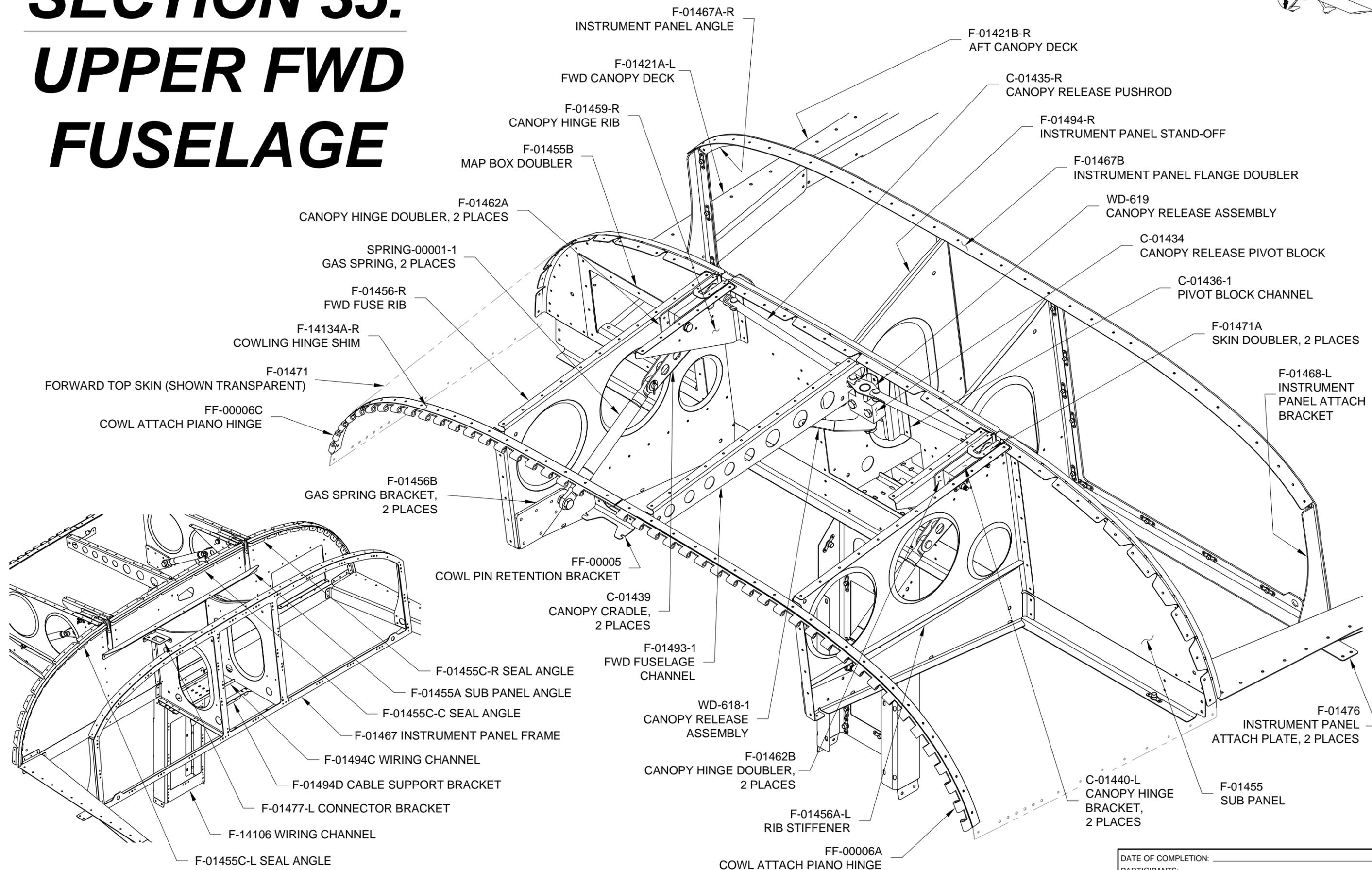




SECTION 35: UPPER FWD FUSELAGE





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

Step 1: Dimple the #40 holes in the F-01456-L & -R Fwd Fuse Rib flanges per Figure 1 call-outs.

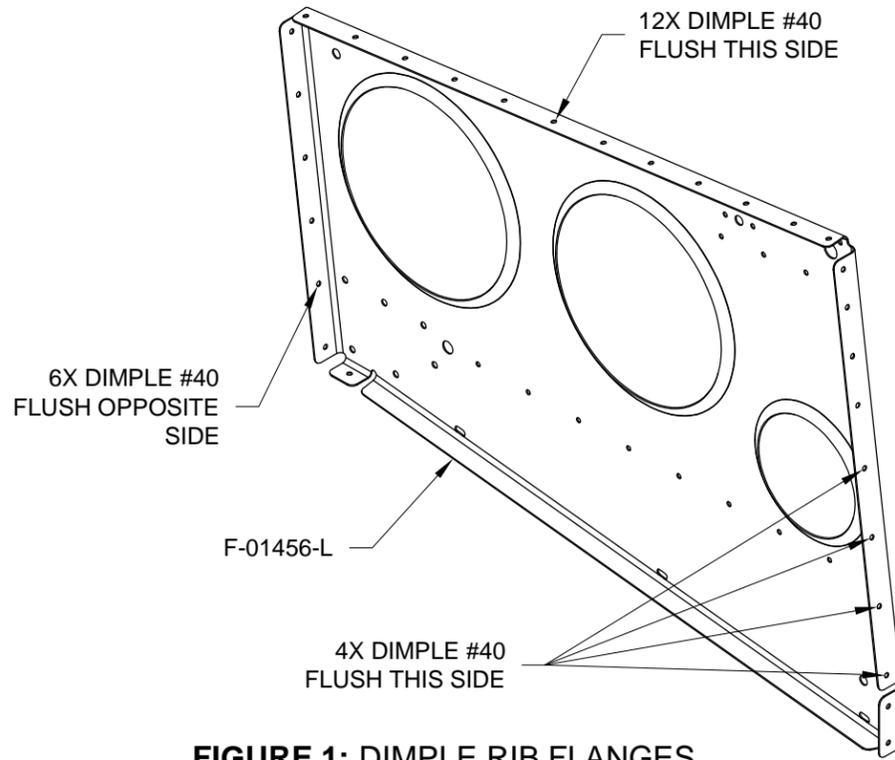


FIGURE 1: DIMPLE RIB FLANGES
(LEFT SIDE SHOWN)

Step 2: Separate and deburr the F-01456A-L & -R Rib Stiffeners as shown in Figure 2.

Step 3: Rivet the F-01456A-L & -R Rib Stiffeners and F-01456B Gas Spring Brackets to the F-01456-L & -R Fwd Fuse Ribs as shown in Figure 2.

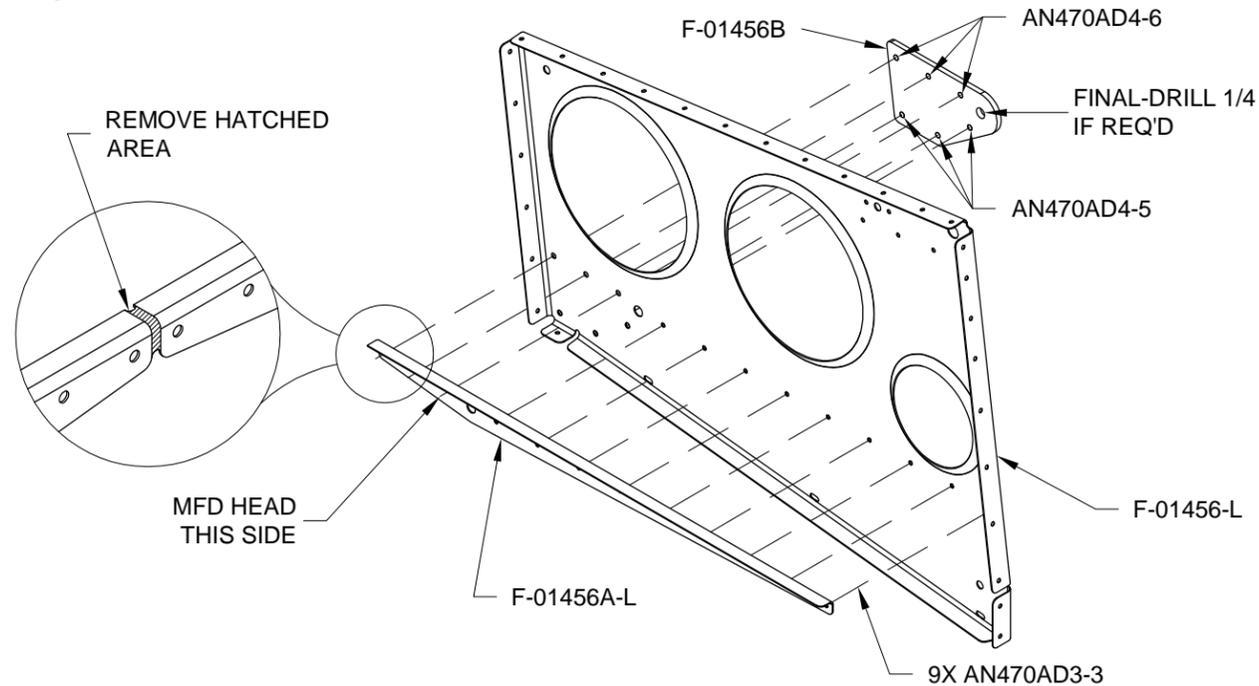


FIGURE 2: RIVET STIFFENERS & BRACKETS TO RIB
(LEFT SIDE SHOWN)

Note: The manufactured heads of the rivets must sit flush or just below the surface of the F-01462A Canopy Hinge Doubler to prevent interference later.

Step 4: Machine countersink the #40 holes in the F-01462A Canopy Hinge Doublers as shown in Figure 3.

Step 5: Rivet the F-01462A Canopy Hinge Doublers and nutplates to the F-01456-L Fwd Fuse Ribs as shown in Figure 3.

Hereafter refer to this as the Left Fwd Rib Assembly.

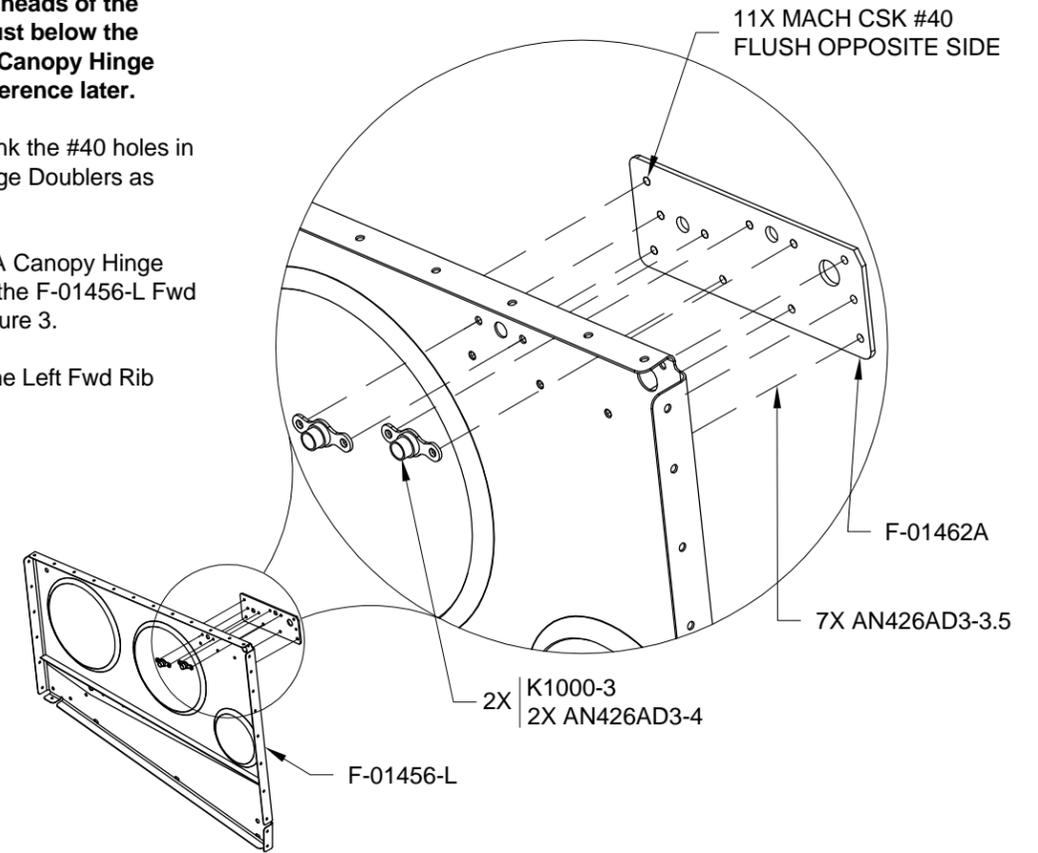


FIGURE 3: FWD RIB ASSEMBLY
(LEFT SIDE SHOWN)

Step 6: Separate the F-01459-L & -R Canopy Hinge Ribs where indicated in Figure 4.

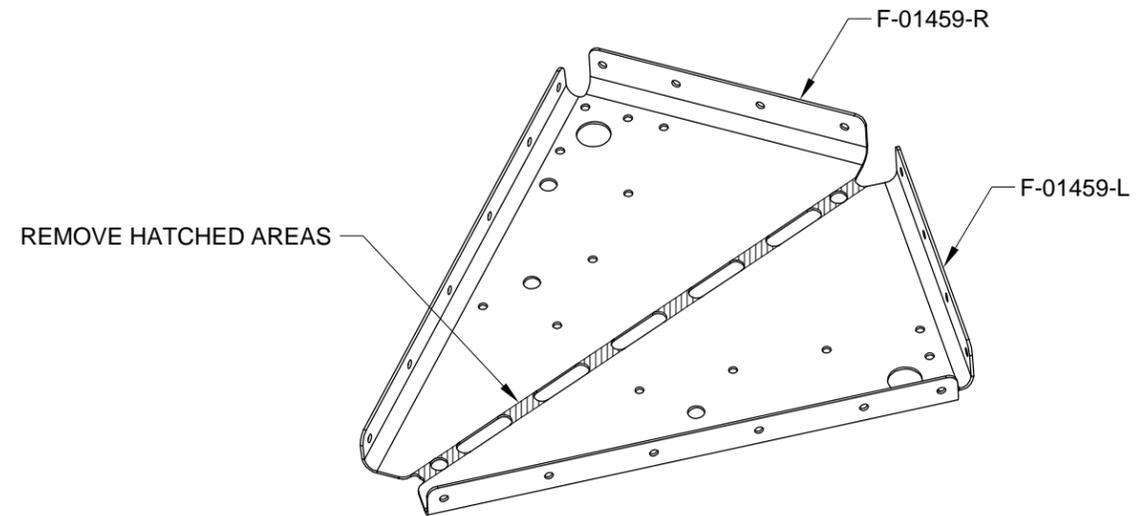


FIGURE 4: SEPARATE CANOPY HINGE RIBS



Note: The manufactured heads of the rivets must sit flush or just below the surface of the F-01462B Canopy Hinge Doubler to prevent interference later.

Step 1: Machine countersink the F-01462B Canopy Hinge Doubler as shown in Figure 1.

Step 2: Insert AN3 bolts into the holes indicated in Figure 1 to hold alignment while riveting.

Step 3: Rivet the F-01462B Canopy Hinge Doubler to the F-01459-L Canopy Hinge Rib as shown in Figure 1 and remove the bolts.

Hereafter refer to this as the Left Hinge Rib Assembly.

Step 4: Repeat the above steps for the Right Hinge Rib Assembly.

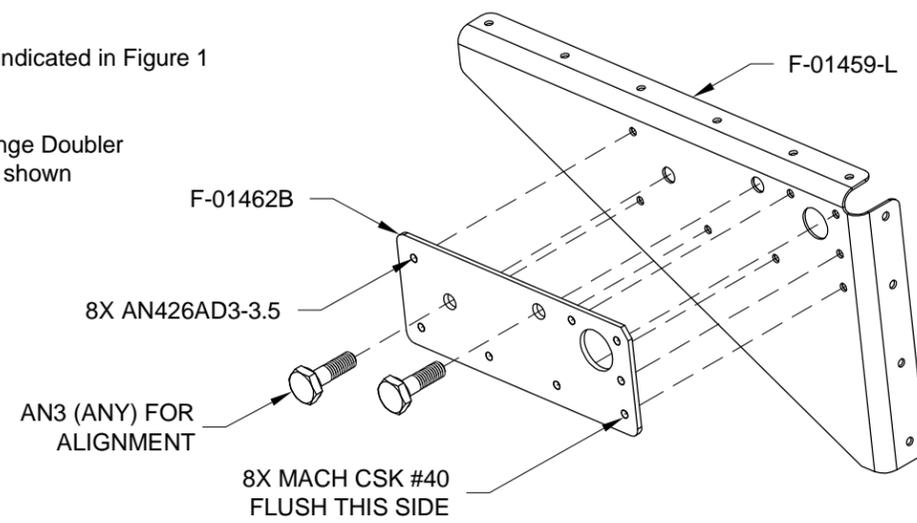


FIGURE 1: LEFT HINGE RIB ASSEMBLY

NOTE: Skip Step 5 if using the newer C-01436-1.

Step 5: Remove the hatched area from the C-01436 Pivot Block Channel as shown in Figure 2 for better rivet squeezer / bucking bar access and deburr.

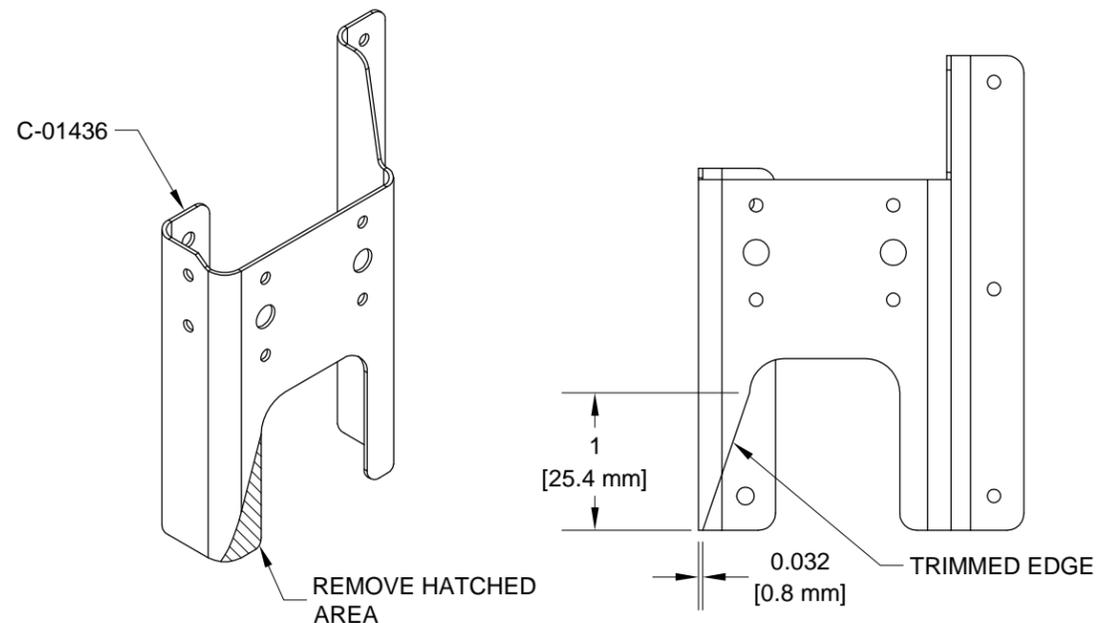


FIGURE 2: C-01436 PIVOT BLOCK CHANNEL TRIM

Refer to Figure 3 for the following steps.

Step 6: Machine countersink the nutplate attach holes in the C-01436-1 Pivot Block Channel.

Step 7: Dimple the #40 holes where indicated in the F-01493-1 Fwd Fuselage Channel.

Step 8: Rivet the C-01436-1 Pivot Block Channel to the F-01493-1 Fwd Fuselage Channel.

Step 9: Rivet the nutplates to the C-01436-1 Pivot Block Channel.

Hereafter refer to this as the Channel Assembly.

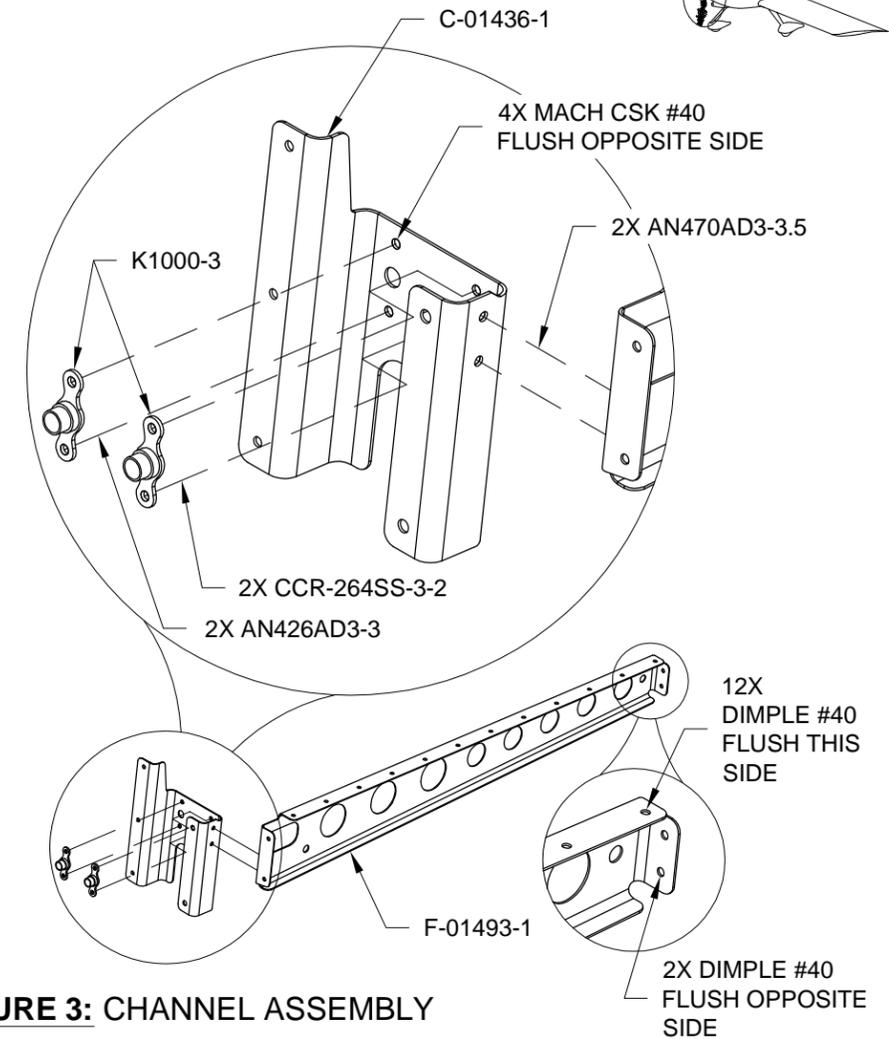


FIGURE 3: CHANNEL ASSEMBLY

Step 10: Remove the hatched areas from the F-01455 Sub Panel as shown in Figure 4.

