink one side of the F-01437A for AN426AD3 rivets as indicated in Figure 2.

Step 6: Separate the F-01437A into four individual parts by removing the hatched areas shown in Figure 2.



**FIGURE 2: MACHINE COUNTERSINKING AND SEPARATING THE F-01437A**

Step 7: Cleco the locating hole in the 13 1/2 [342.9 mm] half of the F-1237F to the F-01437, then align the parts parallel and firmly clamp them together. See Figure 3.

Step 8: Match-Drill #30 the holes in the F-01437 into the F-1237F. Cleco each hole as it is drilled and continue to verify that the parts remain parallel to each other as drilling progresses.

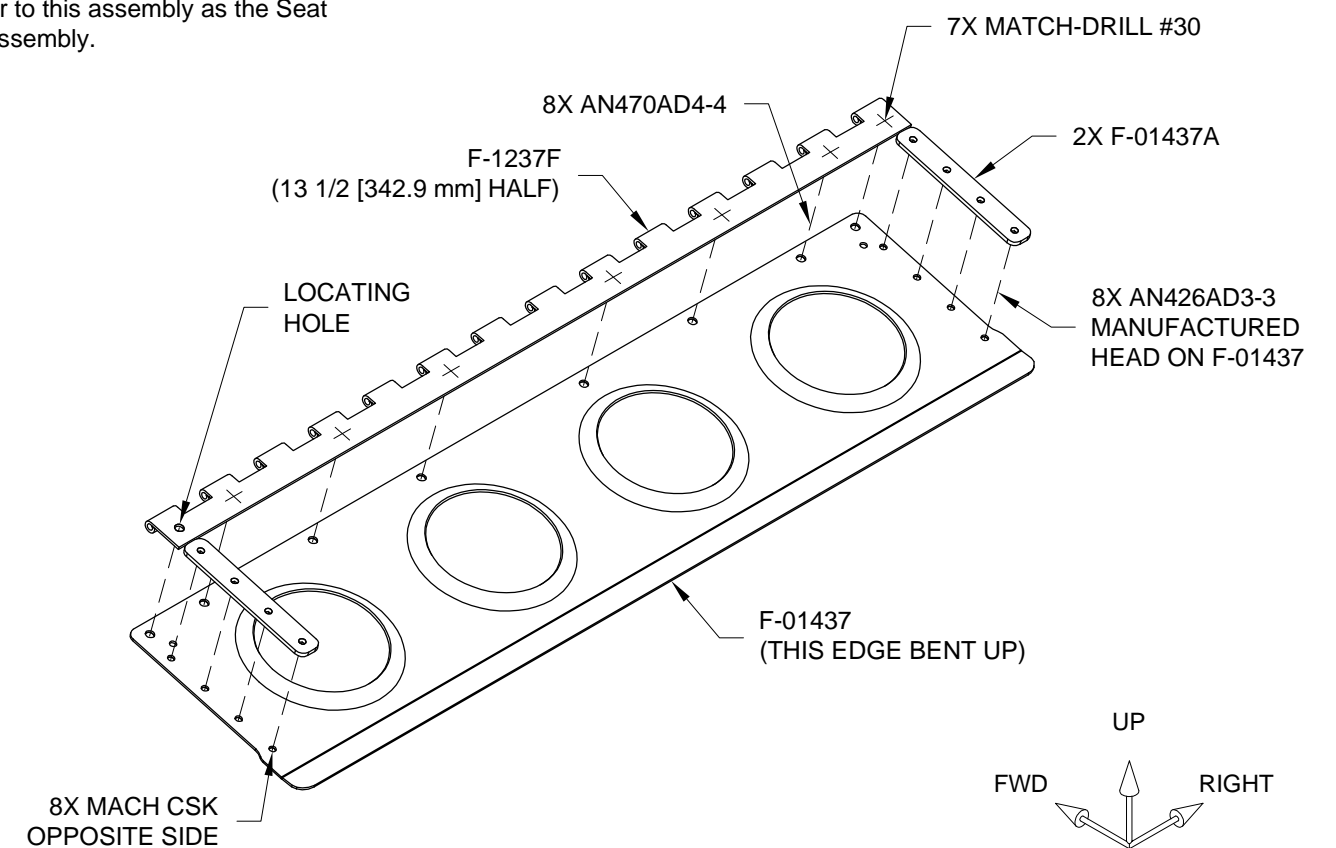
Step 9: Cleco two F-01437A to the F-01437, then machine countersink the F-01437 for double flush rivets.

