

## VAN'S AIRCRAFT, INC.

**NOTE: The following instructions** are for the Left INBD Footwell Rib Subassembly. The right is a mirror of the left.

Step 1: Cut apart the F-1066C-2 Reinforcing Angles into F-1066C-2-L & -R as shown in Figure 1. Mark them 'L' and 'R'.

Step 2: Cleco the F-1016D-1 Seat Belt Attach Bar, F-814HPP Fwd Seat Belt Anchor, and the VENT DL-03 to the F-1016F-L Left INBD Footwell Rib shown in Figure 2, hereafter referred to as the Left INBD Footwell Rib Subassembly.

Step 3: Final-Drill in assembly the 1/4 diameter bolt hole through the F-1016D-1, F-814HPP, and F-1016F-L.

Final-Drill the holes common to the VENT DL-03 and F-1016F-L. See Figure 2.

Step 4: Disassemble the Left INBD Footwell Rib Subassembly.

Deburr the edges and holes in all parts.

Dimple the screw holes along the upper edge of the Left INBD Footwell Rib per the Figure 2 call-out.

Dimple all nutplate attach holes in the F-1016F-L.

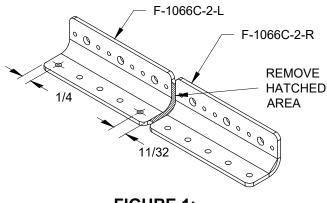
Machine countersink the F-1016D-1 for the dimples in the F-1016F-L coinciding with the holes that will attach the K1000-4 nutplate.

Step 5: Machine countersink the F-1066C-2-L for the nutplate attach rivets per the call-out in Figure 2.

Dimple the attach holes in the K1100-08 and MS21053-L08 nutplates.

Flute the bottom flange of the Left INBD Footwell Rib as required.

Prime parts if/as desired.



SEPARATE THE REINFORCING ANGLES

Step 6: Cleco the K1000-4 nutplate and F-1016D-1-L onto the F-1016F-L. Rivet the K1000-4 in place.

Cleco the remaining parts back together except the F-1066C-2-L.

Step 7: Mark the holes called out "LEAVE OPEN" in Figure 2.

Step 8: Tape over the five rivet holes in F-1016D-1 attaching F-1016C-2-L.

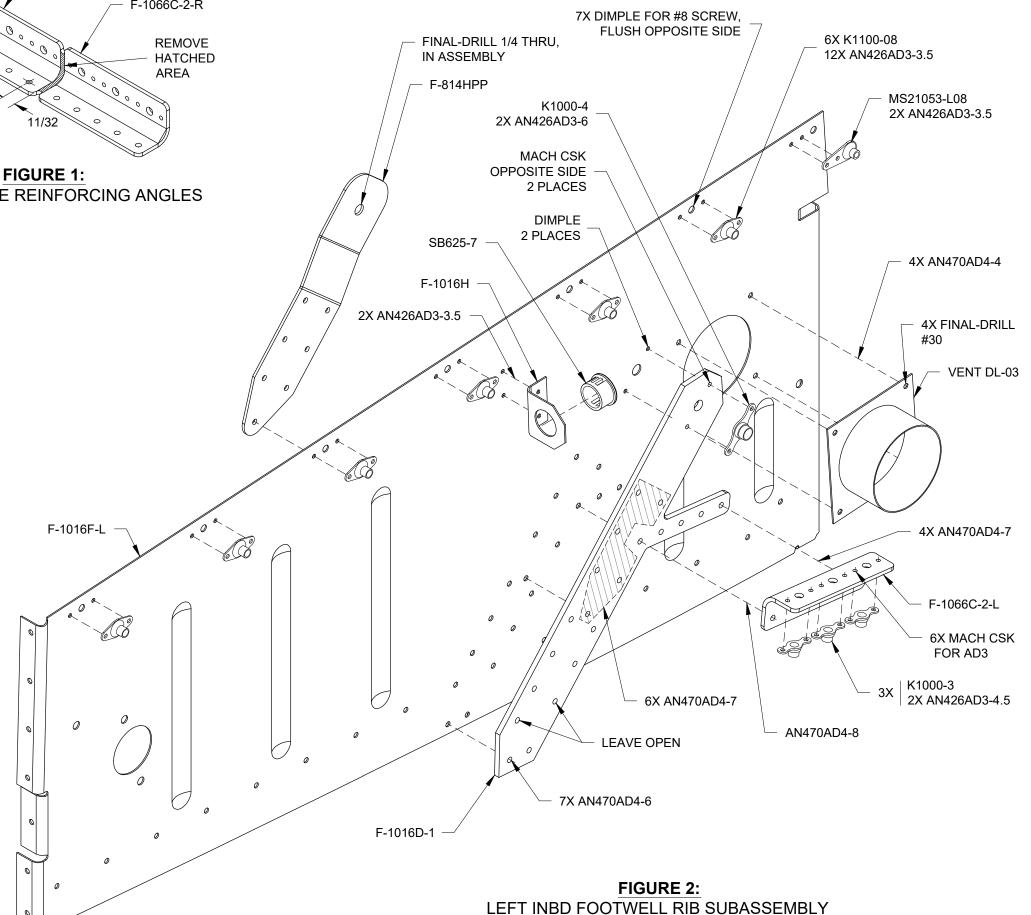
Rivet the F-1016D-1, F-814HPP, F-1016H, VENT DL-03 and nutplates to the F-1016F-L per the call-outs in Figure 2.

