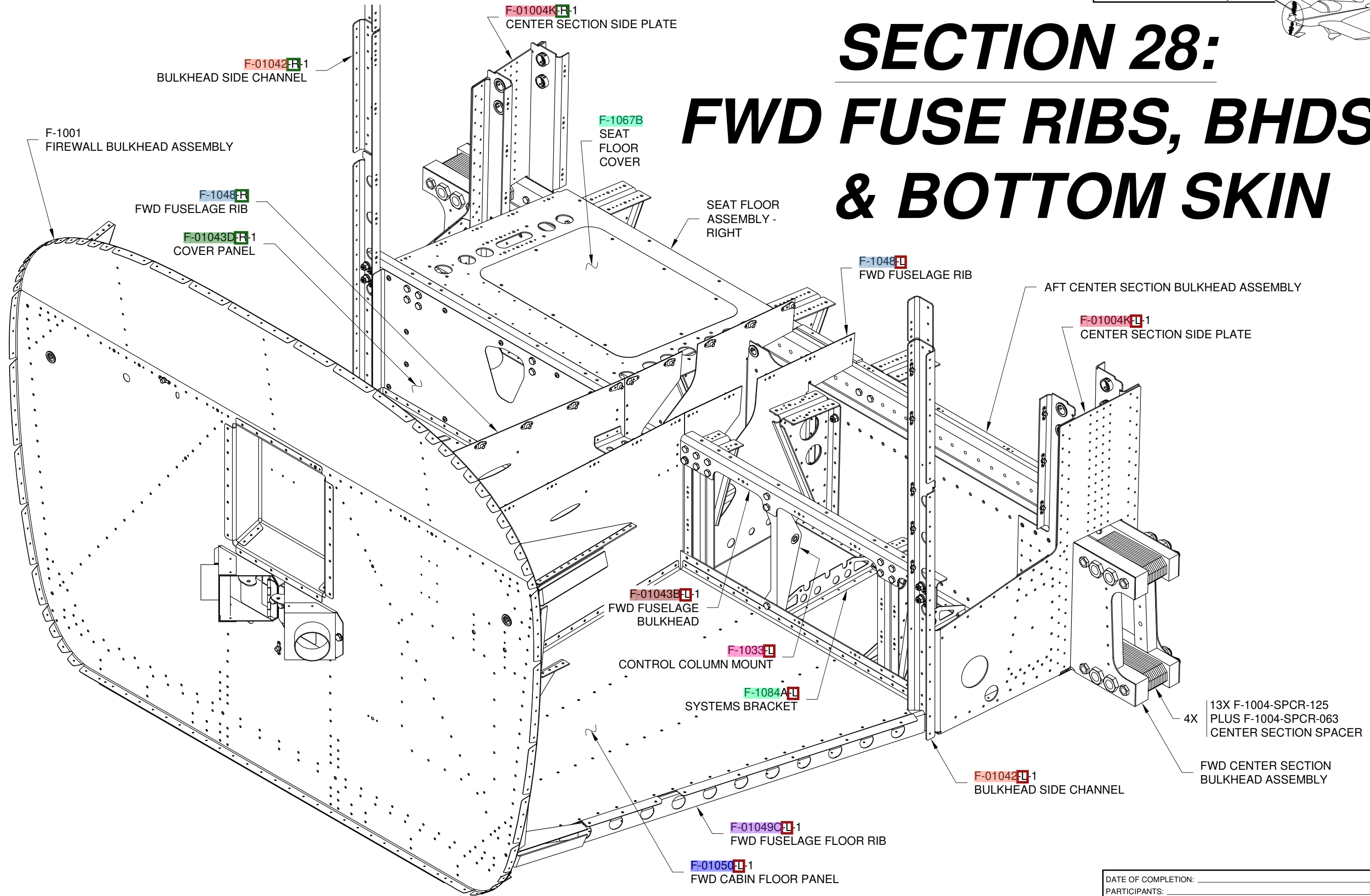


SECTION 28:

FWD FUSE RIBS, BHDS & BOTTOM SKIN



Step 1: Break apart the **F-1043C** Attach Angle into individual **F-1043C-L** & **F-1043C-R** Attach Angles as shown in Figure 1.

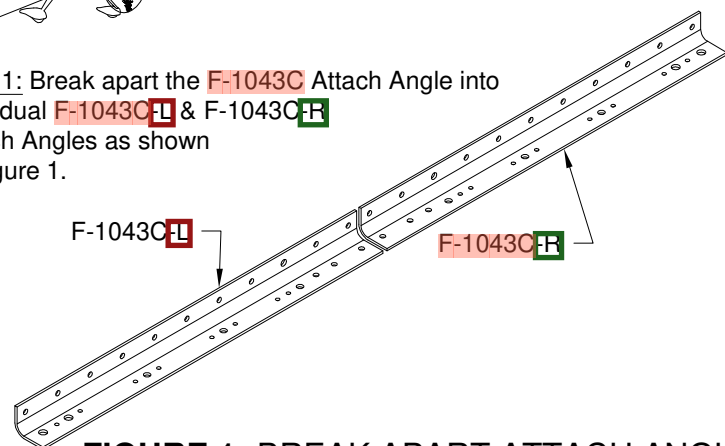


FIGURE 1: BREAK APART ATTACH ANGLE

Step 2: Cleco the **F-1043C-L** & **R** Attach Angles to the **F-1048-L** & **R** Fwd Fuselage Ribs as shown in Figure 2.

Final-Drill #19, #30, and #40 all holes in the flanges of the attach angles that mate to the fwd fuselage ribs.

Uncleco the attach angles.

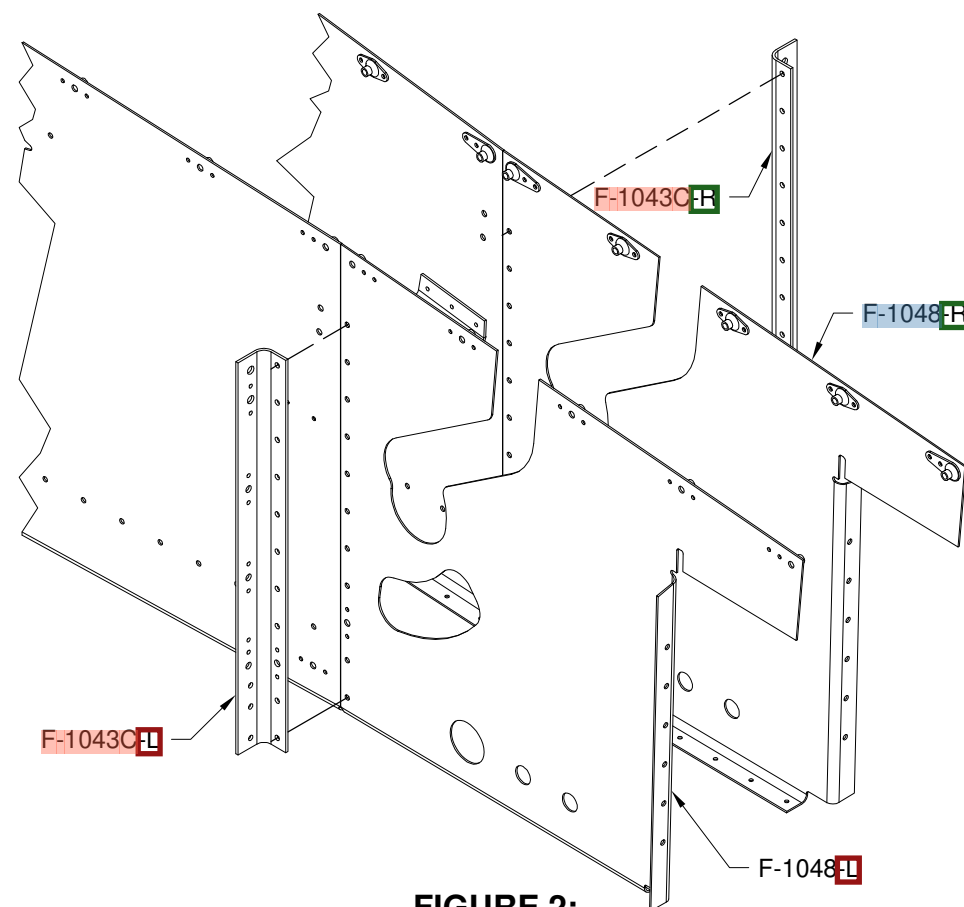


FIGURE 2:
FINAL-DRILL ATTACH ANGLES TO FWD FUSELAGE RIBS

Step 3: Final-Drill #40 the remaining nutplate attach holes in the **F-1043C-L** & **R** Attach Angles. Final-Drill #19 the K1000-08 and MS21051-L08 nutplate screw holes in the attach angles. Final-Drill #12 the K1000-3 nutplate bolt hole in the attach angles. See Figure 3.

Machine countersink the nutplate attach holes in the attach angles for the head of an AN426AD3 rivet. See Figure 3.

Deburr the holes and edges of the attach angles.

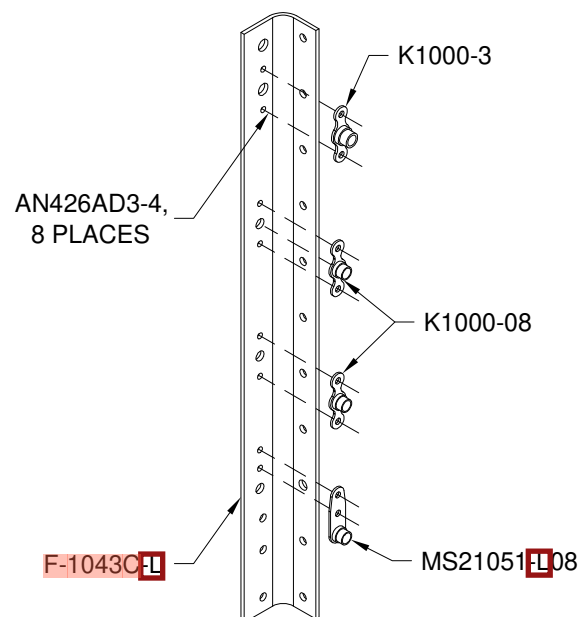


FIGURE 3: ATTACH ANGLE NUTPLATE INSTALLATION

Step 4: For the nutplates shown in Figure 4, machine countersink the nutplate attach holes in the two left and two right **F-01043G-L** & **R** Fwd Seat Rail Supports for the head of an AN426AD3 rivet.

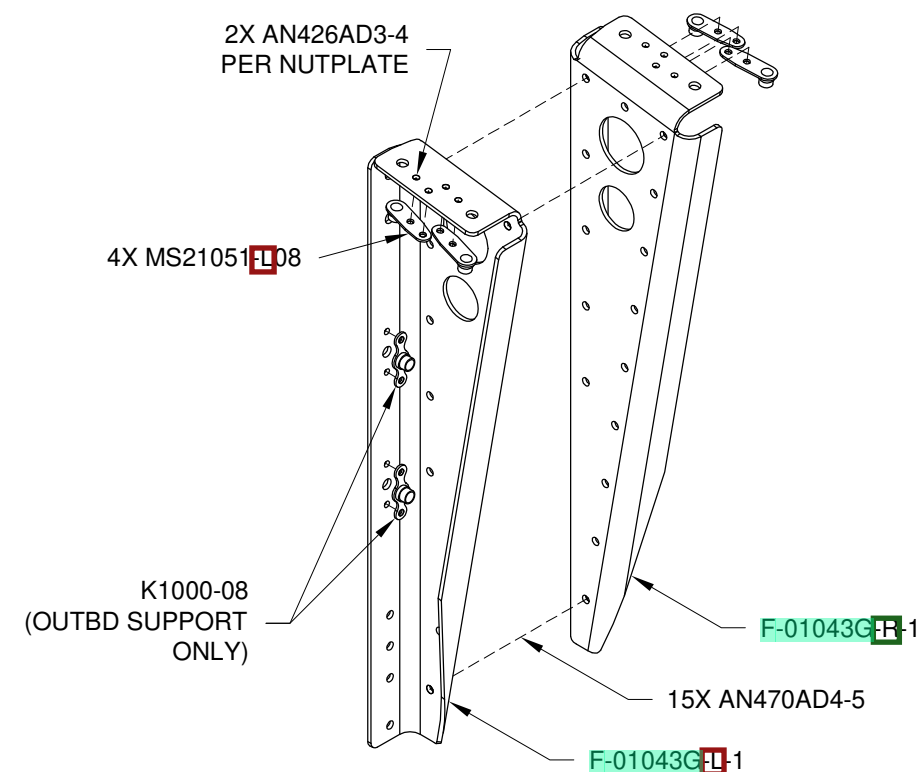


FIGURE 4: FWD SEAT RAIL SUPPORT

Step 5: Break apart the two **F-1043F** Seat Rail Support Angles into individual **F-1043F-L** & **F-1043F-R** Seat Rail Support Angles as shown in Figure 5.

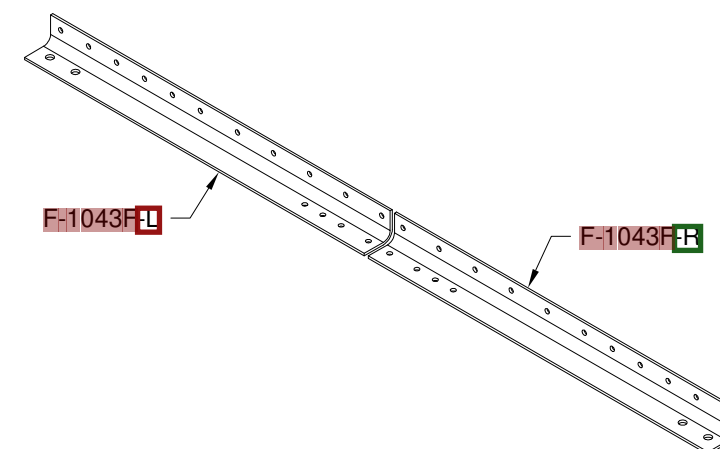


FIGURE 5: BREAK APART SEAT RAIL SUPPORT ANGLE

Step 1: Cleco the F-1043E-L and F-1043E-R Fwd Seat Rail Supports to the F-1043F-L and F-1043F-R Seat Rail Support Angles as shown in Figure 1.

Repeat.

The two subassemblies created in this step will subsequently be referred to as Inbd Fwd Seat Rail Supports.

Final-Drill #30 the holes common between the fwd seat rail supports and seat rail support angles. Final-Drill #30 the holes common between the seat rail support angles. Final-Drill #40 the nutplate attach holes in the fwd seat rail supports. Final-Drill #19 the nutplate screw holes in the fwd seat rail supports. See Figure 1.

Machine countersink the nutplate attach holes in the fwd seat rail supports for the head of an AN426AD3 rivet. See Figure 1.

Uncleco the inbd fwd seat rail supports, deburr holes, and deburr edges.

