Step 1: Slide the wing spar (left shown) into the fuselage and temporarily pin as shown in Figure 1.

When bringing the spar into it's exact position, lining up the bolt holes in the bulkhead and spar, it is often helpful to use drift pins. This could be a disposable hardware store bolt with the end rounded or tapered on a grinder. GENTLY driving this lubricated pin into a nearly aligned hole will center the bulkhead/spar hole so that the bolts can be installed without excessive force.

It is recommended that 3/8 dia. hardware store bolts be used for test fitting to prevent damage to the holes and NAS bolts. For fitting, it is only necessary to install four 3/8 bolts(pins), one top and one bottom per wing.

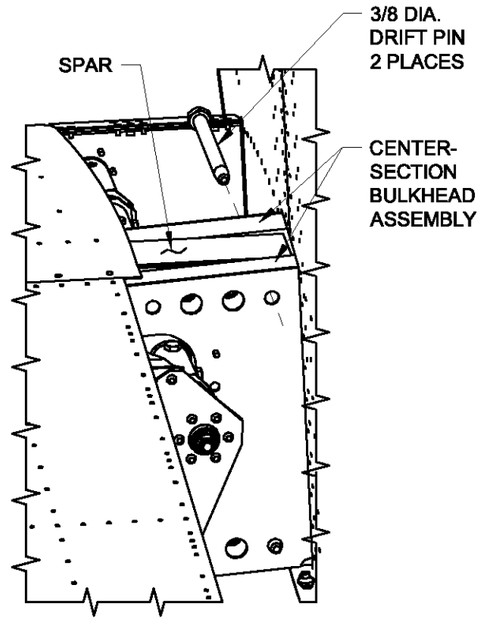

FIGURE 1: ATTACH WING

Step 3: Remove the clamp. Bolt the rear spar to the F-1005B Rear Spar Attach Bars using the hardware shown in Figure 3.

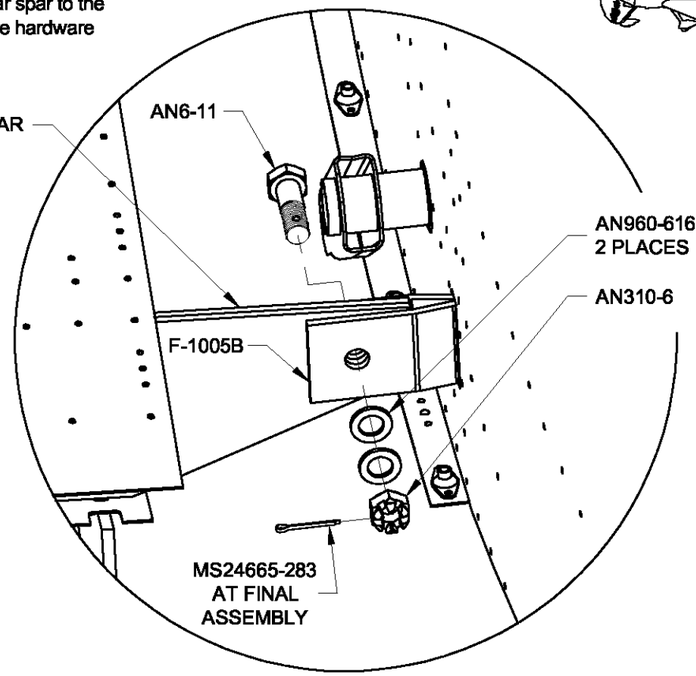

FIGURE 3: BOLT REAR SPAR ATTACH

Step 2: Cleco together the rear spar and F-1005B Rear Spar Attach Bars as shown in Figure 2. Clamp them in place. Remove the cleco and carefully pilot-drill to 3/16, 1/4, 5/16 and finally 3/8.

WARNING: Use great care when drilling to avoid a hole that is oversize or out of round.

