

6. INSTALLING MONOHULL SPONSONS

6.1 Installing the sponsons on strut based wings

IMPORTANT: The instructions given in Section 6.1 are for aircraft with strut braced wings, with two struts. Single strut aircraft are discussed in Section 6.1.7. See Section 6.2 for wire braced wings.

6.1.1 Locating the sponson

1. Level the wings of the aircraft (looking towards the aircraft from the front) by blocking up the main gear. Use a carpenter's level.
2. Raise or lower the tail to level the float stiffener tubes front to back.
3. Build up a flat surface on the ground using

plywood and blocks. Locate it below the sponson attachment point where the aircraft wing strut secures to the wing as shown in Fig. 11 and 12. Make the surface parallel to and at the same height as the top of the stiffener tubes. Use a straightedge or a string and a carpenter's level to project the height of the top of the stiffener tubes to the flat surface.

4. To establish height of sponson above stiffener tubes:

Measure up from the flat surface described in Step 3:

8" +/- 1" (20 +/- 2.5 cm) for FL 1220 and FL 1260 floats.

12" +/- 1" (30.5 +/- 2.5 cm) for Mono 2000 floats.

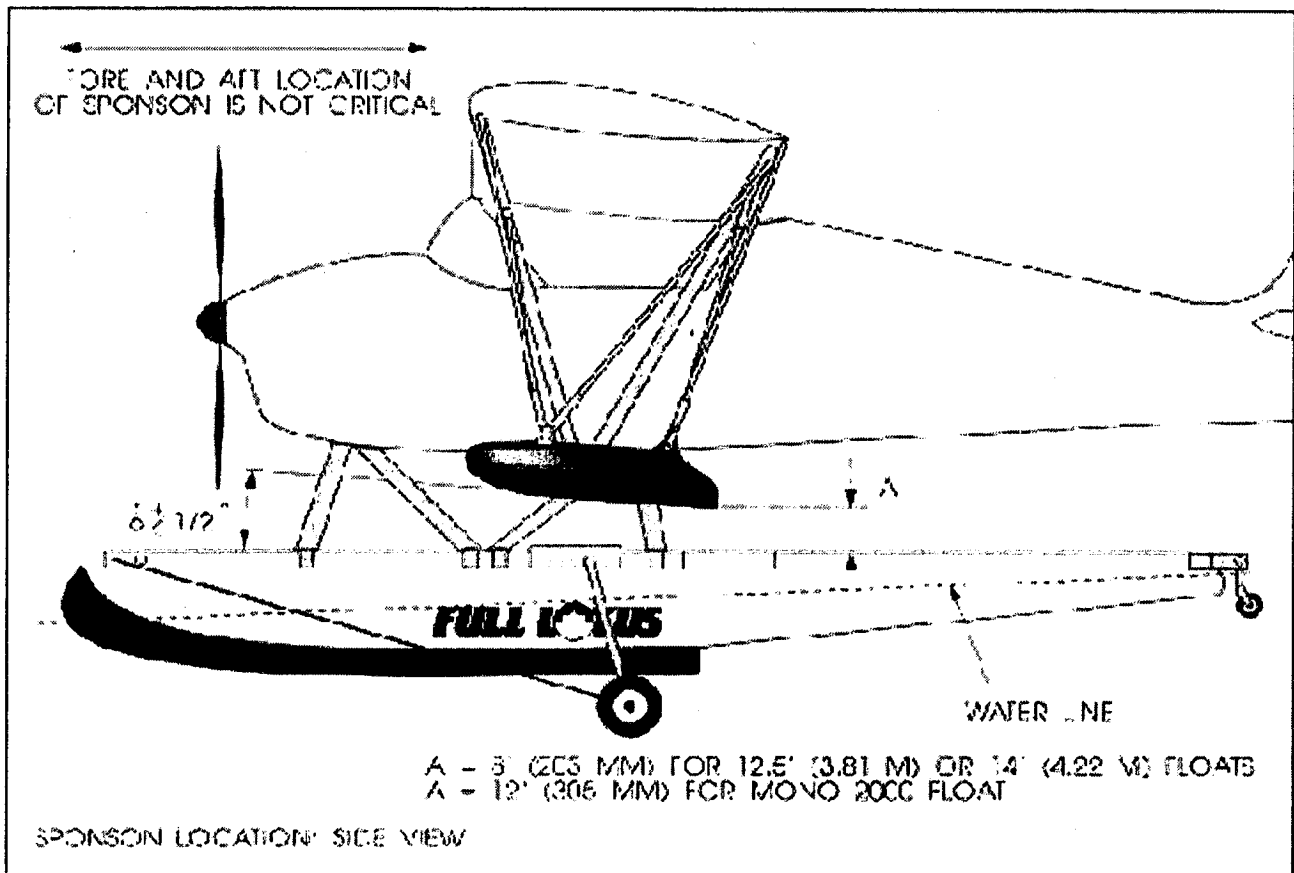


Figure 11: Sponson mounting on strut braced wings, sideview.