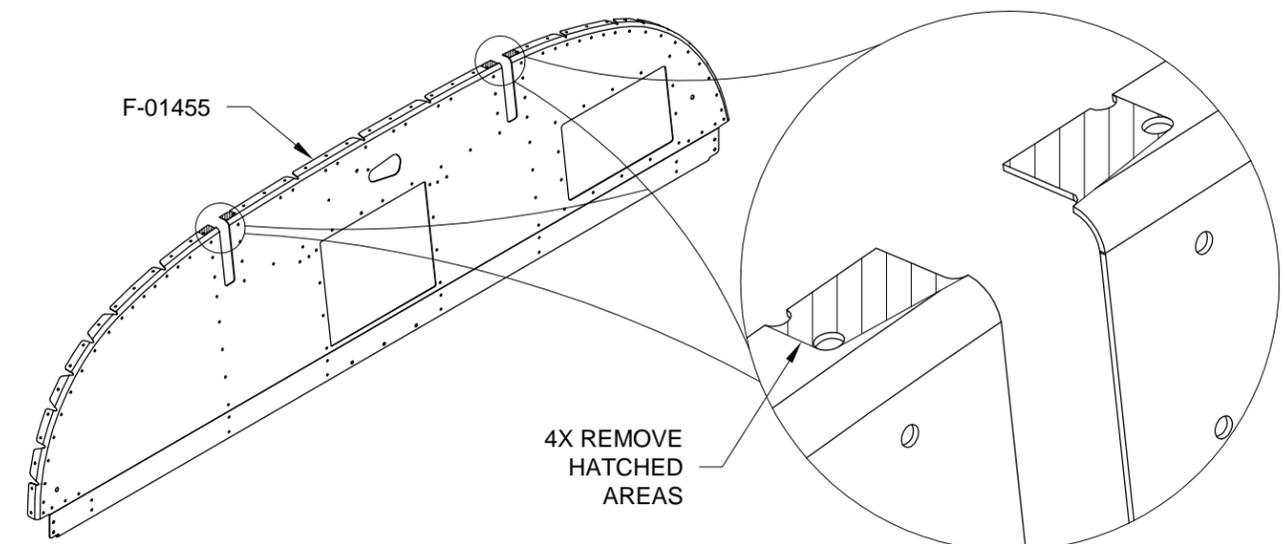


FIGURE 4: TRIM THE SUB PANEL



Step 1: Dimple the #40 holes where indicated in the F-01455 Sub Panel aft face as shown in Figure 1.

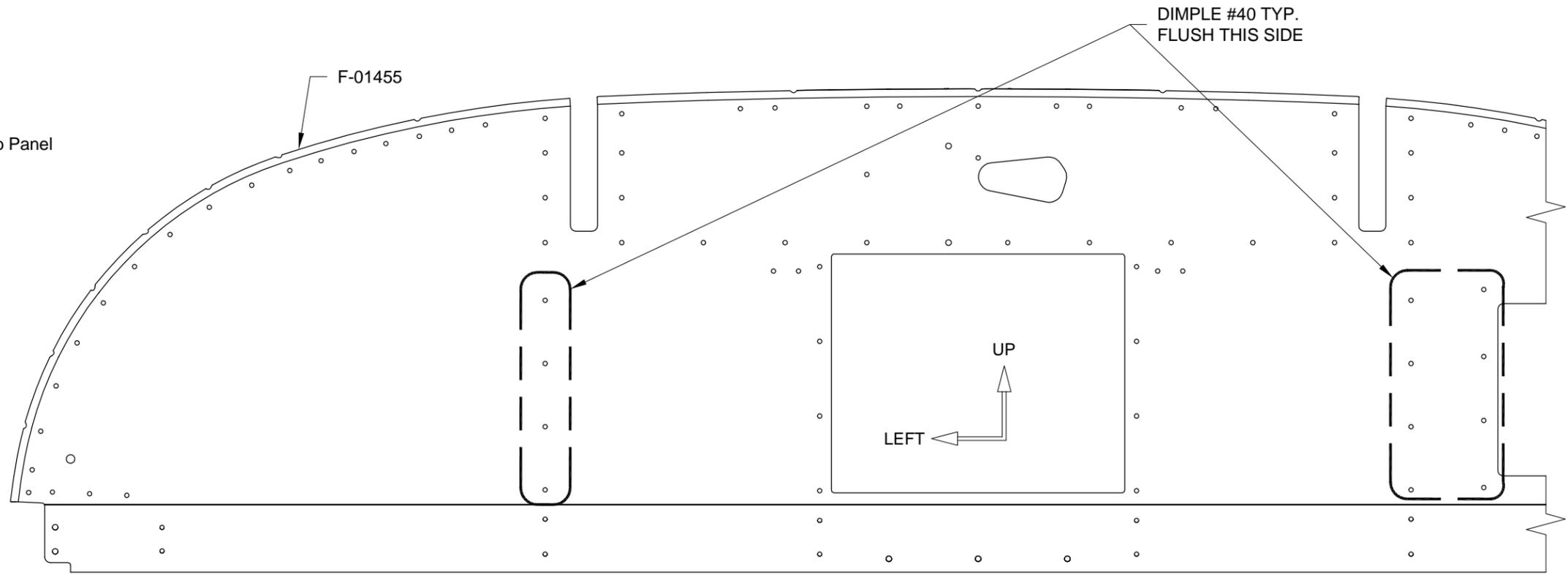


FIGURE 1: DIMPLE SUB PANEL
(REAR VIEW, LOOKING FORWARD)

Step 2: Dimple all the #40 holes along the upper flanges of the F-01455 Sub Panel as shown in Figure 2.

Step 3: Dimple the #40 nutplate attach holes in the bottom flange of the F-01455 Sub Panel as shown in Figure 2.

Step 4: Dimple the four #40 holes where indicated in the F-01455B Map Box Doubler as shown in Figure 2.

Step 5: Cleco then rivet the F-01455B Map Box Doubler to the F-01455 Sub Panel as shown in Figure 2.

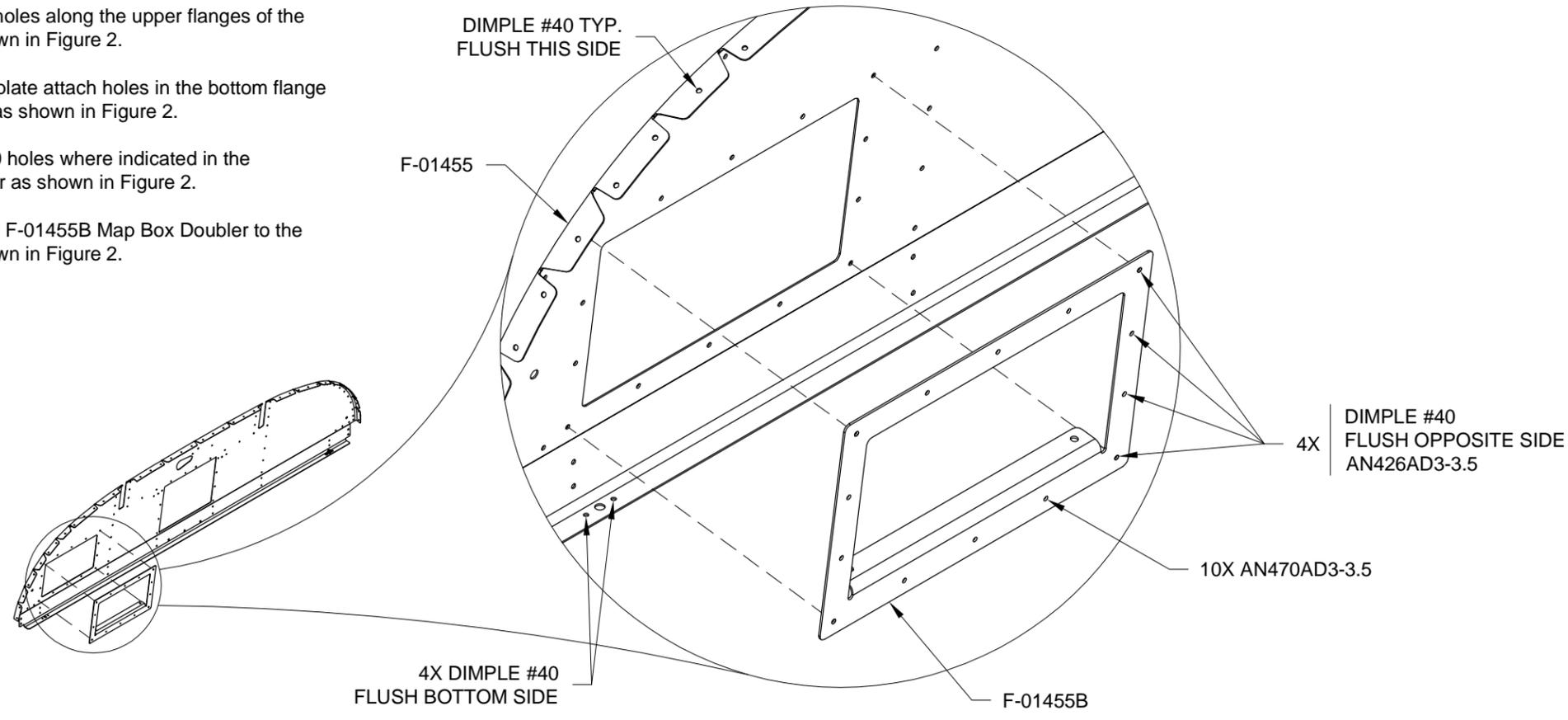


FIGURE 2: INSTALL DOUBLER



Step 1: Dimple the K1000-3 nutplates for installation where indicated in Figure 1.

Step 2: Rivet the nutplates to the F-01455 Sub Panel as shown in Figure 1.

NOTE: Precise fluting of the F-01455 Sub Panel for hole alignment with the skin can wait until Page 35-19 since the skin lacks rigidity at this point.

Step 3: Flute the curved upper flanges of the F-01455 Sub Panel here initially as required to generally align the rivet holes in the flanges with the corresponding holes in the F-01471 Forward Top Skin.

Step 4: Buff the edges of the sub panel flanges where indicated with an abrasive wheel to avoid bulges in the F-01471 Forward Top Skin.

Step 5: Tape over the holes on the sub panel marked with "Do Not Rivet" symbols and "Rivet Later" call-outs as shown in Figure 2.

Step 6: Cleco then rivet the Left and Right Hinge Rib Assemblies, F-01455A Sub Panel Angle, and Channel Assembly to the sub panel as shown in Figure 1. Use the rivets called out in Figure 2.

Hereafter refer to this as the Sub Panel Assembly.

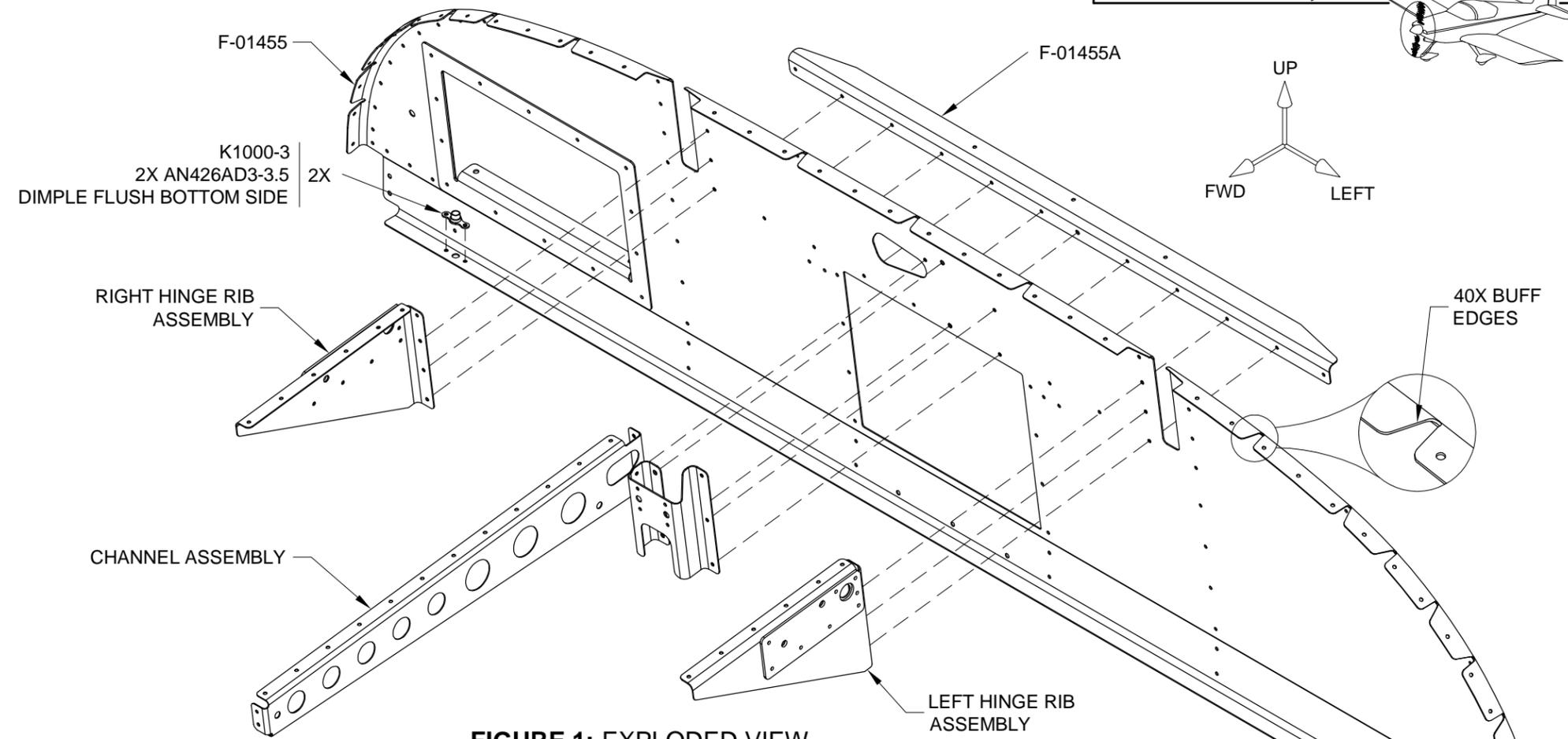


FIGURE 1: EXPLODED VIEW

- | | |
|----------------|----------------|
| △ AN426AD3-3.5 | ⊗ AN470AD3-3.5 |
| ☆ LP4-3 | ▽ AN470AD3-4 |
| ⊘ DO NOT RIVET | ▽ AN470AD4-4 |

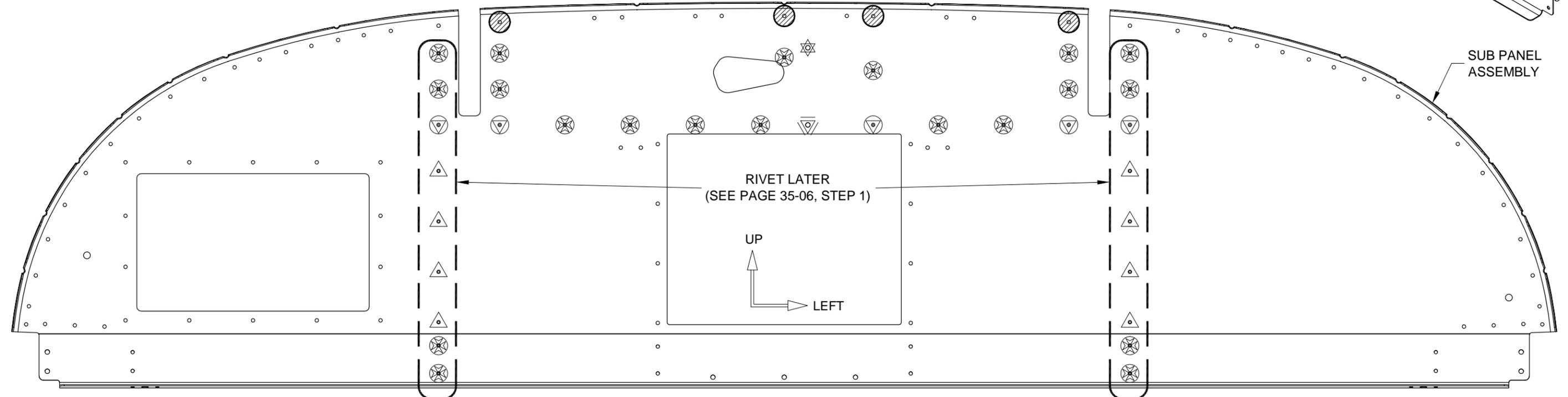
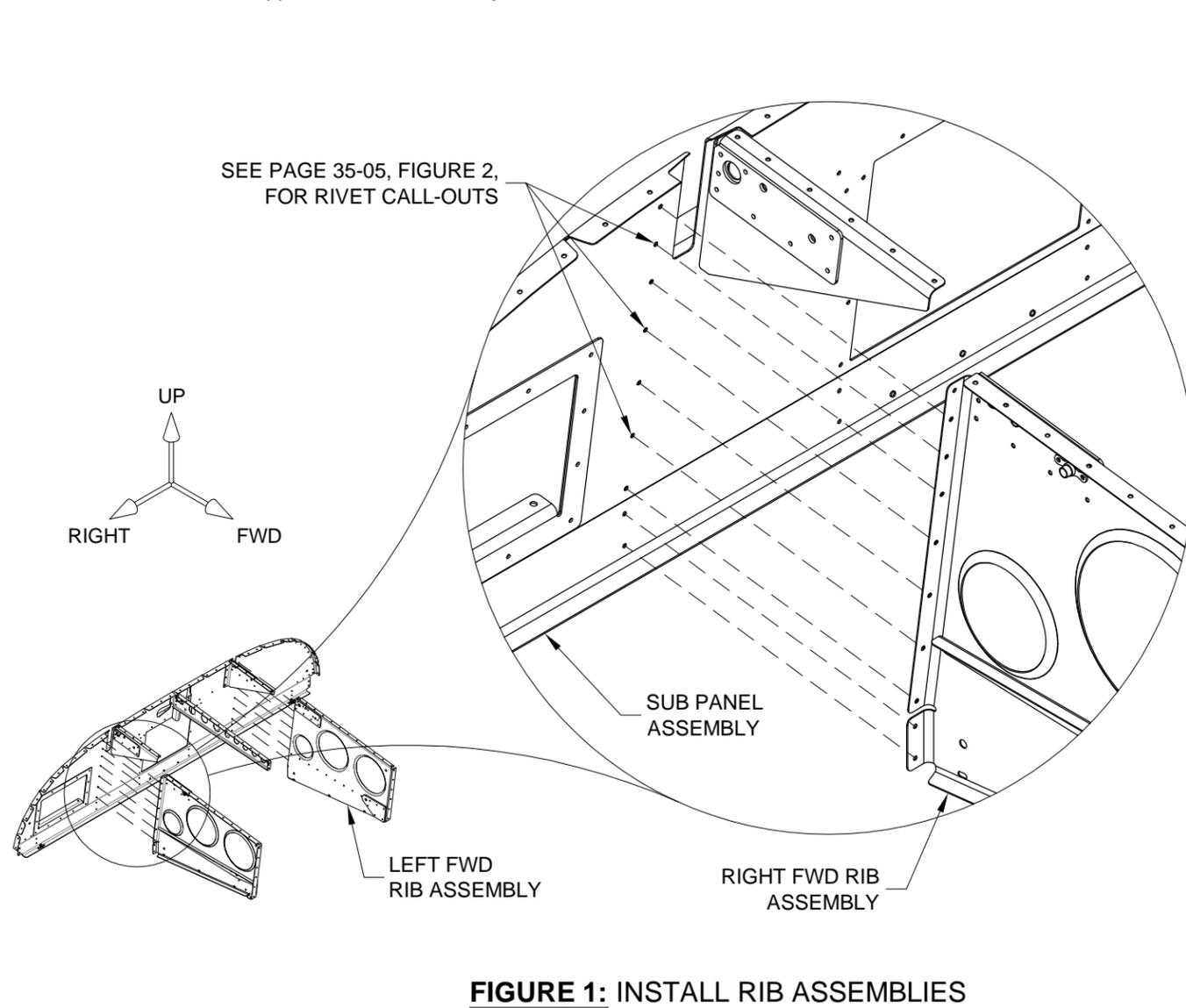


FIGURE 2: RIVET SCHEDULE
(FRONT VIEW, LOOKING AFT, PARTS OMITTED FOR CLARITY)



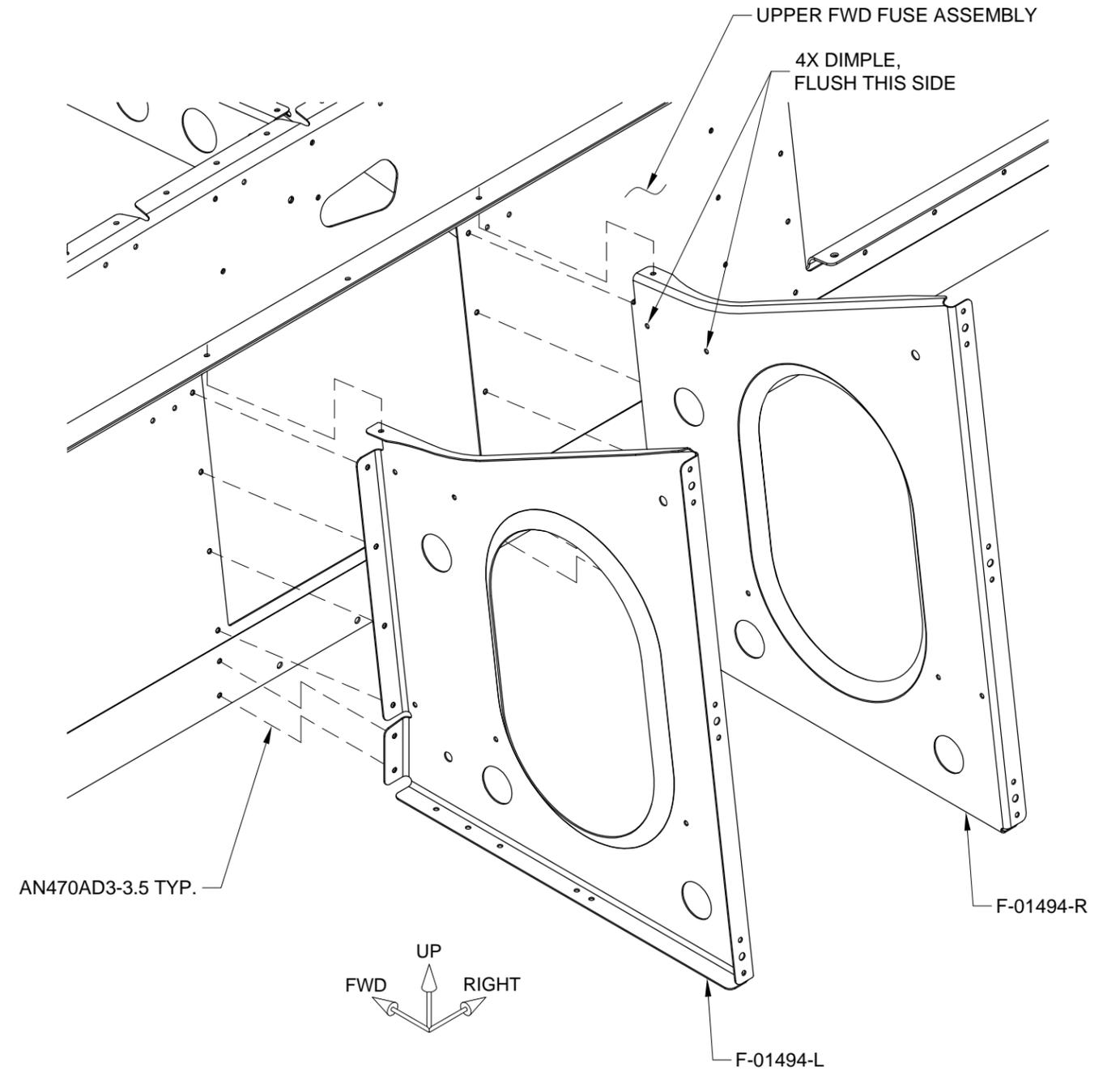
Step 1: Install the Left and Right Fwd Rib Assemblies to the Sub Panel Assembly as shown in Figure 1.