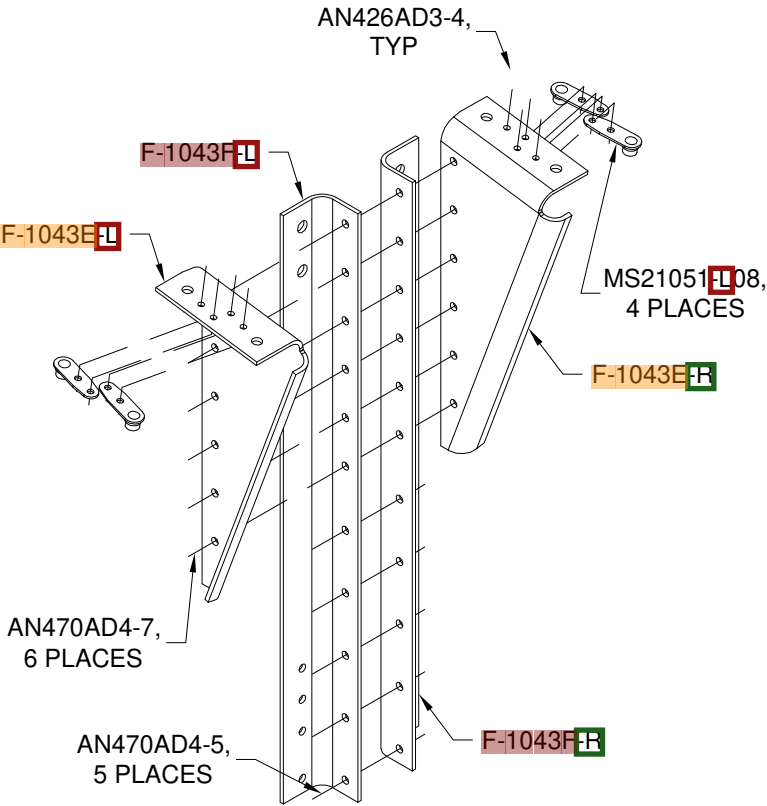


FIGURE 1: INBD FWD SEAT RAIL SUPPORT

Step 2: Break apart the F-01042BCD-1 Clips and Spacers into individual F-01042B-1 Clips, F-01042C-1 Clips, and F-01042D-1 Spacers as shown in Figure 2.

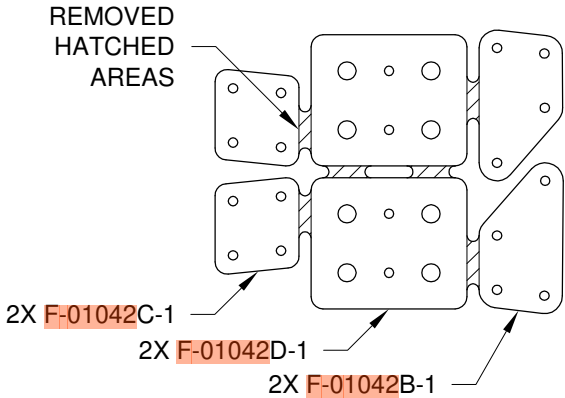


FIGURE 2: BREAK APART CLIPS & SPACERS

Step 3: Machine countersink the F-01042D-1 Spacers and the nutplate attach holes in the F-01042-L-1 & F-01042-R-1 Bulkhead Side Channels for the head of an AN426AD3 rivet. See Figure 3.

Machine countersink the nutplate screw holes. See Page 13-3, Figure 2 for details of the countersunk hole.

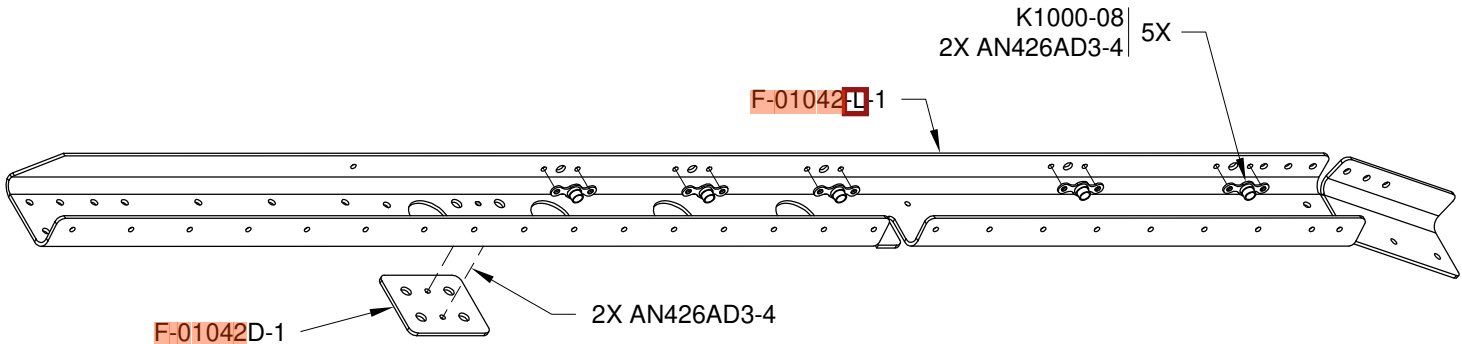


FIGURE 3: BULKHEAD SIDE CHANNEL NUTPLATE INSTALLATION

Step 4: Prime the following parts if/as desired:
F-1043C-L and F-1043C-R Attach Angles;
F-1043E-L and F-1043E-R Fwd Seat Rail Supports;
F-1043F-L and F-1043F-R Seat Rail Support Angles;
F-01043G-L-1 & F-01043G-R-1 Fwd Seat Rail Supports;
F-01042-L-1 & F-01042-R-1 Bulkhead Side Channels;
F-01042D-1 Spacers.

Step 5: Install nutplates to the F-1043C-L and F-1043C-R Attach Angles as shown on Page 28-2, Figure 3.

Step 6: Rivet the F-01043G-L-1 & F-01043G-R-1 Fwd Seat Rail Supports together as shown on Page 28-2, Figure 4 to create the Outbd Fwd Seat Rail Support - Left. Repeat this step to create the Outbd Fwd Seat Rail Support - Right.

Rivet the nutplates to the F-01043G-L-1 & F-01043G-R-1 Fwd Seat Rail Supports. Note that the K1000-08 nutplates are only on the outboard supports.

Step 7: Assemble two Inbd Fwd Seat Rail Supports as shown in Figure 1.

Step 8: Install nutplates and attach F-01042D-1 Spacers to the F-01042-L-1 & F-01042-R-1 Bulkhead Side Channels as shown in Figure 3.



Step 1: Using a #12 bit, drill a hole in the **F-1033-L** Control Column Mount located as shown in Figure 1.

Repeat for the **F-1033-R** Control Column Mount.

Radius the corners and remove material from the middle of both control column mounts as shown in Figure 1.

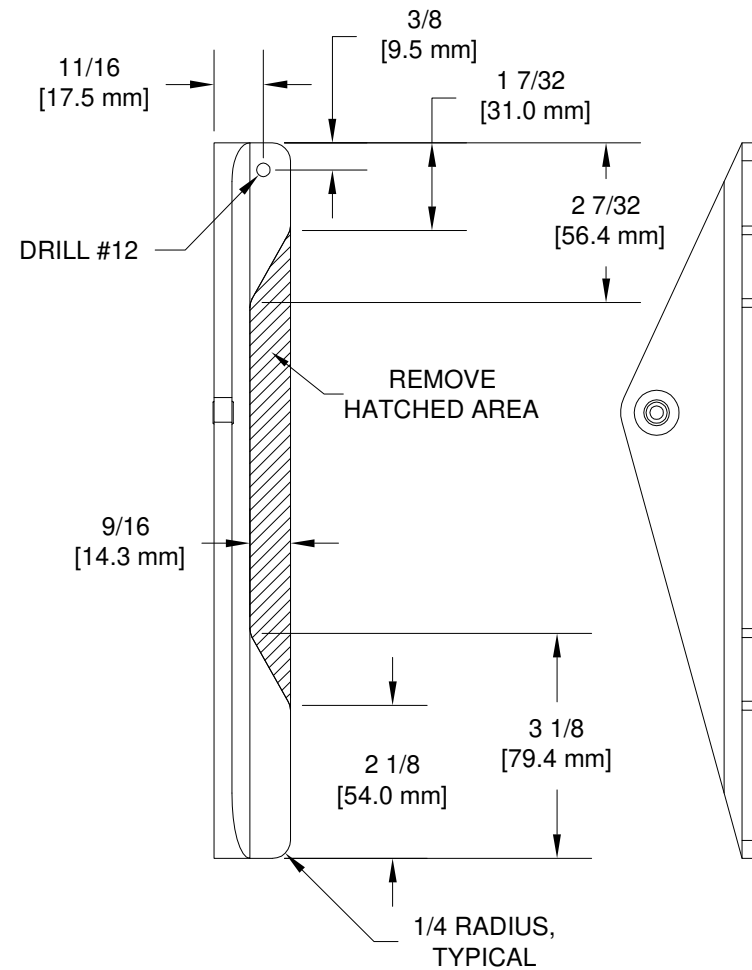


FIGURE 1: DRILL AND TRIM CONTROL COLUMN MOUNT

Step 2: Bolt the **F-01043B-L-1** Fwd Fuselage Bulkhead to the **F-01042-L-1** Bulkhead Side Channel as shown in Figure 2.

Bolt the Outbd Fwd Seat Rail Support - Left to the fwd fuselage bulkhead as shown in Figure 2.

Bolt one of the Inbd Fwd Seat Rail Supports to the fwd fuselage bulkhead as shown in Figure 2.

Bolt the **F-1043C-L** Attach Angle and **F-01043D-L-1** Cover Panel to the fwd fuselage bulkhead as shown in Figure 2.

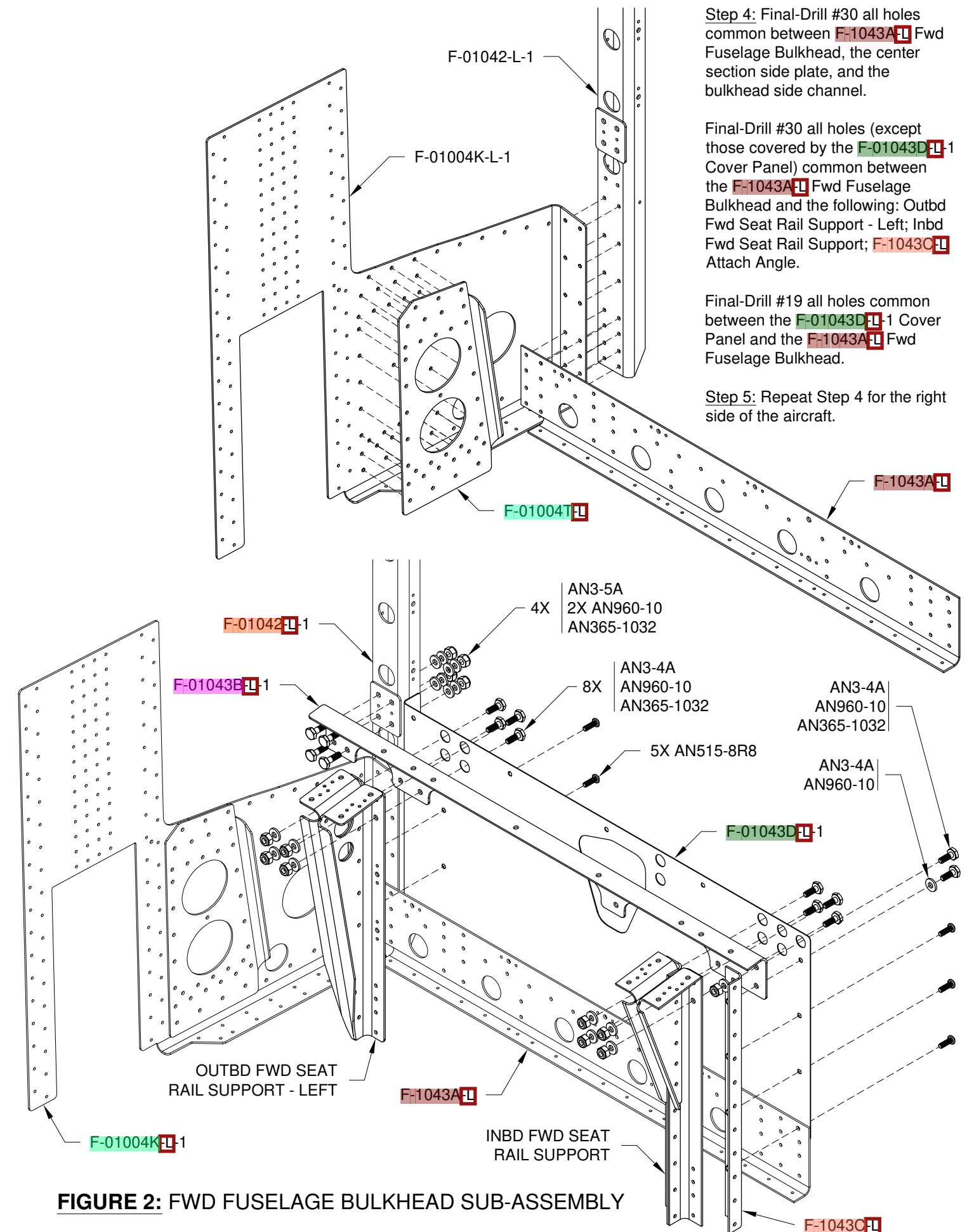
Cleco the **F-01004T-L-1** Center Section Side Plate Doubler to the **F-01004K-L-1** Center Section Side Plate as shown in Figure 2.

Cleco the **F-01004K-L-1** Center Section Side Plate to the bulkhead side channel as shown in Figure 2.

Cleco the **F-1043A-L** Fwd Fuselage Bulkhead to the center section side plate, outbd fwd seat rail support, inbd fwd seat rail support, and attach angle as shown in Figure 2.

Install screws through the cover panel into the fwd fuselage bulkhead/attach angle, attach angle, and outbd fwd seat rail support as shown in Figure 2.

Step 3: Repeat Step 2 for the right side of the aircraft.



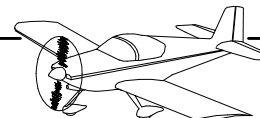
Step 4: Final-Drill #30 all holes common between **F-1043A-L** Fwd Fuselage Bulkhead, the center section side plate, and the bulkhead side channel.

Final-Drill #30 all holes (except those covered by the **F-01043D-L-1** Cover Panel) common between the **F-1043A-L** Fwd Fuselage Bulkhead and the following: Outbd Fwd Seat Rail Support - Left; Inbd Fwd Seat Rail Support; **F-1043C-L** Attach Angle.

Final-Drill #19 all holes common between the **F-01043D-L-1** Cover Panel and the **F-1043A-L** Fwd Fuselage Bulkhead.

Step 5: Repeat Step 4 for the right side of the aircraft.

FIGURE 2: FWD FUSELAGE BULKHEAD SUB-ASSEMBLY



Step 1: Bolt the F-1033-L Control Column Mount to the F-01043B-L-1 Fwd Fuselage Bulkhead as shown in Figure 1.

Bolt the F-1033-R Control Column Mount to the F-01043B-R-1 Fwd Fuselage Bulkhead.

Align each control column mount so that it is parallel to the Inbd Fwd Seat Rail Support and Outbd Fwd Seat Rail Support and clamp it in that position.

Match-Drill #12 three holes in each control column mount using the existing holes in the F-01043B-L-1 & F-1 and F-1043A-L & -R Fwd Fuselage Bulkheads as drill guides. See Figure 1.

Un-clamp and un-bolt the control column mounts from the fwd fuselage bulkheads and deburr holes in the control column mounts.