Rivet the nutplates to the underside of the F-1066C-2-L.

Rivet the F-1016C-2-L to F-1016D-1, F-1016F-L, and F-814HPP per the call-outs in Figure 2.

Insert the snap bushing into the F-1016H to finish the Left INBD Footwell Rib Subassembly.

Step 9: Repeat Steps 2-8 to complete the Right INBD Footwell Rib Subassembly.



(FLANGES FACE OUTBOARD)

Step 1: Cleco the F-1016D Seat Belt Attach Bar, and F-814HPP Fwd Seat Belt Anchor to the F-1016-L Outboard Seat Rib as shown in Figure 1.

Step 2: Final-Drill 1/4 the hole in the F-814HPP, F-1016-L, and F-1016D

Step 3: Cut apart the F-1015EF Spacers into two F-1015E and two F-1015F Spacers. Label each part (the two parts with seven holes in them are F-1015E Spacers).

Step 4: Cleco the F-1015B-L Seat Rib Intercostal and F-1015E Spacer to the F-1016-L Outboard Seat Rib as shown in Figure 2. Final-Drill #40 the holes common between these three parts. Final-Drill #40 the nutplate attach holes and #19 the screw holes in the inboard flange of the seat rib intercostal.

Final-Drill #19 the open screw holes along the upper edge of the outboard seat rib to create the Left Outboard Seat Rib Subassembly. Dimple the lower six #40 holes in the outboard flange of F-1015B-L (see Figure 2).

Step 5: Repeat Steps 1, 2, and 4 to create the Right Outboard Seat Rib Subassembly. The right is a mirror of the left.

Step 6: Disassemble both Right and Left Outboard Seat Rib

Subassemblies. Deburr the edges and holes of all parts. Place the flush side of the following dimples on the inbd side of the subassembly.

Dimple both nutplate attach holes in the F-1016-L & -R Outboard Seat Ribs. Machine countersink the F-1016D Seat Belt Attach Bars for the dimples in the outboard seat ribs. See Figure 1.

Dimple the screw holes in the inboard flange of the seat rib intercostals that correspond to the flush nutplates and the screw holes along the upper edge of the outboard seat rib for a #8 screw.

Dimple the holes common to the outboard seat ribs, F-1015E Spacers and F-1015B-L & -R Seat Rib Intercostals. Dimple the nutplate attach holes in the inboard flange of the seat rib intercostals.