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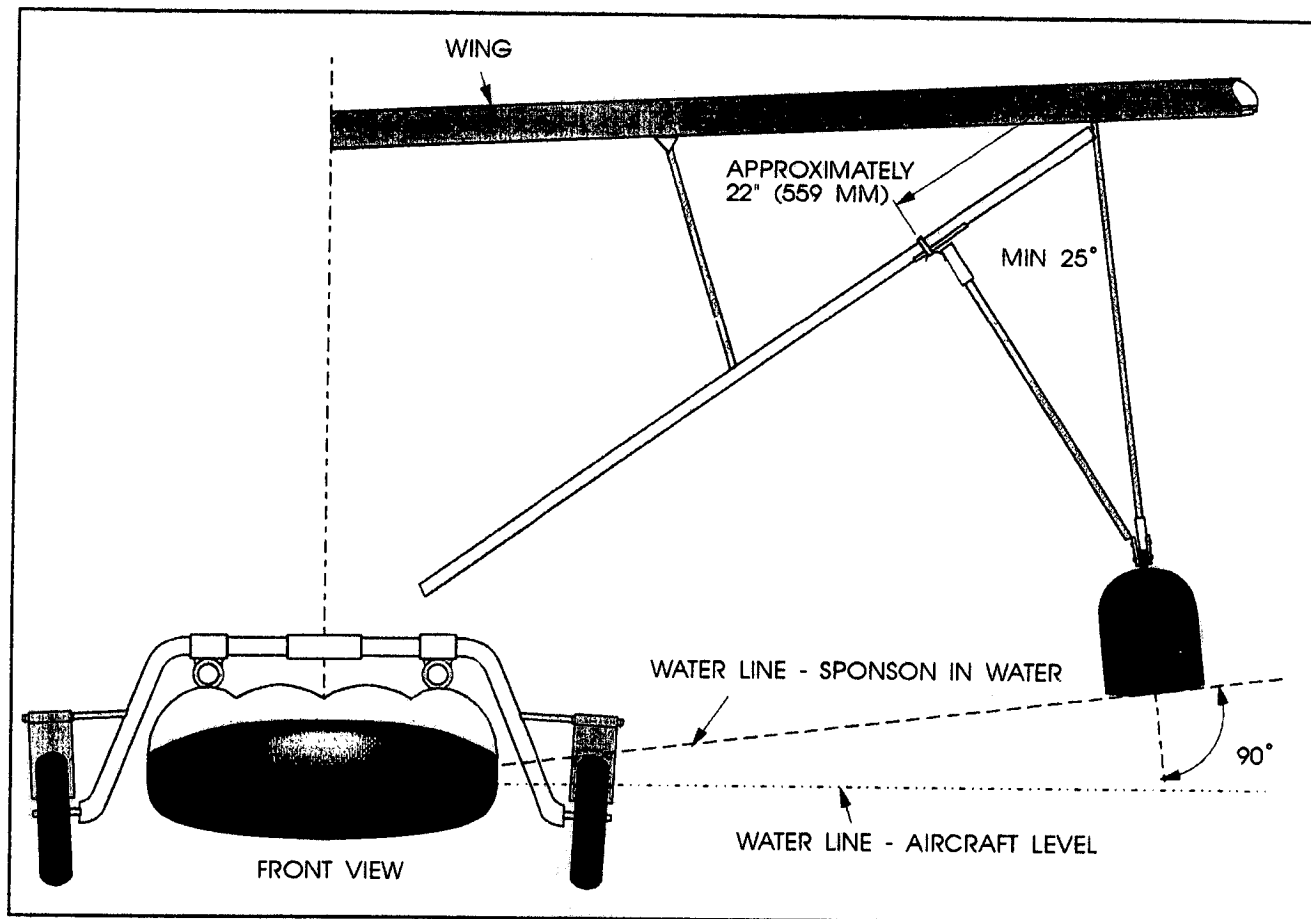


Figure 12: Sponson mounting on strut braced wings, front view.

This is the height of the rear of the sponson as shown in Fig. 11 dimension "A".

5. To establish fore and aft position of the sponson: place the front of the sponson slightly behind the wing spar as shown in Fig. 11. Fore and aft position is not critical.

6. To set the angle of the sponson relative to the float: set the flat bottom surface of the sponson at a $6 \pm 1/2^\circ$ positive angle of attack relative to the stiffener tubes of the float as shown in Fig. 11.

Measure this angle with a carpenter's level from below the sponson attachment point.