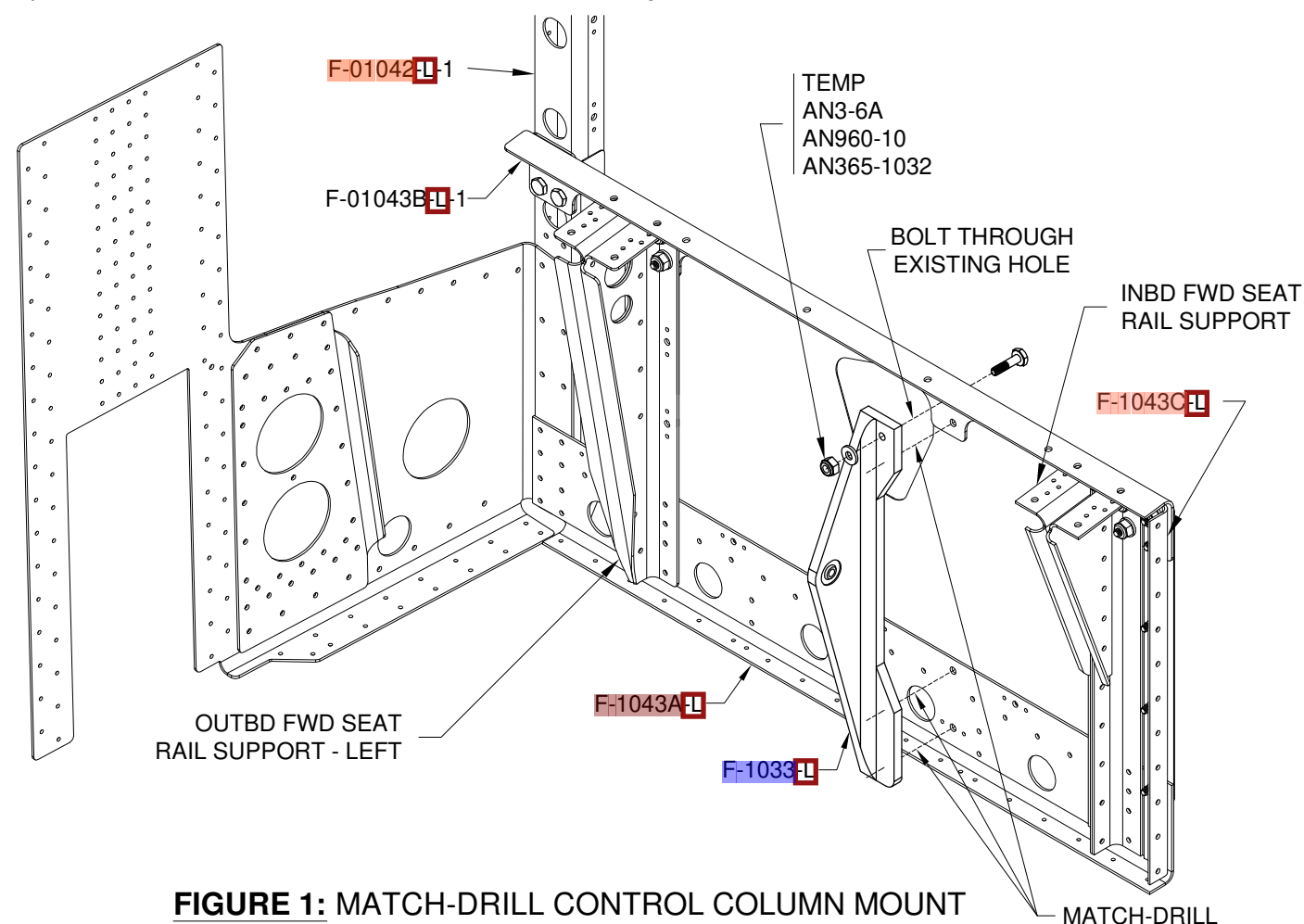


FIGURE 1: MATCH-DRILL CONTROL COLUMN MOUNT

Step 2: Remove one bolt from each of the following parts: F-01042-L-1 Bulkhead Side Channel; Outbd Fwd Seat Rail Support; Inbd Fwd Seat Rail Support; F-1043C-L Attach Angle.

Repeat for the right side of the aircraft.

Final-Drill #12 the open bolt holes.

Remove one of the remaining bolts in each location mentioned above and re-install in a hole that has already been final-drilled.

Final-Drill #12 the open bolt holes.

Repeat this process until all bolt holes have been final-drilled.

Un-bolt the F-01043B-L-1 & F-1.

Step 3: Remove the F-01043D-L-1 & F-1 Cover Panels from the Outbd Fwd Seat Rail Supports, Inbd Fwd Seat Rail Supports, and F-1043C-L & F-1 Attach Angles.

Final-Drill #30 the holes common to the F-1043A-L and F-1043A-R Fwd Fuselage Bulkheads, outbd and inbd fwd seat rail supports, and attach angles that had been blocked by the cover panels.

Uncleco the inbd and outbd fwd seat rail supports from the fwd fuselage bulkheads and deburr holes in the fwd seat rail supports.

Step 4: Study Figure 2 until you understand the proper orientation of the F-01072-1 Fwd Fuse Bottom Skin, it is NOT symmetrical.

Trim the aft end of the upper flanges of the F-01049C-L-1 & F-1 Fwd Fuselage Floor Rib as shown in Figure 2. Trim from center-to-center of the two "notches" punched in the flange of each fwd fuselage floor rib.

Enlarge the two pre-punched brake line pilot holes to 5/8" diameter as shown in Figure 2.

Inserting clecos from the bottom up, cleco the F-1049A-L & R, F-1049B-L & R, F-01049C-L-1 & F-1, F-1049D-L & R Fwd Fuselage Floor Ribs, two F-1048D Fuel Filter Brackets, and VA-188 Flo-Scan Mount Bracket to the fwd fuse bottom skin as shown in Figure 2.

Final-Drill #40 all the holes common to the fwd fuse bottom skin and the parts clecoed to it.

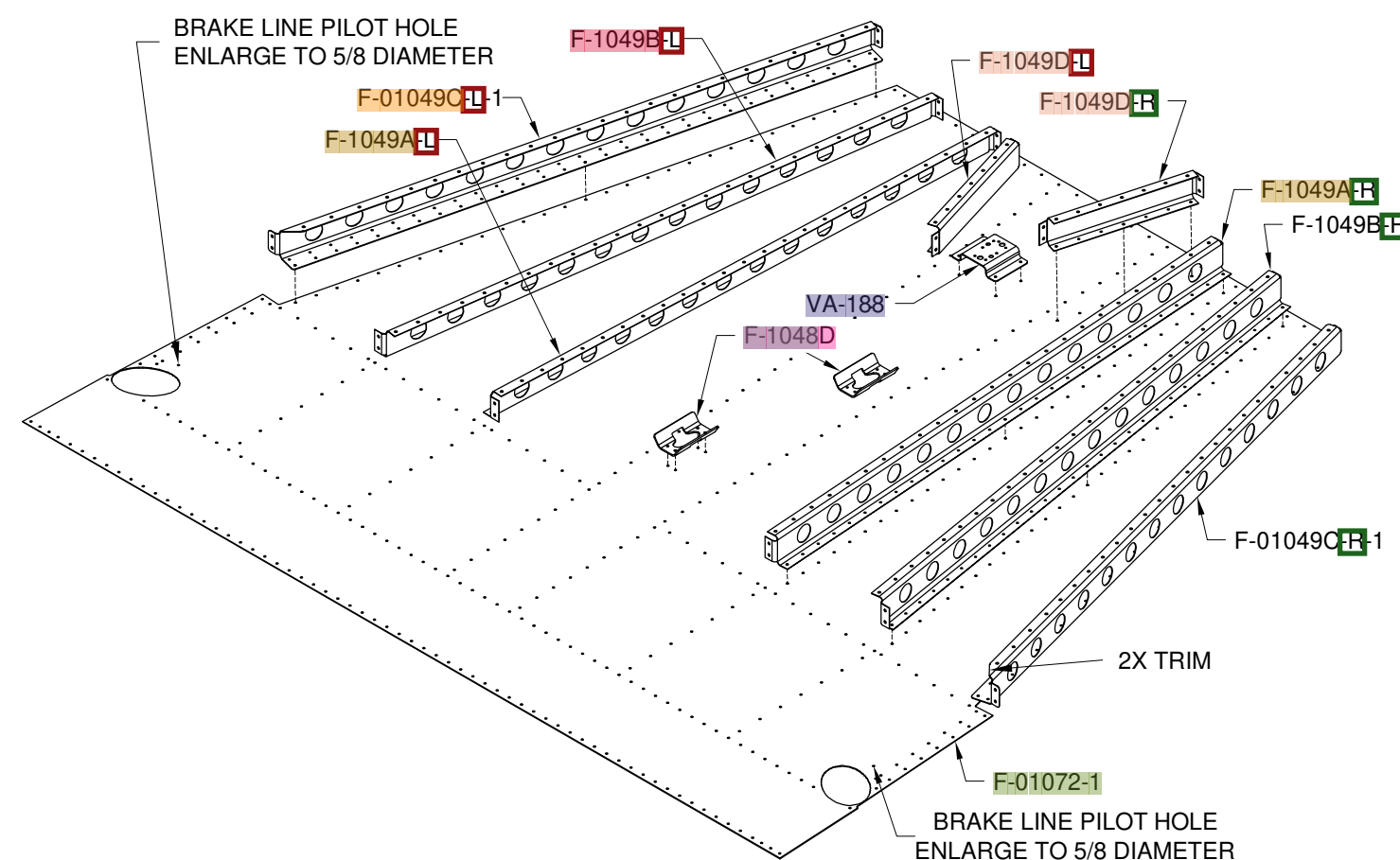
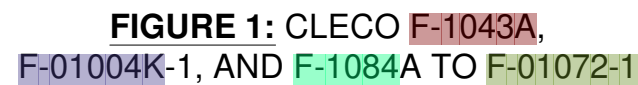


FIGURE 2: FINAL-DRILL FWD FUSE BOTTOM SKIN



Final-Drill #30 the aft tabs of the fwd fuselage floor ribs to the fuselage bulkheads.



The diagram illustrates three components of the Break Apart Systems Brackets. Component F-1084A-FL is a long, narrow bracket with multiple circular holes and a triangular cutout. Component F-1084A-FR is a similar bracket, slightly shorter than F-1084A-FL. Component F-1084B is a smaller, L-shaped bracket. Arrows point from the labels to their respective components.

FIGURE 2:
BREAK APART SYSTEMS BRACKETS

FIGURE 2:
BREAK APART SYSTEMS BRACKETS

in the fwd fuse bottom skin onto the bottom flange of the
F-01004K-L-1 & F-1 Center Section Side Plates. See
Figure 1 and Figure 3.

Final-Drill #40 all holes common the the fwd fuse
bottom skin and the fwd fuselage ribs, firewall
bulkhead assembly, center section side plates,
F-1043A-L & R Fwd Fuselage Bulkheads, and
F-1084A-L & R Systems Brackets. See Figure 3.

9A-R

F-1049B-R

01049C-R-1

F-01004K-L-1

F-1043A-L

F-1048-L

F-1048-R

F-1043C-R

F-1043A-R

F-1084A-L

F-01072-L

F-1043C-L

F-1084A-R

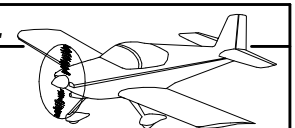
F-01004K-R-1

FIREWALL BULKHEAD ASSEMBLY

The diagram is an exploded view of the firewall bulkhead assembly. It shows the firewall bulkhead assembly at the top right, with various components labeled with part numbers and side indicators (L for left, R for right). The components include: F-01004K-L-1 (purple box, L), F-1049B-R (green box, R), 01049C-R-1 (orange box, R-1), F-1043A-L (red box, L), F-1048-L (red box, L), F-1048-R (green box, R), F-1043C-R (green box, R), F-1043A-R (green box, R), F-1084A-L (red box, L), F-01072-L (green box, L), F-1043C-L (red box, L), F-1084A-R (green box, R), and F-01004K-R-1 (purple box, R-1). The diagram shows the firewall bulkhead assembly being installed onto the bottom skin of the forward fuselage, with various ribs and brackets also shown.

FIGURE 3: ADD FIREWALL BULKHEAD

FIGURE 3: ADD FIREWALL BULKHEAD ASSEMBLY TO FWD FUSE BOTTOM SKIN

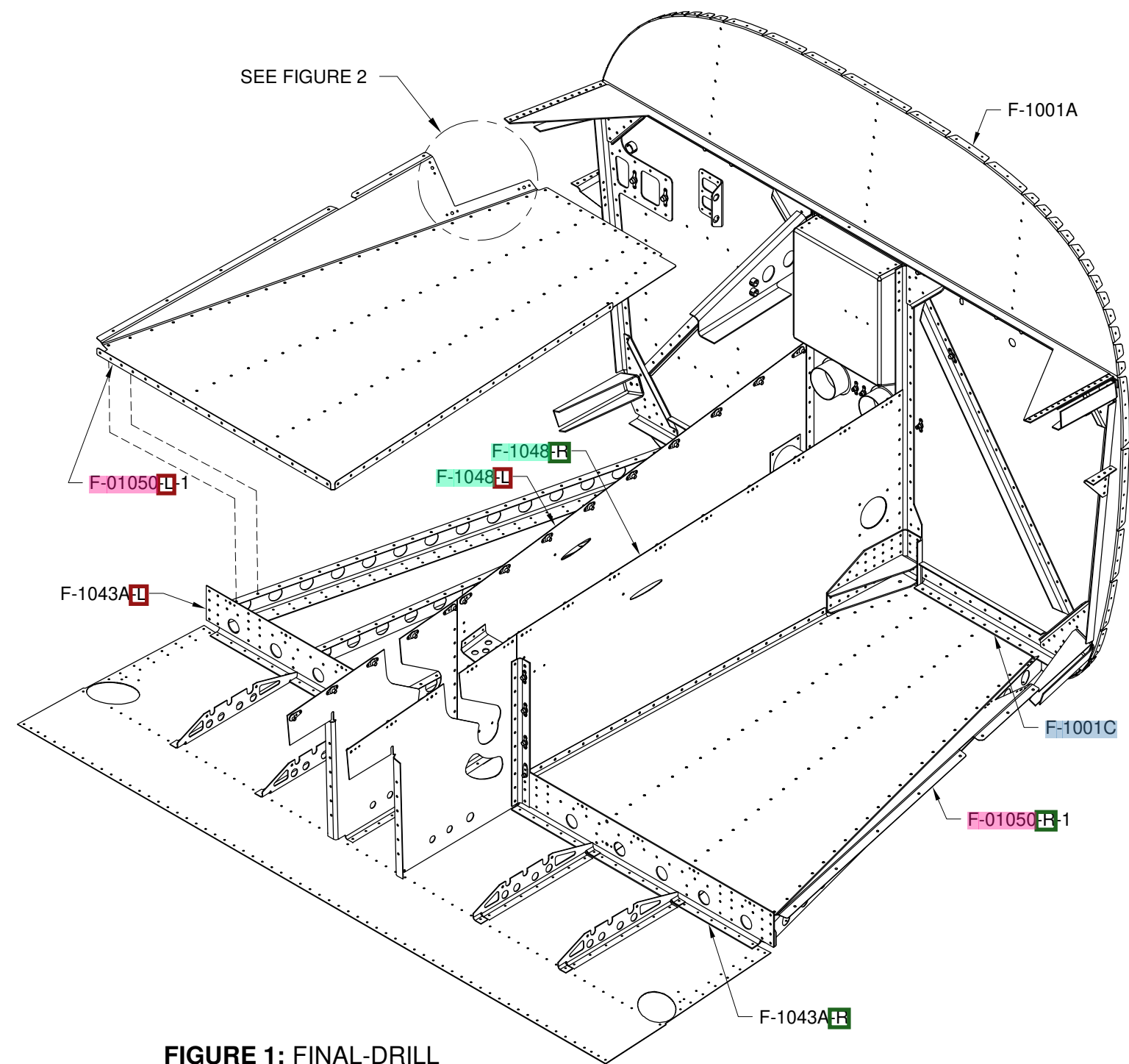


Step 1: Tip the Forward Fuselage assembly down to be oriented as shown in Figure 1.

Final-Drill #30 the holes common to the F-1001A Firewall Bulkhead and the forward tabs of the F-1049A-L & -R, F-1049B-L & -R, F-01049C-L-1 & -R-1, and F-1049D-L & -R Fwd Fuselage Floor Ribs. See Page 28-5, Figure 2.

