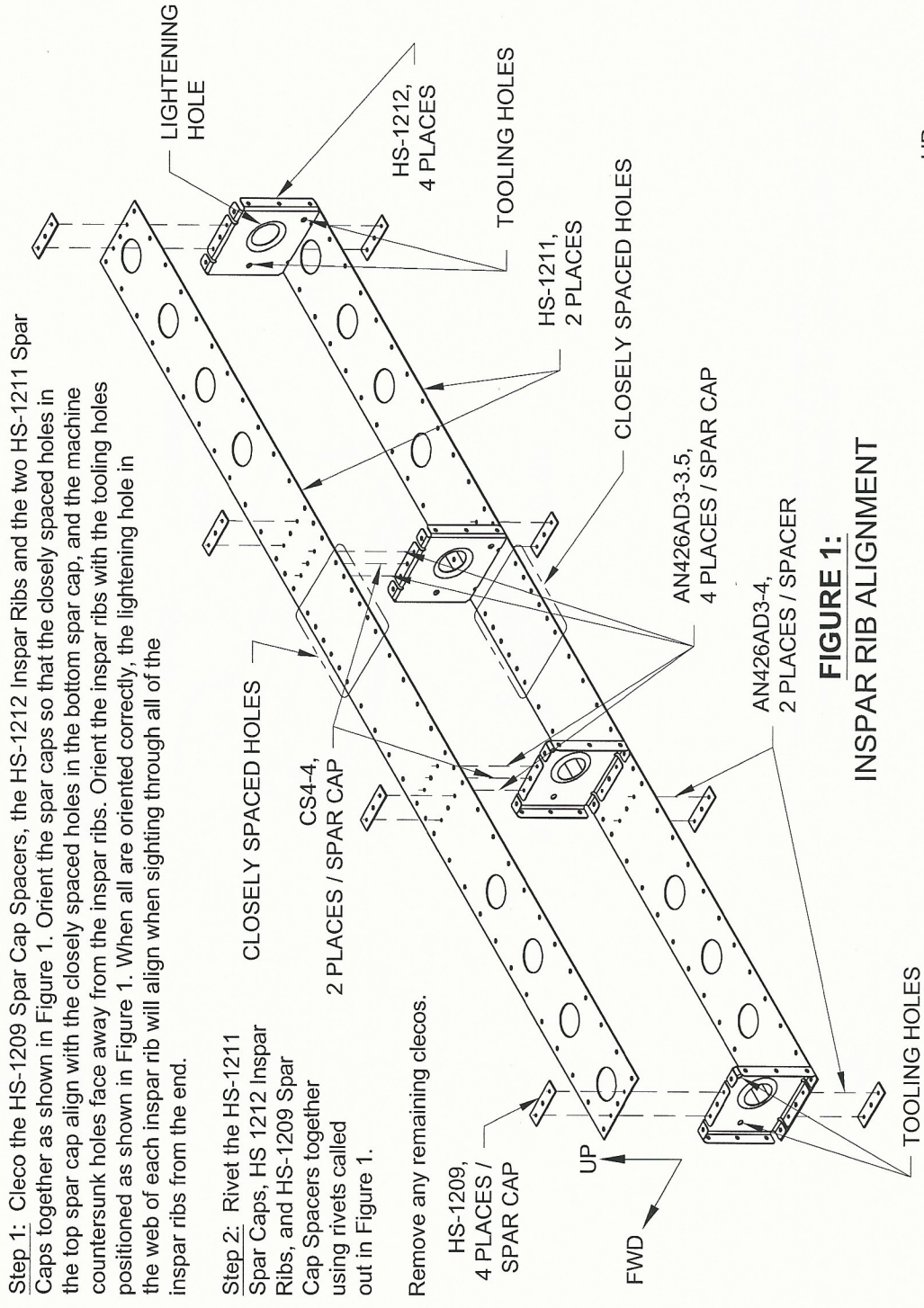




**NOTE: The proper orientation of the spars (top, bottom, forward, aft) is critical throughout the Stabilizer assembly. Make sure that all spar flange holes align with spar cap holes.**



