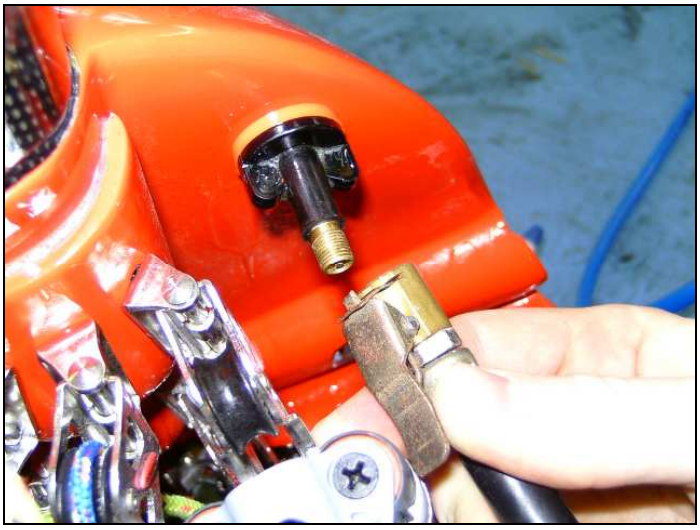
Bladerider – Hull Leak Test

Last Update - July 1, 2009

Each new Bladerider must pass a strict QA test which includes leak testing each boat to ensure that it is water tight. However over time and under load, the hull can open up tiny holes that let water into the hull. This means that you may have to leak test your hull ever 6-12 months to make sure no new holes have opened up.

Required Tools/Materials:

- Air Compressor (do not use more than 2.5 PSI)
- 2 x Ronstan male drain plugs
- 1 x shraeder valve
- 3m x 8-10mm OD plastic tube
- Soapy water in a spray gun (5 Water : 1 Dishwashing liquid)

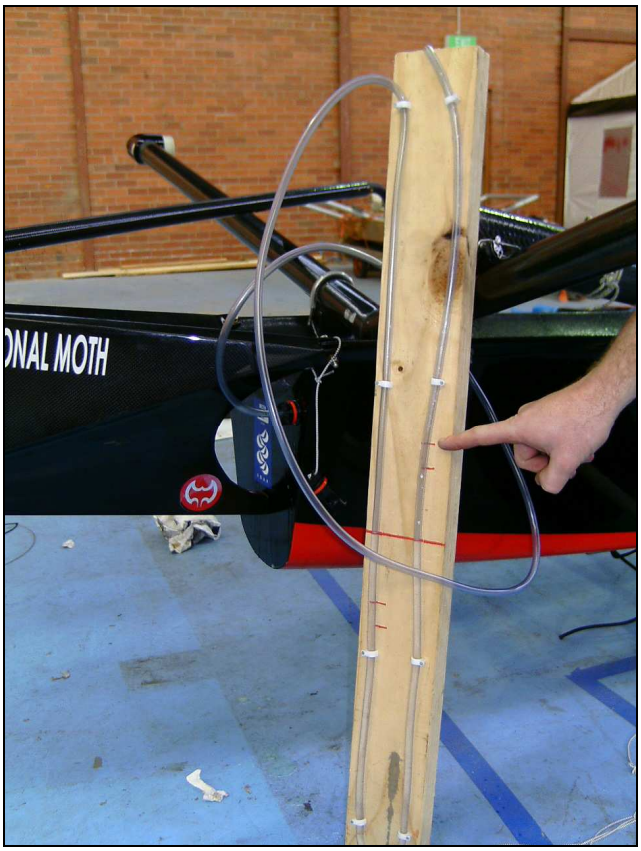


Drill holes in the bungs, one that is a tight fit for the plastic tube and one that will fit the valve and seal them well with Sikaflex or silicone. Leave them to dry for 24hrs, so they are nice and strong. Once dry, attach the valve to a pump.

At the other bung hole, screw in another bung with a plastic tube inserted into it. Fix the other end of the plastic tube to a piece of wood as shown below.

Bladerider – Hull Leak Test

Last Update - July 1, 2009



Draw a level line across the wood and put enough water into the tube to level out at this line. This hose pipe has water inside and is rigged up to a board that indicates the netural water level (with no compressed air inside). Be sure there are no air bubbles in the tube, or the system will not work properly. Tapping the tube will help to remove any bubbles.

Then place a mark 100mm above the water line and another 90mm above the water line.

Bladerider – Hull Leak Test

Last Update - July 1, 2009

When you pump air inside the hull slowly and carefully, it will force the water level will rise.

Keep pumping until the water reaches the 100mm line. Do not pump any more than the 100mm line or you blow the boat up. Then time how long it takes for the water to drop from the 100mm back to the level line.

If the boat has air leaks, then this water will drop back to the neutral level (big red line) in a short time. If the boat has no air leaks, then the water level should stay at the high point for at least 1 minute.

If there are leaks in the hull, you may need someone else to keep adding more air to the hull to maintain pressure in the boat, while the other person sprays soapy water on the items listed below and look for bubbles. This will show you where the leaks are.

Common Places for Bladerider X8 Hull Leaks include:

1. **Bow Shackle Hole** - remove shackle, drill hole out one size larger, place tape over one side of the hole and with the boat tipped on its side fill the hole with epoxy and re-drill to the correct size when cured.

2. **Push Rod Exit Tube at Bow** - Some times the bond between the SS tube and the carbon exit moulding does break free. On some boats with this leak you are able to grind back a small amount of that moulding (maximum 3mm), just around the start of the tube and repair with epoxy, being careful not to get any inside the SS tube. However if this tube has moved back, this fix might not work and therefore you may need to drill a couple of small holes in the moulded piece at the bow and inject the epoxy, so that it goes in and forms around the tube.

3. **Push Rod Exit Tube at Deck** - Same as above.

4. **Around Vang Plate** - clean up and reseal with flexible sealant.

5. **Centreboard Case** - Once cleaned of any trace of salt water, get a long flat stick or wooden ruler, stick some cloth on it and use this to apply a coat of resin to the inside of the case.

6. **Mainsheet Bridle, Rear U-bolts and Gantry Fixing Bolts Holes** - Treat these the same way as the Bow shackle. Drill them out, tape up the bottom, fill them with resin/filler and re-drill to the correct size.

7. **Bungs** - Reseal with flexible sealant (Sikaflex not silicone)

8. **Wing Bar Sockets** – These are rare, but you will need to get in there with some epoxy after it is all cleaned and keyed up.

9. **Wand Axle** – Reseal with sikaflex.