Step 2: Cleco the F-01050-L-1 & -R-1 Fwd Cabin Floor Panels to the F-1048-L & -R Fwd Fuselage Ribs, F-1043A-L & -R Fwd Fuselage Bulkheads, F-1001C Firewall Lower Channel, and the F-1049A-L & -R, F-1049B-L & -R, F-01049C-L-1 & -R-1, and F-1049D-L & -R Fwd Fuselage Floor Ribs. See Figure 1. The forward end of the fwd cabin floor panel slips UNDER the firewall lower channel.

Final-Drill #30 all holes common to the fwd cabin floor panels and fwd fuselage floor ribs, fwd fuselage bulkheads, firewall bulkhead, and fwd fuselage ribs.



**FIGURE 1: FINAL-DRILL
FWD CABIN FLOOR PANELS**
(NOTE: SOME PARTS OMITTED FOR CLARITY)

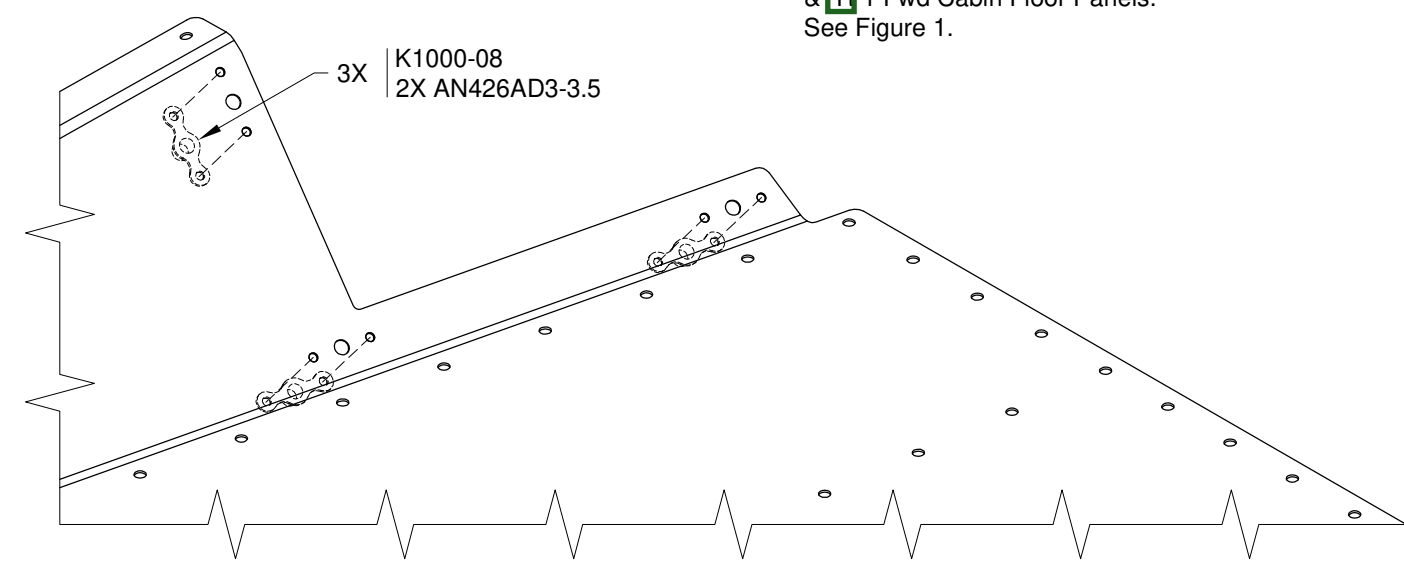


FIGURE 2: FWD CABIN FLOOR PANEL NUTPLATE INSTALLATION

Step 4: Deburr all edges and final-drilled holes in the F-01050-L-1 & -R-1 Fwd Cabin Floor Panels.

Dimple the nutplate attach holes in the fwd cabin floor panels. See Figure 2.

Dimple the holes in the fwd cabin floor panels as called-out in Figure 3.

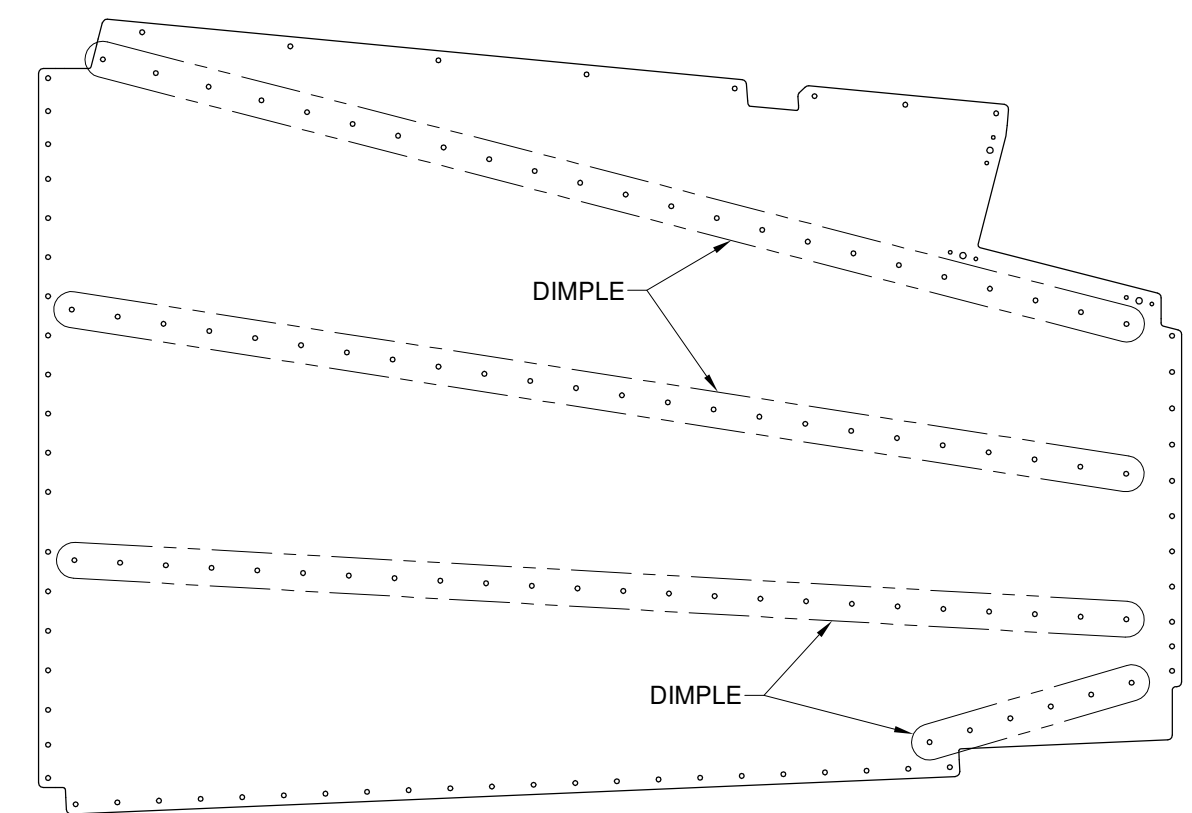
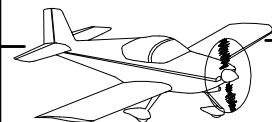


FIGURE 3: FWD CABIN FLOOR PANEL DIMPLE DIAGRAM
(NOTE: PART SHOWN FLAT FOR CLARITY)



Step 1: Remove the F-01004K-L1 & F-1 Center Section Side Plates and F-01042-L1 & F-1 Bulkhead Side Channels from the F-1043A-L & R Fwd Fuselage Bulkheads and F-01072-1 Fwd Fuse Bottom Skin.

Remove the F-1084A-L & R Systems Brackets from the fwd fuse bottom skin.

Step 2: Trim the bottom flanges of the F-01004K-L1 & F-1 Center Section Side Plates to match the elliptical holes in the F-01072-1 Fwd Fuse Bottom Skin.

Step 3: Cleco the aft flanges of the F-1048-L & R Fwd Fuselage Ribs to the web of the Fwd Center Section Bulkhead Assembly as shown in Figure 1.

Match-Drill #12 through the Fwd Center Section Bulkhead Assembly into the aft flanges of the fwd fuselage ribs 4 places as shown in Figure 1.

Final-Drill #30 through the Fwd Center Section Bulkhead Assembly and fwd fuselage ribs 12 places as shown in Figure 1.

Step 4: Uncleco the Fwd Center Section Bulkhead Assembly from the F-1048-L & R Fwd Fuselage Ribs. Deburr the holes in all parts that were drilled in the previous step.

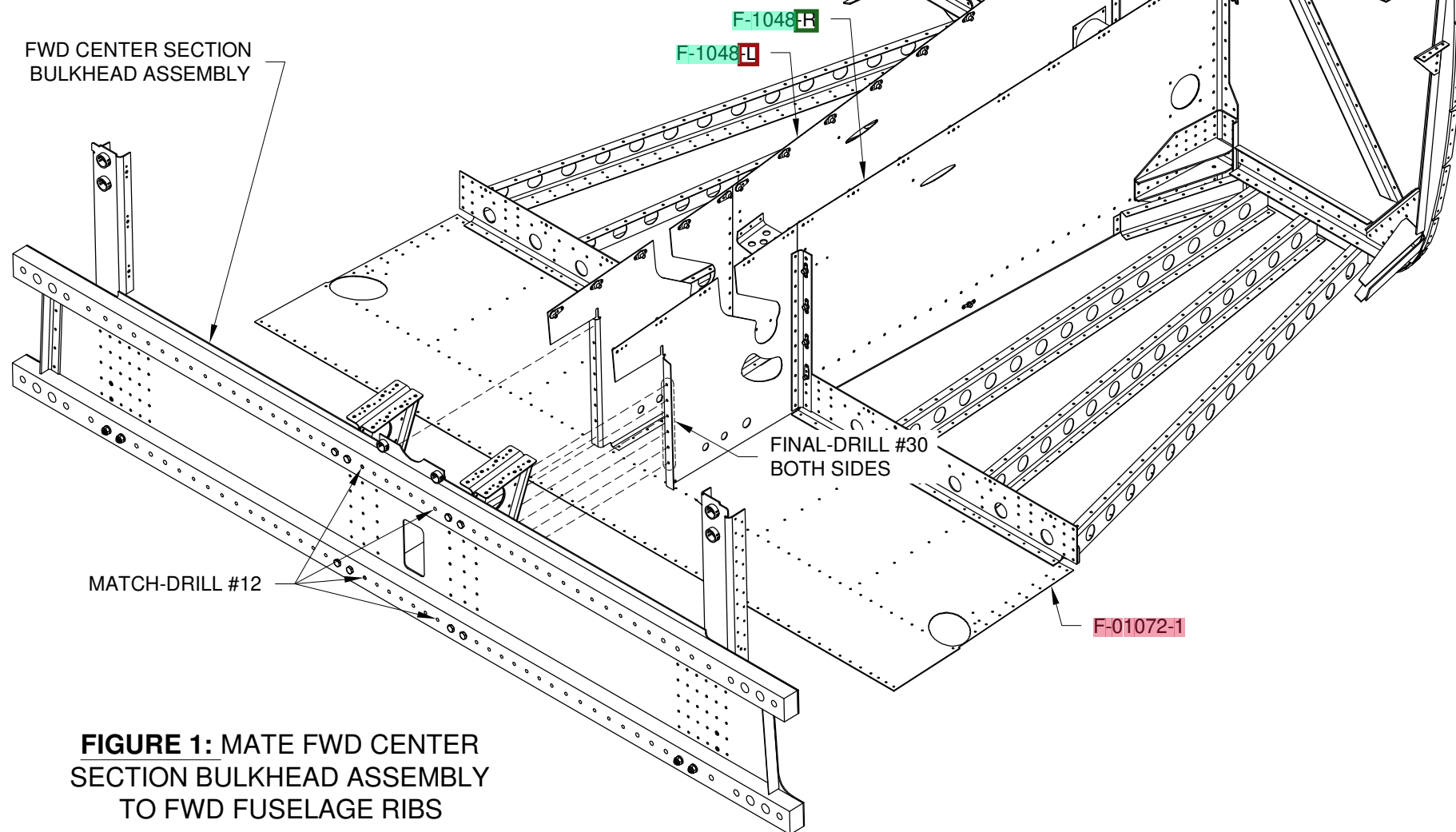


FIGURE 1: MATE FWD CENTER SECTION BULKHEAD ASSEMBLY TO FWD FUSELAGE RIBS

Step 5: Attach the Fwd Center Section Bulkhead Assembly to the F-1048-L & R Fwd Fuselage Ribs using bolts and clecos as shown in Figure 2.

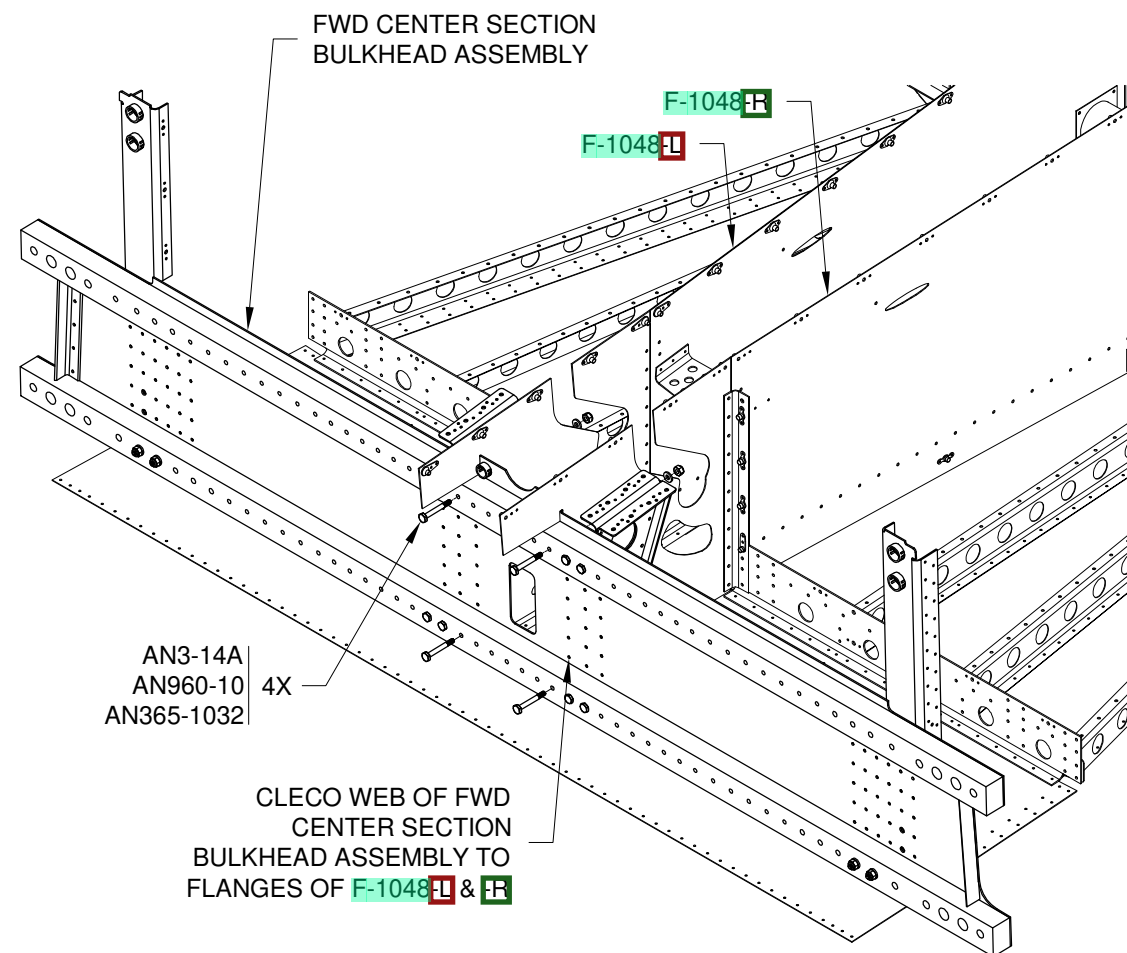
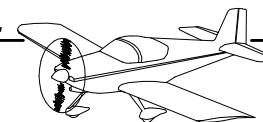


FIGURE 2: BOLT FWD CENTER SECTION BULKHEAD ASSEMBLY TO FWD FUSELAGE RIBS



Step 1: Mate the Mid Fuselage Assembly to the Forward Fuselage Assembly as shown in Figure 1. The **F-1076** Center Bottom Skin (part of the Mid Fuselage Assembly) fits BETWEEN the Fwd Center Section Bulkhead Assembly and the **F-01072-1** Fwd Fuse Bottom Skin as shown in Figure 2.