Dimple the two rivet holes in the lower flange of the outboard seat ribs that are below the lower edge of the seat belt attach bars (see Figure 2). Flute the bottom flange of both the outboard seat rib subassemblies. Prime all parts if/as desired.

Step 7: Dimple the K1000-08, K1100-08 and MS21053-L08 nutplates.

Rivet the nutplates to the inboard flange of the F-1015B-L & -R Seat Rib Intercostals per the callouts in Figure 2.

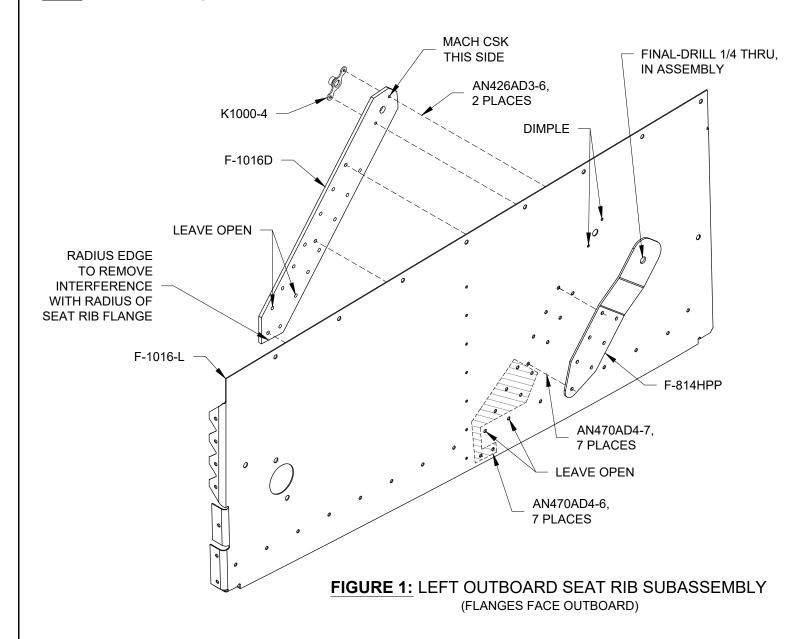
Step 8: Cleco the K1000-4 nutplates and F-1016D Seat Belt Attach Bars onto the F-1016-L & -R Outboard Seat Ribs.

Rivet the K1000-4 nutplates in place per the callouts in Figure 1. Cleco the rest of the parts together per Step 2 and Step 4 to form the Left and Right Outboard Seat Rib Subassemblies.

Step 9: Rivet the F-1016D Seat Belt Attach Bar, and F-814HPP Fwd Seat Belt Anchor to the F-1016-L Outboard Seat Rib per the call-outs in Figure 1 (leave the holes open where indicated).

Rivet the F-1015B-L Seat Rib Intercostal and F-1015E Spacer to the F-1016-L Outboard Seat Rib per the call-outs in Figure 2 to finish the Left Outboard Seat Rib Subassembly.

Repeat this step to finish the Right Outboard Seat Rib Subassembly.