Hereafter refer to this as the Upper Fwd Fuse Assembly.



Step 2: Dimple the F-01494-L & -R Instrument Panel Stand-Offs as shown in Figure 2.

Step 3: Rivet the F-01494-L & -R Instrument Panel Stand-Offs to the Upper Fwd Fuse Assembly as shown in Figure 2.





Step 1: Dimple the F-01477 Connector Brackets where indicated in the Figure 1 detail view.

Step 2: Separate the F-01477 Connector Brackets as shown in the Figure 1 detail view.

Step 3: Install the F-01477-L & -R Connector Brackets to the Upper Fwd Fuse Assembly and F-01494-L & -R Instrument Panel Stand-Offs as shown in Figure 1.

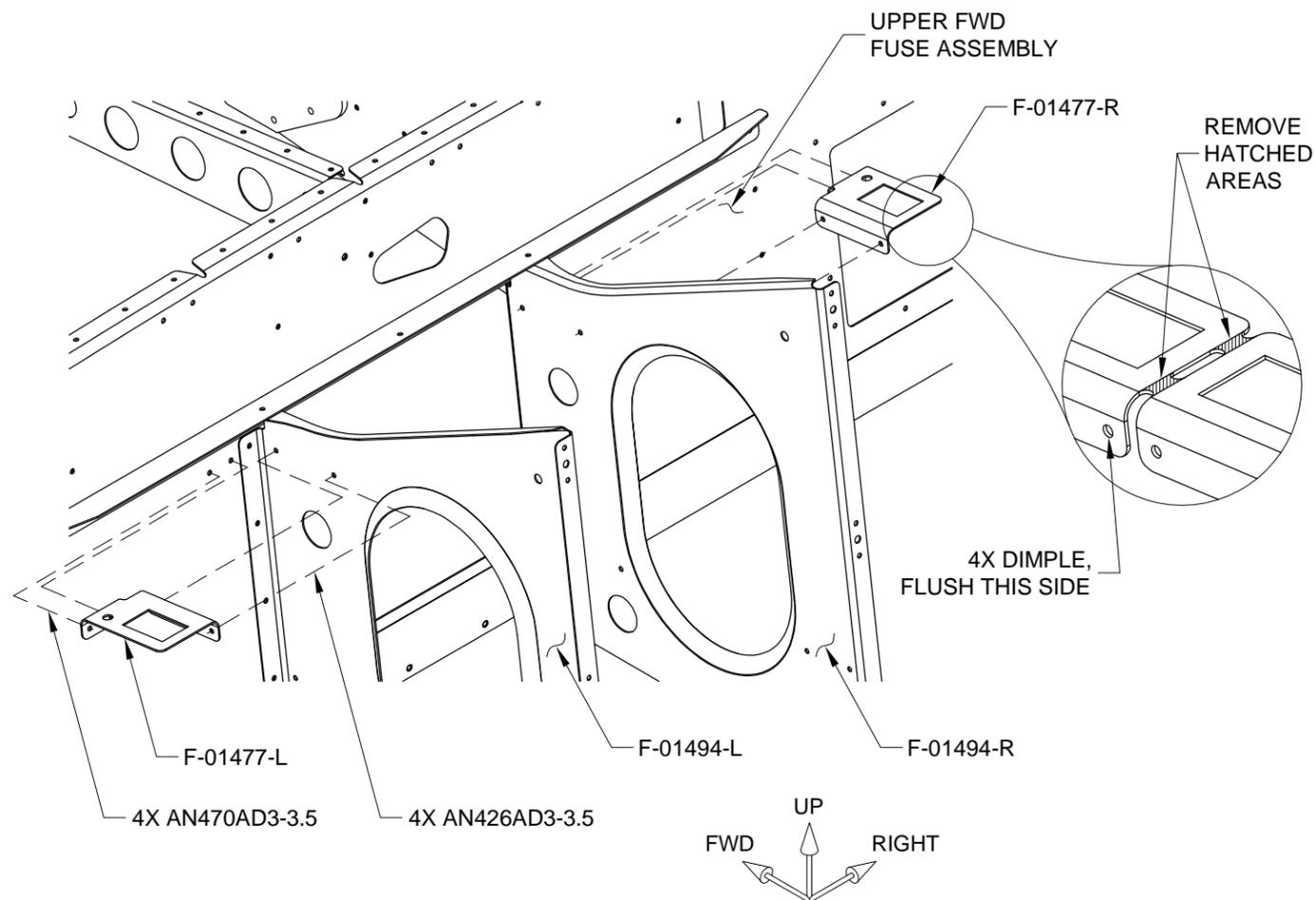


FIGURE 1: INSTALL CONNECTOR BRACKETS

Step 4: Separate and deburr the F-01455C Seal Angles as shown in Figure 2.

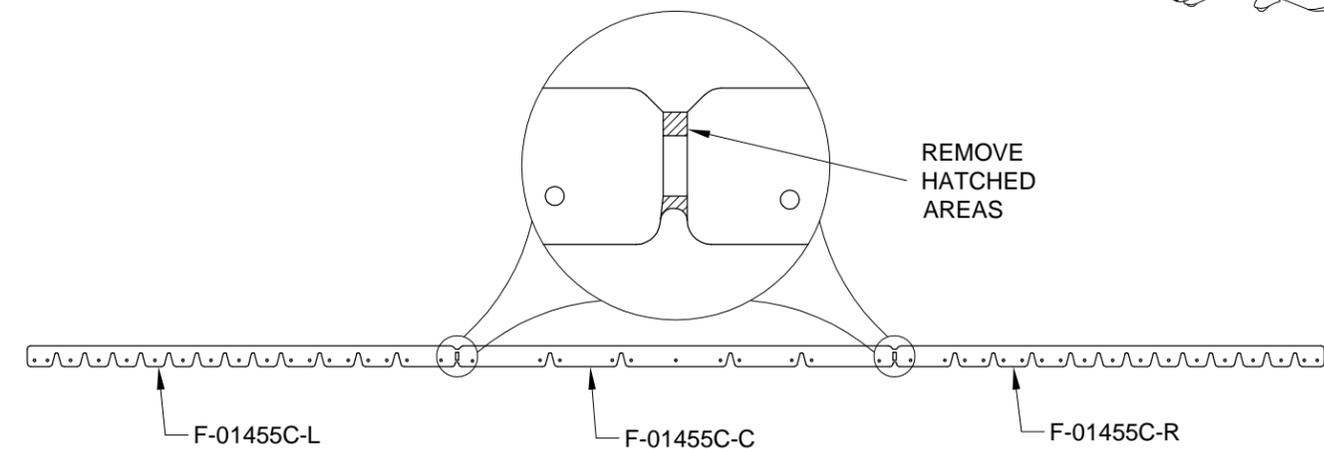


FIGURE 2: SEPARATE SEAL ANGLES (SHOWN FLAT)

Step 5: Cleco then rivet the F-01455C-C, -L, & -R Seal Angles to the Upper Fwd Fuse Assembly as shown in Figure 3.

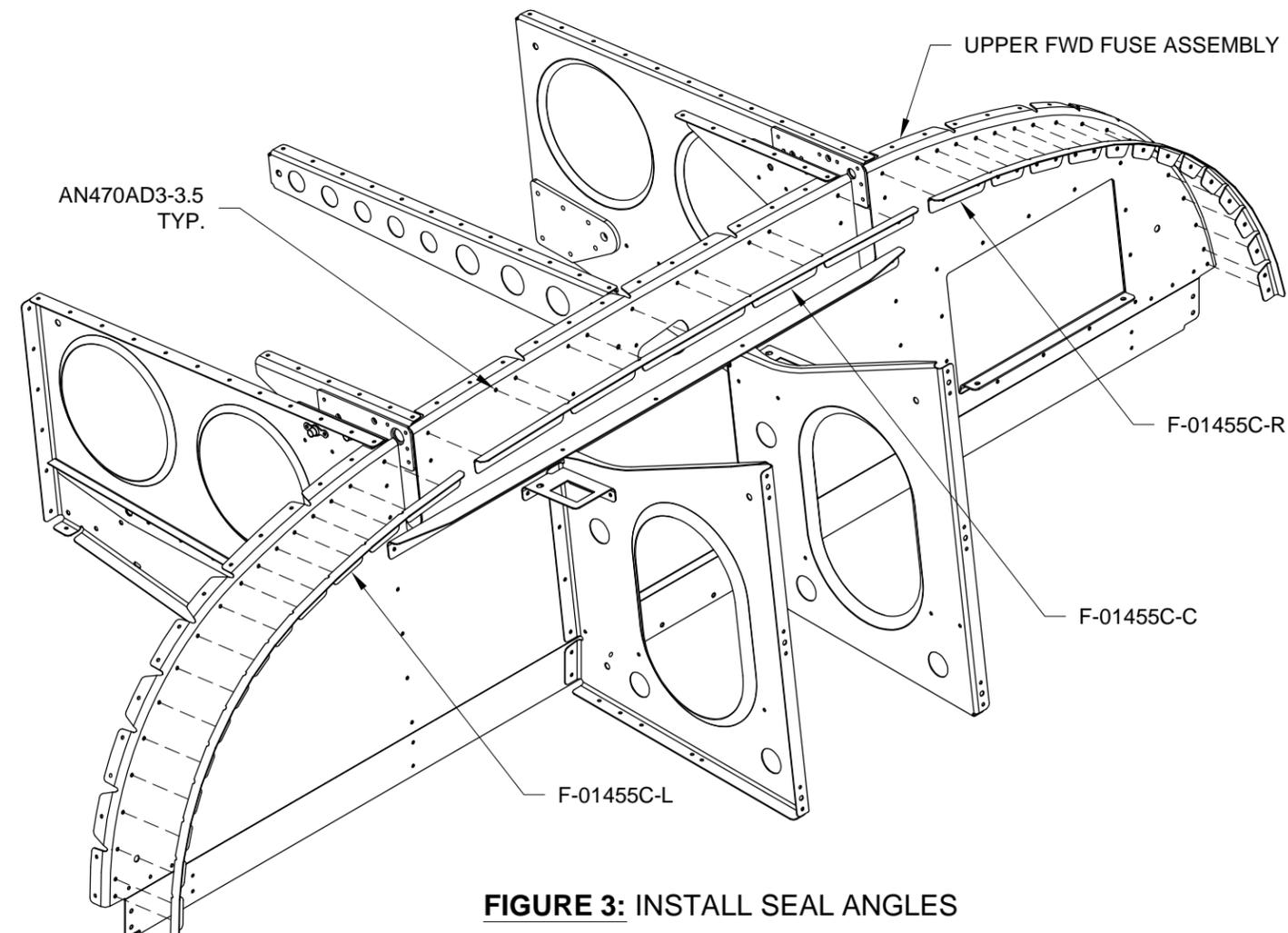


FIGURE 3: INSTALL SEAL ANGLES



Refer to Figure 1 for the following Steps.

Step 1: Cleco the Upper Fwd Fuse Assembly into the position shown. For the F-01456-R Fwd Fuse Rib to F-01401A Firewall Top use only two clecos and none at all for the F-01456-L Fwd Fuse Rib. See Detail A.

Step 2: Insert a rivet into the hole common to the F-01456-L Fwd Fuse Rib and the F-01401D Firewall Angle where indicated in Detail A.

Step 3: Lean the F-01456-L Fwd Fuse Rib inboard to provide access then set the rivet.

Cleco the F-01456-L Fwd Fuse Rib to the F-01401A Firewall Top.

Step 4: Remove the clecos from the F-01456-R Fwd Fuse Rib.

Repeat Steps 2 and 3 for the F-01456-R Fwd Fuse Rib.

Step 5: Rivet the Upper Fwd Fuse Assembly to the F-01401A Firewall Top and F-01402-L & -R Side Frames where indicated. See Details A, B, and C.

Step 6: Temporarily install both sets of C-01440-L & -R Canopy Hinge Brackets to the Upper Fwd Fuse Assembly using the called out hardware. See Detail D.

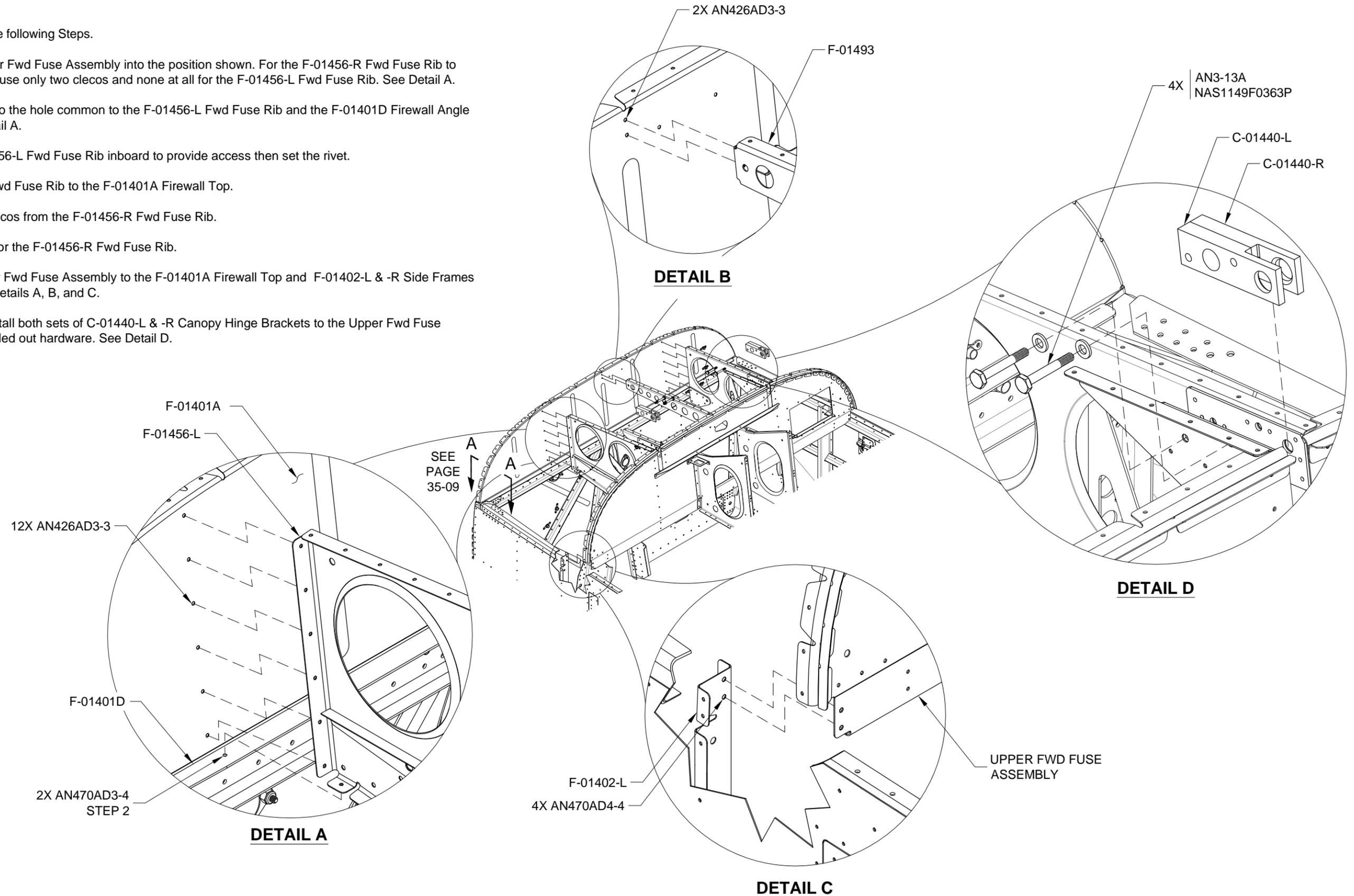


FIGURE 1: INSTALL UPPER FWD FUSE ASSEMBLY



Step 1: Fabricate two small foam blocks from SEAL-00003 Foam PVC .375X.625 per the dimensions shown in Figure 1.

Cut away the adhesive while trimming the foam to size. The fit need not be perfect since the foam only acts as a backing for fuel tank sealant.

Step 2: Push the foam blocks into the gaps between the firewall and the F-01470-L & -R Fuselage Side Skins as depicted in View A-A.

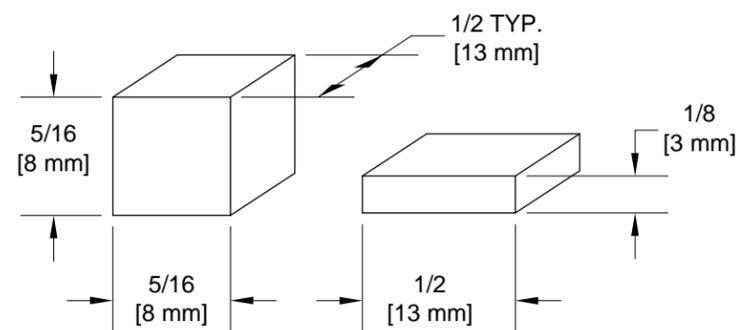
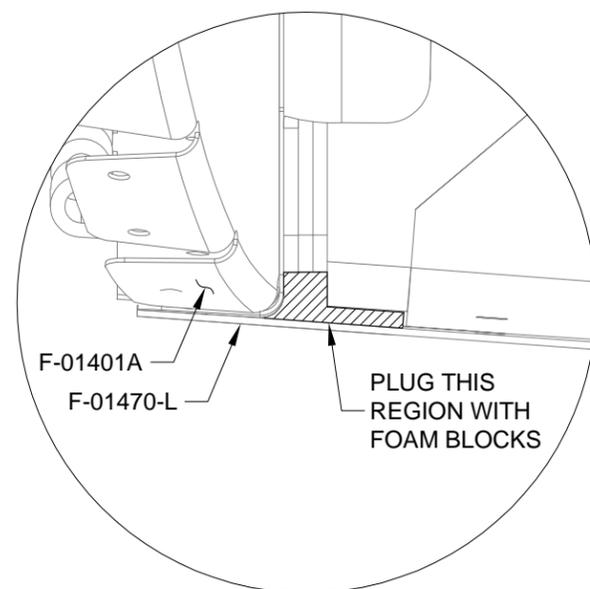


FIGURE 1: FABRICATE FOAM BLOCKS



VIEW A-A
(SEE PAGE 35-08 FIGURE 2)

Step 3: Dimple the #40 holes in the FF-00005 Cowl Pin Retention Bracket where indicated in Figure 2.

Step 4: Cleco then rivet the FF-00005 Cowl Pin Retention Bracket to the forward face of the F-01401A Firewall Top using the rivets called out in Figure 2.