Cleco together the center bottom skin, Fwd Center Section Bulkhead Assembly, and fwd fuse bottom skin.

Cleco together the fwd fuse bottom skin, center bottom skin, and Aft Center Section Bulkhead Assembly.

Cleco the **F-01004K-L-1** & **F-1** Center Section Side Plates to the Aft Center Section Bulkhead Assembly, Fwd Center Section Assembly, and fwd fuse bottom skin as shown in Figure 1.

Cleco the **F-1084A-L** & R Systems Brackets to the fwd fuse bottom skin and Fwd Center Section Bulkhead Assembly as shown in Figure 1.

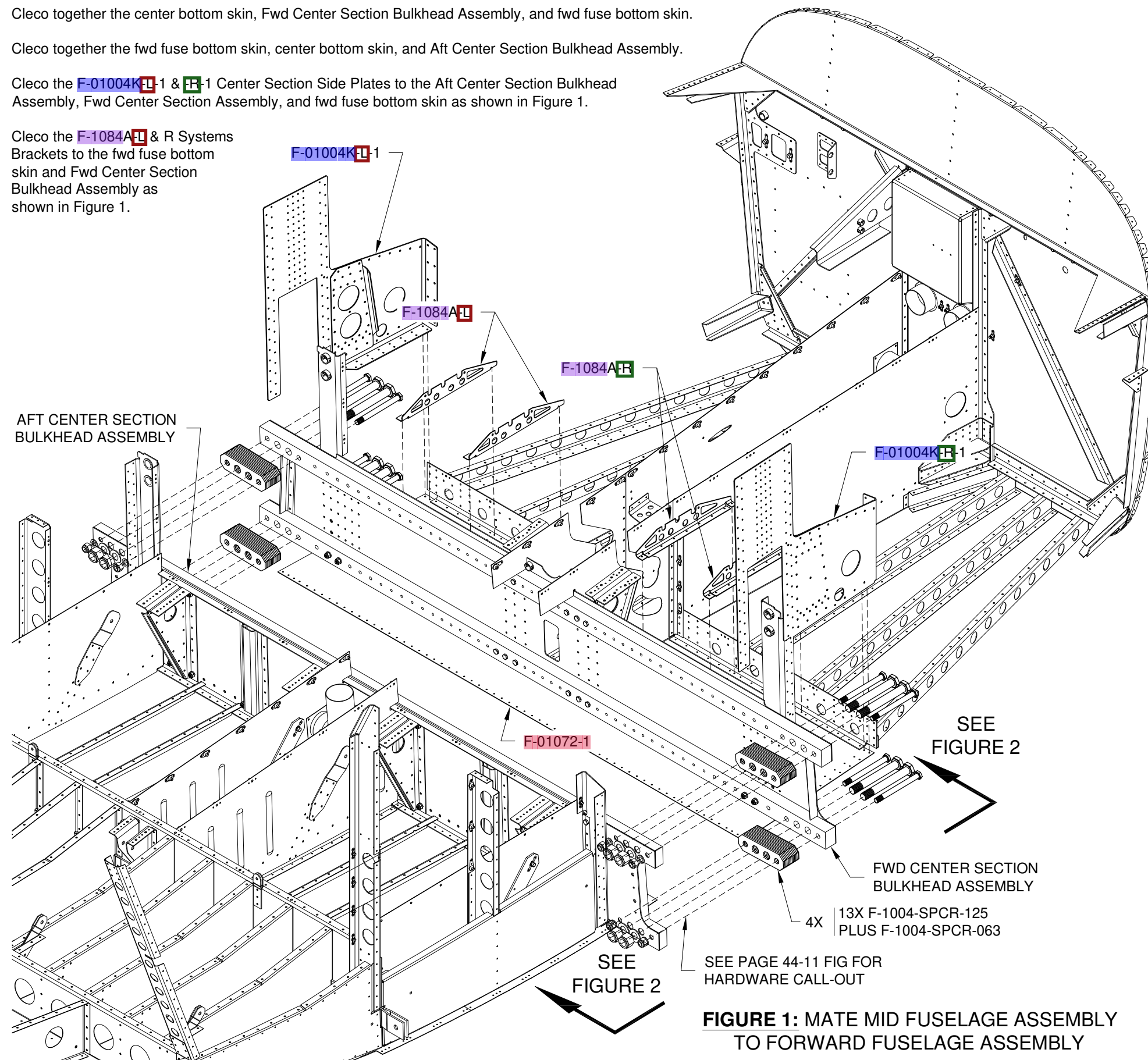


FIGURE 1: MATE MID FUSELAGE ASSEMBLY TO FORWARD FUSELAGE ASSEMBLY

Step 2: Final-Drill #40 the holes common to the **F-1076** Center Bottom Skin, Fwd Center Section Bulkhead Assembly, and **F-01072-1** Fwd Fuse Bottom Skin. Note that at four locations the aft tabs of the **F-1084A-L** & R Systems Brackets will have been final-drilled.

Final-Drill #40 the holes common to the fwd fuse bottom skin, center bottom skin, and Aft Center Section Bulkhead Assembly.

Final-Drill #40 the holes common to the **F-01004K-L-1** & **F-1** Center Section Side Plates to the Aft Center Section Bulkhead Assembly and Fwd Center Section Bulkhead Assembly.

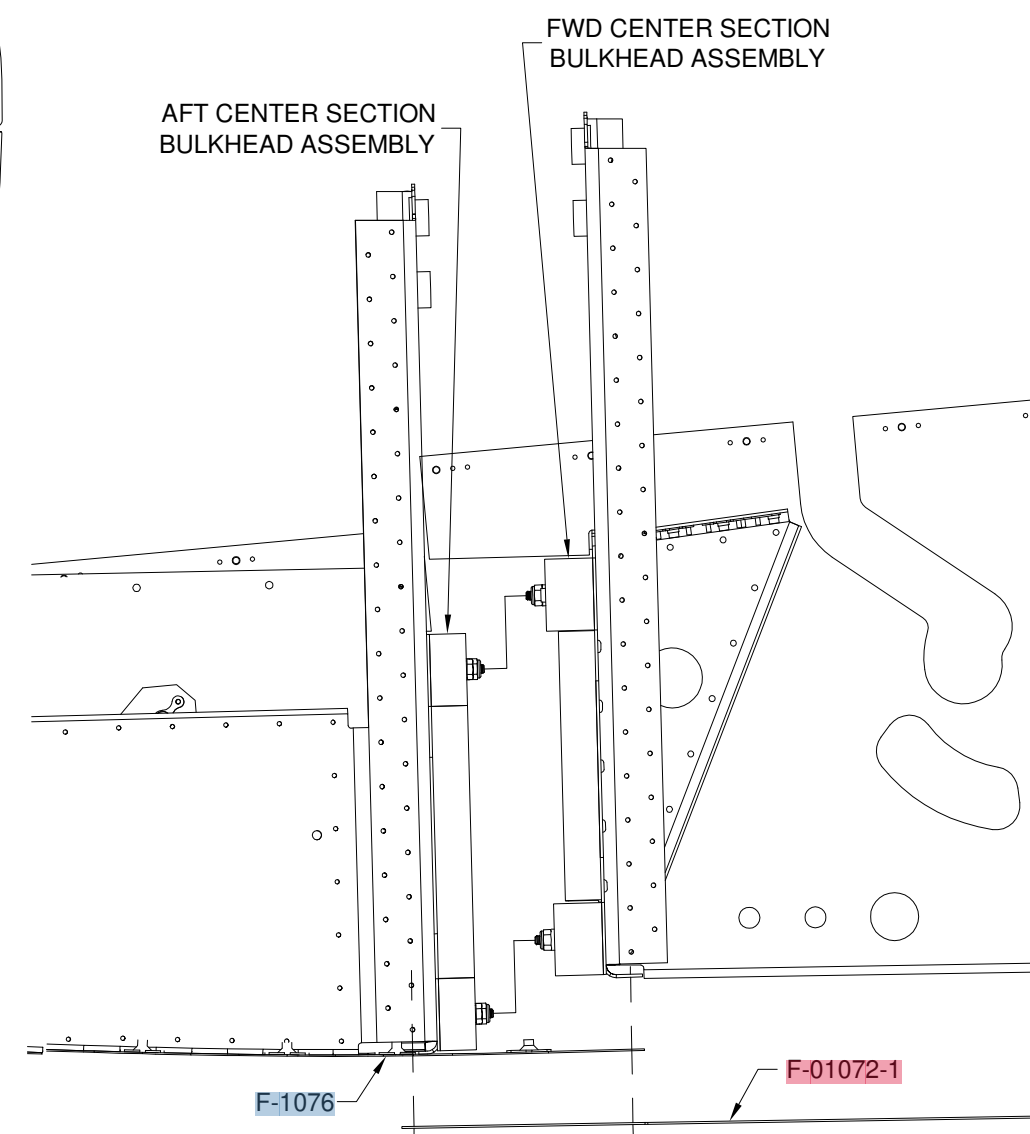


FIGURE 2: SKIN OVERLAP DETAIL



VAN'S AIRCRAFT, INC.

Step 1: Remove the **F-01004K-L** & **FR-1** Center Section Side Plates.

Machine countersink the holes on the bottom flange of the center section side plates to fit a piece of .040 skin that has been dimpled for an AN426AD3 rivet.

Deburr all final-drilled holes in the center section side plates.

Step 2: Remove the **F-1084A-L** & R Systems Brackets.

Deburr all holes and edges.

Dimple all rivet holes EXCEPT the single hole in each of the "tabs" at each end of the systems brackets.

Step 3: Un-cleco the **F-1076** Center Bottom Skin, Fwd Center Section Bulkhead Assembly, Aft Center Section Bulkhead Assembly, and **F-01072-1** Fwd Fuse Bottom Skin.

Separate the Mid Fuselage Assembly from the Forward Fuselage Assembly.

Step 4: Deburr and dimple the holes along the forward edge of the **F-1076** Center Bottom Skin.

Step 5: Remove the Fwd Center Section Bulkhead Assembly from the **F-1048** Fwd Fuselage Ribs.

Machine countersink the holes on the bottom flange of the Fwd Center Section Bulkhead Assembly to fit a piece of .032 skin that has been dimpled for an AN426AD3 rivet.

Deburr all holes in the Fwd Center Section Bulkhead Assembly that have been final-drilled.

Step 6: Remove the **F-1043A-L** & R Fwd Fuselage Bulkheads.

Machine countersink the holes on the bottom flange of the fwd fuselage bulkheads to fit a piece of .040 skin that has been dimpled for an AN426AD3 rivet.

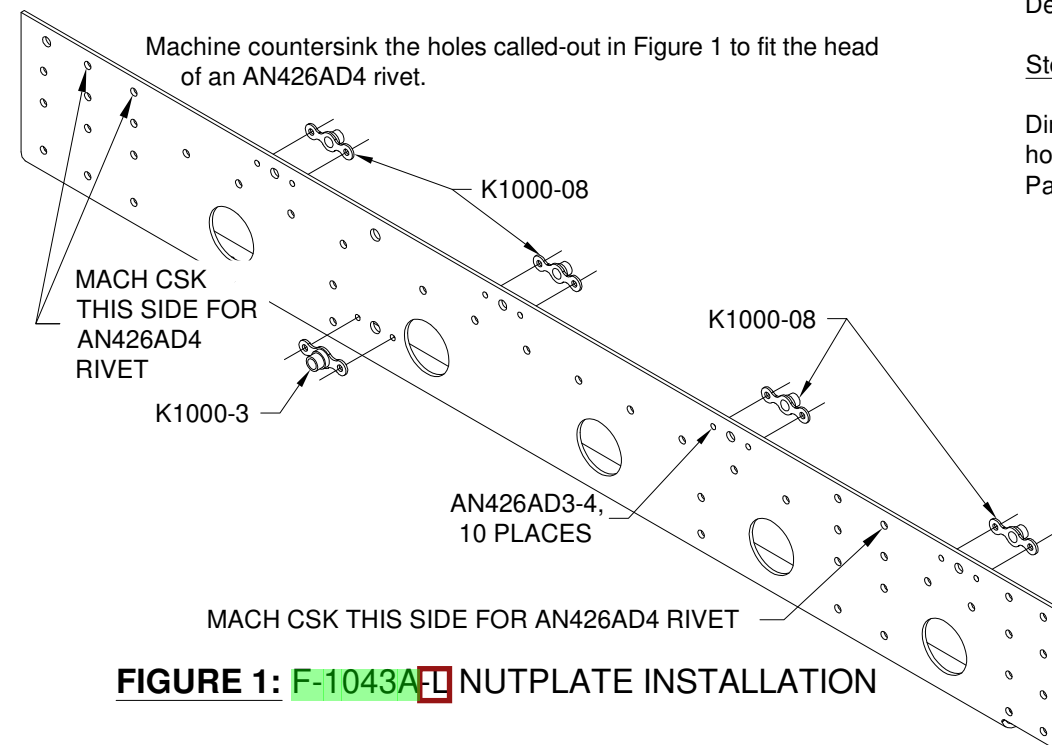


FIGURE 1: F-1043A-L NUTPLATE INSTALLATION

Step 6 (continued): Machine countersink the nutplate attach holes in the web of the fwd fuselage bulkheads to fit the head of an AN426AD3 rivet. See Figure 1.

Deburr all holes and edges.

Step 7: Locate the **F-01043B-L** & **FR-1** Fwd Fuselage Bulkheads.

Machine countersink the nutplate attach holes in the web of the fwd fuselage bulkheads to fit the head of an AN426AD3 rivet. See Figure 2.