Step 10: Mark the F-1237F and F-01437A so that they can be reassembled in their original configuration.

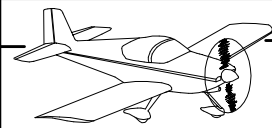
Disassemble and deburr the holes.

Step 11: Cleco, then rivet the F-01437A and the 13 1/2 [342.9 mm] half of the F-1237F to the F-01437 as shown in Figure 3. Place the manufactured heads of the rivets on the F-01437.

Hereafter refer to this assembly as the Seat Back Brace Assembly.



**FIGURE 3: SEAT BACK BRACE ASSEMBLY**



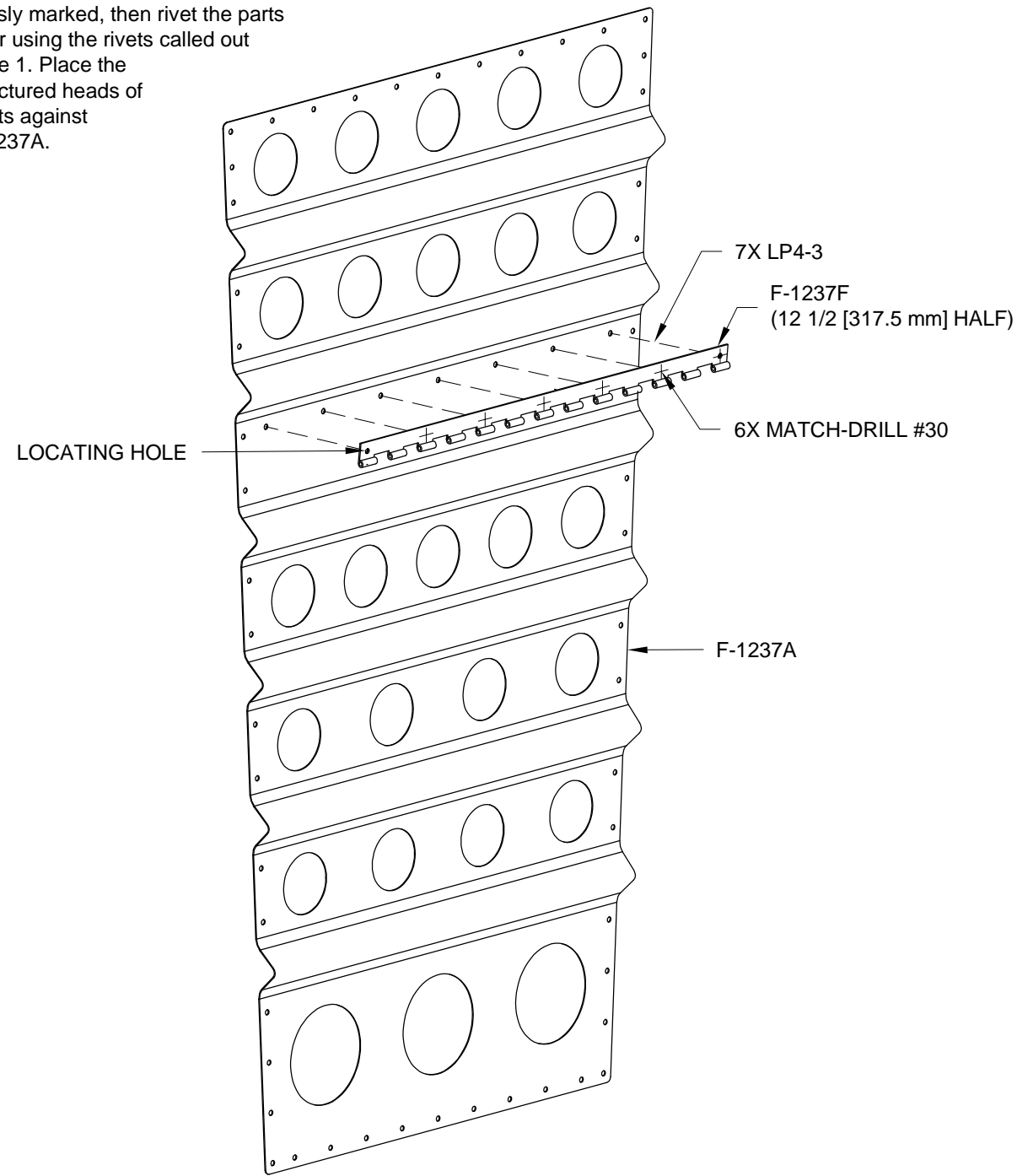
**Step 1:** Cleco the locating hole in the 12 1/2 [317.5 mm] half of the F-1237F to the F-1237A. See Figure 1. Center the line drawn on the F-1237F with the holes in the F-1237A, then firmly clamp the parts together.

