



- Step 1: Read all steps prior to construction.
- Step 2: Separate the R-1204 Spar Caps by removing the material shown hatched in Figure 1.
- Deburr all the edges of both spar caps.
- Step 3: Mark both of the R-1204 Spar Caps with a centerline on the surface that will nest against the R-1202 Spar web as shown in Figure 3.

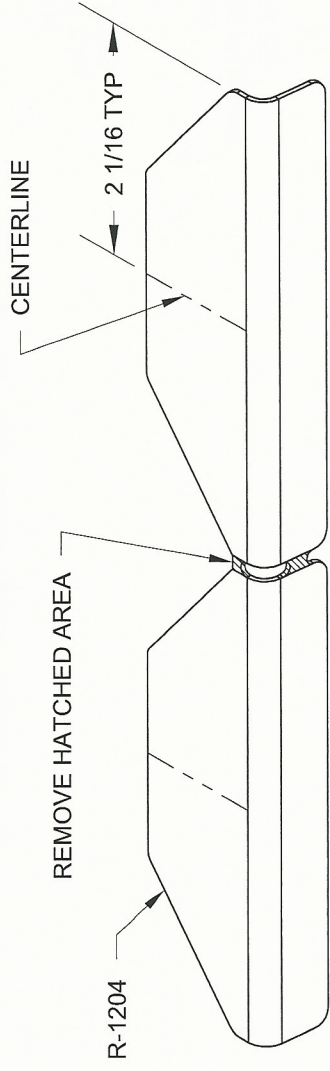


FIGURE 1:
SPAR CAP PREPARATION

- Step 4: Final-Drill #30 the 1/8 inch holes in the R-1205 Hinge Brackets as called out in Figure 2.
- Step 5: Final-Drill #12 the 3/16 inch holes in the R-1205 Hinge Brackets as called out in Figure 2.
- Step 6: Separate the R-1205 Hinge Brackets by removing the material shown hatched in Figure 2.
- Deburr all the edges and drilled holes of both hinge brackets.

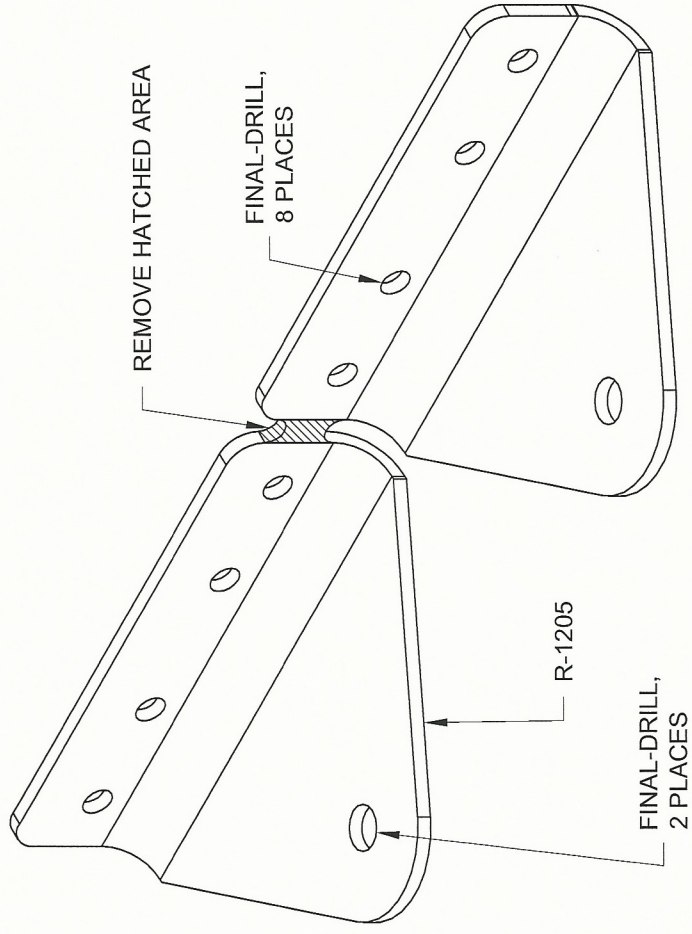


FIGURE 2:
HINGE BRACKET PREPARATION

- Step 7: Position the R-1204 Spar Caps between the flanges of the R-1202 Spar so the centerline shows through the middle set of holes in the spar web as shown in Figure 3. Adjust the bend of each spar cap, as necessary, to nest against the inner surfaces of the spar web and flange as shown in Figure 3, Detail A-A.

Clamp the spar caps in place. Mark the spar caps left or right so they can be installed in the same position as drilled.

- Step 8: Match-Drill #30 the holes from the R-1202 Spar into the R-1204 Spar Caps per call-out in Figure 3. Cleco each hole before drilling the next. First match-drill the holes in the spar web, unclamp and clear away any chips, cleco the spar caps back in place. Then match-drill the holes in the spar flanges.

Remove the spar caps, deburr all drilled holes, and clear away any chips.