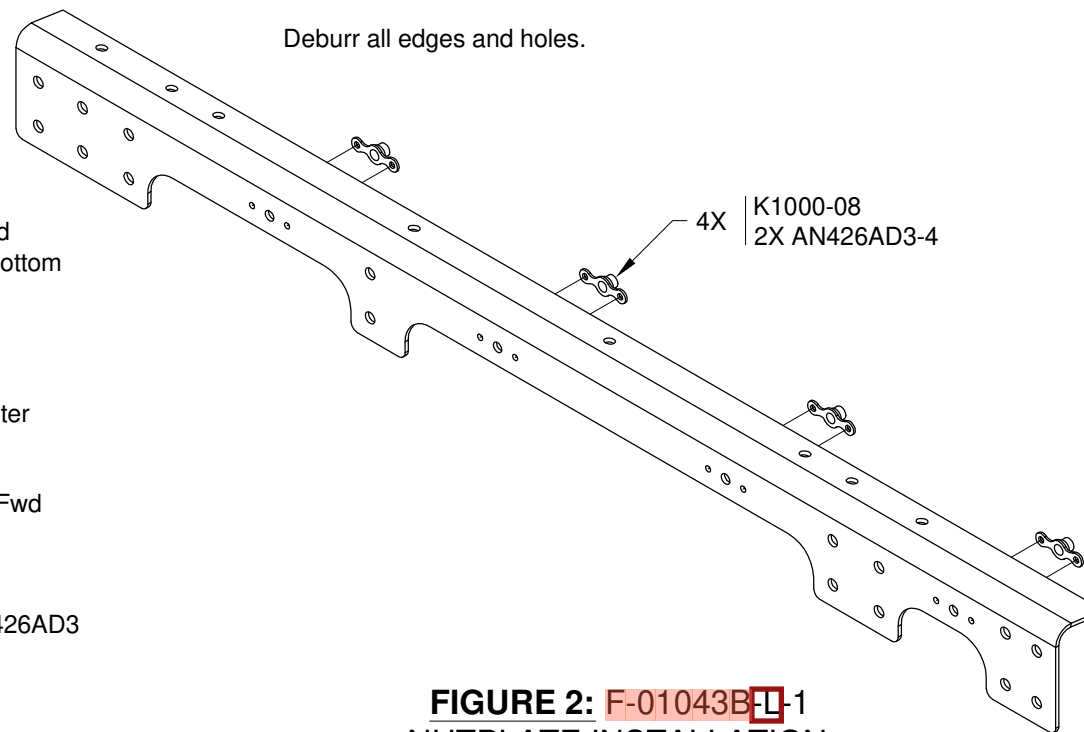


FIGURE 2: F-01043B-L 1 NUTPLATE INSTALLATION

Step 8: Remove the **F-1049A-L** & **FR**, **F-1049B-L** & -R, **F-01049C-L** & -R-1, and **F-1049D-L** & **FR** Fwd Fuselage Floor Ribs. See Page 28-5, Figure 2.

Deburr all holes and edges.

Step 9: Dimple all of the #40 holes in all of the F-1049 Fwd Fuselage Floor Ribs.

Dimple all of the #30 holes in all of the F-1049 Fwd Fuselage Floor Ribs EXCEPT the holes in the forward and aft tabs and the most forward hole in the upper flange. See Page 28-5, Figure 2.

Step 10: Remove the **F-01072-1** Fwd Bottom Skin from the **F-1048** Fwd Fuselage Ribs. See Page 28-6, Figure 3.

Remove the **F-1048D** Fuel Filter Brackets and **VA-188** Flo-Scan Mount Bracket from the fwd bottom skin.

Final-Drill #40 the nutplate attach holes in the flo-scan mount bracket. Final-Drill #12 and 1/4 the nutplate screw holes in the flo-scan mount bracket. See Figure 3.

Machine countersink the fuel filter brackets to fit a piece of .040 skin dimpled for an AN426AD3 rivet.

Deburr holes and edges of the fuel filter brackets and flo-scan mount bracket

Dimple the rivet holes in the flo-scan mount bracket. See Figure 3.

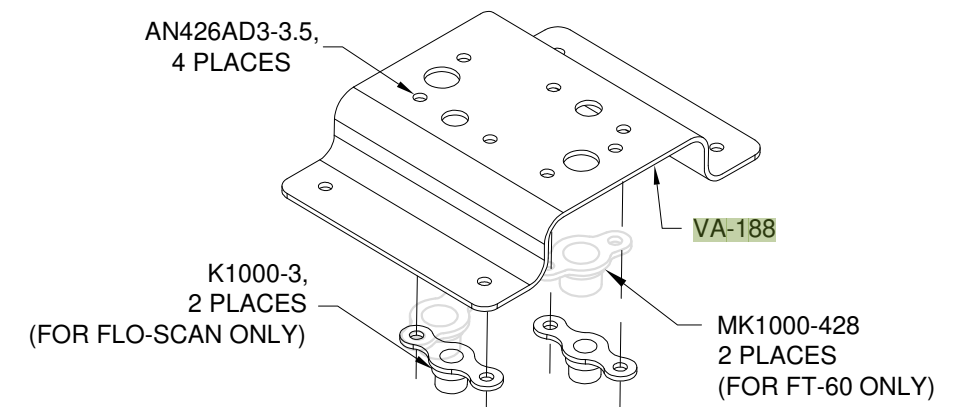


FIGURE 3: FLO-SCAN MOUNT BRACKET NUTPLATE INSTALLATION

Step 11: Deburr holes and edges of the **F-01072-1** Fwd Bottom Skin.

Dimple all holes.

Step 12: Prime the following parts if/as desired:

F-01004K-L & **FR-1** Center Section Side Plates

F-1043A-L & R and **F-01043B-L** & **FR-1** Fwd Fuselage Bulkheads

F-01043D-L & **FR-1** Cover Panels

F-1048D Fuel Filter Brackets

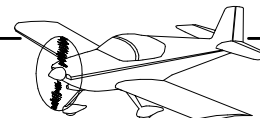
F-1049A-L & R, **F-1049B-L** & R, **F-01049C-L** & **FR-1**, and **F-1049D-L** & R Fwd Fuselage Floor Ribs

F-01050-L & **FR-1** Fwd Cabin Floor Panels

F-01072-1 Fwd Bottom Skin

F-1084A-L & R and **F-1084B** Systems Brackets

VA-188 Flo-Scan Mount Bracket



Step 1: Dimple the nutplates that will be installed to the **VA-188** Flo Scan Mount Bracket. Rivet nutplates to the flo scan mount bracket as shown on Page 28-10, Figure 3.

Step 2: Rivet nutplates to the **F-1043A-L** & R Fwd Fuselage Bulkheads as shown on Page 28-10, Figure 1.

Step 3: Rivet nutplates to the **F-01043B-L-1** & **R-1** Fwd Fuselage Bulkheads as shown on Page 28-10, Figure 2.

Step 4: Rivet the **F-1043C-L** Attach Angle to the **F-1048-L** Forward Fuselage Rib as shown in Figure 1.

Similarly, rivet the **F-1043C-R** Attach Angle to the **F-1048-R** Forward Fuselage Rib.

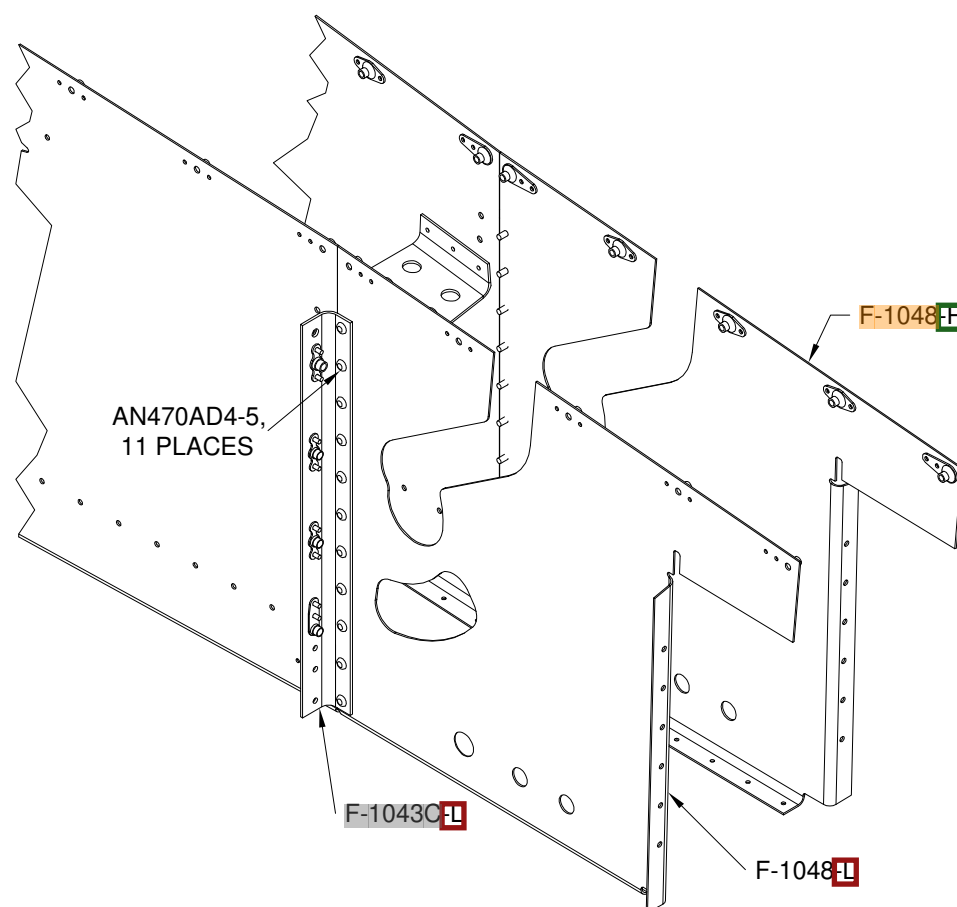


FIGURE 1: RIVET **F-1043C-L** & R TO **F-1048-L** & R

Step 5: Rivet the Outbd Fwd Seat Rail Support - Left and one of the Inbd Fwd Seat Rail Supports to the **F-1043A-L** Fwd Fuselage Bulkhead as shown in Figure 2.

Similarly, rivet the Outbd Fwd Seat Rail Support - Right and the remaining Inbd Fwd Seat Rail Support to the **F-1043A-R** Fwd Fuselage Bulkhead.

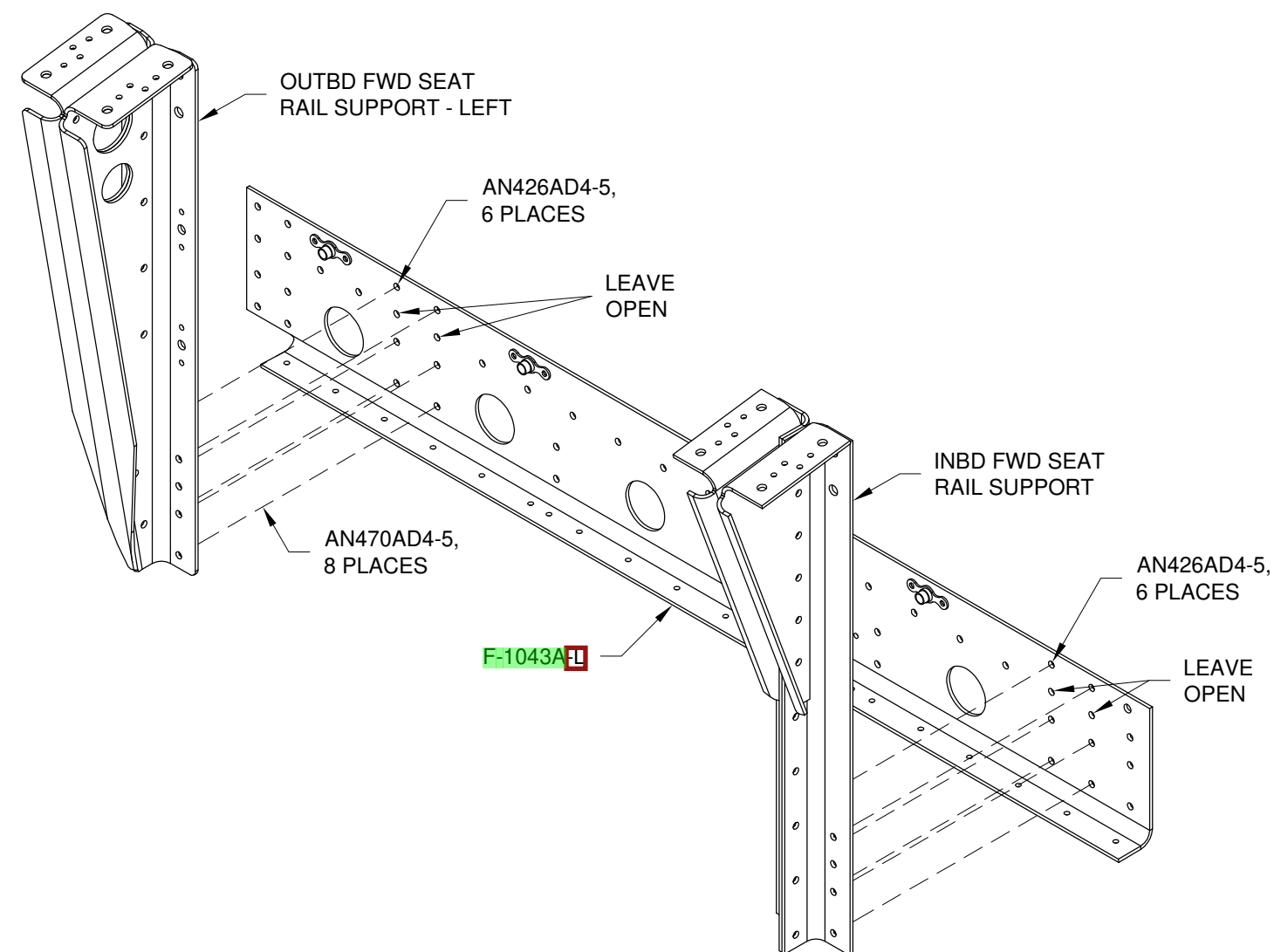
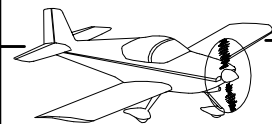


FIGURE 2: RIVET FWD SEAT RAIL SUPPORTS TO FWD FUSELAGE BULKHEAD

Step 6: Rivet the **F-1049A-L** & R, **F-1049B-L** & R, **F-01049C-L-1** & **R-1**, **F-1049D-L** & R Fwd Fuselage Floor Ribs, two **F-1048D** Fuel Filter Brackets, and **VA-188** Flo-Scan Mount Bracket to the **F-01072-1** Fwd Fuse Bottom Skin as shown on Page 28-5, Figure 2. See Page 28-12, Figure 2 for rivet call-outs.

Dimple the forward tabs of the fwd fuselage floor ribs.



Step 1: Rivet the F-1043A-L and F-1043A-R Fwd Fuselage Bulkheads to the F-01072-1 Fwd Fuse Bottom Skin as shown in Figure 1. See Figure 2 for rivet call-outs.

Note that Figure 1 calls out "DO NOT RIVET" in four locations.

Step 2: Rivet the aft tabs of the F-1049A-L and F-1049B-L Fwd Fuselage Floor Ribs to the F-1043A-L Fwd Fuselage Bulkhead as shown in Figure 1.

Rivet the aft tabs of the F-1049A-R and F-1049B-R Fwd Fuselage Floor Ribs to the F-1043A-R Fwd Fuselage Bulkhead as shown in Figure 1.

