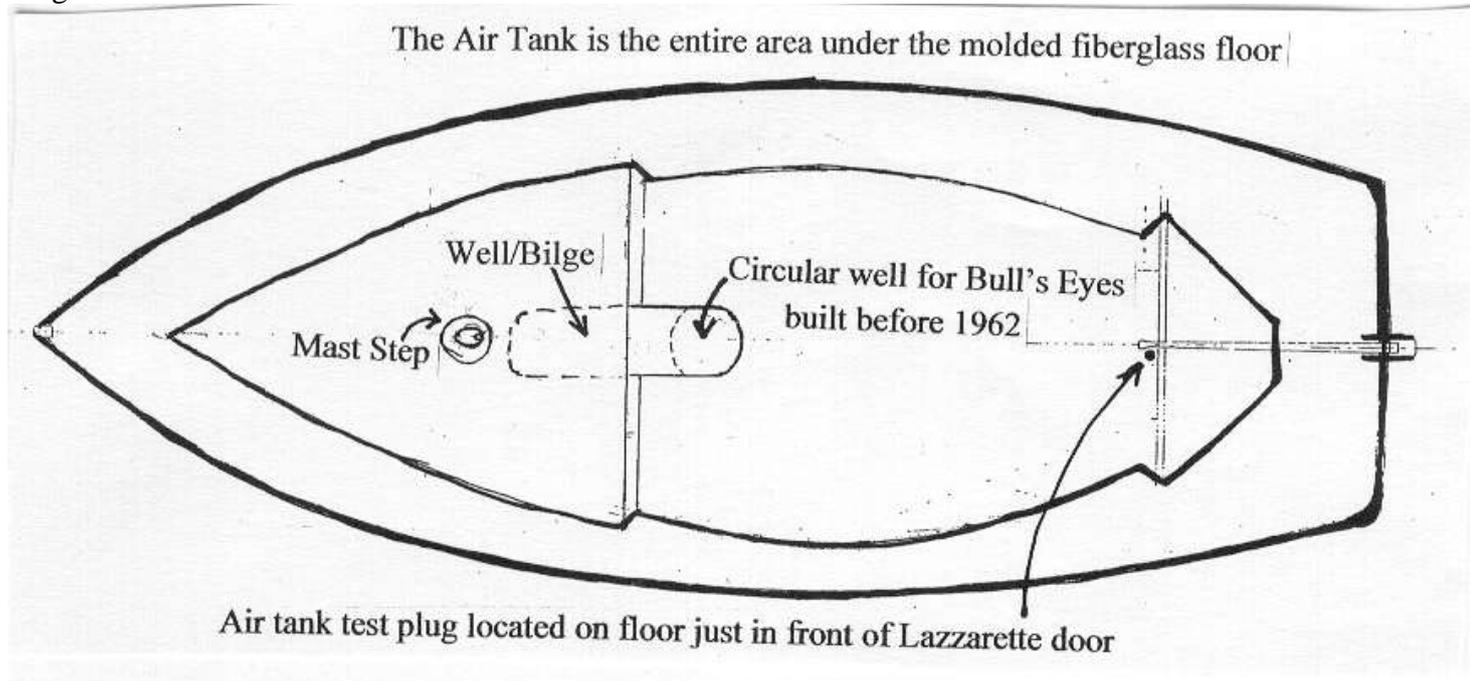


Bull's Eye Air Tank Information

Testing the Air Tanks

If you notice your boat sitting low in the water while or you hear water sloshing around when the well is dry, she quite possibly has an air tank leak. The air tank is the only thing preventing the boat from sinking when swamped. It is incredibly important to assure that the air tanks are tight for safety sake. If you believe that your boat has an air tank leak, it should be hauled immediately and repaired. The main air tank on the Bull's Eye is under the molded floor. Bull's Eyes with an oval well also have a smaller tank in the bow. These air tanks need to be tested every season and also any time there is a collision or damage. Generally leaks occur when water is allowed to gather in the well and freeze. This causes cracks in the well which allow water to seep into the air tank. If you find one leak, it should be assumed that there are multiple leaks.