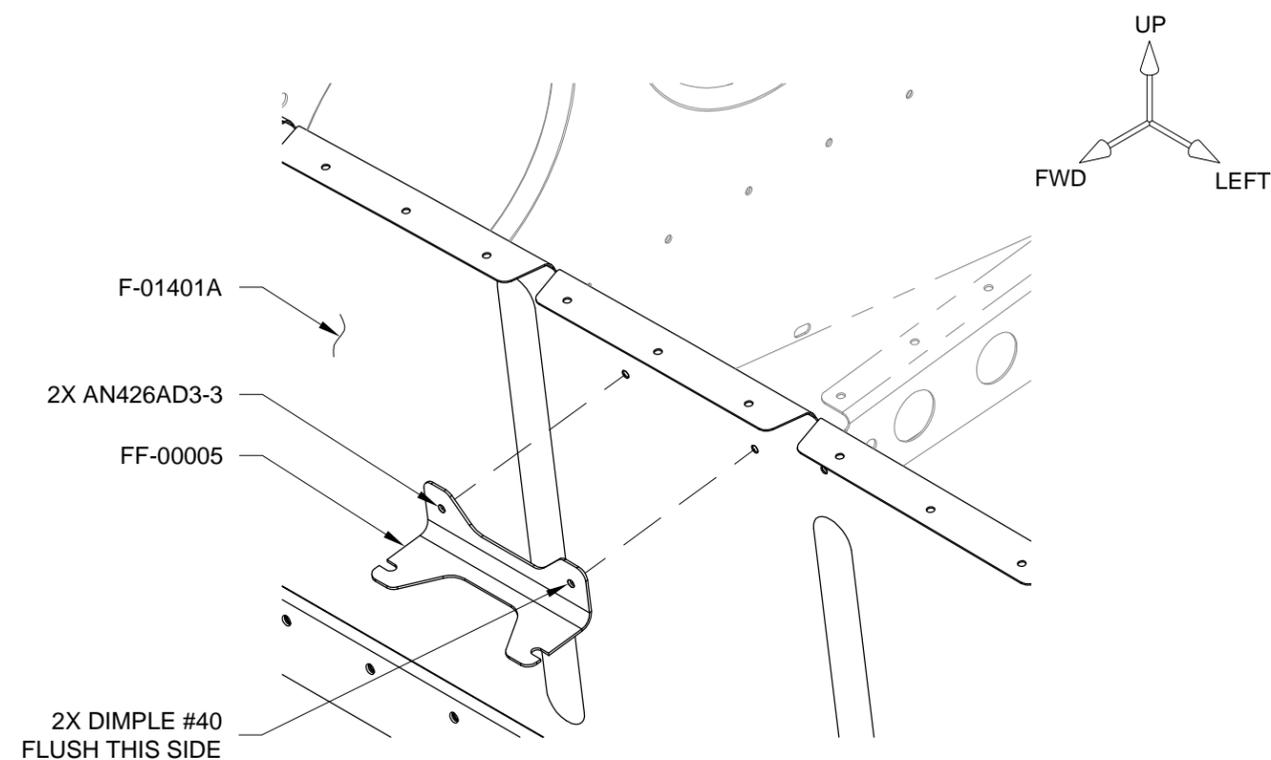


FIGURE 2: INSTALL COWL PIN RETENTION BRACKET

See Figure 1 for the following steps.

Step 1: Dimple all of the #40 nutplate attach holes in the F-14106 Wiring Channel.

Step 2: Dimple all of the nutplates that require dimpling.

Step 3: Rivet the nutplates to the wiring channel using the called out rivets.

Hereafter refer to this as the Wiring Channel Assembly.

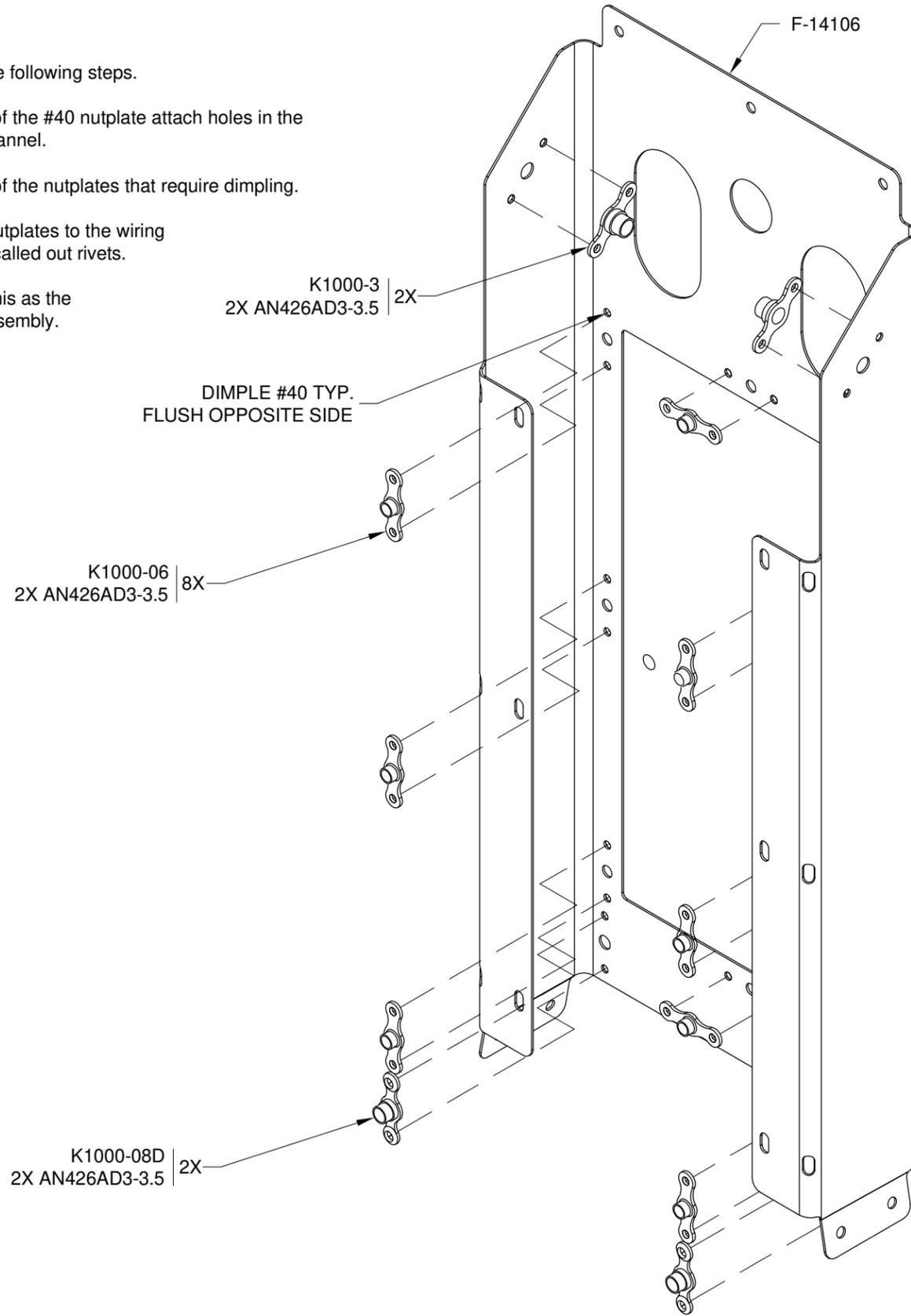


FIGURE 1: INSTALL WIRING CHANNEL NUTPLATES

Step 4: Bend the tabs on the wiring channel assembly to match the slant of the F-01451-L & -R Tunnel Sides.

Step 5: Cleco then rivet the Wiring Channel Assembly to the F-01455 Sub Panel and to the inboard sides of the F-01451-L & -R Tunnel Sides per the Figure 2 call-outs.

NOTE: For those builders not using the AV-50003 60A Power Module (see Section 59), the F-00220 Wiring Channel Blank Cover Plate is available for purchase directly from Van's.

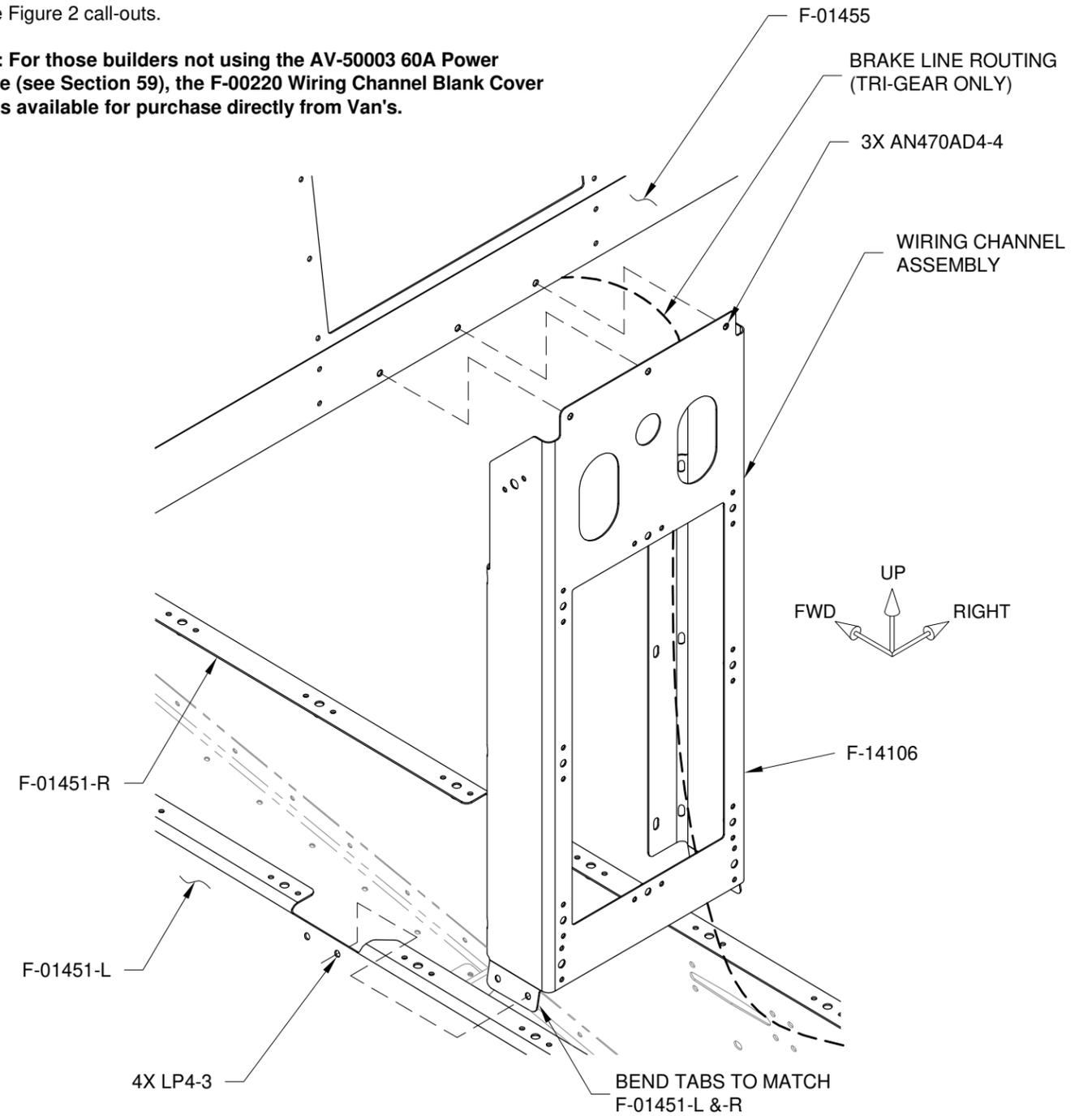
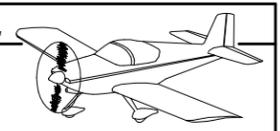


FIGURE 2: INSTALL WIRING CHANNEL ASSEMBLY
(SOME PARTS OMITTED FOR CLARITY)



Refer to Figure 1 for the following steps unless otherwise noted.

Step 1: Cleco the F-01421B-L Aft Canopy Deck to the F-01457-L Gusset and the F-01487-L Center Section Channel.

Step 2: Align the outboard edge of the aft canopy deck flush to the F-01470-L Fuselage Side Skin as shown in Section A-A.

Step 3: Final-Drill #30 one hole in the Upper Longeron Assembly using a #30 hole in the aft canopy deck as a guide. Begin at the aft end of the canopy deck. Use #40 clecos adjacent to the hole being drilled to clamp the parts together. Cleco the drilled #30 hole.

Step 4: Repeat Steps 2 and 3 at the middle and forward end of the aft canopy deck.

Step 5: Final-Drill #30 the remaining holes in the Upper Longeron Assembly.

Step 6: Cleco the F-01421A-L Fwd Canopy Deck to the aft canopy deck and to the F-01455 Sub Panel as shown.

Step 7: Align the outboard edge of the fwd canopy deck flush to the F-01470-L Fuselage Side Skin as shown in Section A-A.

Step 8: Match-Drill #30 the Upper Longeron Assembly using the holes in the F-01421A-L Fwd Canopy Deck as guides.

Step 9: Remove and deburr the fwd canopy deck and the aft canopy deck.

Step 10: Dimple the fwd canopy deck and aft canopy deck except where otherwise indicated.

Step 11: Machine countersink the Upper Longeron Assembly for the dimpled .040 [1.0 mm] fwd canopy deck and aft canopy deck except where otherwise indicated.

Step 12: Separate the F-01468 Instrument Panel Attach Brackets.

Step 13: Rivet the F-01468-L Instrument Panel Attach Bracket to the F-01421A-L Fwd Canopy Deck.

Step 14: Mask the F-01470-L Fuselage Side Skin flush to the top edge as shown in Section A-A and fill the gap with fuel tank sealant.

Step 15: Cleco the aft canopy deck to the Upper Longeron Assembly, F-01457-L Gusset, and F-01487-L Center Section Channel.

Step 16: Cleco the fwd canopy deck to the Upper Longeron Assembly, aft canopy deck, and F-01455 Sub Panel.

Step 17: Rivet the fwd and aft canopy decks to the structure and clean off any sealant squeeze out.

Step 18: Repeat the above steps for the right side.

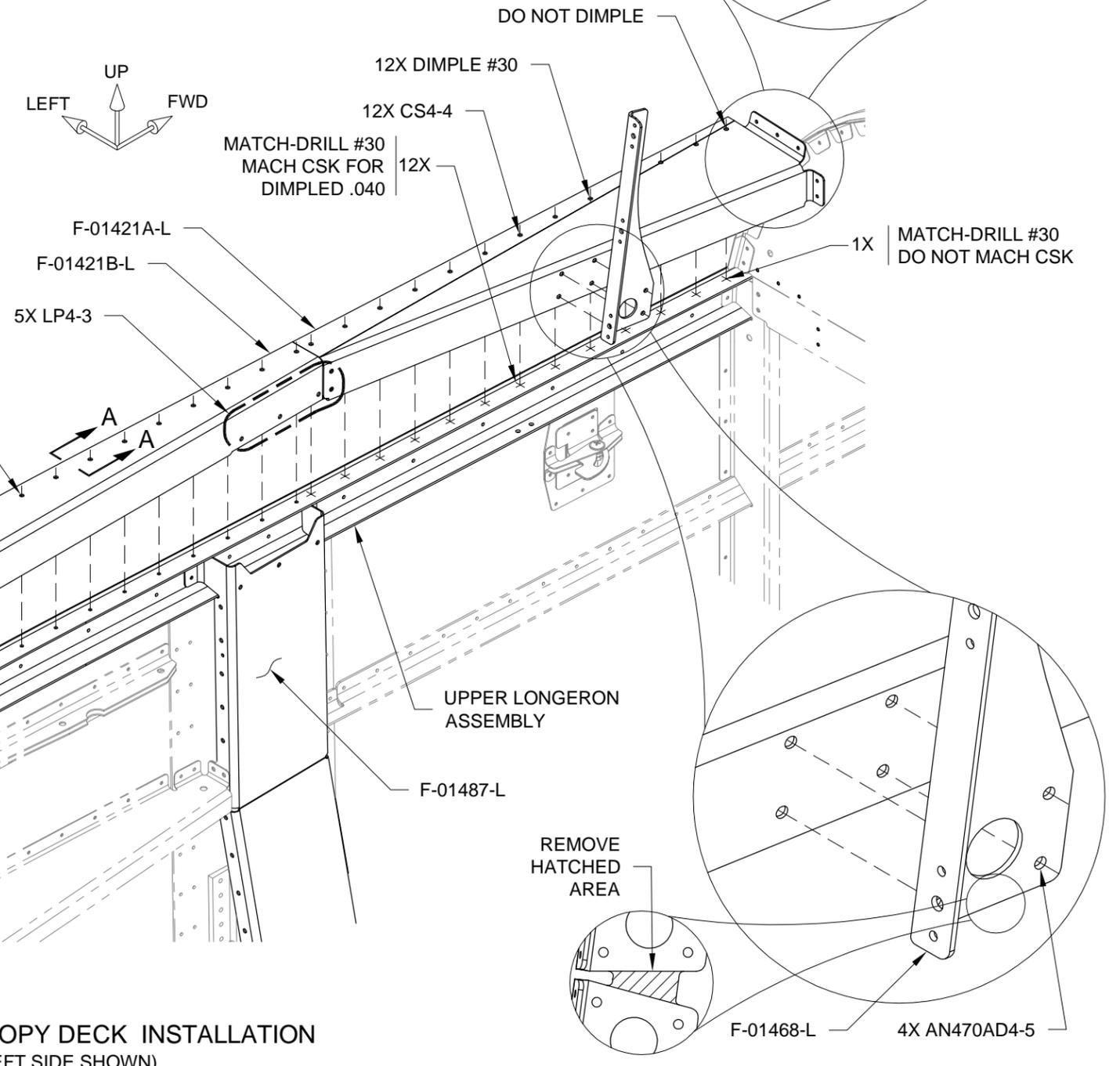
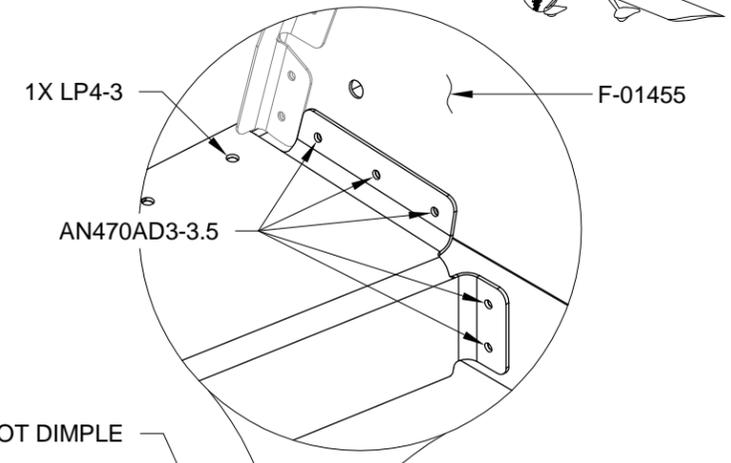
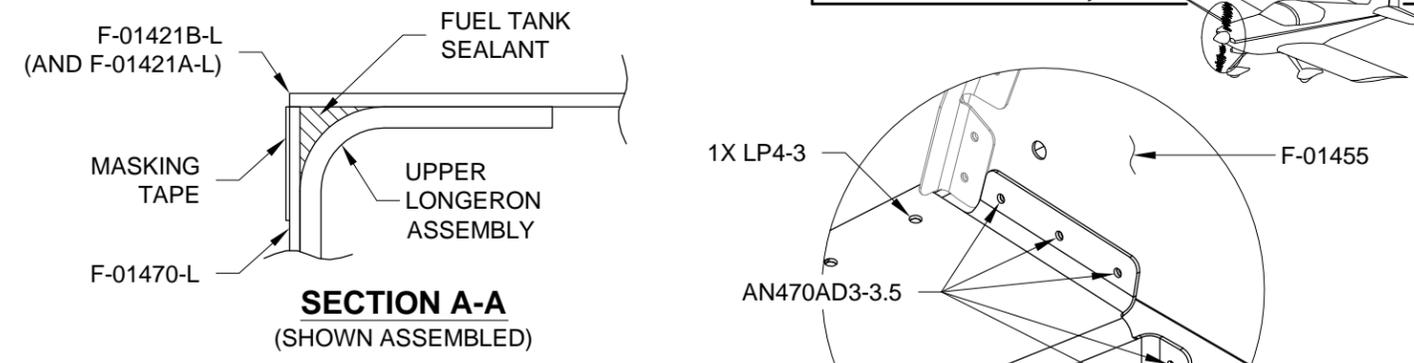
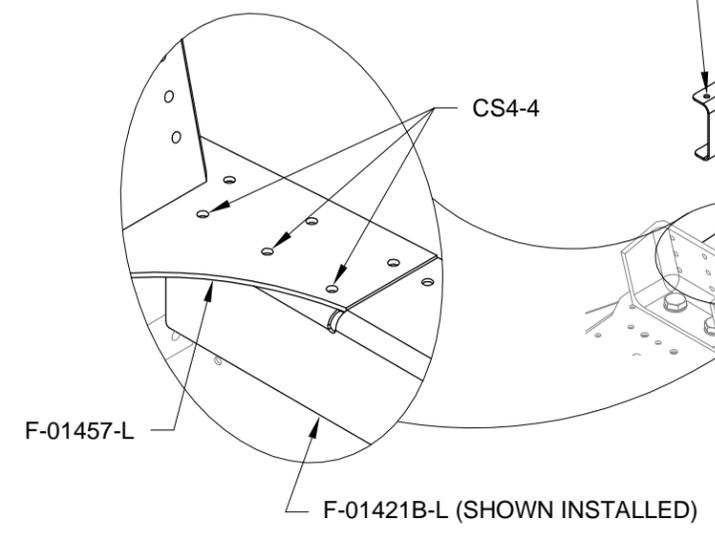


FIGURE 1: CANOPY DECK INSTALLATION
(LEFT SIDE SHOWN)





Step 1: Cleco then rivet the F-01494C Wiring Channel to the F-01494-L & -R Instrument Panel Stand-Offs as shown in Figure 1.

Step 2: Cleco then rivet the F-01494D Cable Support Bracket to the F-01494-L & -R Instrument Panel Stand-Offs as shown in Figure 1.