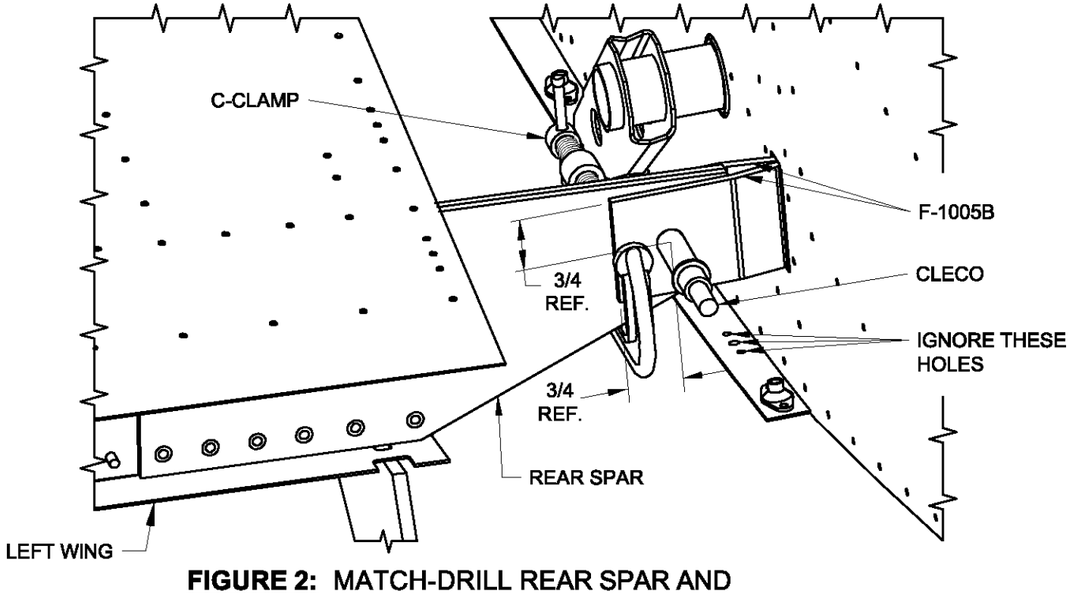

FIGURE 2: MATCH-DRILL REAR SPAR AND REAR SPAR ATTACH BARS

Step 4: Break apart the F-1054-L Tank Attach Angles and final-drill #12 the holes punched 3/16. Bolt the tank attach angle to the side of the F-1069-L Fwd Side Skin as shown in Figure 4. Match-Drill #30 the T-1005-L Tank Attach Bracket using the holes in the tank attach angle as a guide.

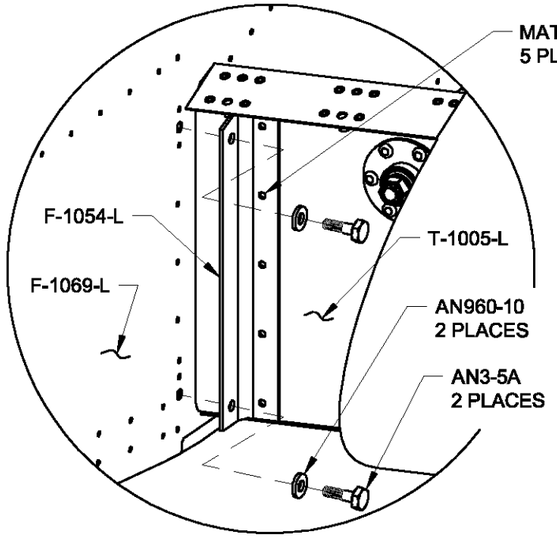

FIGURE 4: DRILL TANK ATTACH BRACKET

The following steps may be performed at the builders convenience.

Step 1: Pin the wing to the fuselage using the same drift pins from Page 44-3, Step 1.

NOTE: When installing the wing lubricate the NAS bolts with LPS #1,2 or 3 (available in a spray can). In lieu of that a light coat of ordinary motor oil will do.

CAUTION: Do not lubricate the threaded portion of the bolt as this will cause the bolts to be incorrectly torqued.

Install the bolts called out in Figure 1 in the remaining six holes. Replace the two drift pins with the hardware called out in Figure 1. See Section 5 under the heading 'Nut and Bolt Torques' for the appropriate torque values.