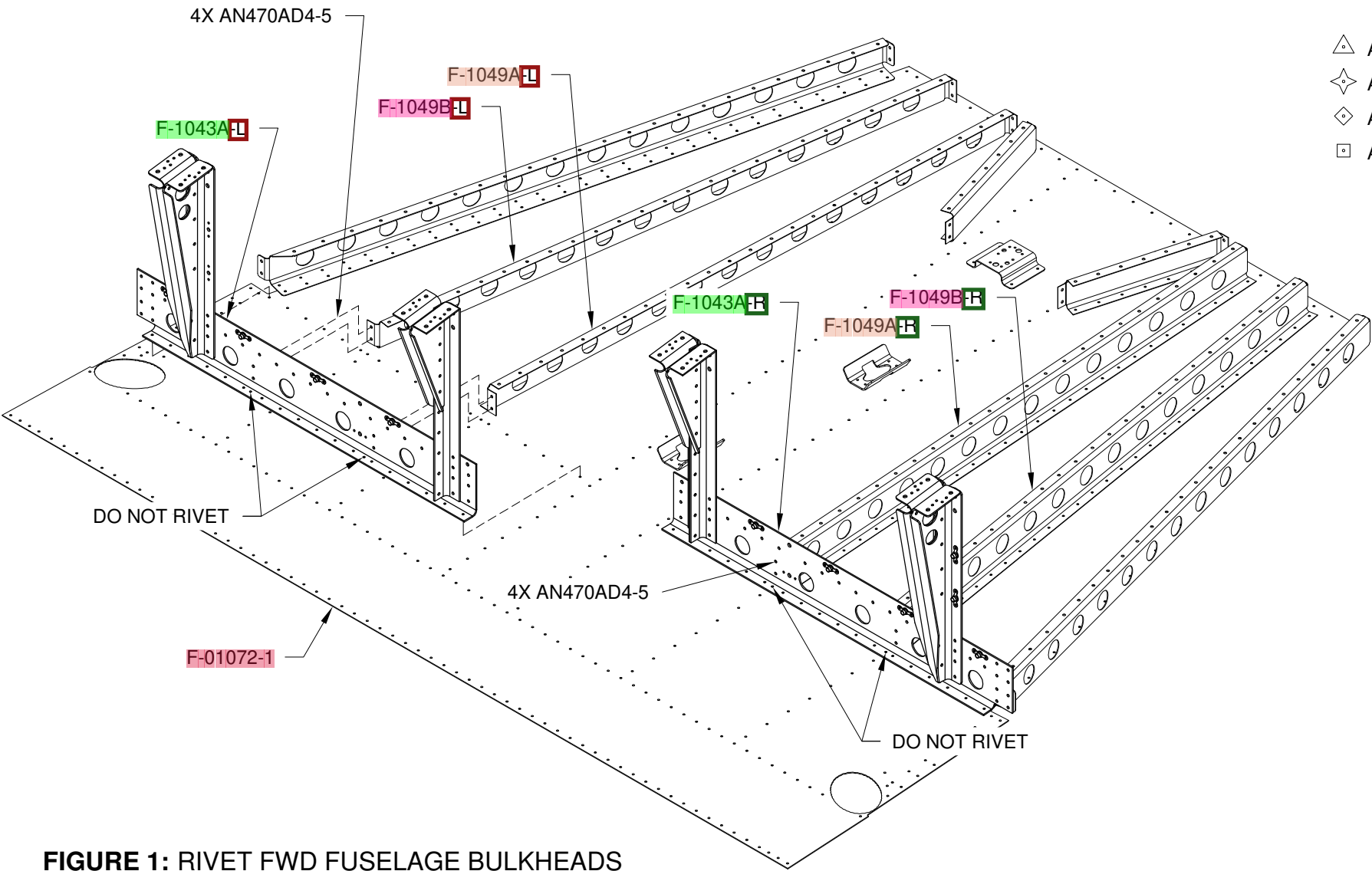


FIGURE 1: RIVET FWD FUSELAGE BULKHEADS TO FWD FUSE BOTTOM SKIN

LEAVE OPEN FOR COWL SUPPORT (LYCOMING ENGINES)

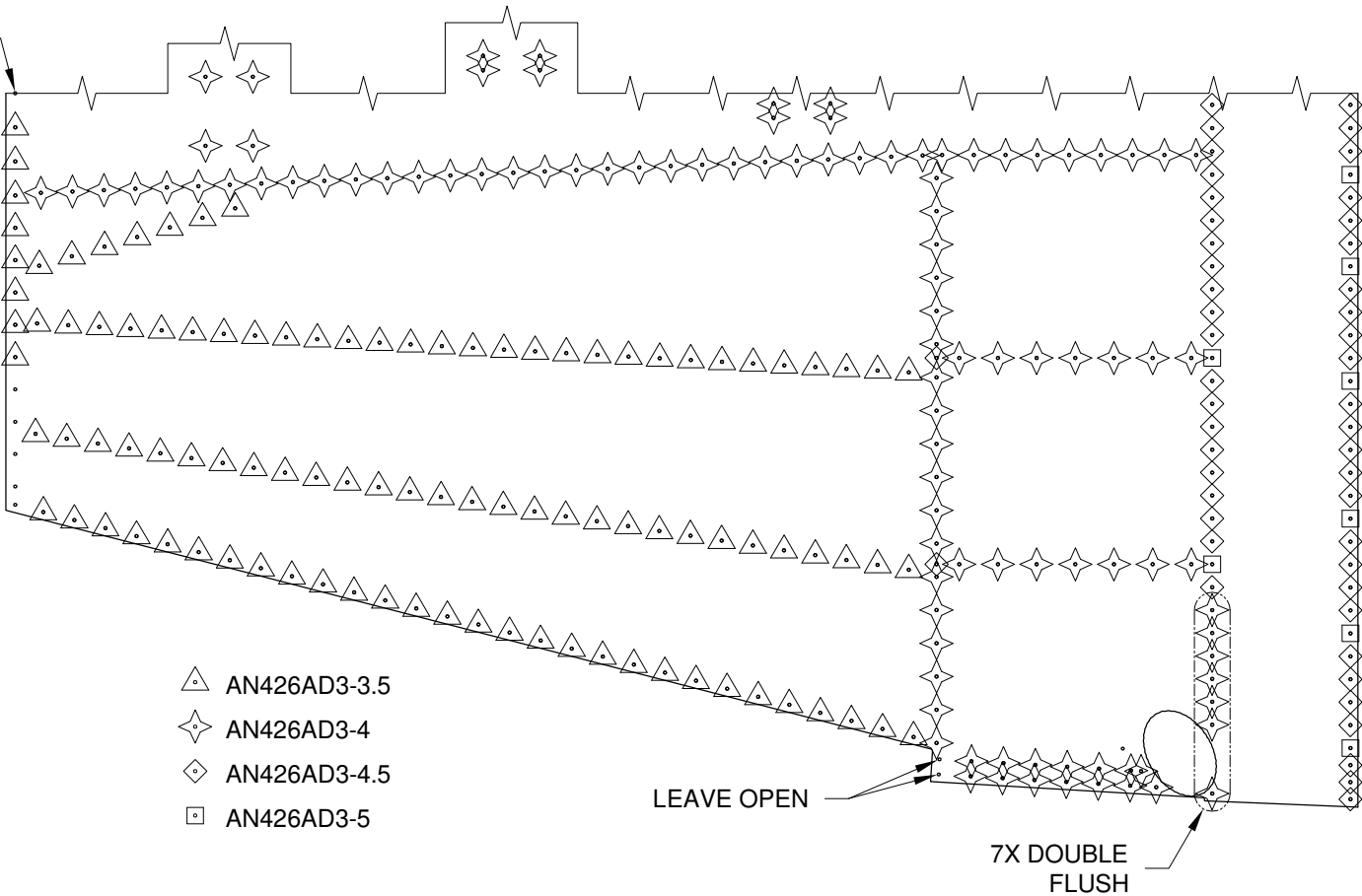
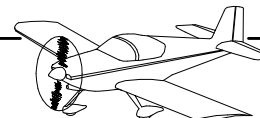


FIGURE 2: FWD FUSE BOTTOM SKIN RIVET DIAGRAM



Step 1: Rivet the F-1084A-L and F-1084A-R Systems Brackets to the F-01072-1 Fwd Fuse Bottom Skin and F-1043A-L and F-1043A-R Fwd Fuselage Bulkheads as shown on Page 28-6, Figures 1 and 3.

Leave the aft three holes in each systems bracket unriveted for now. (These rivets will be installed after mating the Forward Fuselage and Mid Fuselage Assemblies.)

See Page 28-12, Figure 2 for rivet call-outs.

Step 2: It is recommended to use a thin layer of Pro-Seal between the firewall flanges and the fuselage skins. Apply Pro-Seal to the lower flange of the F-1001A Firewall Bulkhead then cleco the Firewall Assembly to the F-01072-1 Fwd Fuse Bottom Skin as shown in Figure 1.

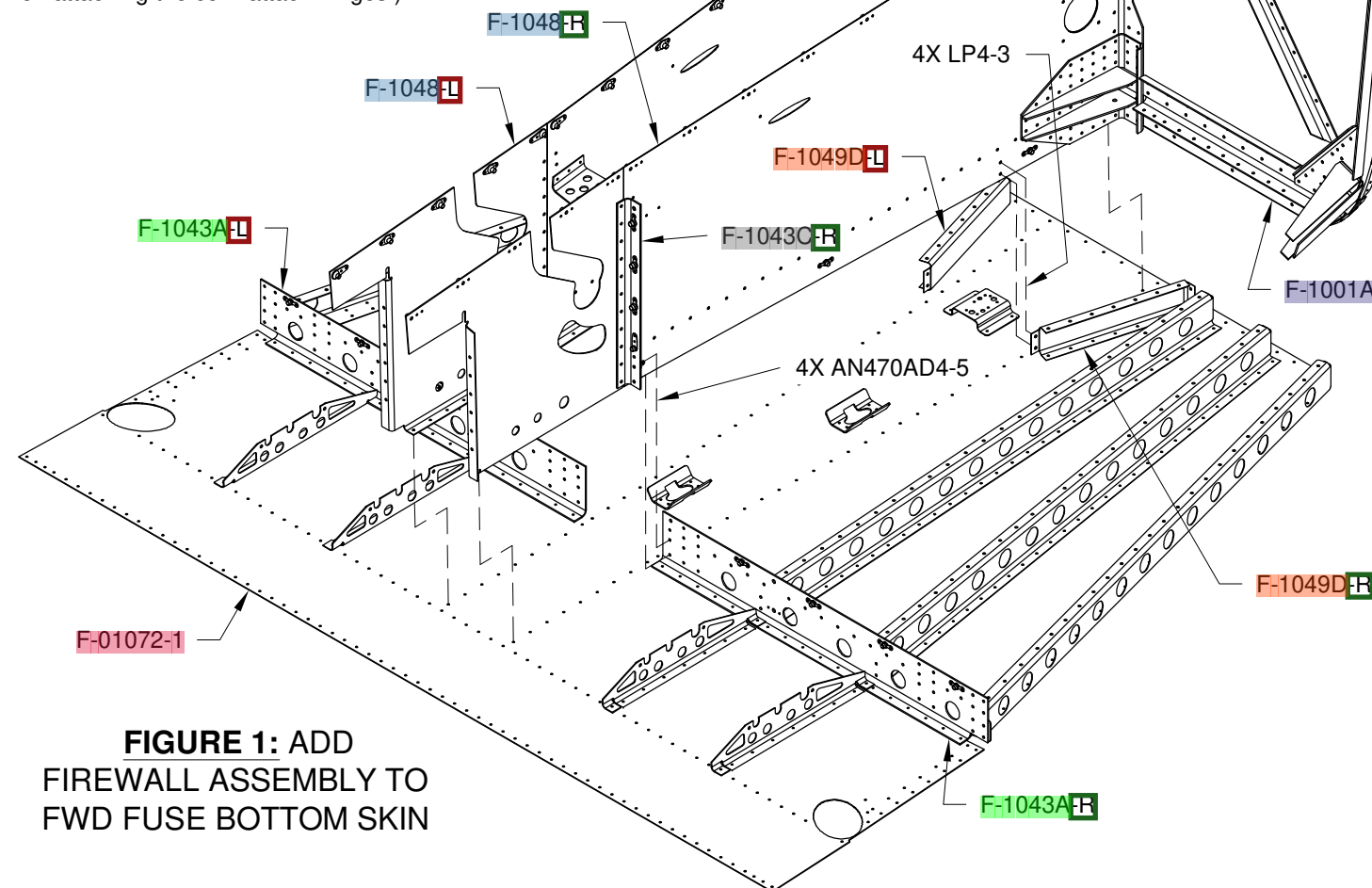
Rivet the flanges of the F-1048-L and F-1048-R Fwd Fuselage Ribs to the fwd fuse bottom skin. Leave the aft three holes in each fwd fuselage rib unriveted for now. (These rivets will be installed after mating the Forward Fuselage and Mid Fuselage Assemblies.) See Page 28-12, Figure 2 for rivet call-outs.

Rivet the F-1043C-R Attach Angle to the F-1043A-R Fwd Fuselage Bulkhead as shown in Figure 1. Rivet the F-1043C-L Attach Angle to the F-1043A-L Fwd Fuselage Bulkhead.

Rivet the aft tabs of the F-1049D-L and F-1049D-R Fwd Fuselage Floor Ribs to the webs of the fwd fuselage ribs as shown in Figure 1.

Rivet the forward tabs of all the F-1049 Fwd Fuselage Floor Ribs to the firewall bulkhead using the rivets called-out on Page 27-5, Figure 1.

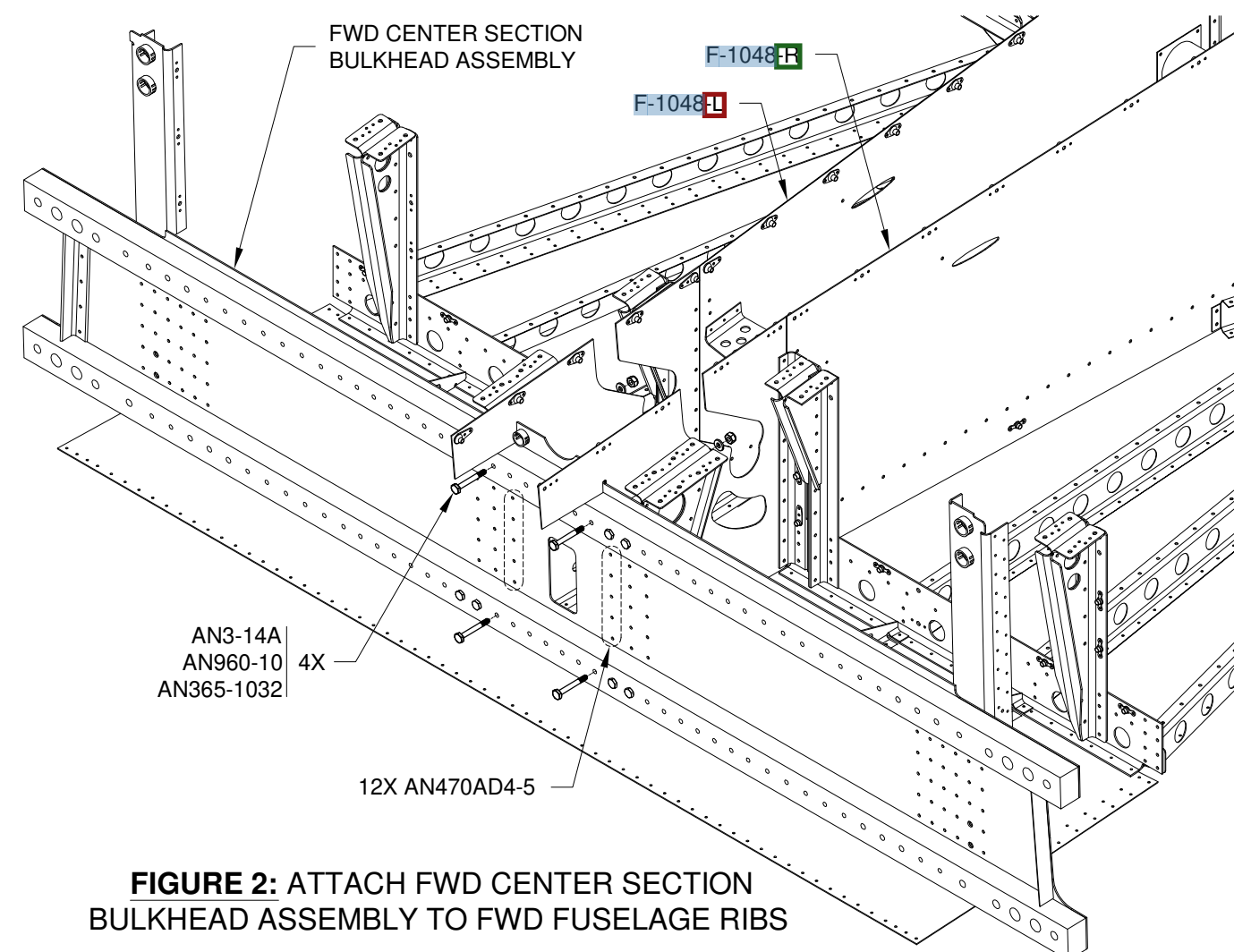
Rivet the lower flange of the firewall bulkhead to the fwd fuselage bottom skin EXCEPT leave the five most outboard holes on each side unriveted for now. (These rivets will be installed later when attaching the cowl attach hinges.)