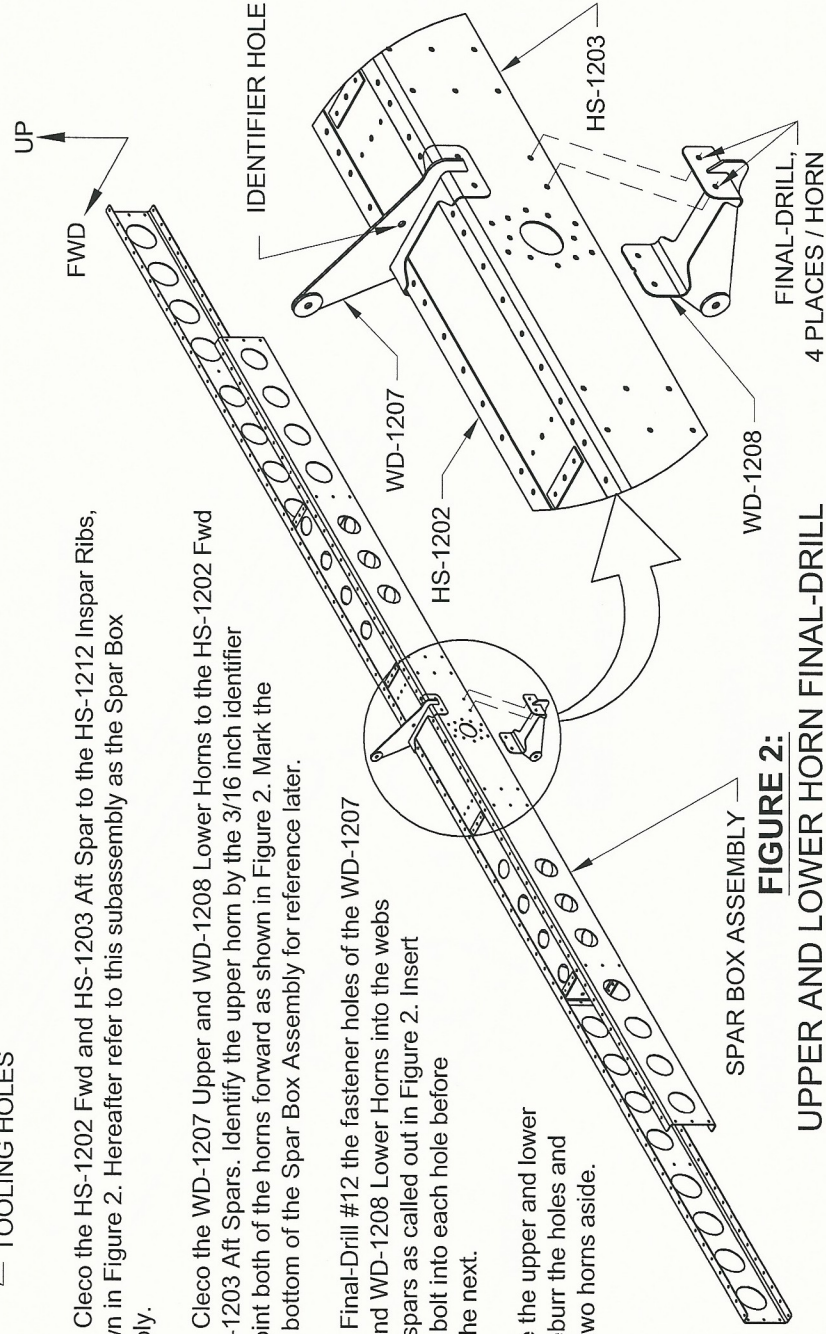
**FIGURE 1:  
INSPAR RIB ALIGNMENT**

**Step 3:** Cleco the HS-1202 Fwd and HS-1203 Aft Spar to the HS-1212 Inspar Ribs, as shown in Figure 2. Hereafter refer to this subassembly as the Spar Box Assembly.

**Step 4:** Cleco the WD-1207 Upper and WD-1208 Lower Horns to the HS-1202 Fwd and HS-1203 Aft Spars. Identify the upper horn by the 3/16 inch identifier hole. Point both of the horns forward as shown in Figure 2. Mark the top and bottom of the Spar Box Assembly for reference later.

**Step 5:** Final-Drill #12 the fastener holes of the WD-1207 Upper and WD-1208 Lower Horns into the webs of both spars as called out in Figure 2. Insert an AN3 bolt into each hole before drilling the next.

Remove the upper and lower horn, deburr the holes and set the two horns aside.