To test, find the tank test plug located near the mast step on boats built before 1974, or in the center floor ridge near the lazarette hatch on newer boats (1974 – present). Remove the plug with an allen wrench. If there is a slight inrush or outrush of air, the tank may be tight. If no air exchange is noticed, put pressure in the tank (1 to 2 P.S.I.) by the use of an air compressor, or bicycle pump. Build up pressure in the tank and hold it for 5 to 10 minutes. If there is still pressure, the tank may be tight. It is possible that the pressure is closing a crack shut, so multiple tests may be necessary. If pressure is lost, build back pressure and listen for air escaping to locate the leak. Sometimes the leak is too small to detect by ear and a 50-50 solution of water and a liquid dish detergent (Joy or Ivory Liquid) can be made to help find the leak. Apply this solution with rag or small disposable paint brush around the well, the tabbing of the floor, and the mast step. Large bubbles will indicate the location of the leaks.



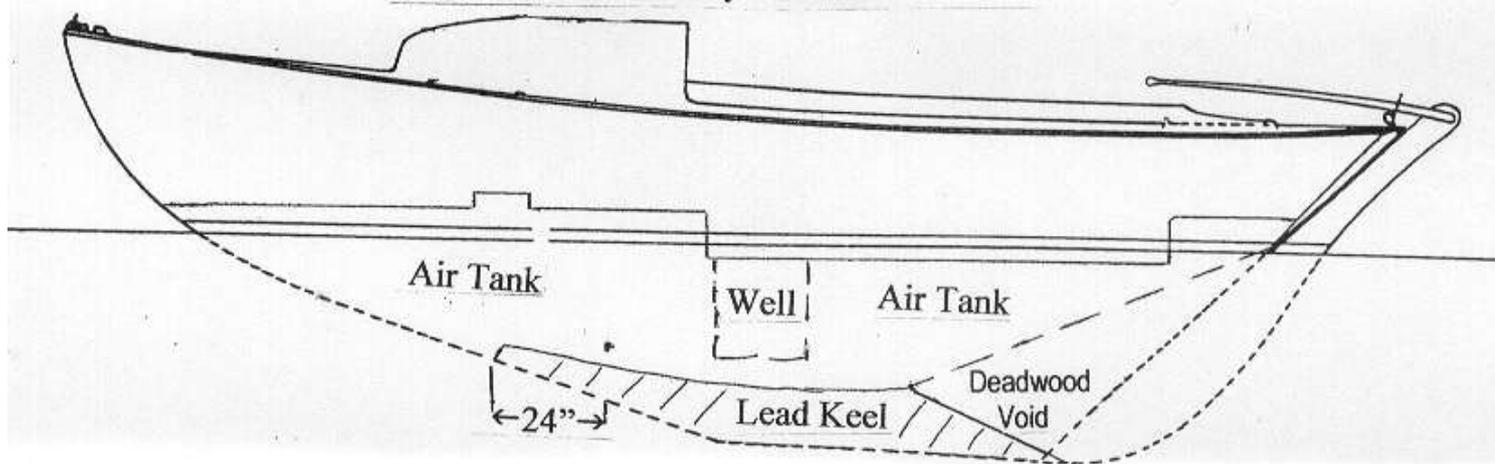
Draining & Repairing Air Tanks

Once you have determined there is a leak, it must be properly repaired. A air tank test kit can be purchased through us that includes the tools needed to test, drain & install a tank test plug. We do not recommend installing a plastic inspection port in the floor to pump out the water in the air tank. This puts one more hole in the air tank where leaks could occur & they fail under pressure. The proper solution is to make the air tank tight again. Fix the problem properly the first time instead of making it worse.