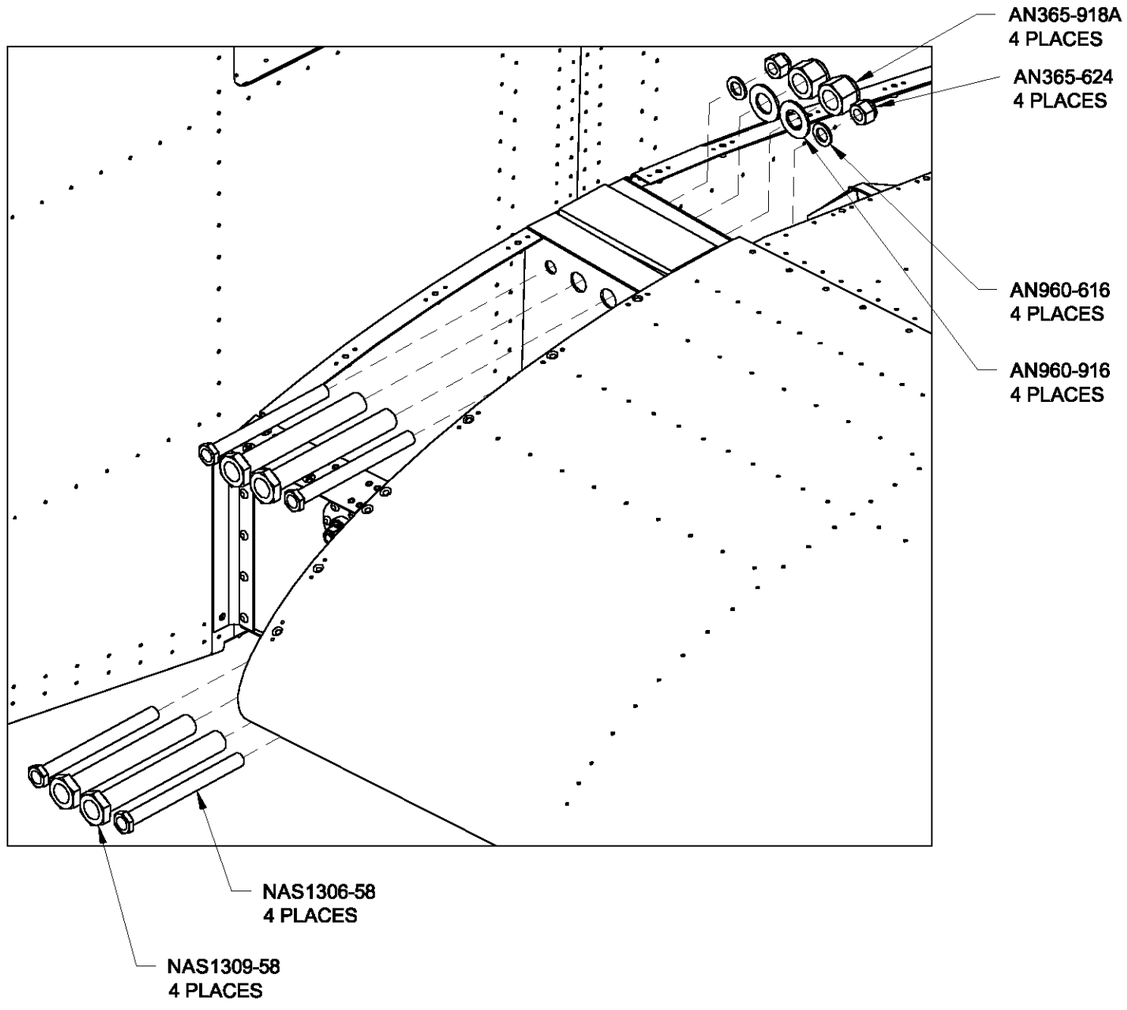

FIGURE 1: FINAL WING ATTACHMENT

Step 2: Install the F-1004J Center Section Upright Bar (not shown) hardware as called out in Figure 2.

