

# Seawind Rebuild

## Seawind 100

In spite of having a new Seawind kit sitting in my basement I have bought a second hand boat and will be rebuilding it. First I will take it apart.

The rig came off easily. The masthead, spreaders and boom fittings were removed and the main slid out of the track. The mast had a sideways bend so I started to straighten it.



The result was a typical Seawind mast break. Right at the bottom of the bronze jointer, just where moisture will accumulate, the

dissimilar metals have corroded the aluminum and eaten almost completely through the mast walls.

This happened to my current boat a couple of years ago and I repaired it with an internal splint. The repair has lasted well so I will try again.

## Mast Repair

The corrosion was only around the bottom of the jointer and filing it away left clean metal with



only the loss of a millimetre each end.

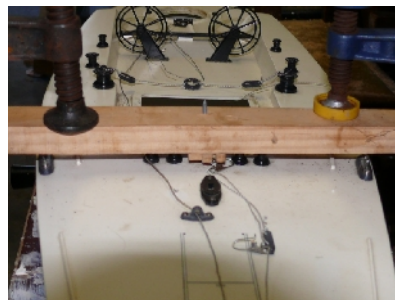
An internal splint was made from aluminium as this is easy to work on a disk sander to rough out the

shape and then file to fit. Leaving the surface rough will give a better grip to the epoxy that will be used.

## Removing the Keel

The keel had not been glued in but was stuck fast. The stainless keel bolt runs through an aluminium tube and this inevitably corrodes due to dissimilar metals in water. To remove it I needed to press it out.

Penetrating oil was applied to the bulb bolt and soaked down the keel rod. The lead bulb was removed. My Workmate was set to the width of the keel root so that the keel would pass through while the jaws supported the hull and socket.



With the keel nut loosened a beam was placed across it and clamps were positioned each side.

As the clamps were tightened the timber bent, the spacer split, the nail taking the weight was pushed in, but finally the bolt shifted a fraction. More oil, reset the clamps and reapply. Millimetre by millimetre the bolt moved until it was free enough to be driven out with a punch and just the small hammer.

This is not a recommended procedure and should only be done if the results are disposable, and never done if the keel blade is glued or stuck in the socket.

With the blue tube sheared off at its thread I can remove the battery box and mast support bracket (C3) which, as expected, is broken.

## Keel Socket

Seawinds should be reinforced around the keel box inside as flexing here from will crack the plastic just ahead of the keel socket and this will cause leaks and, ultimately, structural failure. In bad cases the hull skin fails around the front edge of the socket.



The rebuild boat does have some small cracks radiating out but not enough to cause problems yet. It will be useful to ensure that these don't get worse.



I made some fine wooden splints to lie alongside the keel box and reach forward to support the hull skin forward of the keel. These were epoxied in place and the glue smeared over the wood to seal it.

## **Mast Support**



The mast support, part C3, is inadequate for the job being too short, badly designed and lacking strength. This had broken completely.

A replacement mast support was made from tufnol, similar to the one illustrated in the damage report on 01 (see web site) and the interior was reassembled.

## **Keel Blade**

In order to seat the keel blade firmly into the bulb about 1 mm was removed from the lower end of the blade. This then seated down with the root level with the bulb.

At the top end of the blade the recess where the rod emerges was also filed and scraped down so that it seated fully into the keel socket with no rocking movement. This required removal of about 0.5mm.

## **Rear Hatch**



The rear hatch had split. The gluing surface is very narrow and 'Superglue' can become brittle. This joint can split without any outward indication

and the water will leak behind the O-ring. I scraped as much failed glue off as I could and used epoxy to glue it back together with a thick bead around the inside angle to increase the glue surface area.

## **Painting**



The hull was sanded, primed and painted grey while the blades were painted white to show when any weed had been caught. The sails were cleaned and battens replaced where they had been lost. Stripes were added to the sails with marker pens to aid boat

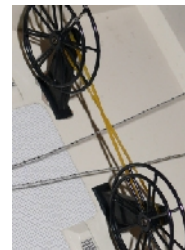
identification.

## **Avoiding snags**

If the sheet gets caught over an object this will ruin the set of the sails.



If there is a steering rod on the port side it may catch the sheet on the joint. This can be avoided by having a rubber band between the sail servo attachment post and the rear support post.



The sheet can fall over the wheels if these are fitted, especially when the boat is laid on the grass. A rubber band between the wheel axles will ensure that the sheet stays between the wheels and can't hook over a wheel.

## **Avoid catching other boats**

The cleats on the side of the booms to hold the sail clew rope are set towards the rear end of the boom. Thus they can swing out beyond the deck line and can catch in other boat's rigging.



Moving the cleats forward so that they are always within the deck will eliminate this risk. The jib boom cleat must be moved almost to the pivot as the deck is very narrow.



The main boom cleat should be moved so that it is completely within the shrouds otherwise it may catch on these.

## **Tripple Rack**



I was already taking two boats to the pond each day: 01 and the Club Boat. Now I needed to extend the double rack to take 100 as a third boat.

The existing rack needed clearance above to get the boats in so a clip-on each side needed to be added after the first two were in the rack.