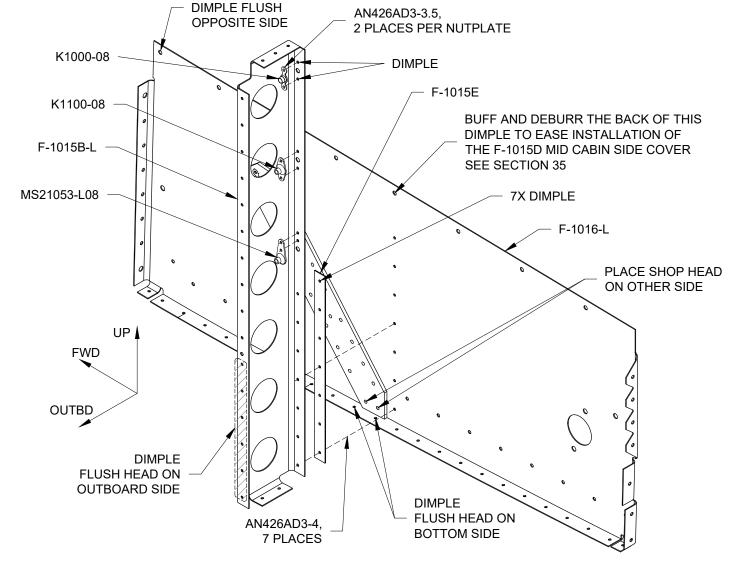


FIGURE 2: LEFT OUTBOARD SEAT RIB SUBASSEMBLY

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Step 1: Break apart the F-1016G Inboard Seat Rib Spacers into two parts. See Figure 1.

Step 2: Cleco the left and right, inboard and outboard seat rib subassemblies and inboard seat rib spacers to the Aft Center Section Bulkhead Assembly as shown in Figure 2.

Step 3: Final-Drill #30 all the holes common between the seat rib subassemblies and the Aft Center Section Bulkhead Assembly.

Step 4: Match-Drill #12 the upper and lower holes in the forward flanges of the seat rib subassemblies and inboard seat rib spacers using holes in the Aft Center Section Bulkhead Assembly as drill guides.

Step 5: Disassemble and deburr all parts.

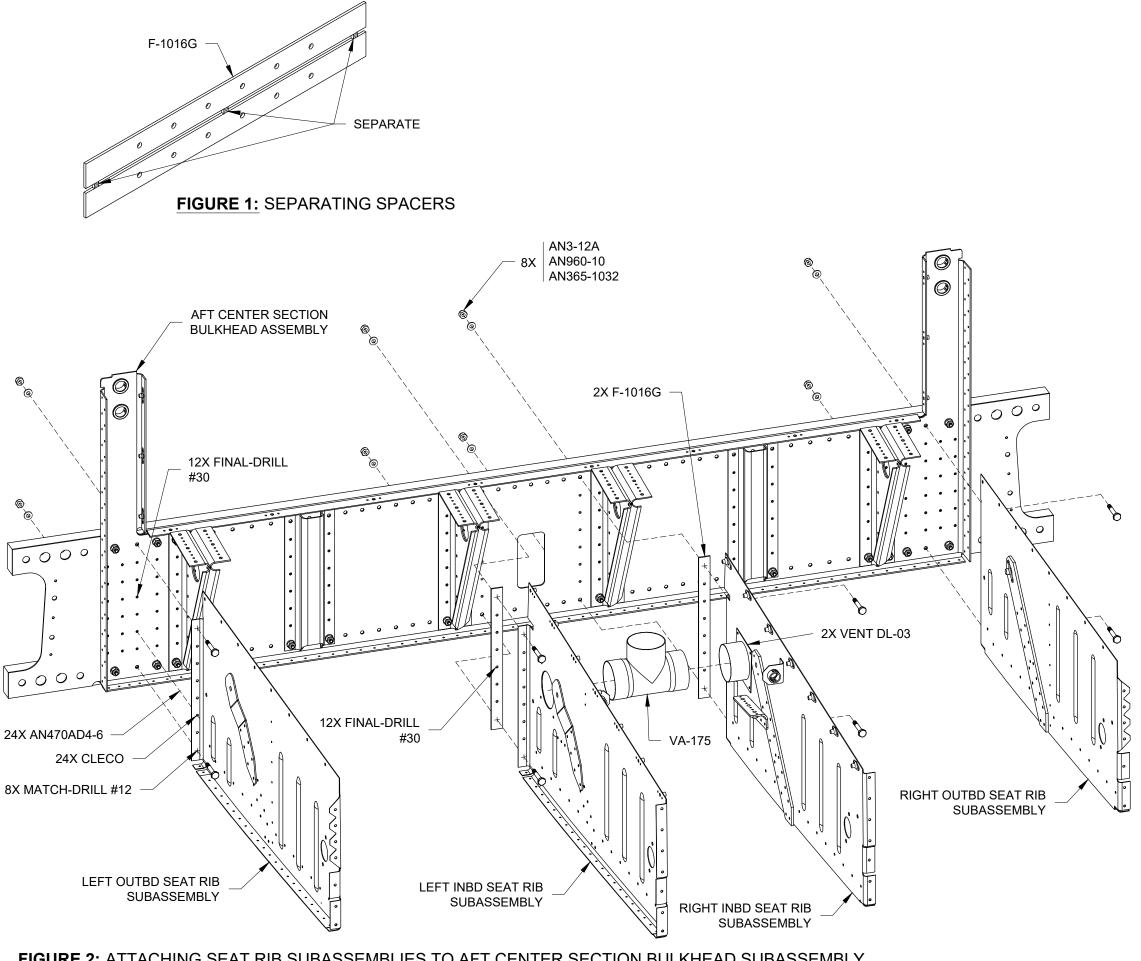
Prime the parts if/as desired.