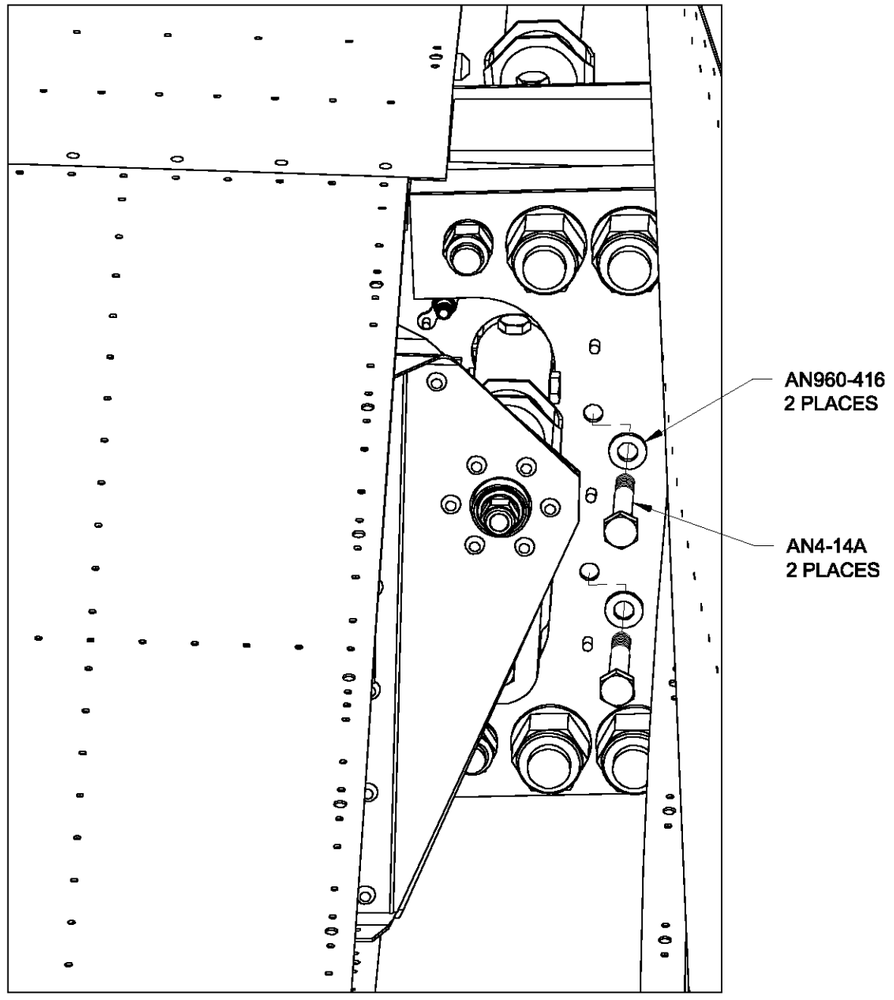

FIGURE 2: INSTALLING CENTER SECTION UPRIGHT BAR HARDWARE REAR VIEW

Step 1: Reinstall the rear spar attach hardware. See Page 44-3, Figure 3. Don't forget the cotter pin.

Step 2: Reinstall the F-1054-L Tank Attach Angle hardware. See Page 44-3, Figure 4.

Step 3: Reinstall the F-1064 Aileron Pushrod Assembly attach hardware. See Page 44-4, Figure 1.

Step 4: Connect the fuel supply line to the nipple tube/pipe fitting using the hardware shown in Figure 1.

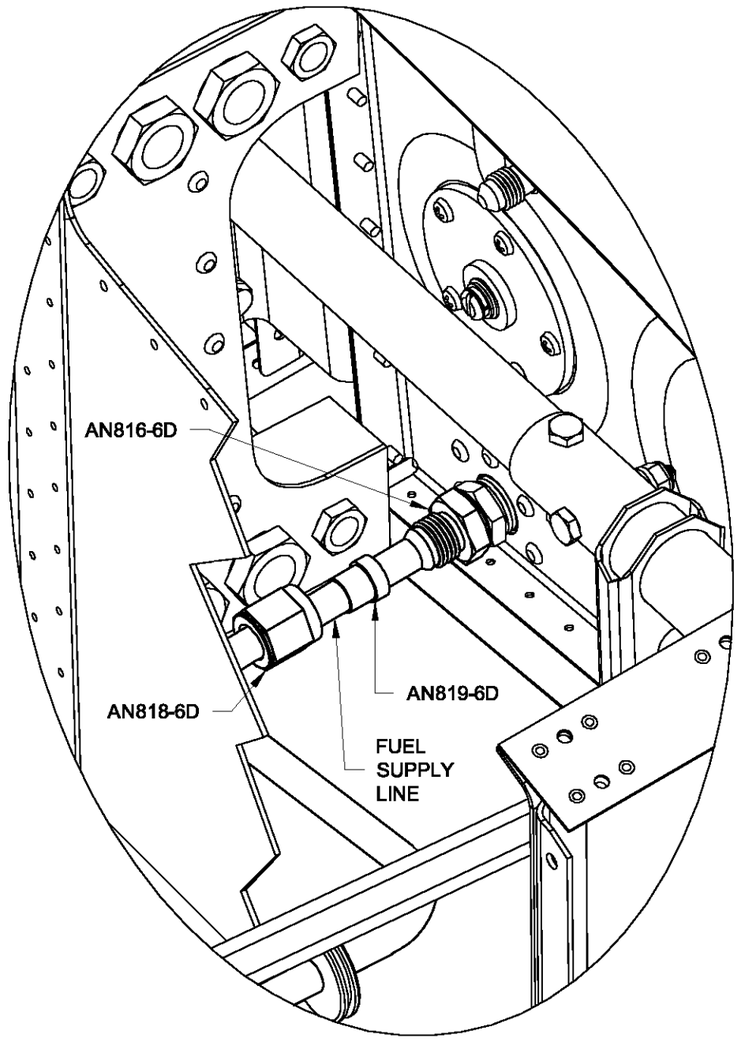

FIGURE 1: CONNECTING THE FUEL SUPPLY LINE

Step 5: Reinstall the VA-256 Flap Pushrod Assembly. See Page 44-5, Figure 2.

Step 6: Reinstall the F-1099B Lower Wing Root Fairing. Five additional AN509-8R8 screws are required beyond those depicted on Page 44-6, Figures 1 and 2.

Step 7: Reinstall the F-Fuel Vent Fuselage Fuel Vent line. See Page 44-7, Figure 2.

Step 8: Permanently install the F-1099C Wing Walk Spacer, gluing it to the top of the spar with RTV or Proseal. See Page 44-7, Figure 4.

Step 9: Reinstall the F-1099A Upper Wing Root Fairing. Fifteen additional AN509-8R8 screws are required beyond those depicted on Page 44-9, Figure 1.