**Step 2:** Match-Drill #30 the holes in the F-1237A into the F-1237F. Cleco each hole as it is drilled and continue to verify that the line on the F-1237F remains centered on the holes in the F-1237A as drilling progresses.

**Step 3:** Mark the F-1237F and F-1237A so that they can be reassembled in their original configuration.

Disassemble the parts and deburr the holes.

**Step 4:** Cleco the F-1237F to the F-1237A as previously marked, then rivet the parts together using the rivets called out in Figure 1. Place the manufactured heads of the rivets against the F-1237A.



**FIGURE 1: F-1237F PREPARATION AND RIVETING**

**NOTE: Refer to Figure 2 for the following steps:**

**Step 5:** Cleco the F-1237B, F-1237D, and F-1237C-L & -R to the F-1237A.

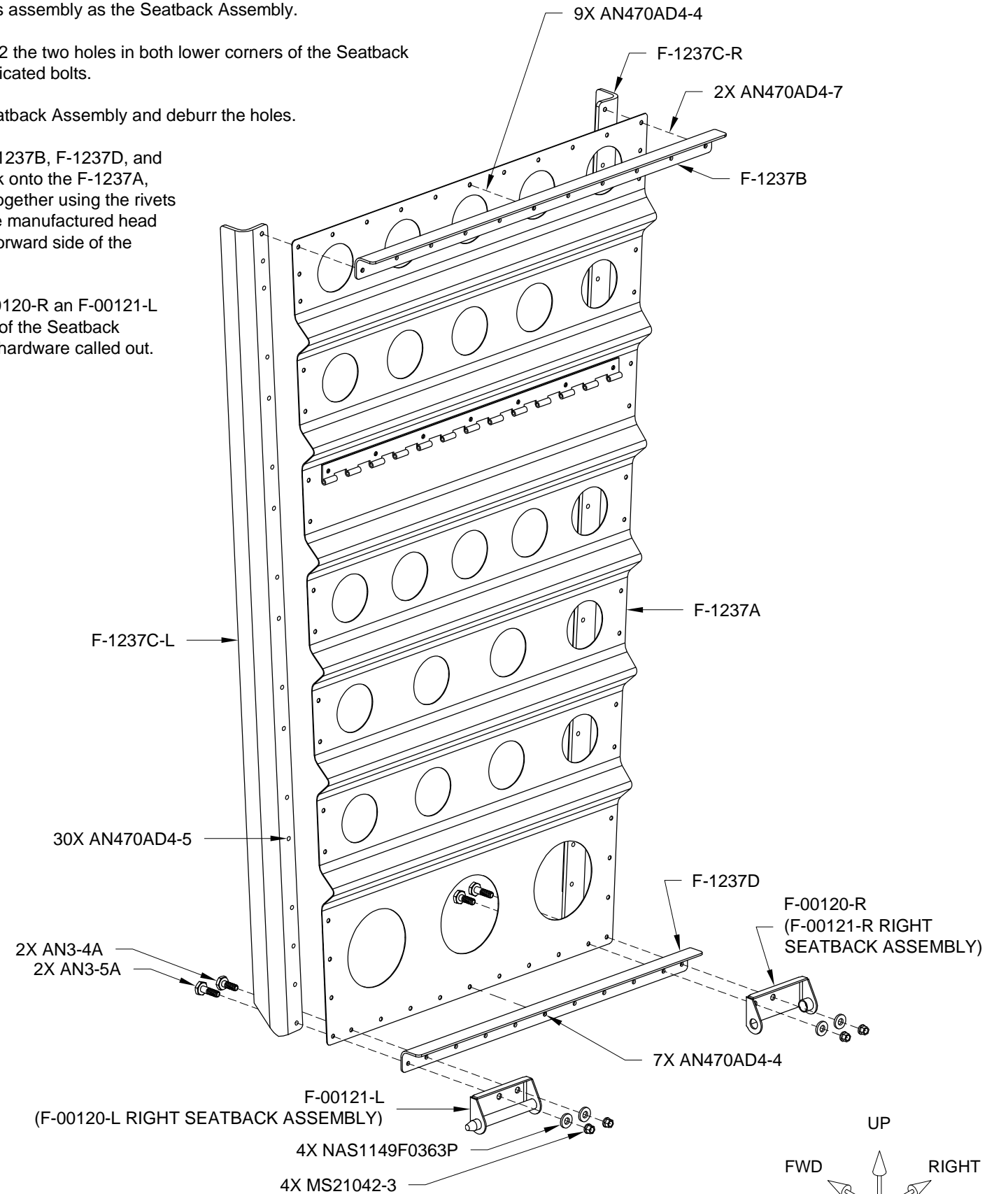
Hereafter refer to this assembly as the Seatback Assembly.