Step 6: Insert the VA-175 Heat Duct Tee into the VENT DL-03 Scat Tube Flanges on the inboard seat rib subassemblies as shown in Figure 2.

Step 7: Cleco the seat rib subassemblies to the Aft Center Section Bulkhead Assembly.

Step 8: Bolt the seat rib subassemblies to the Aft Center Section Bulkhead Assembly as shown in Figure 2.

Step 9: Rivet the seat rib subassemblies to the Aft Center Section Bulkhead Assembly as shown in Figure 2.



Step 1: Dimple all #40 holes in the web of the F-1015A-L Outboard Seat Ribs. Flute the lower flange of the F-1015A-L ribs until the holes in the rib match the corresponding holes in the F-1076 Center Bottom Skin. Cleco the outboard seat ribs and Inboard Seat Rib Subassemblies to the Rear Spar Bulkhead Assembly as shown in Figure 2 and Figure 3. Final-Drill #30 all the holes common between the ribs and the rear spar bulkhead. Uncleco the outboard seat ribs and inboard seat rib subassemblies.

Step 2: Uncleco the F-1005C-L and Right Outboard Seat Rib Subassemblies to the rear spar bulkhead assembly as shown in Figure 3. Uncleco the outboard seat rib subassemblies from the rear spar bulkhead assembly as shown in Figure 3. Uncleco the outboard seat rib subassemblies from the rear spar bulkhead assembly. Note that the rivets that attach this flange to the rear spar bulkhead assembly are AN426AD4 rivets and that the flush head goes on the aft side of the rear spar bulkhead assembly underneath the F-1005C-L and R Bulkhead Side Channels, see Figure 2. Deburr and dimple these holes now for the head of an AN426AD4 rivet. Cleco the bulkhead side channels back in place.

Step 3: Break apart F-1017B to make the F-1017BL and Reat Belt Attach Ribs. Cut apart F-1017C to make the F-1017C-L and Reat Belt Attach Lugs.

Step 4: Cleco then final-drill #30 the F-1017B-L Seat Belt Attach Rib and F-1017C-L and Rear Seat Rib as shown in Figure 1. This will form a Left Rear Seat Rib Subassembly. Repeat this step to form another Left Rear Seat Rib Subassembly and two Right Rear Seat Rib Subassembly is a mirror of the left.

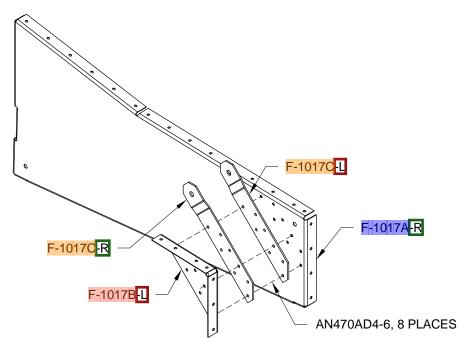
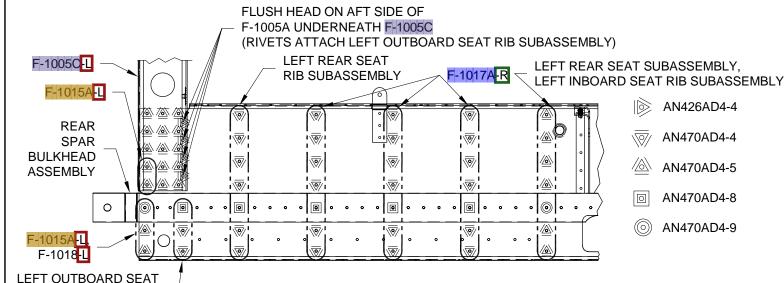


