



Projects

Water in the Keel and/or Rudder

The hulls of Aloha 27 (8.2) and 28 (8.5) models were moulded in 2 halves and then bolted together fully encapsulating the keel ballast. This is both a significant blessing and a minor curse - there are no keel bolts to worry about and the boats can hit the ground fairly hard without serious damage but occasionally they can suffer from water entering a foam filled void area in the keel. Either water from the bilge makes its way down into the keel or small splits appear along the join and allow water into the keel. On boats sailed in freshwater and removed onto land in freezing winter conditions the water expands as it freezes and creates or makes the split worse, and could damage the glass laminations if it is not detected and corrected in a timely manner.

This is not a serious structural fault, and a complete cure can be effected by drilling holes into the void areas to drain the water, allowing it to dry out completely, injecting resin to fill the void and then resealing the hull join wherever needed, as follows:

- ✗ By tapping on the keel with a screwdriver handle, you can establish where the void areas are. The ballast is in the front half of the keel and the remainder is foam filled.
- ✗ About a dozen small (1/4" or less) test holes are drilled in various areas along the void area and at various heights to determine exactly where the moisture is accumulating, and all moisture allowed to drain. If you can catch and measure the water this may give you an idea how big the voids are to be filled later.
- ✗ If possible, leave these open for several weeks to dry completely. If not one owner has suggested that running methyl hydrate through the void will remove any remaining moisture and speed the drying process.
- ✗ Use an epoxy (e.g. West system) mixed with filler to a consistency of warm molasses and fill the upper holes until it begins to come out the lower holes and plug each lower hole with a wooden plug.
- ✗ After a week or so, remove the plugs and repair the surfaces.
- ✗ If all the voids are to be filled, you should expect to use at least as much epoxy as the volume of water drained. Typically, you may use around a litre of epoxy in all - some holes will take hardly any and a few may take up to a 1/4 litre.

- ✎ Repair any surface cracks along the join with epoxy filler and fibreglass, then re-paint.

The rudders are also constructed of two-halves with voids and can suffer water ingress which can be cured in a similar manner.

Finally, some Aloha 28 (8.5) owners have reported problems identifying the source of fresh water accumulating in the bilge. One owner traced it to the anchor locker. When it rained hard the water would drain through the drain holes just underneath the lid and drop **outside** the locker wall and on down to the bilge. Took 15 min. to fix but a year to find!

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