

1. Release Date: 8/27/202	25			
2. Service Letter No.:	SL61 22-21004		Rev	I/R
3. Subject: Installation of 22-21004-SUPP Bottom Shell Supplemental Reinforcements				
4. Part/Assembly No.: 22-21004 Bottom Shell, Model 2200 Seaplane Floats				
5. Float Model (s) Affected: Model 2200 Float Serials 290-291 & Prev.				
6. Compliance:   M	landatory 🔲	Recommended	$\boxtimes$	Optional
7. Approval: All information provided is in accordance with approved data.				
8. Corrective Action: None Required				
9. Time Required: Approximately 4-8 Hr. plus approximately 24 hr. cure time.				
<b>10. Payments:</b> ☐ Credit to Customer ☐ Under Warranty ☒ Customer Pays				
11. Call Parts Department (208) 448-0400 for Parts Kit				
This service letter conveys information consistent with approved practices and type data.				
Observe manufacturer safety precautions for materials used.				
Work may be accomplished while installed on airplane, but is much easier with the floats not installed and unassembled.				
Tools required (shop supplied):				
Lint-free towels				
Sand-paper, 80 grit				
Small fan and a shop vacuum  Barrel Sander (for removing burrs after cure)				
Masks, face protection, gloves, and ear protection				
Shop Light (Interior of float)				
Scale capable of weighing 50g to 500g.				

## **Aerocet Supplies:**

Approximately 2 yd^2 (MIN) or As Req'd, Style 7781 e-glass fabric.

Hydrex® 33350 VINYLESTER resin

Chip Brush(es) as required. (A/R 1 recommended)

Mixing Cups, disposable (A/R 2 recommended)

Tongue Depressors (for mixing or sweeping the bonding fillet)(A/R 2 recommended)



Polyethylene sheets for working area. (2X) 2ft x 4ft min. (A/R 2 recommended) Syringe for measuring catalyst (or similar device)(cc or ml)

## **Consumables:**

Acetone (obtain locally if possible)

Masking Tape, 2" wide (included with additional charge)

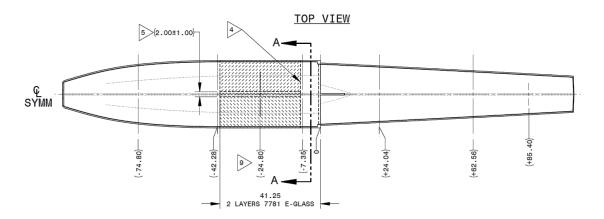
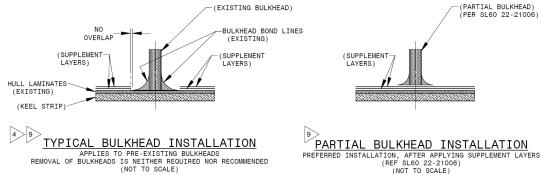


Figure 1 - Excerpt from 22-21004-SUPP

- 1. Assure a suitable, dry, well-ventilated working area. If the floats are to be left on the airplane, then assure that a suitable shop vacuum is running near the activities described below to remove contaminates during preparation, and to ventilate the float cavity during application and curing of the resin. Use proper personal protective equipment while mixing and applying resin.
- 2. Thoroughly clean entire affected surfaces, lightly scuff with sandpaper, vacuum, clean, and fully dry.
- 3. Trim fabric and dry-fit to each area, noting 45°±15° orientation to float centerline. Keep these organized by orientation and location, away from the working area. Fit each piece as closely as possible to bulkhead bond lines without overlapping the adhesive. Seams of 1 inch minimum overlap are acceptable where needed to help manage fabric, avoid bunching, and facilitate working in the tight spaces of the float hull cavities.



4. Fabric reinforcements may be wet out in two ways: 1) on a flat workspace, such as a bench, using a clean polyethylene sheet taped to a worktable; or 2) fabric may be wetted in the hull on the work piece itself. Consider your situation and thoroughly prepare the work area before catalyzing the resin.



5. Prepare a single portion of resin, catalyze to 1% - 2% and thoroughly mix. Recommend a portion of 100g to 400g, depending on temperature and working time needed. It is likely that the resin will catalyze before you are able to use any more than this amount at a time.

## WARNING:

Catalyst or other additives that may be used in this process require careful handling and Personal Protective Equipment (PPE). Failure to observe the recommended measures may result in permanent blindness or other injuries.

- 6. **Bench method:** Wet one layer with catalyzed resin, hand-working the resin with a chip brush until entirety of the fabric is saturated. Work any air bubbles out to edges. Lay the second layer over the wetted out first and repeat the process, removing all air bubbles in a similar manner. Work quickly to achieve the next step before catalysis.
- 7. Carefully lift the wetted fabrics together from the bench while avoiding pinching and shredding them. Lay these into the workpiece of the hull. Working quickly with a chip brush and the catalyzed resin, work out air bubbles and excess resin. Apply more resin to any starved areas. (These will appear dry, or lighter white in color.) Remove excess resin with an "unloaded" chip brush, dabbing, wicking, and smoothing as you go.
- 8. **Workpiece method:** Wet the workpiece with a thin layer of catalyzed resin and apply first layer of dry fabric, working it into the resin and applying additional resin as needed with a chip brush. Work air bubbles to the edges and apply resin until entire fabric is saturated. Apply second layer in the same manner. Apply more resin to any starved areas. (These will appear dry, or lighter white in color.) Remove excess resin with an "unloaded" chip brush, dabbing, wicking, and smoothing as you go.
- 9. **Apply peel ply,** trimming and slicing it as needed to apply smoothly. Use small pieces as necessary to assure full coverage. (This is recommended to create a smooth, matte surface finish.)
- 10. **Allow at least 2.0 hours of cure time**, with a small fan in the float bays to ventilate gasses while curing. (Recommend not longer than 12 hours, to avoid difficult removal.)
- 11. Use Acetone for cleaning tools and spills. Do not apply any acetone to workpiece before fully cured, and only lightly for cleanup thereafter.
- 12. **Remove peel ply.** This is best accomplished before complete cure. If the workpiece is too green, then the peel ply will remove some resin and possibly de-laminate the reinforcements. If it is too cured, then it will pull with great difficulty, and may remove resin with it.
- 13. **Inspect for resin voids and catalysis.** Resin-voided areas may be filled. Dry cloth must be removed and replaced.
- 14. Repeat this process in each area of the float, and assure ventilation during cure, either mechanically or by gravity, flipping the hull to allow fumes to escape the bays.

## CAUTION:

Excess resin pots should be kept in a cool, dry, and well-ventilated area during catalysis. Do not stack resin pots until fully cured.

This completes the installation of 22-21004-SUPP, Bottom Shell, Supplemental Reinforcements for Model 2200 Seaplane Floats.

**END**