**Step 6:** Final-Drill #12 the two holes in both lower corners of the Seatback Assembly for the indicated bolts.

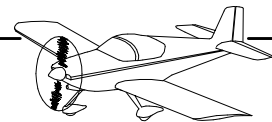
Disassemble the Seatback Assembly and deburr the holes.

**Step 7:** Cleco the F-1237B, F-1237D, and F-1237C-L & -R back onto the F-1237A, then rivet the parts together using the rivets called out. Place the manufactured head of the rivets on the forward side of the Seatback Assembly.

**Step 8:** Bolt the F-00120-R or F-00121-L to the lower corners of the Seatback Assembly using the hardware called out.



**FIGURE 2: SEATBACK ASSEMBLY (LEFT SEATBACK ASSEMBLY SHOWN)**



Step 1: Cut a 14 1/2 in. [368.3 mm] length from one of the hinge pins that was previously set aside.

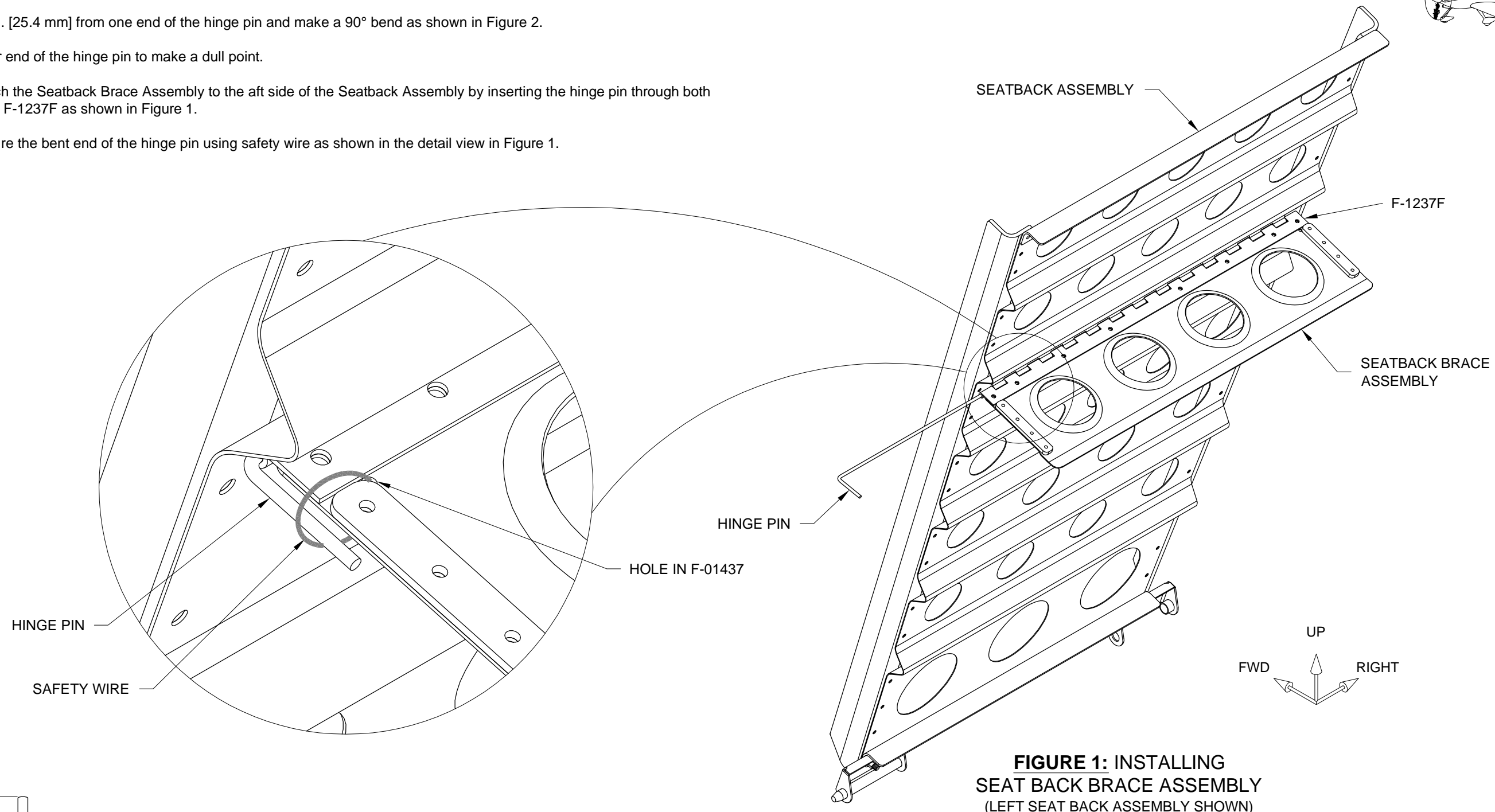
Measure 1 in. [25.4 mm] from one end of the hinge pin and make a 90° bend as shown in Figure 2.