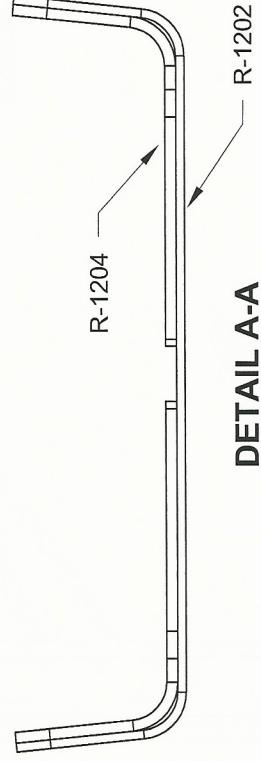
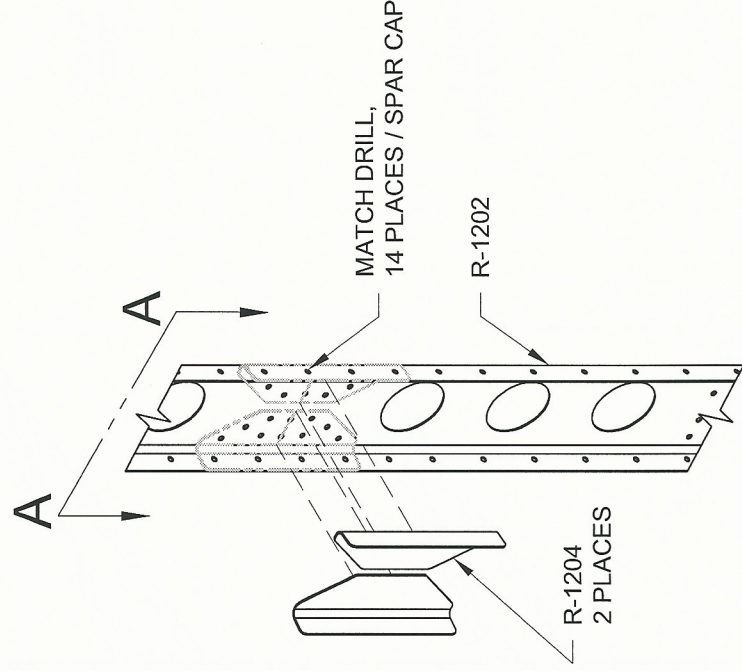


FIGURE 3:
POSITION SPAR CAPS

- Step 9: Final-Drill the holes in the WD-1205 Rudder Horn as shown in Figure 4.

- Step 10: Cleco the R-1204 Spar Caps, the R-1205 Hinge Brackets and the WD-1205 Rudder Horn to the R-1202 Spar. Position clecos on the web of the spar as shown in Figure 4. Hereafter refer to this assembly as the Rudder Spar Assembly.

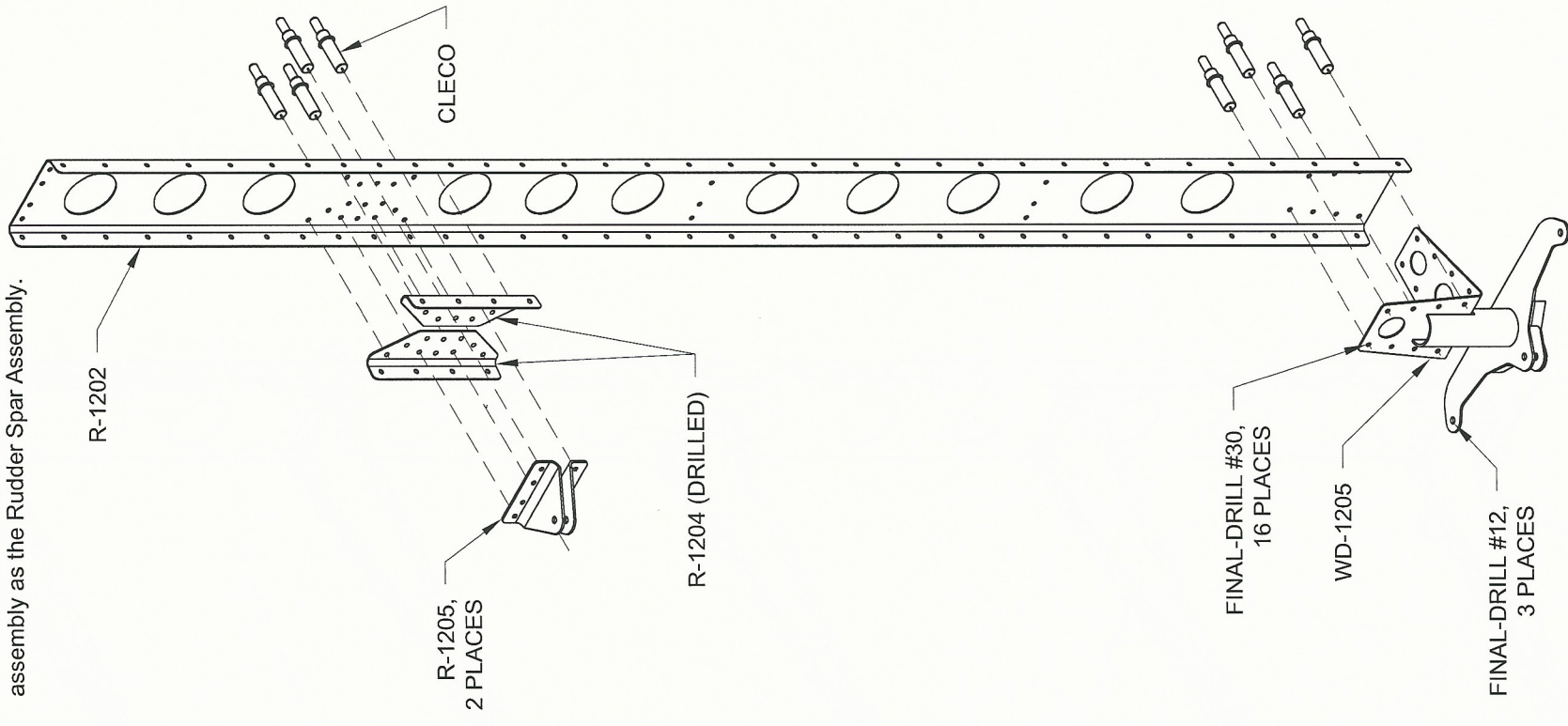


FIGURE 4:
RUDDER SPAR ASSEMBLY