FIGURE 1: REAR SEAT RIB SUBASSEMBLY



RIB SUBASSEMBLY

FIGURE 2: RIB TO REAR SPAR BULKHEAD RIVETS

(BULKHEAD ASSEMBLY IS SYMMETRICAL ABOUT THE CENTERLINE OF THE AIRCRAFT)

Step 5: Cleco the F-1017A-L and Rear Seat Ribs, Left and Right Rear Seat Rib Subassemblies and F-1018-L and R Outboard Rear Seat Ribs to the to the Rear Spar Bulkhead Assembly as shown in Figure 2 and Figure 3. Final-Drill #30 all the holes common between the ribs and the rear spar bulkhead.

Step 10: Cleco the F-1015A-L and -R Outboard Seat Ribs and F-1018-L and -R Outboard

Step 6: Disassemble and deburr all parts. Final-Drill #40 and dimple the 3/32 holes in the web of the F-1018-L and -R Outbd Rear Seat Ribs **except** the holes common to the F-1005C-L and -R Bulkhead Side Channels and the aft row of holes. Dimple the three #30 holes in the web of F-1018-L and -R as shown in Figure 3. Prime parts if/as desired.

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<u>Step 7:</u> Cleco the Left and Right Rear Seat Rib Subassemblies together per Step 4 then rivet them together per the callouts in Figure 1.

Step 8: Cleco the Outboard Seat Rib Subassemblies to the Rear Spar Bulkhead Assembly then rivet them together per the callouts in Figure 2.

Step 9: Cleco the F-10050-L and R Bulkhead Side Channels to the Rear Spar Bulkhead Assembly then rivet (all but the two rivet locations that will attach the F-1015A-L and R Outboard Seat Ribs) them together per the callouts in Figure 2.

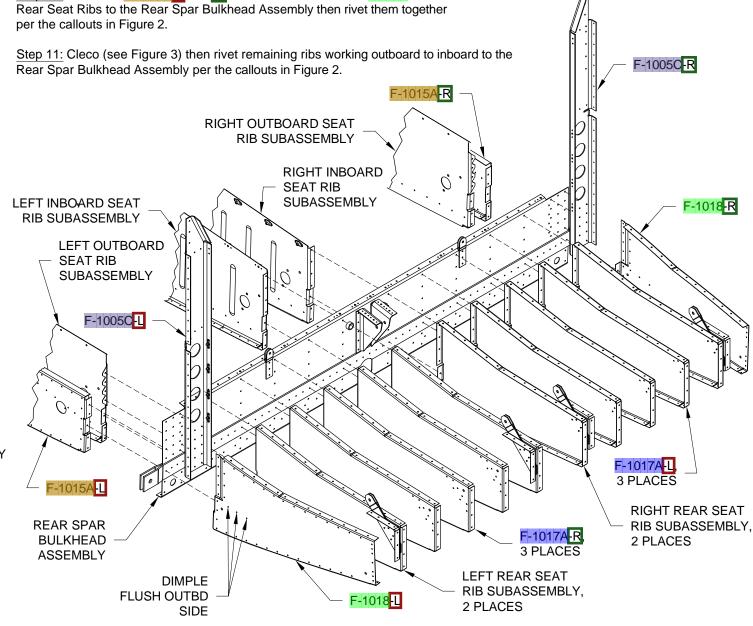


FIGURE 3: RIB ATTACH TO REAR SPAR BULKHEAD

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