File the other end of the hinge pin to make a dull point.

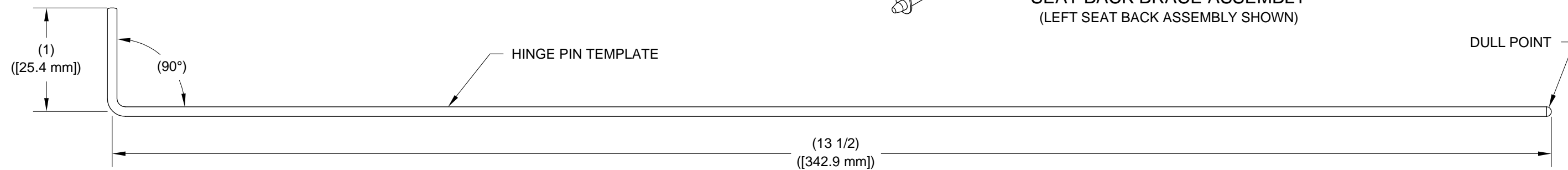
Step 2: Attach the Seatback Brace Assembly to the aft side of the Seatback Assembly by inserting the hinge pin through both halves of the F-1237F as shown in Figure 1.

Step 3: Secure the bent end of the hinge pin using safety wire as shown in the detail view in Figure 1.

10 9/16  
[268.3 mm]

