## REPAIRS

## **Bladder Repairs**

Important! Never open access zippers while the float is under pressure.

CAUTION: Glue Contains TETRAHYDROFURAN. Vapor is harmful. Harmful or fatalif swallowed. Use only under well ventilated conditions.

Note: Due to D.O.T. regulations pertaining to shipment of hazardous materials, Full Lotus does not ship the adhesive used in the repairs of the bladders. The following instructions are for making the adhesive:

- 1) Obtain about 250 ml of tetrahydrofuran (THF) solvent. This is available from a chemical supply store.
- 2) Cut a small piece of bladder patch into small bits.
- 3) Mix equal amounts of the bladder patch material and THF solvent in a small jar with a lid.
- 4) Allow the patch material to fully dissolve in the solvent. This will take 3 weeks so patience is required. This is the adhesive.

Pin holes can be repaired by applying a thick coat of glue over the damaged area. A patch is not necessary.

## Foll® w these instructions exactly to obtain a strong bond.

- 1) Work in a warm, dry environment.
- 2) Cut a patch with rounded corners about 2" (51 mm) larger than the hole.

- 3) The bladder and patch surfaces must be completely clean and dry. A rag soaked in acetone will remove most kinds of dirt and oil.
- 4) Working quickly, apply an even coat of adhesive to the bladder and the patch and press them together while adhesive is still wet.
- 5) Working on a hard flat surface use a small roller to work out any air bubbles and ensure a tight bond.
- 6) The joint should be clamped or heavily weighted down for a minimum of 2 hours before use. Maximum strength is not reached until all thinner has evaporated from the adhesive.
- 7) If adhesive becomes too thick it can be thinned with Tetrahydrofuran. It should be thin enough to brush out easily and smoothly.

## Poor bonding can be caused by:

- 1) Working in a cool damp area can cause condensation on the surface of the adhesive.
- 2) An uneven application of adhesive will bond only on the "high" spots.
- 3) If the adhesive is too dry before contacting, the surfaces will not bond. Moisten with another thin coat of adhesive.
- 4) If the adhesive is too thick it will not soften the base material sufficiently to produce a good bond. Thin with Tetrahydrofuran.
- 5) If the surfaces are not held tightly together while the adhesive is still wet they will only bond on the areas of contact, the areas not touching will not bond.

A good bond should be very difficult to pull apart by hand and should show a matt finish surface where the urethane coating has separated.