**FIGURE 1: ADD
FIREWALL ASSEMBLY TO
FWD FUSE BOTTOM SKIN**

Step 3: Bolt the Fwd Center Section Bulkhead Assembly to the F-1048-L & R Fwd Fuselage Ribs as shown in Figure 2.

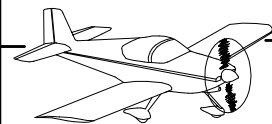
Rivet the web of the Fwd Center Section Bulkhead Assembly to the fwd fuselage ribs as shown in Figure 2.



**FIGURE 2: ATTACH FWD CENTER SECTION
BULKHEAD ASSEMBLY TO FWD FUSELAGE RIBS**

Step 4: Mate the Mid Fuselage Assembly to the Fwd Fuselage Assembly as shown on Page 28-9, Figures 1 & 2.

Inserting bolts into the holes in the Fwd and Aft Center Section Bulkhead Assemblies and using the spacers between the Fwd and Aft Center Section Bulkhead Assemblies ensures proper alignment of the center section bulkhead assemblies.



Step 1: Rivet the bottom flange of the Aft Center Section Bulkhead Assembly to the F-1076 Center Bottom Skin and F-01072-1 Fwd Fuse Bottom Skin. See Page 28-12, Figure 2 for rivet call-outs.

Step 2: Rivet the open holes in the aft ends of the F-1048 Fwd Fuselage Ribs and F-1084A-L & R Systems Brackets to the F-01072-1 Fwd Fuse Bottom Skin. See Page 28-12, Figure 2 for rivet call-outs.

Step 3: Rivet the bottom flange of the Fwd Center Section Bulkhead Assembly to the F-1076 Center Bottom Skin and F-01072-1 Fwd Fuse Bottom Skin. See Page 28-12, Figure 2 for rivet call-outs.

Step 4: Cleco the F-01004K-L-1 & F-1043A-L & R Center Section Side Plates to the Fwd and Aft Center Section Bulkhead Assemblies. Cleco the center section side plates to the F-01072-1 Fwd Fuse Bottom Skin. See Page 28-9, Figure 1.

Note that the forward flange of the center section side plates are FORWARD of the F-1043A-L & R Fwd Fuselage Bulkheads as shown on Page 28-4, Figure 2.

Step 5: Cleco the F-01042-L-1 & F-1043A-L & R Bulkhead Side Channels to the F-01004K-L-1 & -R-1 Center Section Side Plates and F-1043A-L & R Fwd Fuselage Bulkheads as shown in Figure 1 and Page 28-4, Figure 2.

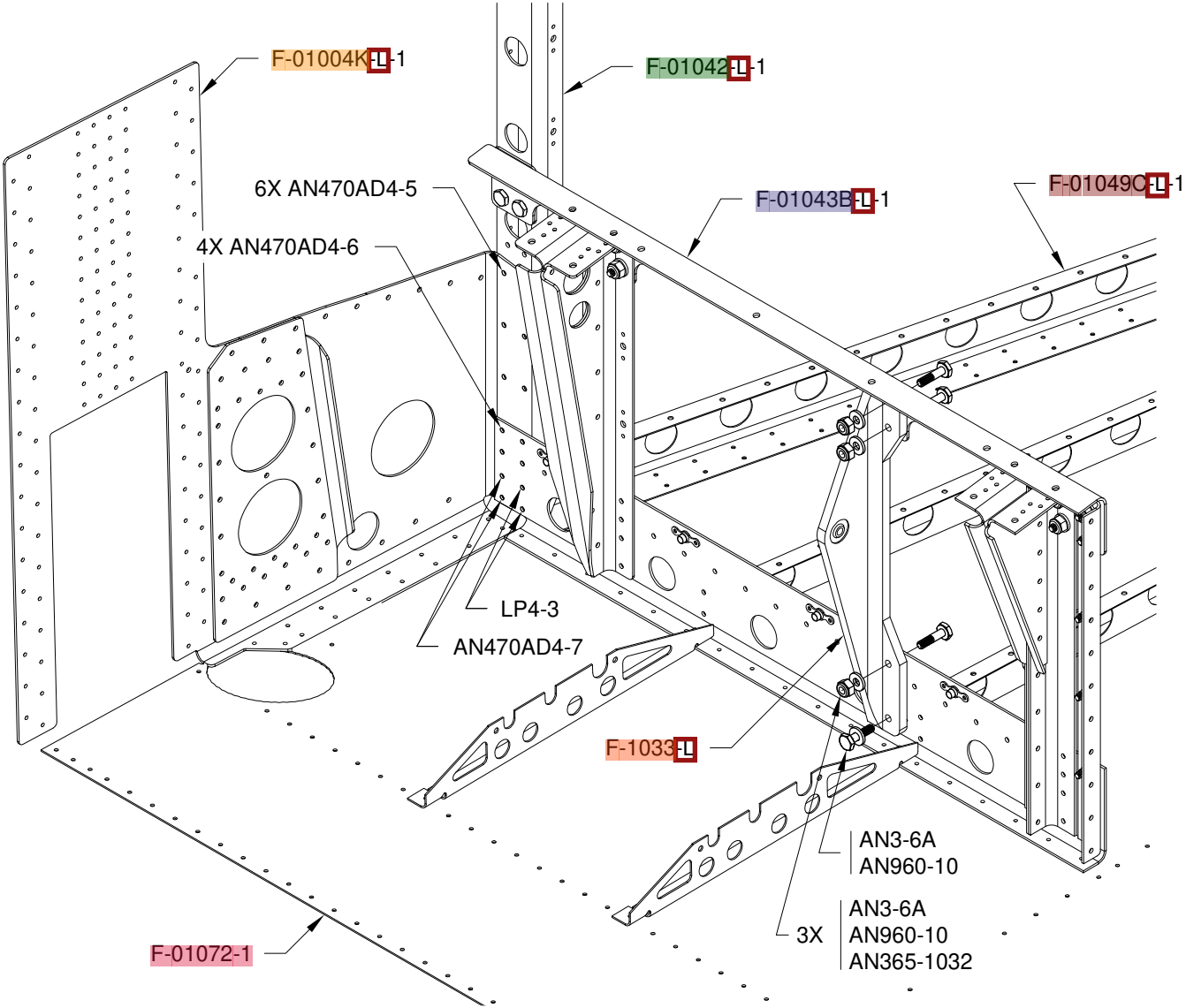


FIGURE 1: INSTALL BULKHEAD SIDE CHANNEL, FWD FUSELAGE BULKHEAD, AND CONTROL COLUMN MOUNT
(SOME PARTS NOT SHOWN FOR CLARITY)

Step 6: Bolt the F-01043B-L-1 & F-1043C-L & R Attach Angles, Inbd Fwd Seat Rail Supports, Outbd Fwd Seat Rail Supports, and F-01042-L-1 & F-1043A-L & R Bulkhead Side Channels as shown in Figure 1 and Page 28-4, Figure 2.

Step 7: Bolt the F-1033-L Control Column Mount to the F-1043A-L and F-01043B-L-1 Fwd Fuselage Bulkheads as shown in Figure 1.

Bolt the F-1033-R Control Column Mount to the F-1043A-R and F-01043B-R-1 Fwd Fuselage Bulkheads.

Step 8: Rivet the bottom flange of the F-01004K-L-1 & F-1043A-L & R Center Section Side Plates to the F-01072-1 Fwd Fuse Bottom Skin. See Page 28-12, Figure 2 for rivet call-outs.

Step 9: Blind rivet the F-1043A-L Fwd Fuselage Bulkhead, forward flange of the F-01004K-L-1 Center Section Side Plate, and F-01042-L-1 Bulkhead Side Channel as shown in Figure 1.

Repeat this step for the right side of the aircraft.

Step 10: Rivet the F-1043A-L Fwd Fuselage Bulkhead, forward flange of the F-01004K-L-1 Center Section Side Plate, F-01042-L-1 Bulkhead Side Channel, and the aft tab of the F-01049C-L-1 Fwd Fuselage Floor Rib as shown in Figure 1. See Page 28-6, Figure 1.

Repeat this step for the right side of the aircraft.

Step 11: Rivet the forward flange of the F-01004K-L-1 Center Section Side Plate, and F-01042-L-1 Bulkhead Side Channel as shown in Figure 1.

Repeat this step for the right side of the aircraft.

Step 12: Final-Drill #19 all the holes in the F-1067B Seat Floor Covers as shown in Figure 2.

Deburr the holes and edges of the seat floor covers.

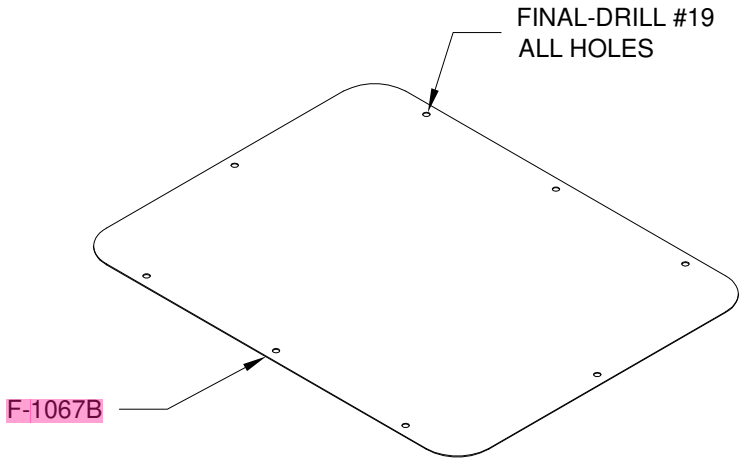


FIGURE 2: SEAT FLOOR COVER



NOTE: Two Seat Floor Assemblies are created on this page, one left and one right. The right is a mirror image of what is shown in Figure 1.

Step 1: Machine countersink the nutplate attach holes in the **F-01067A-1** Seat Floors and **F-01067D-1** Seat Floor Attach Strips to fit the head of an AN426AD3 rivet. See Figure 1.

Step 2: Separate the F-0167C-1 Seat Floor Angle.

Step 3: Machine countersink the holes in the **F-01067A-1** Seat Floors that are common to the **F-01067D-1** Seat Floor Attach Strips and **F-01067C-1** Seat Floor Angles to fit the head of an AN426AD3 rivet. See Figure 1.

Step 4: Prime the parts if/as desired.

Step 5: Rivet the **F-01067C-1** Seat Floor Angles and **F-01067D-1** Seat Floor Attach Strips to the **F-01067A-1** Seat Floor as shown in Figure 1.

Rivet nutplates to the seat floors and seat floor attach strips as shown in Figure 1.

Step 6: The two subassemblies created on this page will subsequently be referred to as Seat Floor Assembly - Left and Seat Floor Assembly - Right.

The Seat Floor Assembly - Left, Seat Floor Assembly - Right, and **F-1067B** Seat Floor Covers will not be installed at this time. Set them aside until called for during later sections.

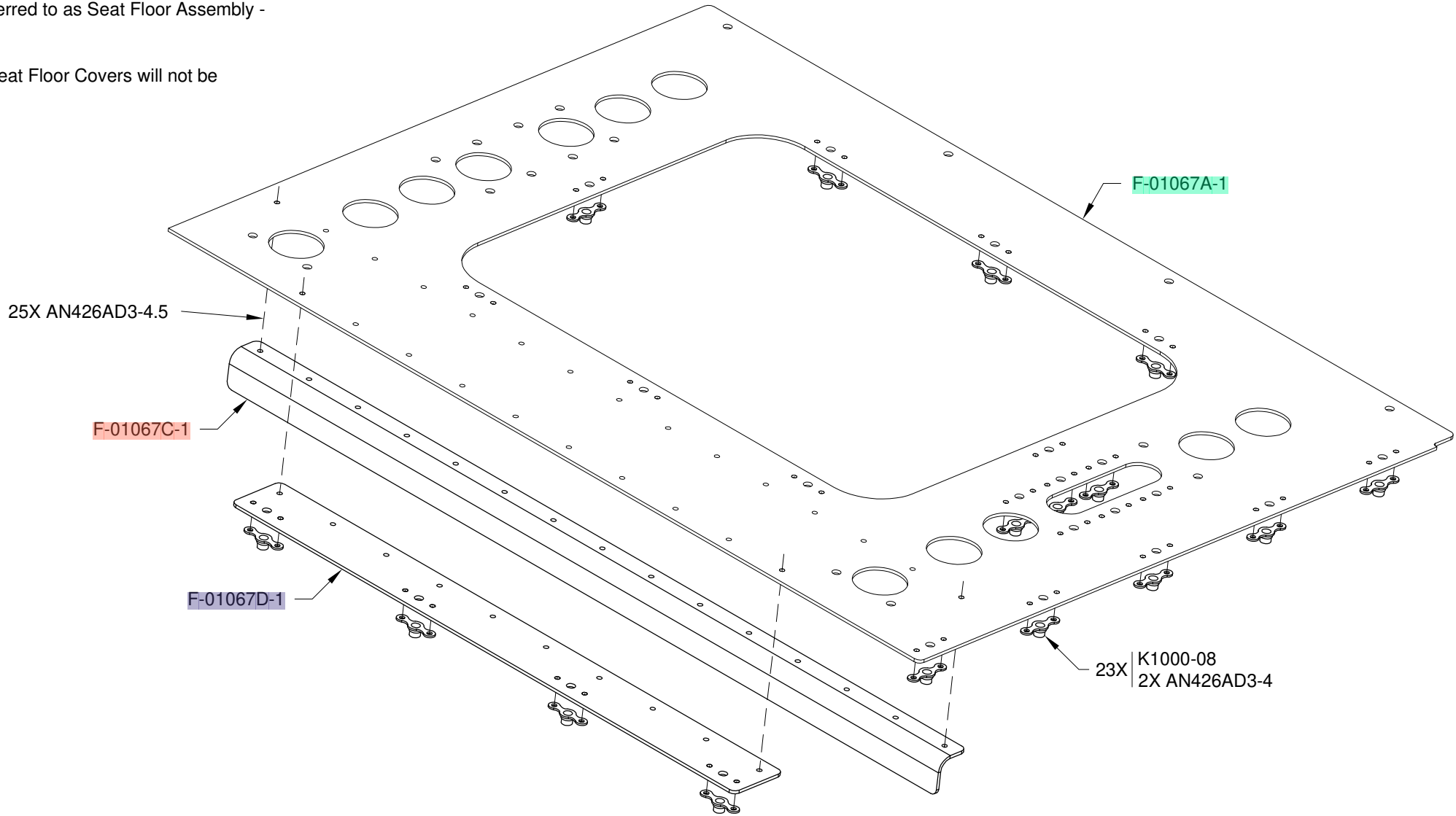


FIGURE 1: SEAT FLOOR ASSEMBLY - LEFT
(SEAT FLOOR ASSEMBLY - RIGHT IS A MIRROR IMAGE OF WHAT IS SHOWN)



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