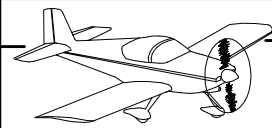


**FIGURE 1: INSTALLING SEAT BACK BRACE ASSEMBLY**  
(LEFT SEAT BACK ASSEMBLY SHOWN)

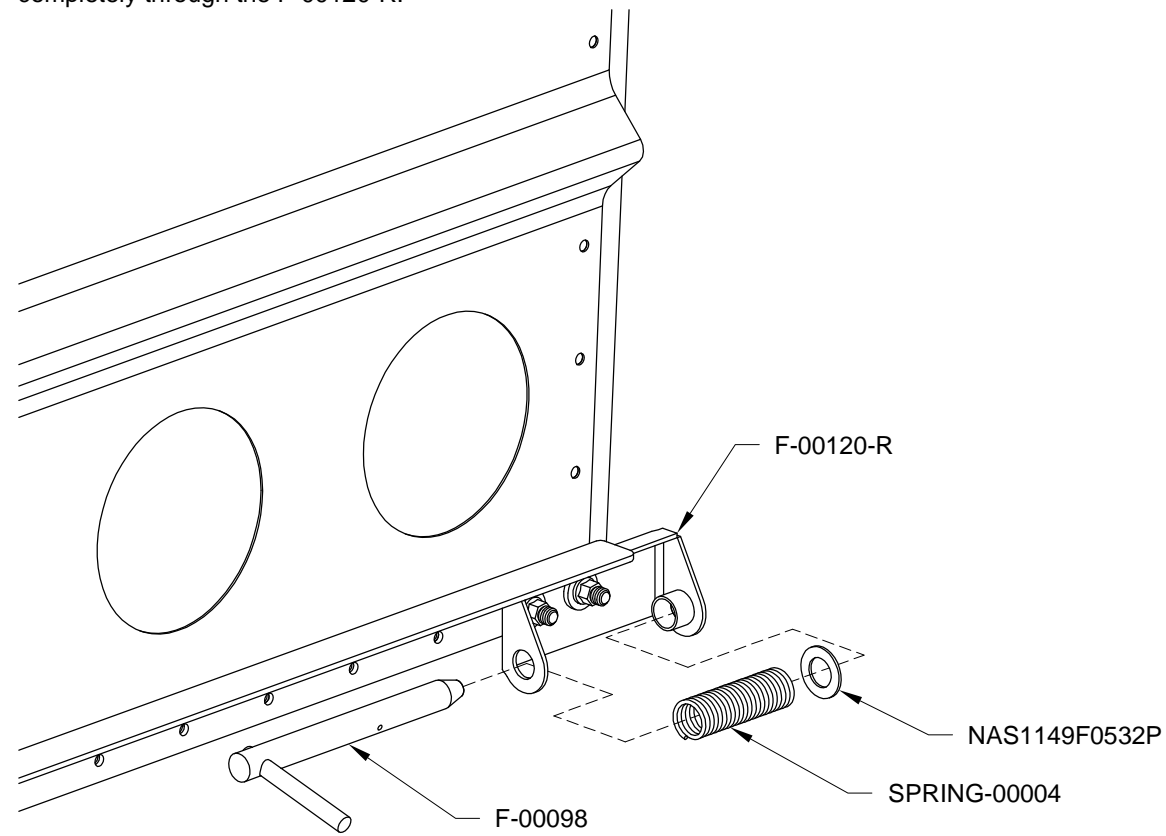


**FIGURE 2: HINGE PIN**

(NOTE: CHECK PRINTED SCALE 1:1 PER SECTION 3 BEFORE USING THE TEMPLATE!)

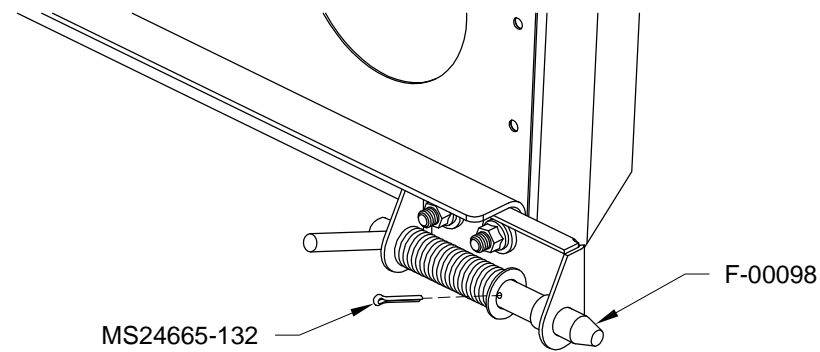


**Step 1:** Insert the F-00098 partially through the F-00120-R, slide on the SPRING-00004 and washer, then insert the F-00098 completely through the F-00120-R.



**FIGURE 1: INSTALLING THE F-00098**

**Step 2:** Compress the spring with the washer, then secure the F-00098 with the cotter pin called out in Figure 2.



**FIGURE 2: SECURING THE F-00098**

**Step 3:** Install the Left and Right Seatback Assemblies as shown on Page 25iS/U-01.

The four F-00122 on the seat floor have three hole positions for the pins at the bottom of the Seatback Assemblies: in the forward hole position, the Seatback Brace Assemblies are intended to engage the forward F-01205D; in the middle hole position, the Seatback Brace Assemblies are intended to engage the aft F-01205D; and in the aft hole position, the Seatback Brace Assemblies simply lie on top of the F-01205D, and the Seatback Assemblies rest against the F-01205A-1.