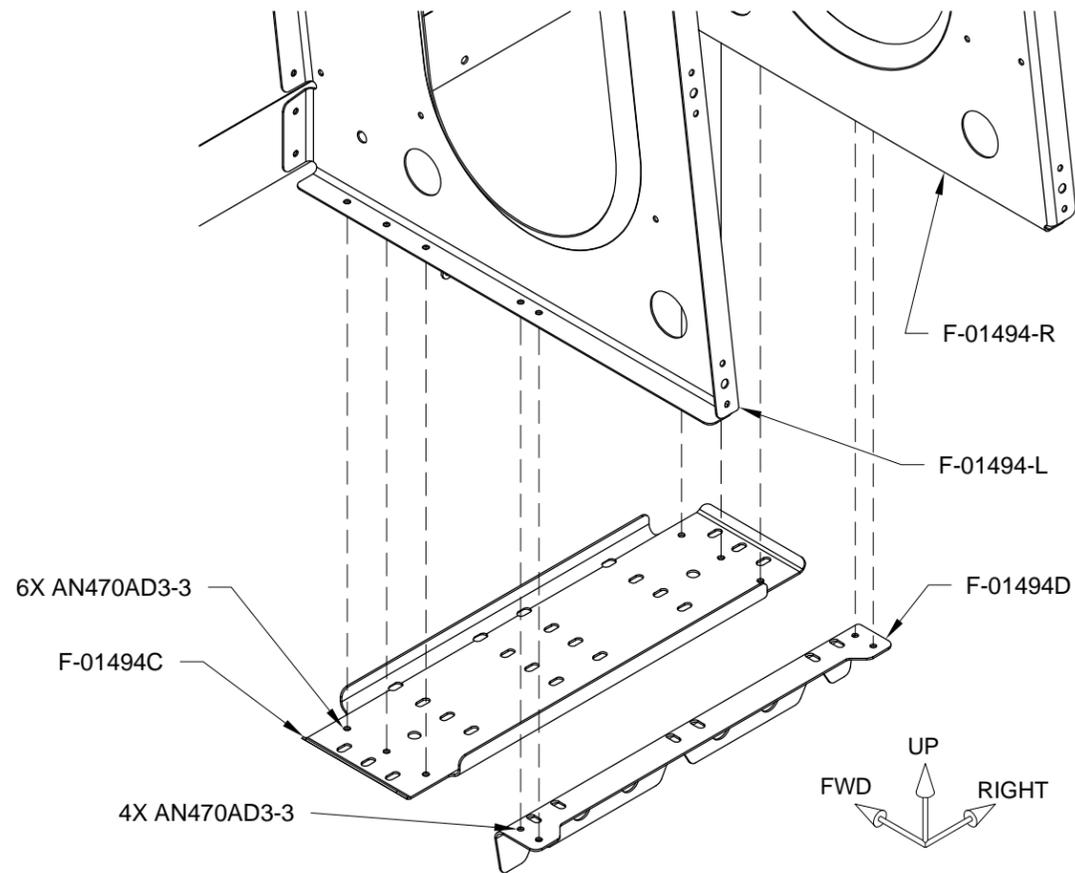


FIGURE 1: INSTALL WIRING CHANNEL & CABLE SUPPORT BRACKET
(SOME PARTS OMITTED FOR CLARITY)

Step 3: Separate the F-01476 Instrument Panel Attach Plates as shown in Figure 2.

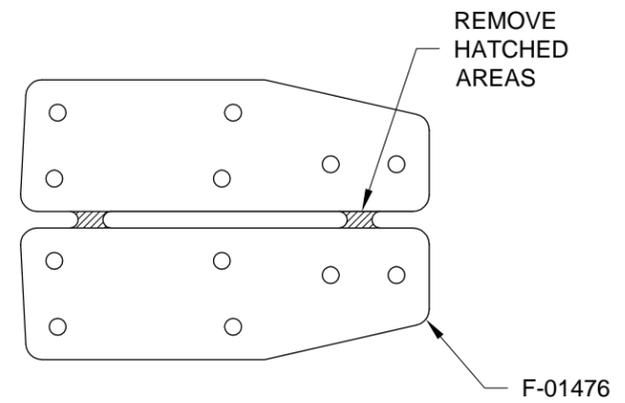


FIGURE 2: SEPARATE PANEL ATTACH PLATES

Step 4: Cleco then rivet the F-01476 Instrument Panel Attach Plates to the Upper Longeron Assemblies and F-01421A-L & -R Fwd Canopy Decks as shown in Figure 3.

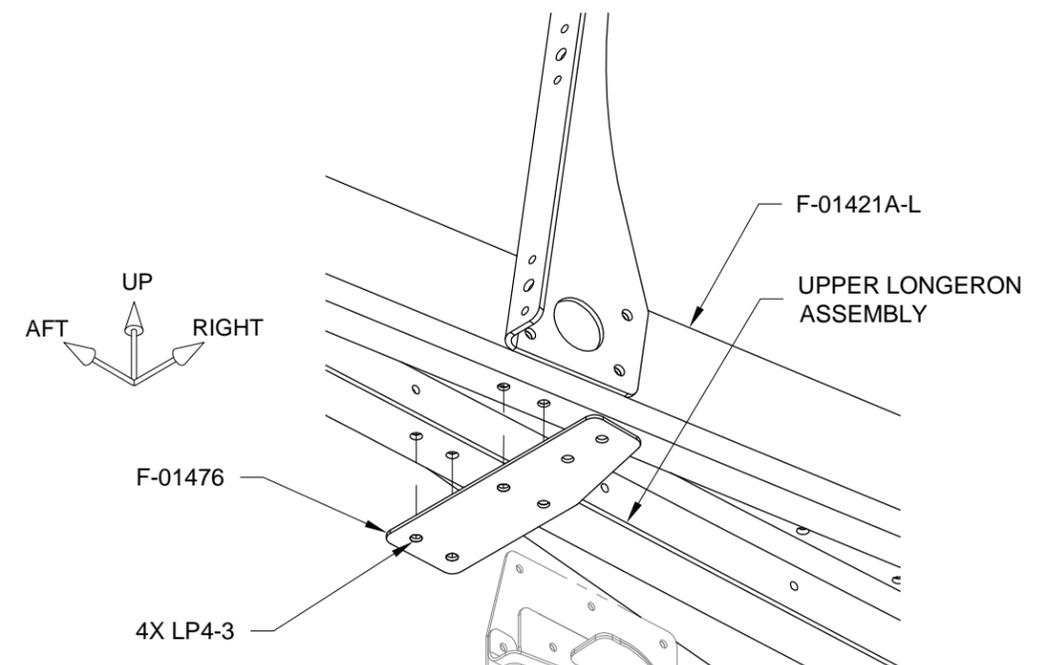
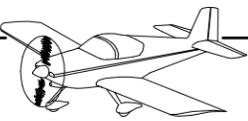


FIGURE 3: INSTALL INSTRUMENT PANEL ATTACH PLATE
(LEFT SIDE SHOWN)



Step 1: Separate the F-01467A Instrument Panel Angles as shown in Figure 1.

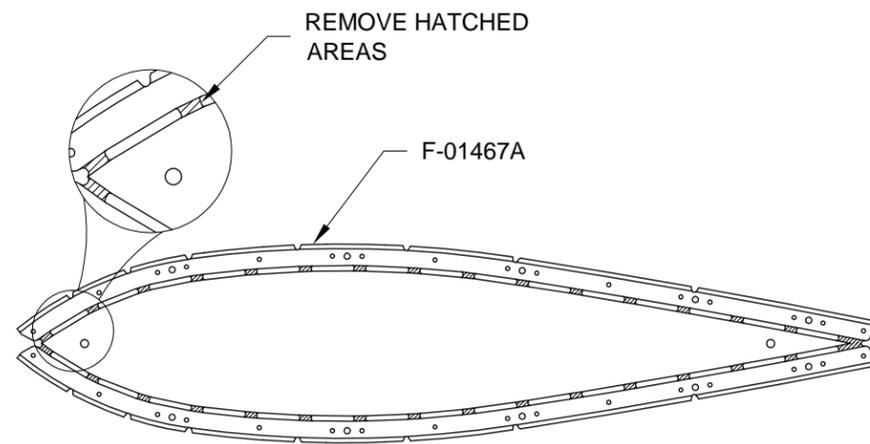


FIGURE 1: SEPARATE ANGLES

Refer to Figure 2 for the remaining steps.

Step 2: Machine countersink the #40 holes in the F-01467 Instrument Panel Frame.

Step 3: Machine countersink the #40 holes in the F-01467B Instrument Panel Flange Doubler.

Step 4: Cleco then rivet the F-01467A-L & -R Instrument Panel Angles to the instrument panel frame and nutplates.

Step 5: Flute the F-01467A-L & -R Instrument Panel Angle tabs as required for better hole alignment with the flange doubler.

Step 6: Cleco then rivet the flange doubler to the instrument panel angles.

Step 7: Rivet the nutplates to the instrument panel angles and frame.

Hereafter refer to this as the Panel Frame Assembly.

NOTE: If painting the interior of the aircraft this is a good time to mask and paint before installing the Panel Frame Assembly and F-01471 Forward Top Skin.

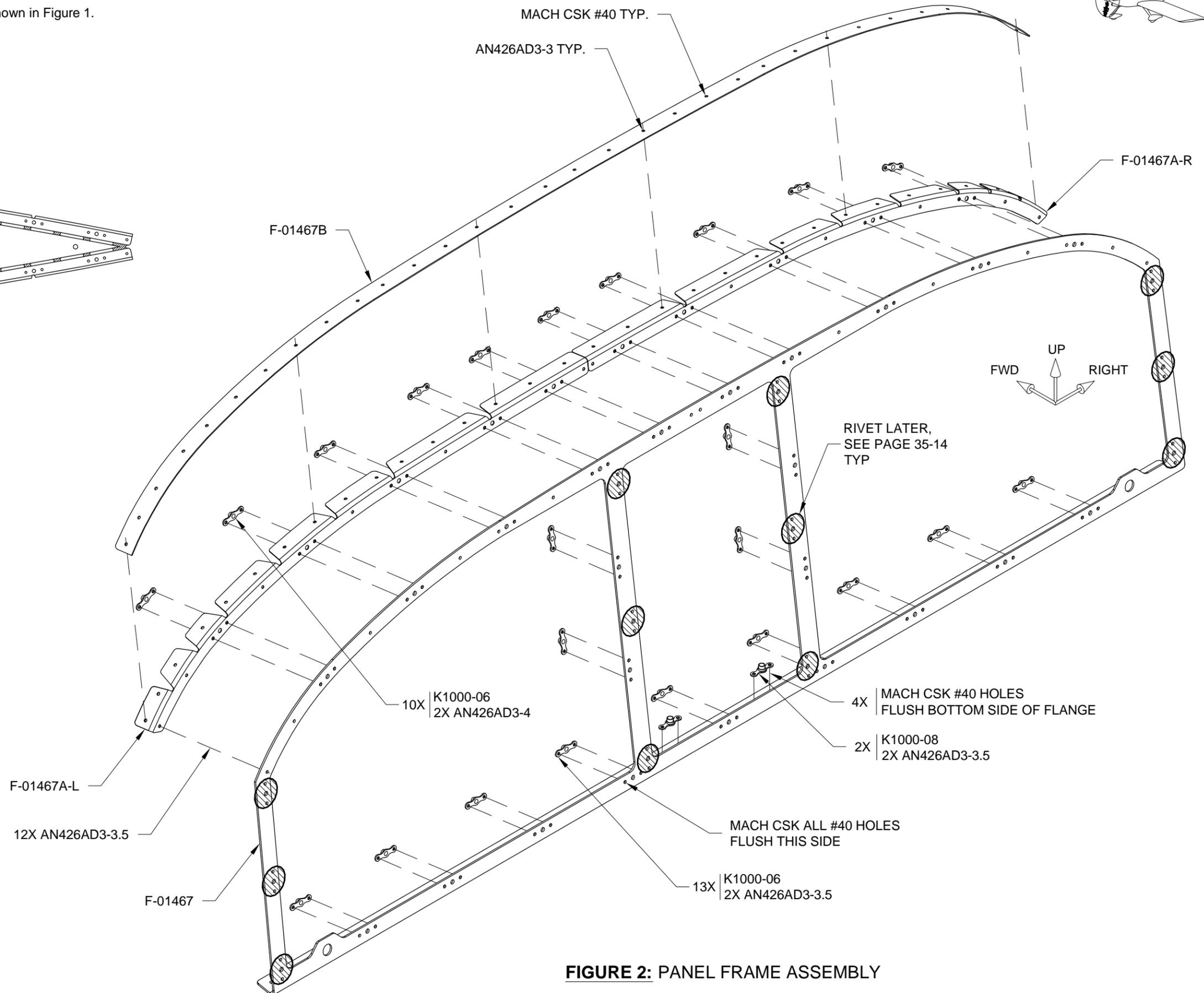


FIGURE 2: PANEL FRAME ASSEMBLY



NOTE: Before riveting, double check that the lower flange of the Panel Frame Assembly is below the F-01476 Instrument Panel Attach Plates as shown in the Figure 1 detail view.

Step 1: Cleco then rivet the Panel Frame Assembly with the called out nutplates to the F-01468-L & -R Instrument Panel Attach Brackets and to the F-01494-L & -R Instrument Panel Stand-Offs as shown in Figure 1.

Step 2: Rivet the Panel Frame Assembly to the F-01476 Instrument Panel Attach Plate as shown in the Figure 1 detail view.

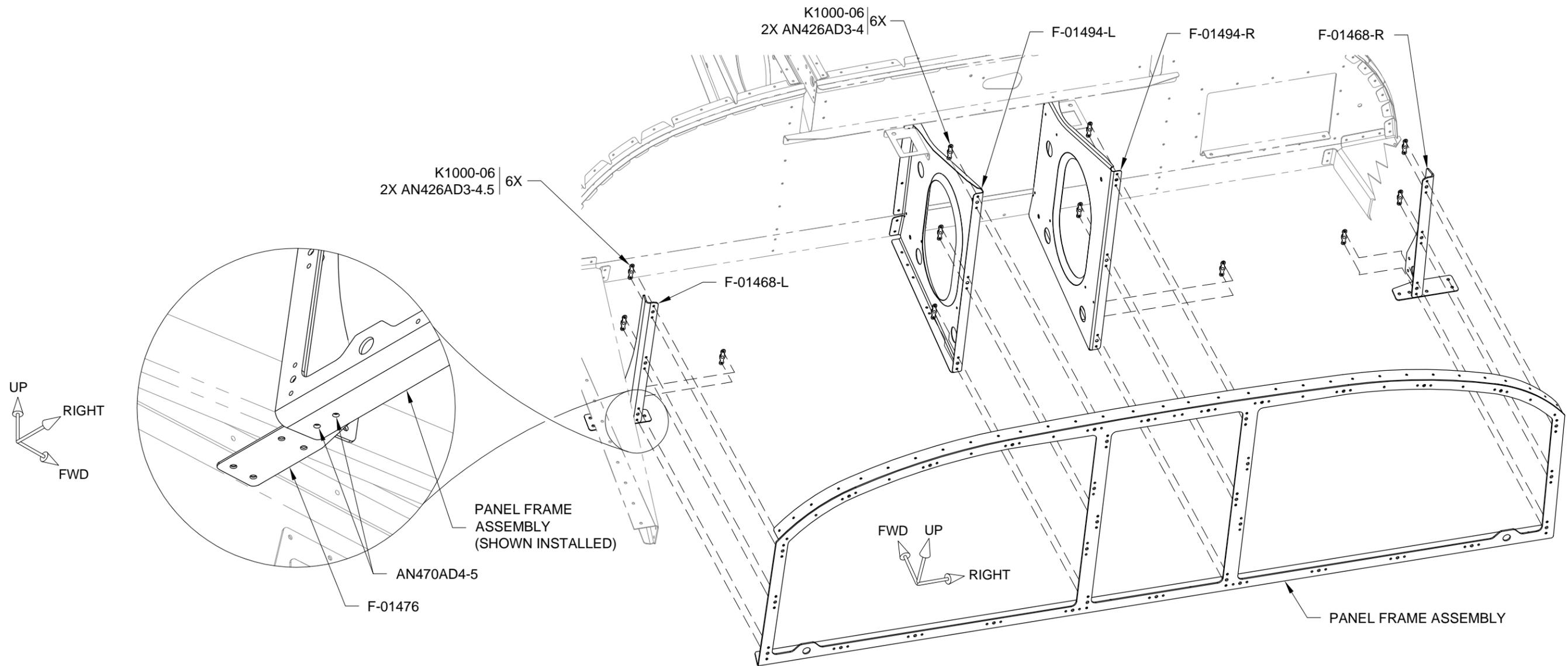


FIGURE 1: PANEL FRAME ASSEMBLY INSTALLATION
(SOME PARTS OMITTED FOR CLARITY)



NOTE: After the AN316-4R nut is tightened the SPRING-00001-1 Gas Spring must be able to rotate freely about the bolt.

Step 1: Final-Drill 1/4 the holes in the SPRING-00001-1 Gas Spring lugs. See Figure 1.

Step 2: Bolt the SPRING-00001-1 Gas Springs to the F-01456-L & -R Fwd Fuse Ribs using the hardware called out in Figure 1.

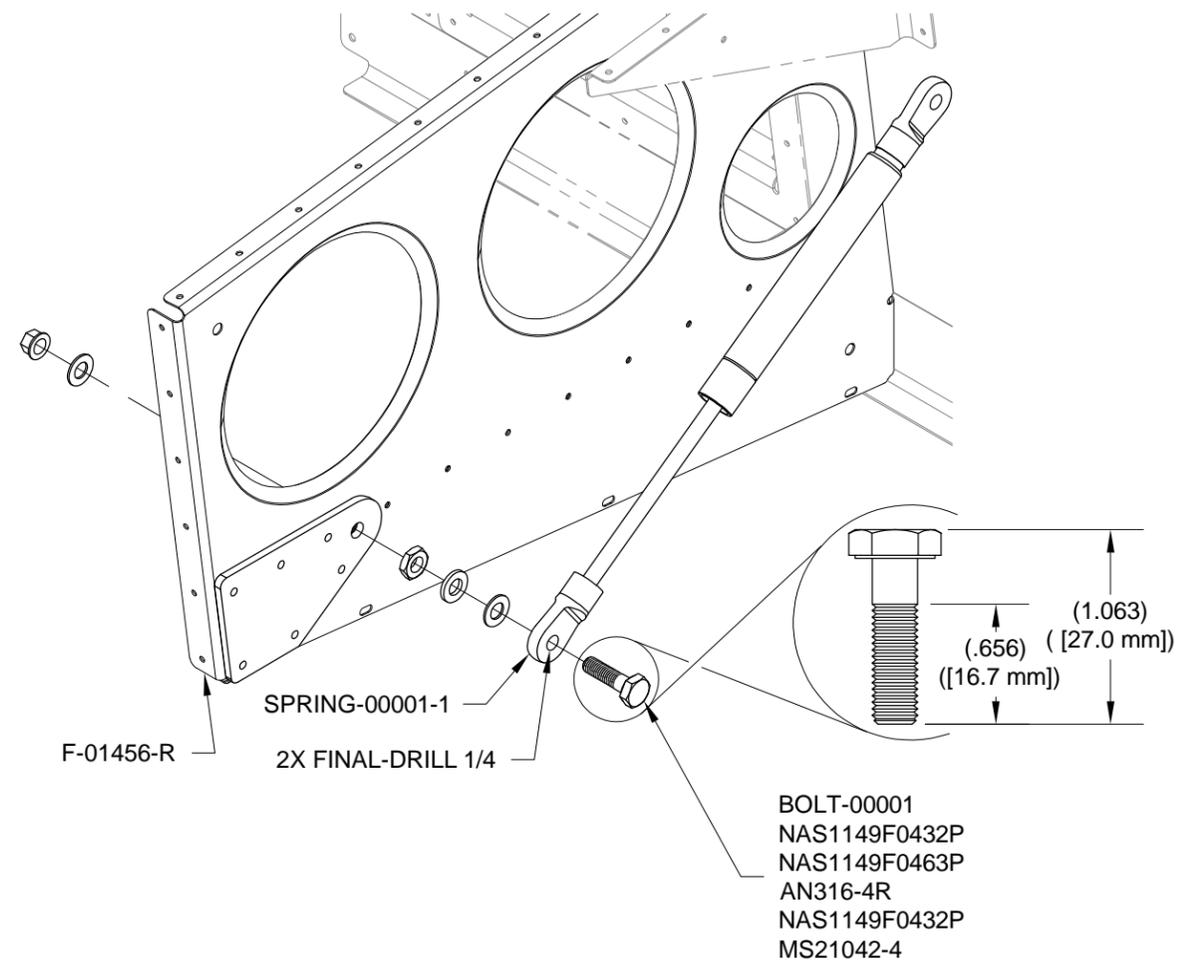


FIGURE 1: ATTACH GAS SPRINGS
(RIGHT SIDE SHOWN)

Step 3: Radius the four corners of the C-01434 Canopy Release Pivot Block as shown in Figure 2.

Step 4: Chamfer the edge of the large hole in the block with a razor knife per the dimensions shown in Section A-A.

Insert the WD-619 Canopy Release Assembly into the block. See Figure 3.

Check for adequate clearance between the block and the fillet weld of the canopy release assembly.

Trim as required to obtain sufficient clearance.

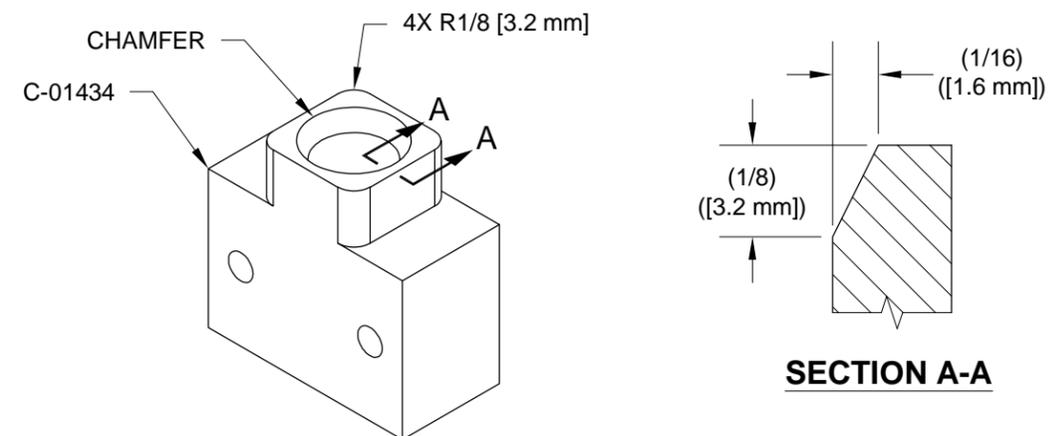


FIGURE 2: RADIUS & CHAMFER PIVOT BLOCK

Step 5: Final-Drill #12 the holes in the flange of the WD-619 Canopy Release Assembly and the arm of the WD-618-1 Canopy Release Assembly where indicated in Figure 3.

