



Hiran had been pestered with leaks in the engine compartment and forward cabin for many years, so in the autumn of 1992, Janet and I stripped the underwater section back to the wood. Three coats of SP resin were applied over all the underwater surfaces including inside the keel boxes. Rust was removed from the brackets at the rear of the keel boxes before the metal was treated and painted. When Hiran was launched it became obvious that the rust had been an important factor in preventing water ingress. A great deal of the Thames had re-located into the engine compartment quite rapidly. We had no option but to recover her and face the prospect of no sailing for 1993, instead time would be spent underneath Hiran.

The brackets in the boxes were removed revealing badly rotted wood in need of replacing. The end blocks of wood are approximately 14" x 3 1/2" x 2 1/2" and were drilled out using a 1" bit from inside the keel box, with a chisel to clear out the glued on remnants. It was necessary to cut out part of the draining runs in the cockpit to gain access from both sides of the problem. The wood that had been removed had the appearance of charcoal, I understand that this is iron rot, but fortunately the plywood sides of the boxes were quite sound and the problem was to adhere a close fitting block between the rigid sides without scraping the adhesive off. I am sure the professionals have a way to achieve this, but I used the following method.

The block was cut about 3/16" wider than the gap between the ply sides, then cut lengthways with a band saw to form two side pieces with the centre shaped as a wedge (see illustration below). It was easy to secure the sides with SP and screws from the engine compartment and quarter berths, and then the centre wedges were coated with SP and hammered home with two long screws each side (dowel could be used) securing them. A strip of 1/4" ply was screwed down with mastic on the inside faces of each box (belt and braces!). I did not replace the metal brackets. The draining runs were replaced in the cockpit.

There still remained the leaks along the hog. The keel strip was removed, it came off with frightening ease, nearly all the brass screws had de-zincified and it was apparent that the gaps had not been very well filled underneath, especially towards the bows. This encouraged me to remove the strips that are fitted around the underside of the keel boxes as well, where I also discovered gaps and a small amount of de-lamination. All remaining portions of brass screws were removed, either unscrewed or drilled out and fluted dowels glued in the resultant holes, 80 or 90, I lost count. Once the adhesive had dried the areas were sanded flat, the keel strip was replaced with two strips of mahogany, the first 1/2' strip was bonded on with SP filling all the gaps and screwed up into the hog in three scarfed sections. The second 3/8" strip was also bonded on with SP and Bronze grip-fix pins (thereby encapsulating the screws), also scarfed in three sections overlapping the previous layer. The keel box surrounds were made slightly thicker than the previous ones, glued and screwed with SP and they proved to be a much easier job than the keel.

The whole task was not as daunting as first thought Hiran has remained a dry boat since the job was completed. Paper re-written June 2001.

ILLUSTRATION OF METHOD USED TO CUT THE BLOCKS FOR THE KEEL BOXES