**FIGURE 2:  
UPPER AND LOWER HORN FINAL-DRILL**

**Step 6:** Final-Drill #30 all of the holes in the plate of both of the WD-1222 Counterbalance Brackets.

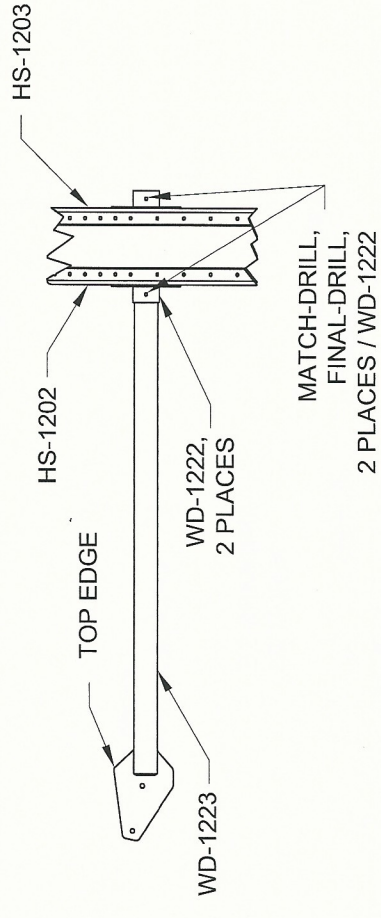
**Step 7:** Align each WD-1222 Counterbalance Bracket to the corresponding holes in the HS-1202 Fwd and HS-1203 Aft Spar. Turn both brackets 90° and cleco them in that position, as shown in Figure 3, Detail A-A.

**Step 8:** Insert the WD-1223 Counterbalance Arm into the forward WD-1222 Counterbalance Bracket (clecoed to the HS-1202 Fwd Spar) through the Spar Box Assembly, then into the aft WD-1222 Counterbalance Bracket. Bring the aft end of the counterbalance arm flush with the aft edge of the aft counterbalance bracket, and orient the counterbalance arm as shown in Figure 3. Clamp the counterbalance arm to the counterbalance brackets.

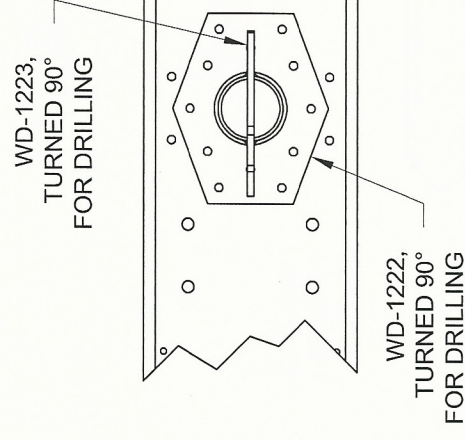
**Step 9:** Match-Drill #30 the two holes from the neck of each WD-1222 Counterbalance Bracket into the WD-1223 Counterbalance Arm. Cleco as you go. Then final-drill #12 per call-out in Figure 3, Detail B-B. Temporarily insert an AN3-14A bolt after final-drilling the first hole.

**Step 10:** Rotate the counterbalance arm and counterbalance brackets 90°, make sure the top edge of the counterbalance arm (see call-out in Figure 3, Detail B-B) is oriented with the top side of the Spar Box Assembly. Mark the counterbalance brackets in relation to the Spar Box Assembly, and the counterbalance arm.

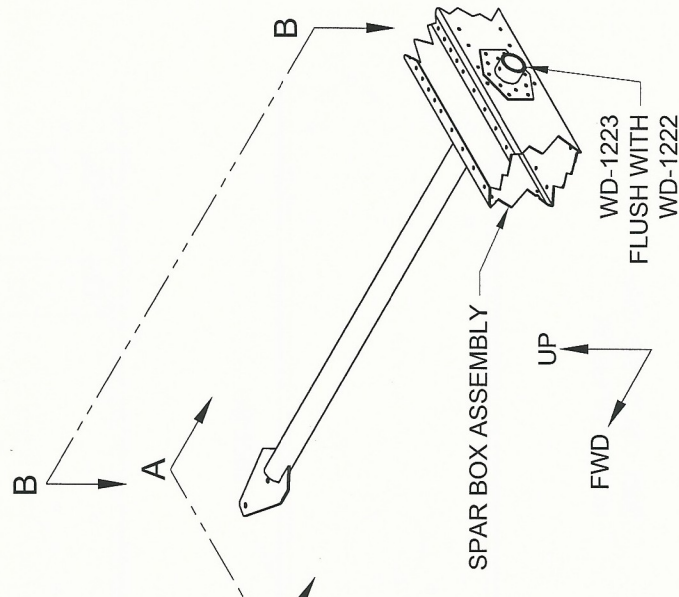
Remove the counterbalance arm and brackets, remove the HS-1202 Fwd and HS-1203 Aft Spar. Deburr holes, and clear away chips.



**DETAIL B-B**



**DETAIL A-A**



**FIGURE 3:  
COUNTERBALANCE ARM MATCH-DRILL**