Step 6: Assemble the parts using the W-00026 Alignment Template from Section 23 as shown in Figure 3.

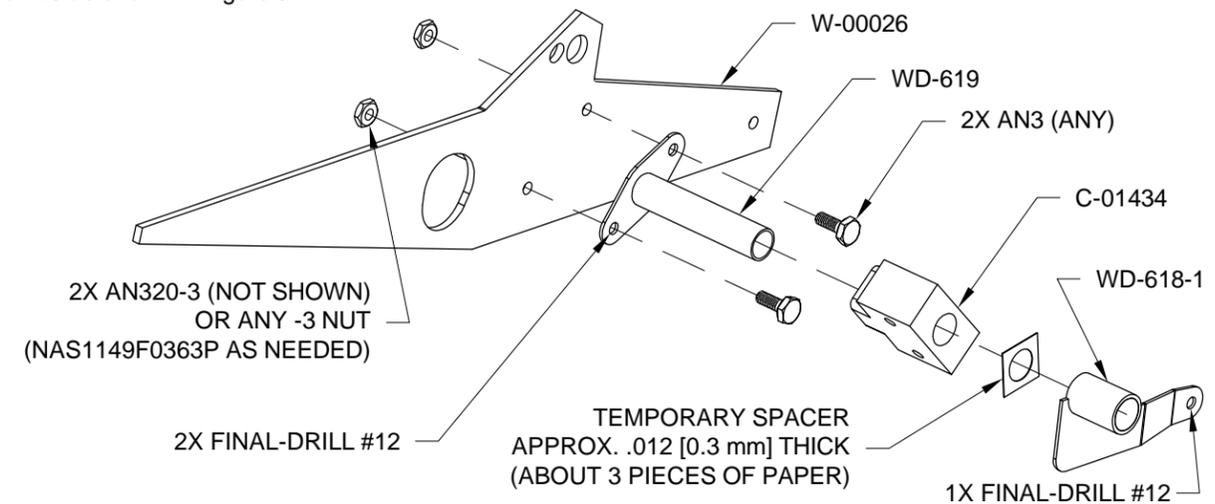


FIGURE 3: RELEASE MECHANISM - EXPLODED VIEW



Step 1: Place the assembled release mechanism on a flat surface as shown in Figure 1.

Step 2: Clamp the tubes of the two canopy release assemblies together to prevent relative motion.

Step 3: Drill #30 a pilot hole completely through both tubes per the dimension.

Step 4: Final-Drill #12 completely through both tubes.

Step 5: Disassemble and deburr.

Step 6: Prime the interior of the WD-619 Canopy Release Assembly tube.

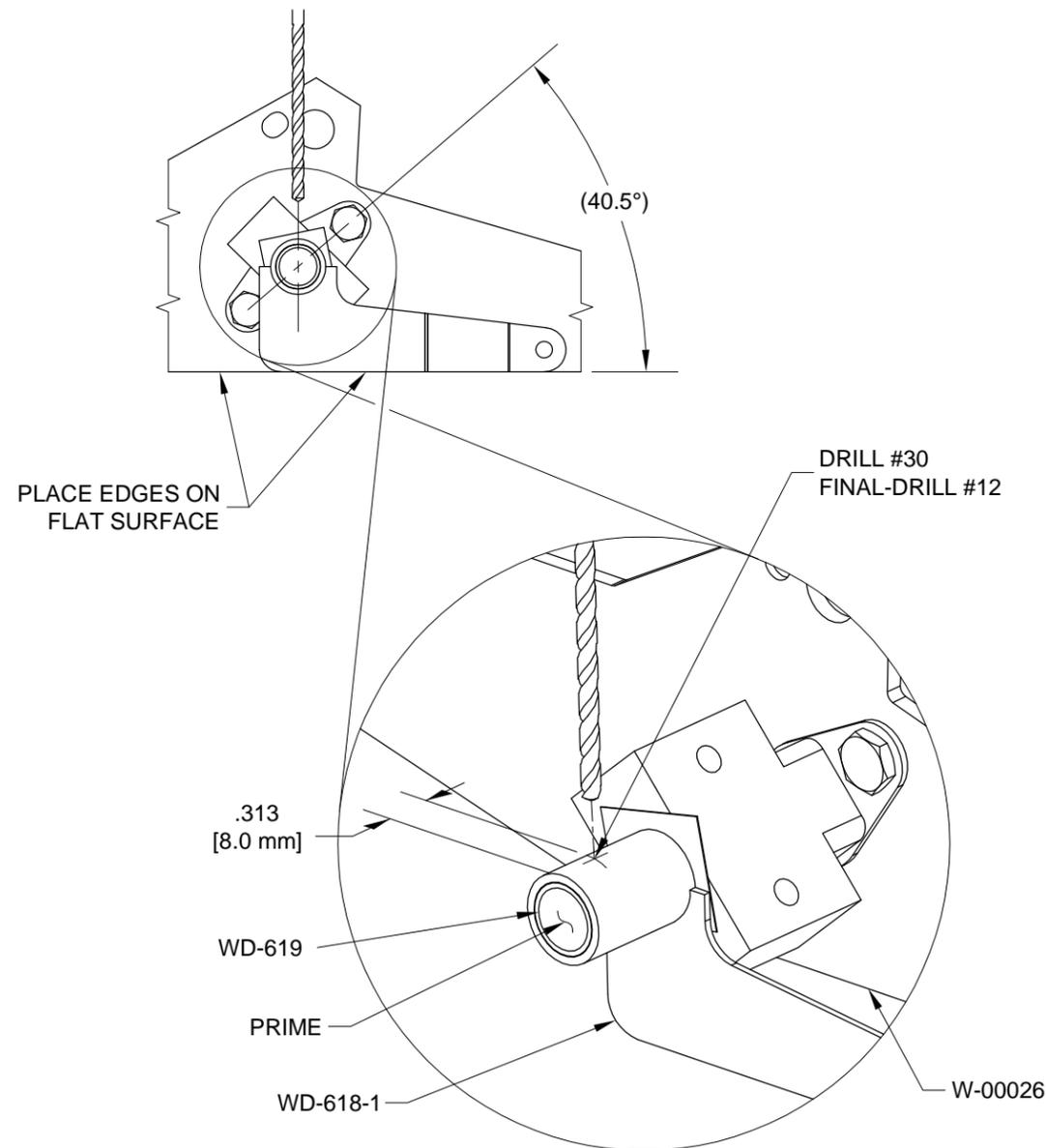


FIGURE 1: RELEASE MECHANISM DRILLING

Step 7: Fabricate the C-01435-L & -R Canopy Release Pushrods from raw material AT6-058X3/8 Tube. See Figure 2.

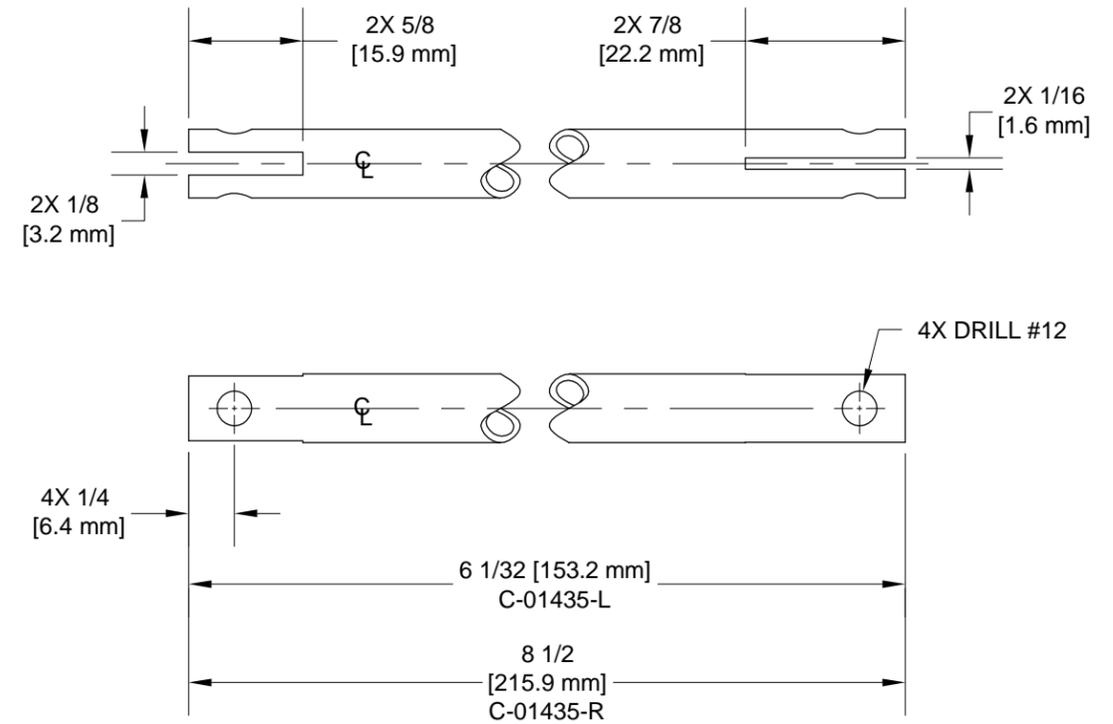


FIGURE 2: LEFT & RIGHT PUSHROD FABRICATION

Step 8: Cut two release pins from AN43-16 eye bolts as shown in Figure 3.

Step 9: Grind a taper on the ends of the release pins following the slope of the existing shoulder (transition from shank to thread). Remove all the thread as shown in Figure 3.

Step 10: Polish the ends of the release pins on an abrasive (scotch-brite) wheel. Polish along, not across, the axis of the pin.

Step 11: Do not prime the bare surfaces of the release pins since they will be coated with grease later.

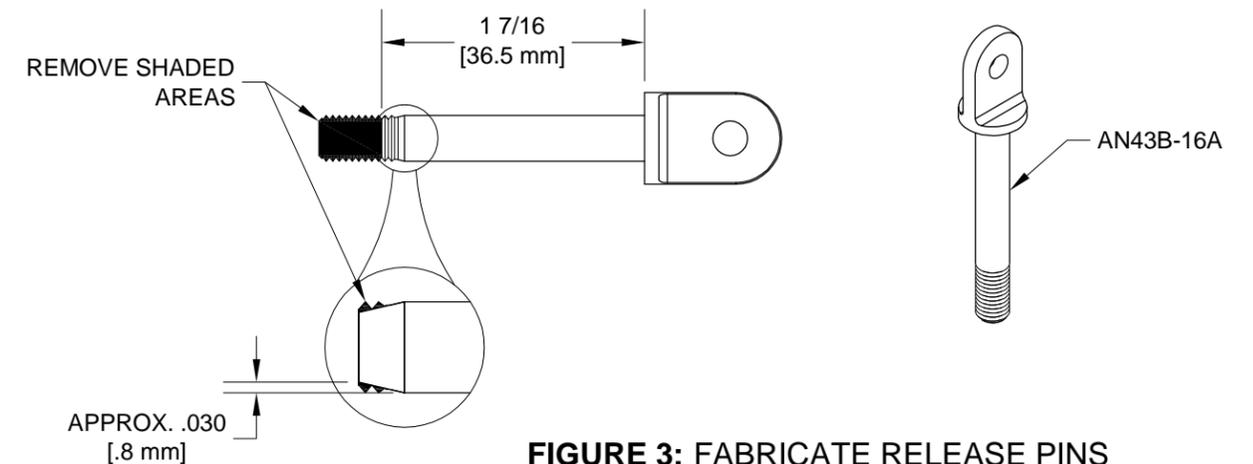


FIGURE 3: FABRICATE RELEASE PINS



Refer to Figure 1 for the following steps.

Step 1: Insert the WD-619 Canopy Release Assembly into the C-01434 Canopy Release Pivot Block.

Step 2: Bolt the WD-618-1 Canopy Release Assembly to the WD-619 Canopy Release Assembly using the called out hardware.

Step 3: Install the release pins to the C-01435-L & -R Canopy Release Pushrods using the called out hardware.

Step 4: Install the pushrods to the WD-619 Canopy Release Assembly using the called out hardware.

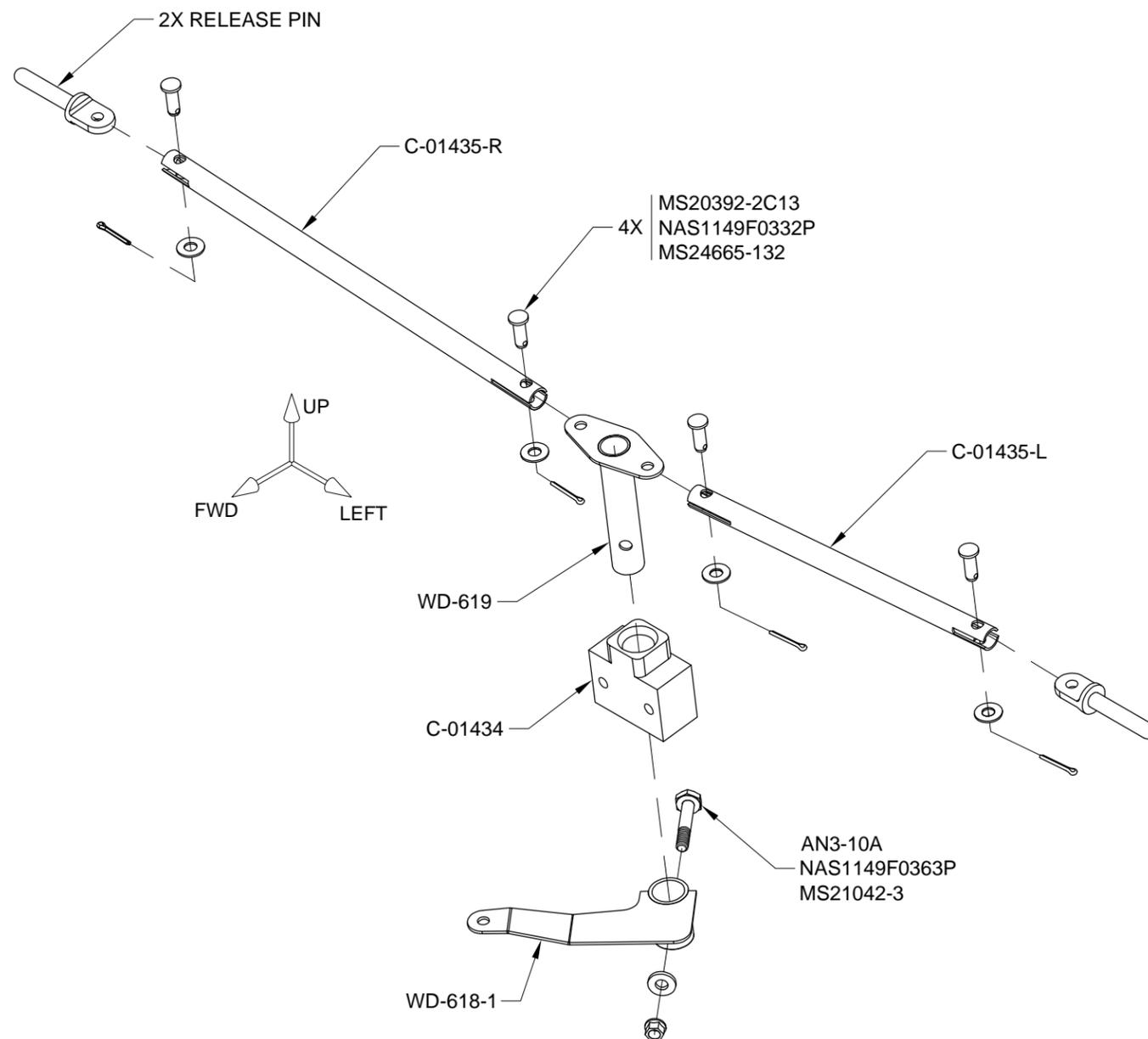


FIGURE 1: ASSEMBLE RELEASE MECHANISM

Refer to Figure 2 for the following steps.

Step 5: Machine countersink the eight .063 [1.6 mm] holes in the F-01471 Forward Top Skin for the head of an AN426AD2 rivet.

Step 6: Machine countersink the eight holes in the F-01471A Skin Doublers, before separation, for the head of an AN426AD2 rivet.

Step 7: Separate and deburr the F-01471A Skin Doublers.

Step 8: Apply a thin layer of fuel tank sealant to the doubler surface that mates to the skin.

Step 9: Rivet the doublers to the bottom surface of the F-01471 Forward Top Skin using the called out rivets.

Step 10: Set the rivets double flush. See Section 5.8 for more information on double flush riveting.

Step 11: Wipe sealant from the portion of the doubler that protrudes from under the skin.

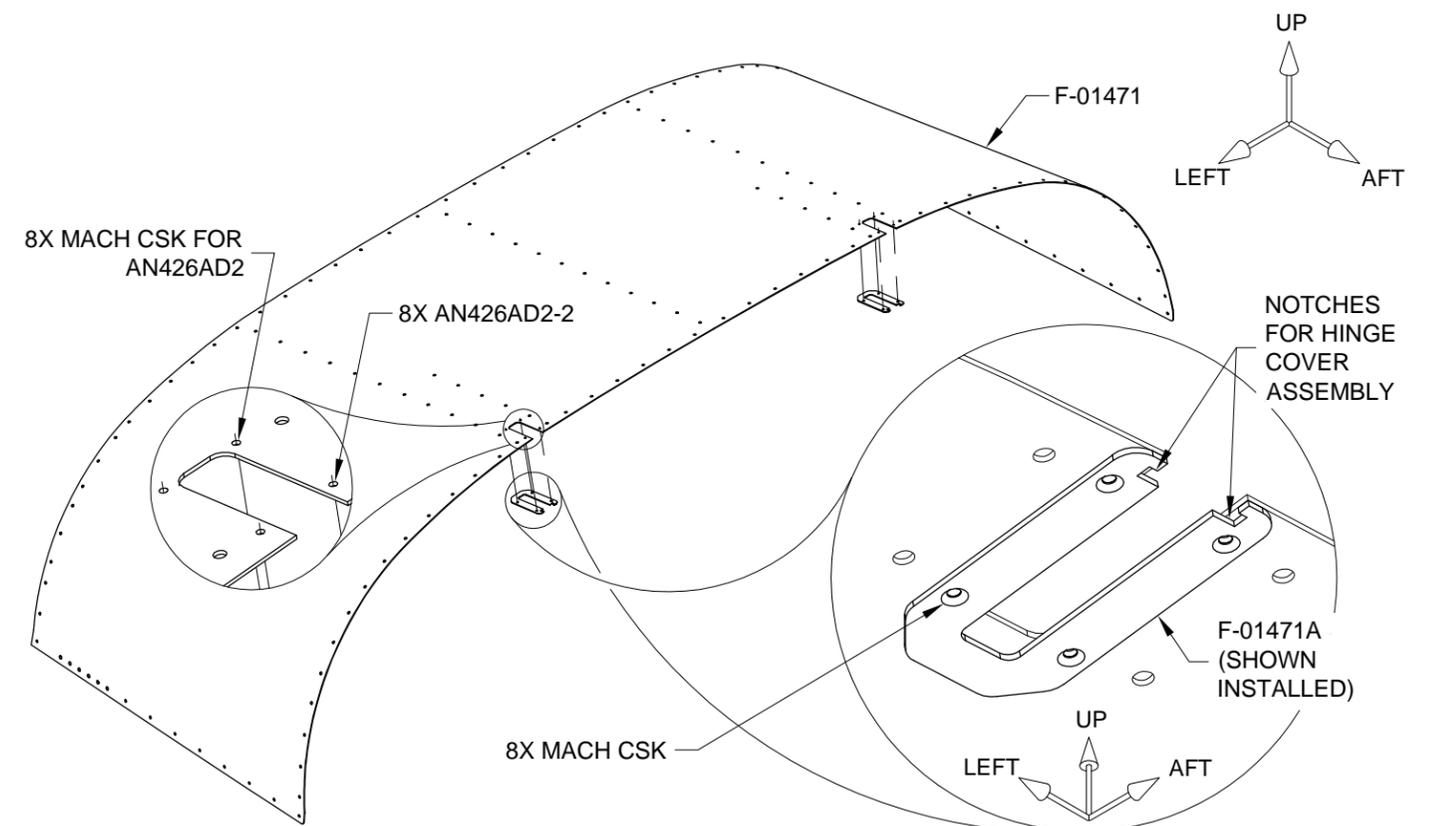


FIGURE 2: INSTALL DOUBLERS

Step 1: Locate and separate the F-14134A-L & -R Cowling Hinge Shims. See Figure 1.

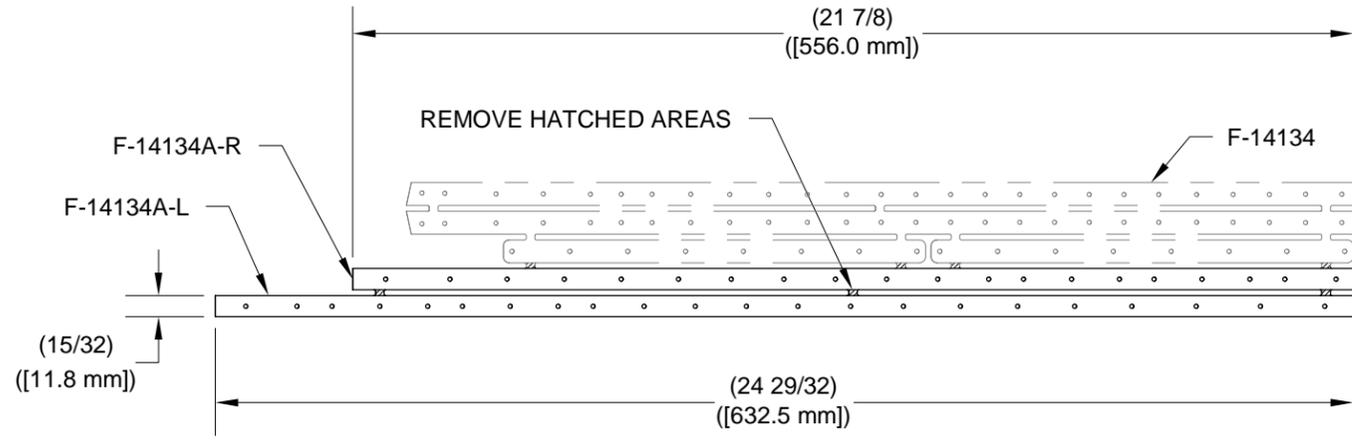


FIGURE 1: COWL HINGE SHIMS

Step 2: Cut the FF-00006A Cowl Attach Piano Hinge from HINGE PIANO 1/8. See Figure 2.