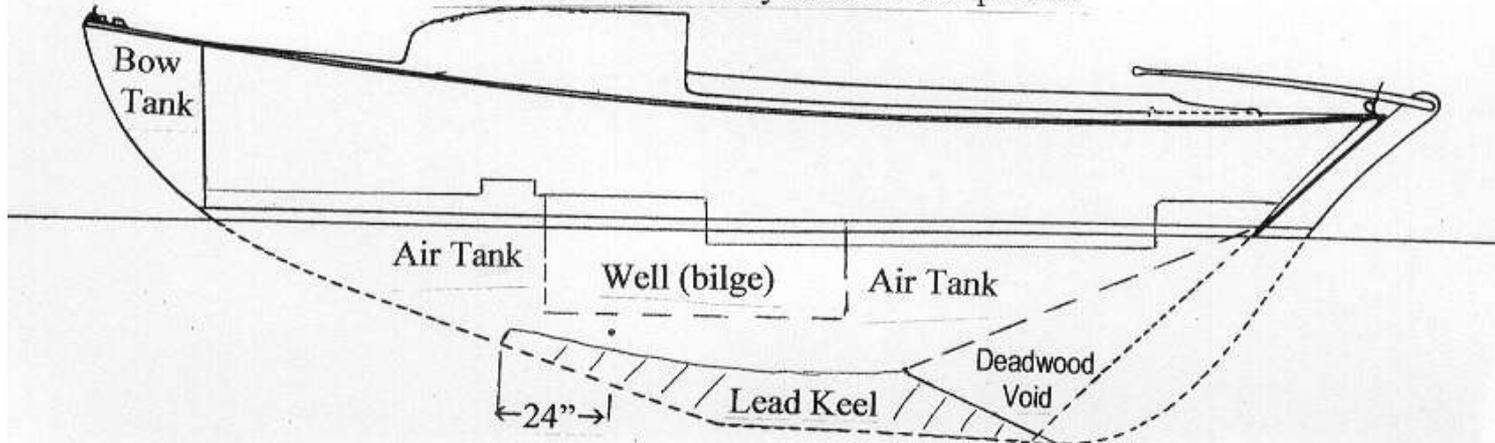
Before repairing the cracks, the water must be drained from the boat. Check to see if you have a drain plug in the hull. The drain plug is the same style as the test plug in the cockpit, which can be purchased through us, or at your local plumbing store. If you don't find an existing drain, you will need to make one. This hole should be located at the lowest point in the air tank in order for the most water to drain out. Drill a hole 24" aft of the forward edge of the lead keel and up approx 3 3/4" from the joint between the keel and deadwood. These measurements are approximate as each boat is a little different. The best way to determine exactly where your air tank begins is to start tapping at the hull to keel seam and move up. You will notice a distinct difference between tapping solid fiberglass, and the hollow fiberglass of the air tank. Drill the hole with a 7/16" drill bit and tap the hole with a 1/4" pipe tap to fit the 1/4" pipe plug. Remove the

upper test plug and make sure all the water is drained out by lifting the bow and stern before installing the lower drain plug.

Side View of Bull's Eyes built before 1962



Side View of Bull's Eyes built 1962-present



The repair should be done in a controlled environment. The repair areas need to be dry and ready for a patch, which means all loose paint should be stripped and clean of debris. Keep the upper plug open and apply a patch of at least 3 ply of mat fiberglass soaked with resin over each crack. When the patch has completely hardened, the tank needs to be tested again. Sometimes leaks occur around areas where hardware is installed. This may require a patch, and the hardware reinstalled with bedding compound.

The best way to keep your air tanks sound is to keep water out of the well during storage. The best storage option is to keep the boat inside for the winter. The next best thing is to use a winter cover that will take wind and snow pressure. These covers and supports are available through us. We don't recommend storage outside with a tarp as they continually need adjusting after each storm for good coverage.