$1\ 7/8"$ in $18" = 6^\circ$ (48mm in $457\text{mm} = 6^\circ$)

7. Block the sponson in place at the height and angle described in Steps 4 to 6, above.

6.1.2 Installing the rear #166 Vertical Strut

8. Install the $1/4"$ hole in two #161 Three Hole Plates to the rear sponson lug with a W/2: AN4-16A: W/2: N/2. Install the #168 Sponson Bracket on the fuselage side at the same time. The parts are illustrated in Fig. 13.

9. Assemble a #169 Strut Sleeve to the upper two holes in the #161 Three Hole Plates installed in Step 8. Use W/2: AN3-15A: W/2: N/2. Use one #60 Plastic Washer per side to shim out the Sleeve.

10. Locate the junction of the rear wing strut and the rear wing spar. This bolt is the upper mounting point of the rear #166 Vertical Strut.

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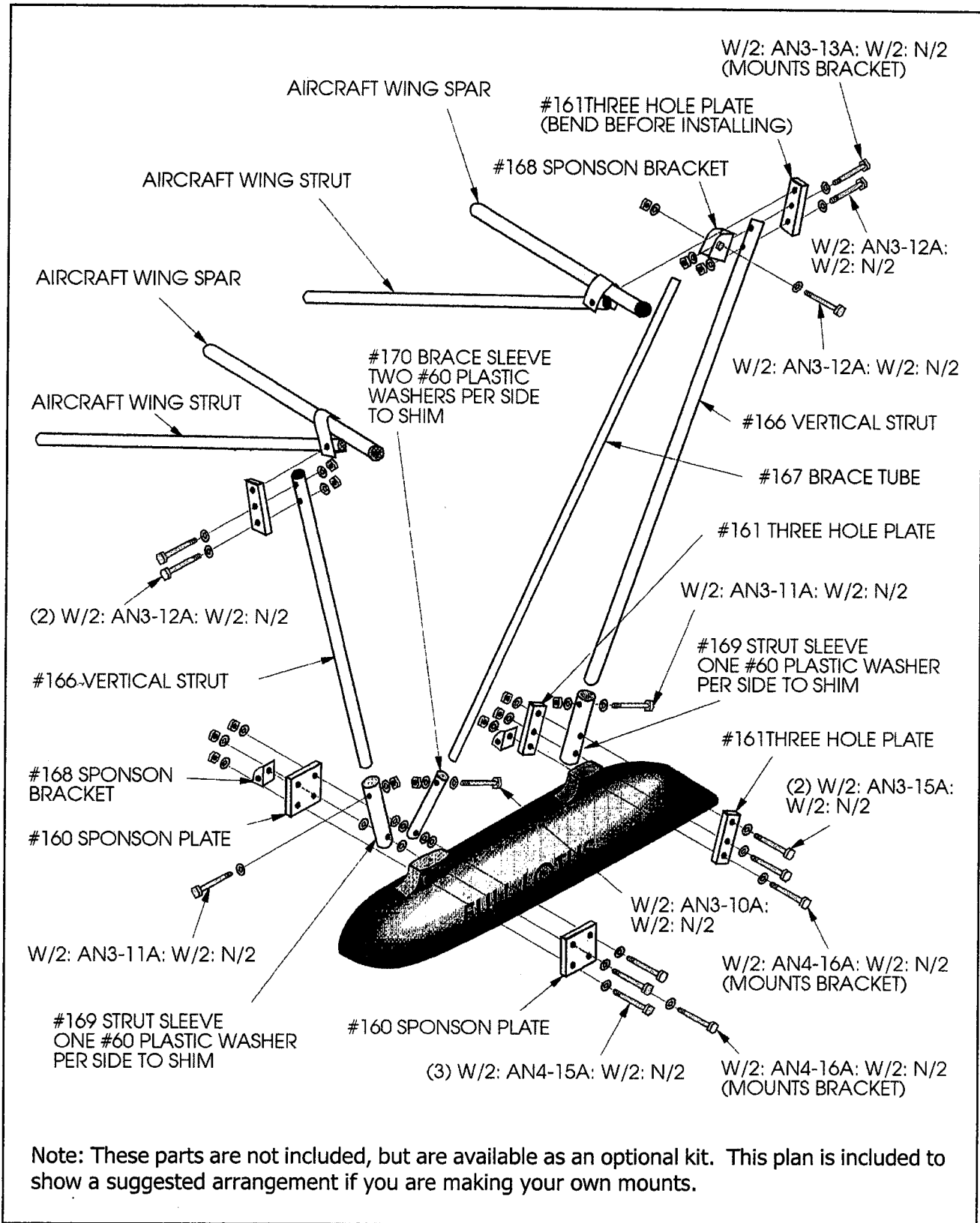


Figure 13: Installing the Strut Tube Truss, exploded view.