Step 3: Drill #40 the index hole in the hinge where indicated in Figure 2.

Step 4: Turn the hinge over and draw a reference line down the entire length of the hinge's flush side as shown in Figure 3.

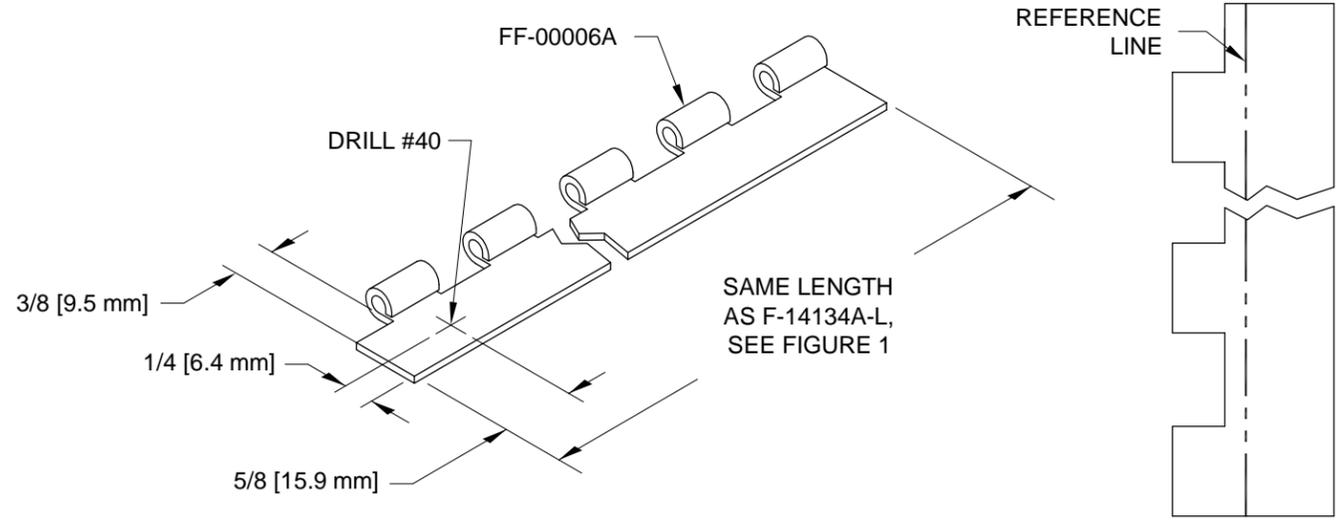


FIGURE 2: FABRICATE LEFT HINGE

FIGURE 3: REFERENCE LINE

Step 5: Repeat the above Steps for the FF-00006C Cowl Attach Piano Hinge but refer to Figure 4 (and Figure 3) instead.

Step 6: Remove two eyelets from the end of the FF-00006C Cowl Attach Piano Hinge as shown in Figure 4.

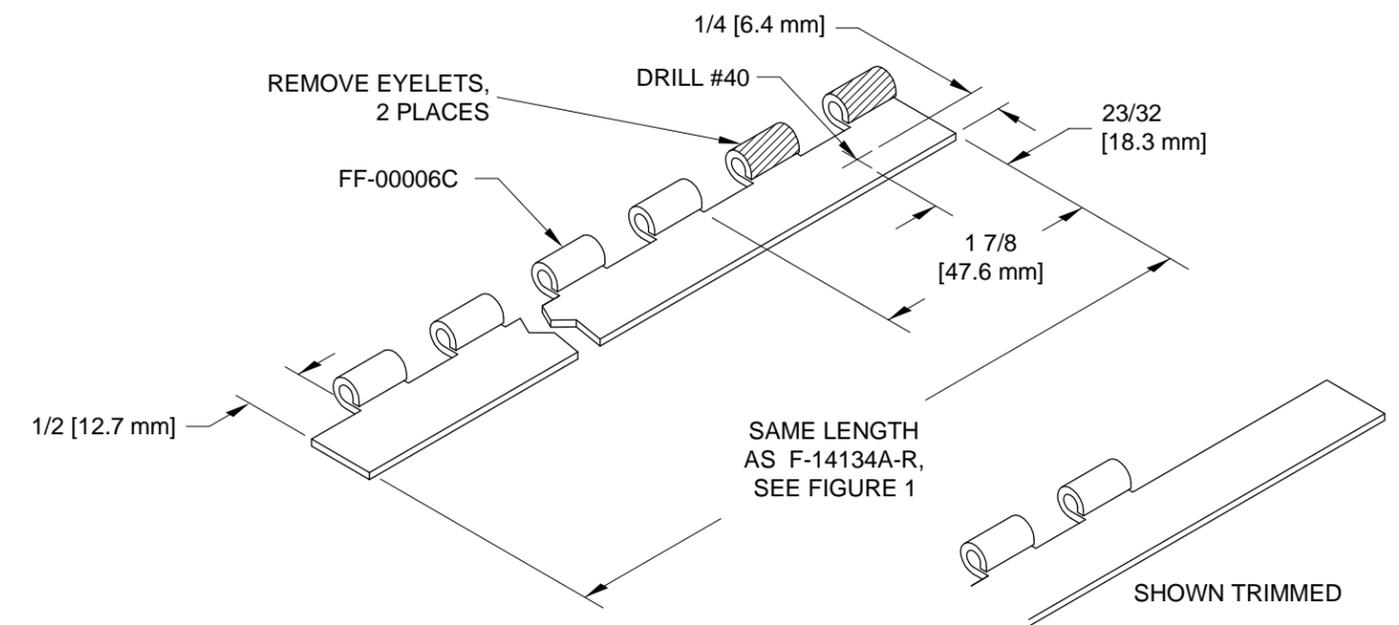


FIGURE 4: FABRICATE RIGHT HINGE

Step 7: Break the side edges of the F-01471 Forward Top Skin as shown in Figure 5.

Step 8: Dimple all of the holes in the F-01471 Forward Top Skin except those indicated in Figure 5.

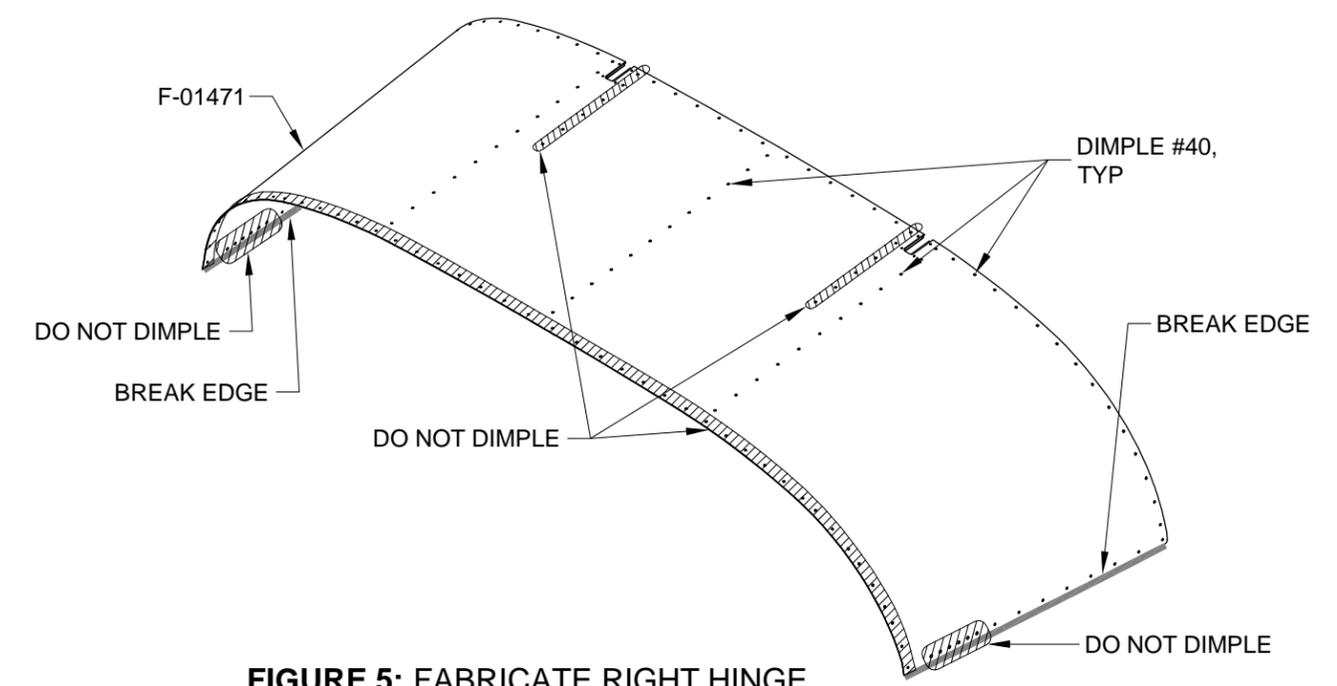


FIGURE 5: FABRICATE RIGHT HINGE



Refer to Figure 1 unless otherwise noted.

Step 1: Cleco the F-01471 Forward Top Skin and F-14134A-L & -R Cowling Hinge Shims to the F-01401A Firewall Top. Cleco every hole along the firewall flanges. Cleco the remaining holes in the forward top skin to the substructure. Start at the center of the skin and work outbd. Adjust the flute depth in the subpanel flanges to obtain the proper hole alignment.

Step 2: Bend the FF-00006A and FF-00006C Cowl Attach Piano Hinges until they approximate the curvature of the forward edge of the forward top skin.

Remove three clecos per side directly outboard of the #40 index holes. Cleco the piano hinges to the lower surface of the shims at the index holes. See Section A-A.

NOTE: Verify that the reference line on the hinge remains parallel to the forward edge of the side skin during drilling.

Work from the skin centerline outbd, clamp and cleco along the way.

Step 3: Match-Drill #40 the hinge beginning at top center and proceeding outboard using the holes in the skin, firewall flange, and shims as guides. Clamp beside each hole as it is drilled. Cleco each hole as it is drilled and re-clamp as drilling progresses.

Step 4: Final-Drill #40 the holes common to the F-01459-L & -R Canopy Hinge Ribs.

Step 5: Final-Drill #30 the holes common to the Upper Longeron Assembly.

Step 6: Label and remove the hinges and shims. Remove the forward top skin as well.

Dimple the remaining #40 holes in the forward top skin, firewall flange, shims, and F-01459-L & -R Canopy Hinge Ribs.

Dimple the #30 holes at the lower forward corners of the forward top skin.

Step 7: Machine countersink the #40 holes in the piano hinges to accept the dimpled .025 thick shims.

Step 8: Machine countersink the #30 holes in the Lower Longeron Assemblies for the dimpled .032 thick forward top skin.

Step 9: Apply a thin layer of fuel tank sealant to the surface of the forward top skin that mates to the sub panel flanges. See Section B-B. Do not apply sealant outside the central rivet zone at this time.

Step 10: Cleco the shims, hinges, and forward top skin to the firewall and substructure.

Step 11: Rivet the forward top skin to the substructure only in the central rivet zone where indicated in Figure 1. Install as many rivets in the holes common to the canopy hinge ribs as possible, then remove the bolts and the C-01440-L & -R Canopy Hinge Brackets to complete the riveting in the canopy hinge ribs.

Remove the clecos from the forward top skin after the riveting has been completed.

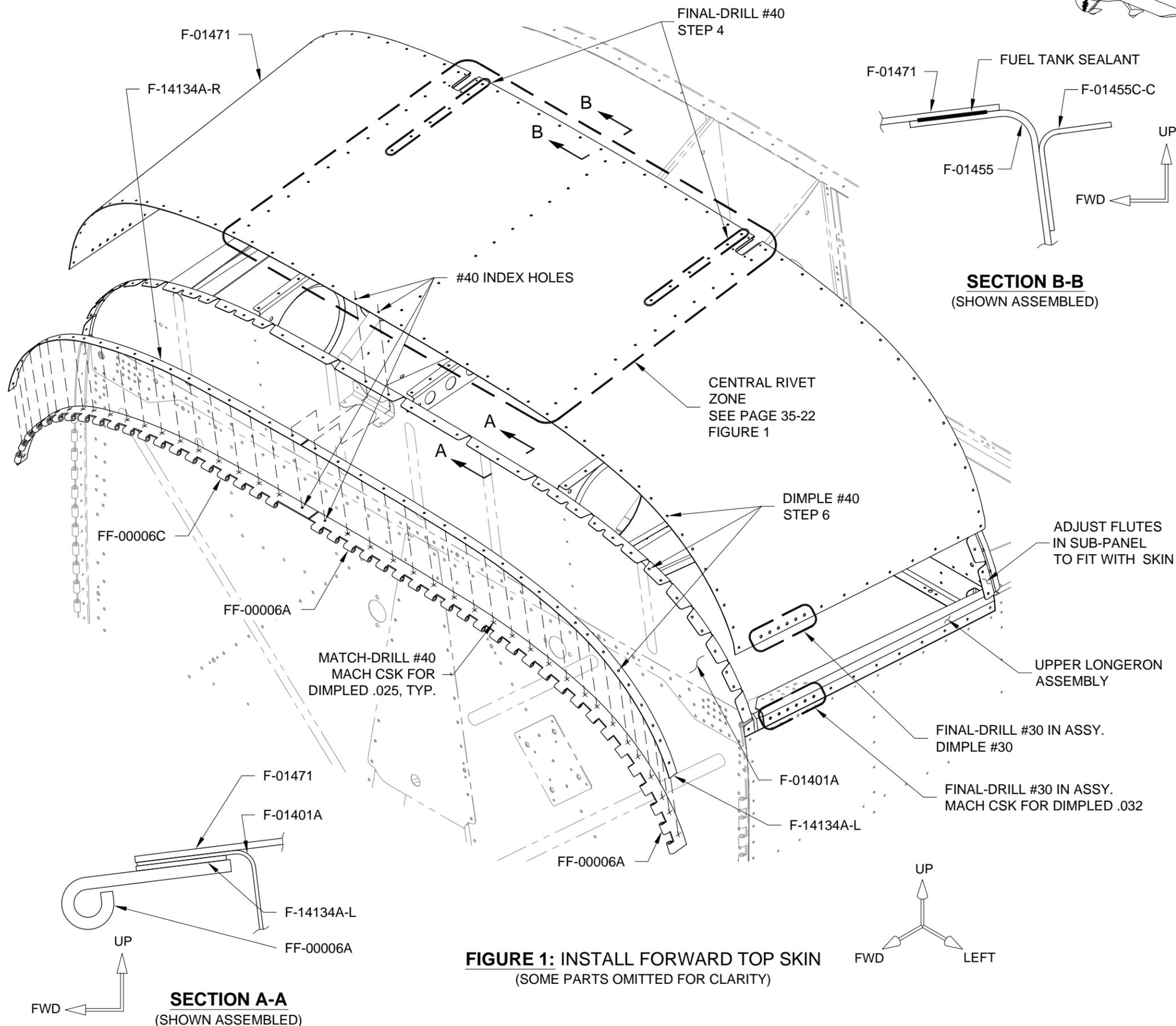


FIGURE 1: INSTALL FORWARD TOP SKIN
(SOME PARTS OMITTED FOR CLARITY)

Step 1: Insert the called out flanged bushing into each F-01459-L & -R Canopy Hinge Rib as shown in Figure 1.

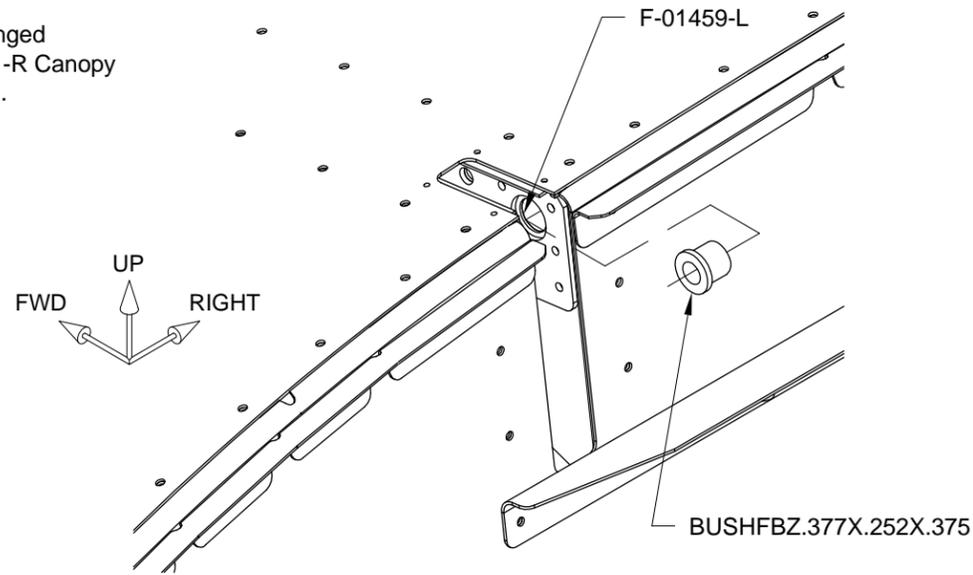


FIGURE 1: INSERT BUSHING
(LEFT SIDE SHOWN)

Step 2: Prime and paint the C-01439 Canopy Cradles except for the integral bushing surfaces as shown in Figure 2.

Step 3: Apply Aeroshell #5 wheel bearing grease or equivalent to the C-01440-L & -R Canopy Hinge Bracket surfaces that will be in contact with the C-01439 Canopy Cradle integral bushings as indicated in Figure 2.

Step 4: Sandwich the C-01439 Canopy Cradles between the C-01440-L & -R Canopy Hinge Brackets as shown in Figure 2.

Hereafter refer to these as Canopy Cradle Assemblies.

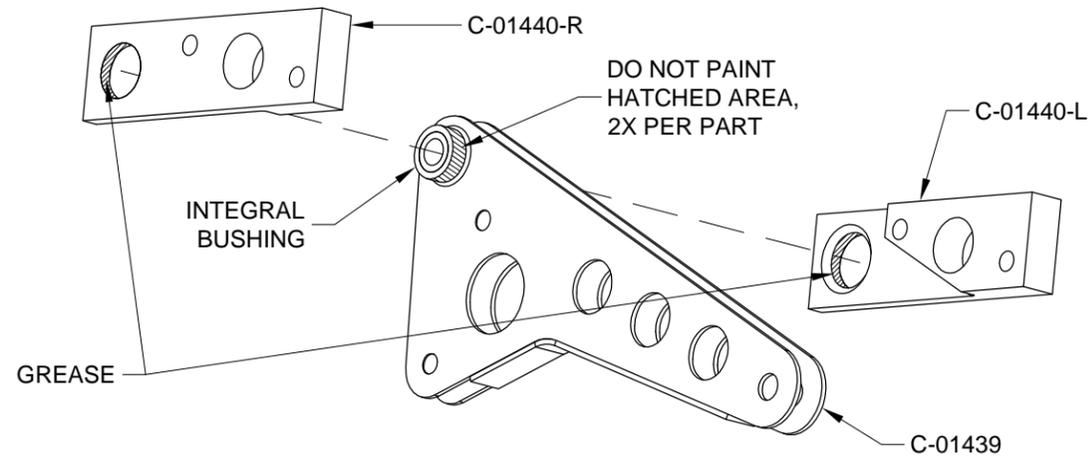


FIGURE 2: CANOPY CRADLE ASSEMBLY
(ONE ASSEMBLY SHOWN)

Step 5: Pull up the F-01471 Forward Top Skin as shown in Figure 3, to gain access for installation of the canopy release mechanism.

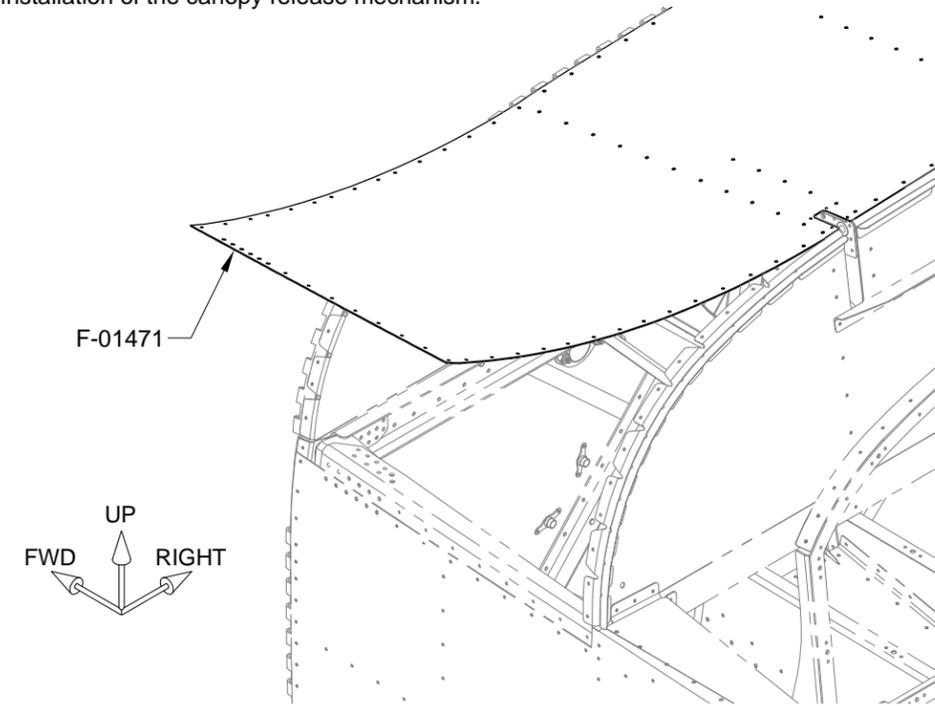


FIGURE 3: UPPER FORWARD FUSE ACCESS

Step 6: Slide the Canopy Cradle Assemblies into the gaps between the F-01456-L & -R Fwd Fuse Ribs and F-01459-L & -R Canopy Hinge Ribs as shown in Figure 4.

Step 7: Bolt the Canopy Cradle Assembly to the ribs using the hardware called out in Figure 4.

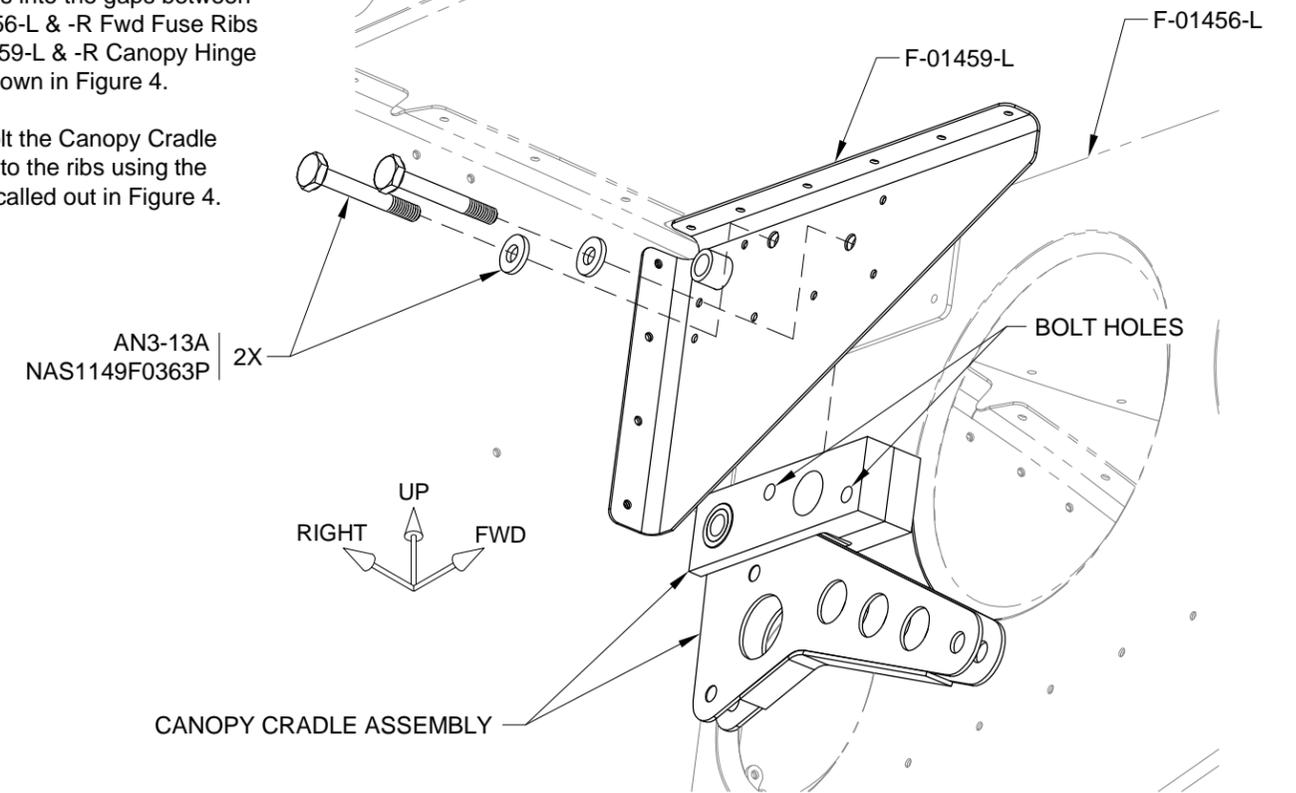


FIGURE 4: INSTALL CANOPY CRADLE ASSEMBLY
(LEFT SIDE SHOWN)



Step 1: Install the aft end of each SPRING-00001-1 Gas Spring into the C-01439 Canopy Cradles using the hardware shown in Figure 1. If necessary, refer to Page 35-01.

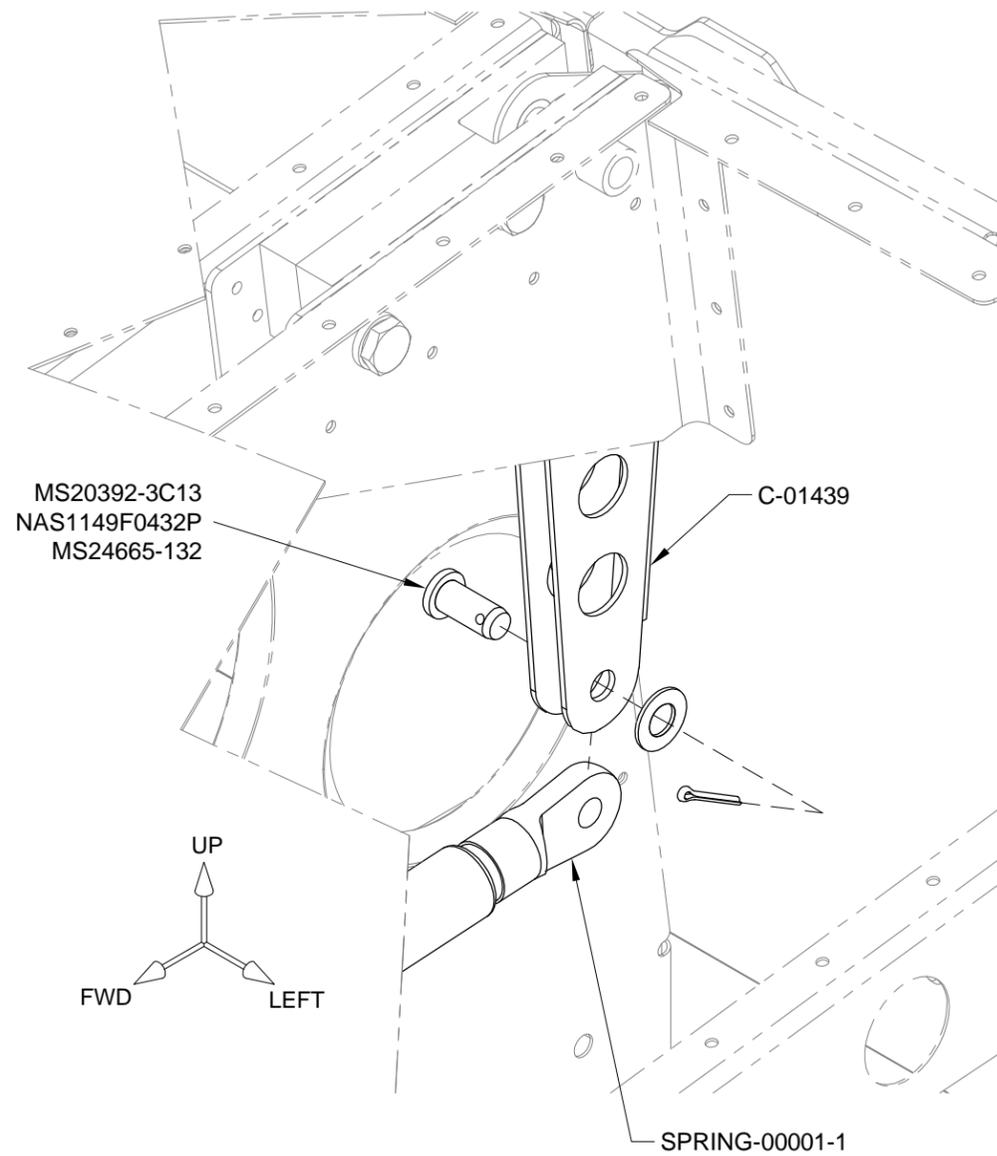


FIGURE 1: ATTACH GAS SPRINGS
(RIGHT SIDE SHOWN)

Refer to Figure 2 for the following steps.

Step 2: Apply Aeroshell #5 wheel bearing grease or equivalent to the bearing surface of the two release pins.

Step 3: Slide the C-01435-R Canopy Release Pushrod through the hole in the F-01493 Fwd Fuselage Channel and insert the right release pin into the right C-01439 Canopy Cradle bushing.

Step 4: Insert the left release pin into the left C-01439 Canopy Cradle bushing.

Step 5: Bolt the C-01434 Canopy Release Pivot Block to the C-01436 Pivot Block Channel using the called out bolts.

Step 6: Check for smooth operation of the canopy release mechanism.

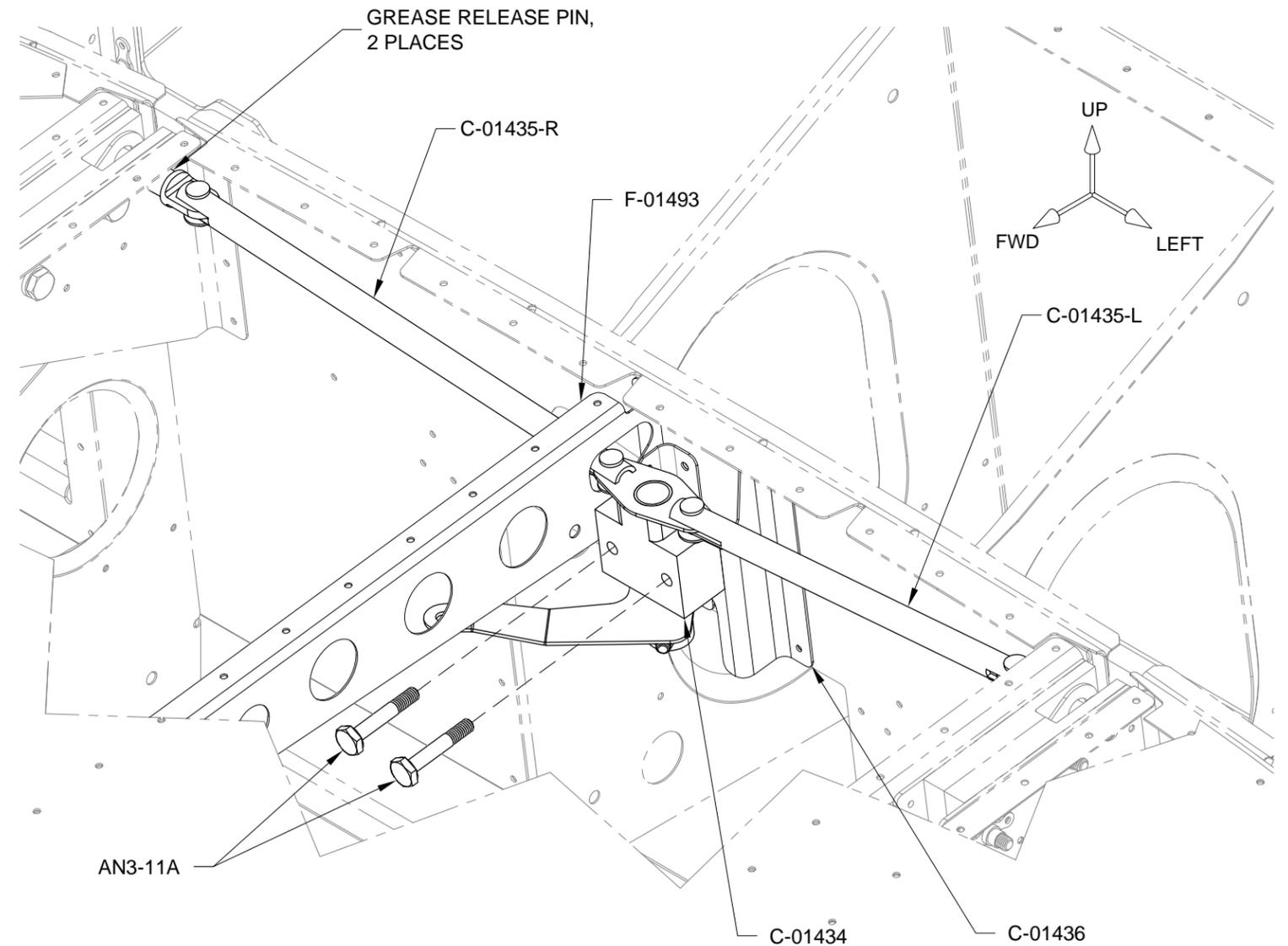


FIGURE 2: INSTALL CANOPY RELEASE MECHANISM
(SOME PARTS NOT SHOWN)



Step 1: Apply a thin layer of fuel tank sealant to the F-01471 Forward Top Skin surfaces that mate to the F-01455 Sub Panel as shown in Section A-A to prevent air and water leakage.

Apply fuel tank sealant to the forward top skin surfaces that mate to the Upper Longeron Assembly as shown in Figure 1.

Step 2: Apply fuel tank sealant to the tops of the foam blocks, especially in the area adjacent to the F-01471 Forward Top Skin. See Page 35-09, View A-A.

Step 3: Cleco then rivet the F-01471 Forward Top Skin to the F-01401A Firewall Top, the F-01455 Sub Panel, and all substructure using the rivet call-outs in Figure 1.

Step 4: Apply masking tape as shown in Section A-A.

Step 5: Apply fuel tank sealant as shown in Sections A-A and B-B. Fill the gaps at the relief notches in the F-01455 Sub Panel and F-01455C-L & -R Seal Angles as shown in Figure 2.

Step 6: When sealant is cured, remove the masking tape and run a final bead of sealant as shown in Section A-A.

Step 7: Verify the integrity of each seal by shining a bright light on the seal from the inside while looking for light escaping to the outside of the Upper Fwd Fuselage. No light should be visible from the outside.

- △ AN426AD3-3.5
- ◇ AN426AD3-4
- ◊ AN426AD3-4.5
- ⊙ AN426AD4-7

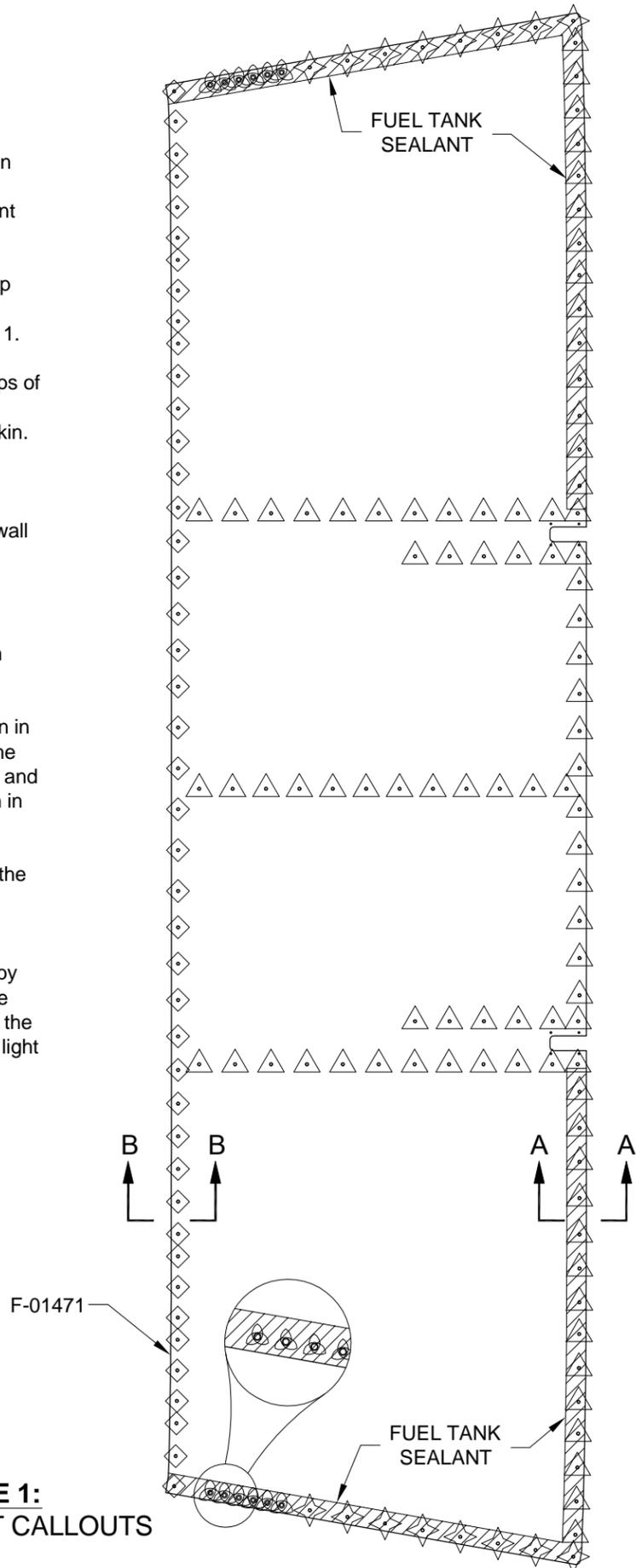
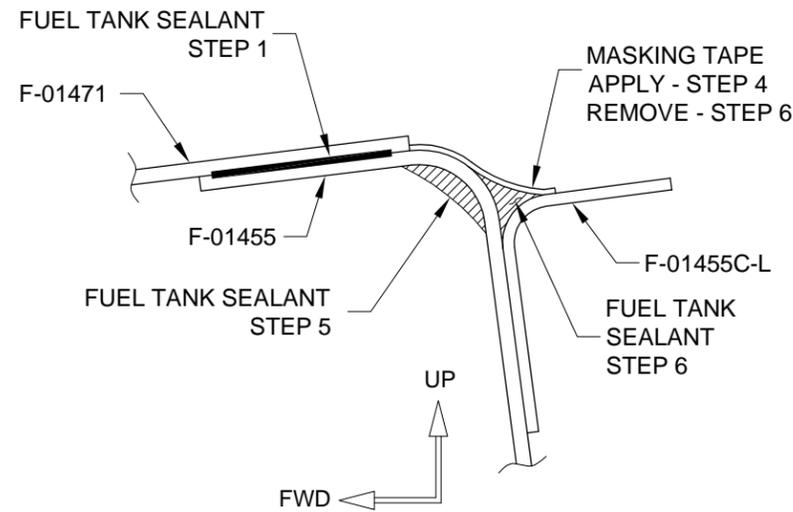
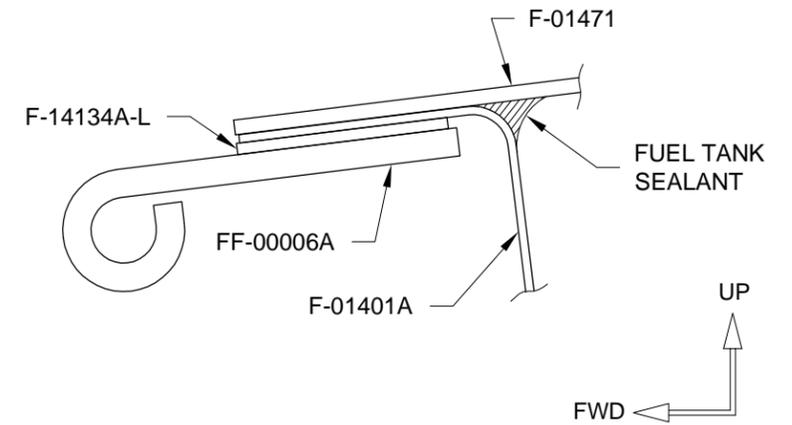


FIGURE 1:
TOP SKIN RIVET CALLOUTS



SECTION A-A
(F-01455 & F-01455C-L ADDED TO SECTION)



SECTION B-B
(F-01401A, F-014134A-L, & FF-00006A ADDED TO SECTION)

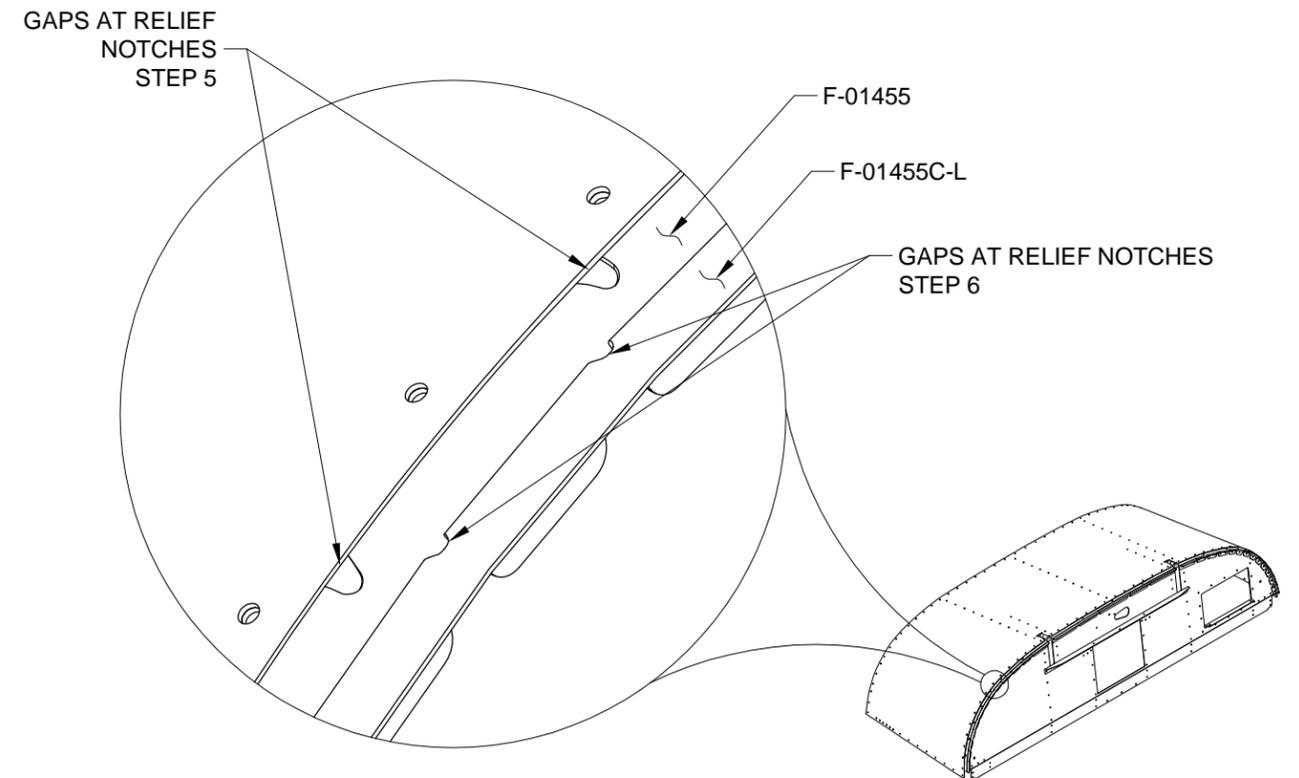


FIGURE 2: SEAL GAPS AT RELIEF NOTCHES