Nottingham 48 and Nottingham 60 Hatch covers.

The hatch covers for the Nottingham 48 and the Nottingham are of the same design, and are built up in the same way although the Nottingham 60 hatches are bigger than those of the Nottingham 48 and so are not interchangeable.

If you follow these instructions you will create an attractive cover for the hatches which should be reasonably watertight in all but extreme conditions. The design is intended to be "J ish" and in keeping with the overall design of the yacht but it isn't intended to replicate any one J boat. For those who are interested, the hatch positions of the Nottingham 60 closely match the cabin positions of Lionheart and some other J boats so this model could be used as a basis for a replica if you so wished.

In the package of parts you will find a sheet of laser cut parts in 1.5mm birch ply, a length of unequal aluminium angle, some 3mm strip wood, brass rod and neoprene seal. The hatch covers are not difficult to construct but you will need to give the fabrication of the aluminium frame some thought before starting.

First, and most importantly, if you are using my hatch covers, the aluminium frame should be attached to the woodwork forming the frame of the hatch opening **before** the deck is fitted!!

Section 1. The Aluminium Frame.

1.1 First measure the four sides of the hatch opening and decide if you are going to bend the aluminium angle as a single piece or whether you are going to cut the angle in four pieces. I prefer the former approach as it makes a better finish and in theory at least, should be more watertight.

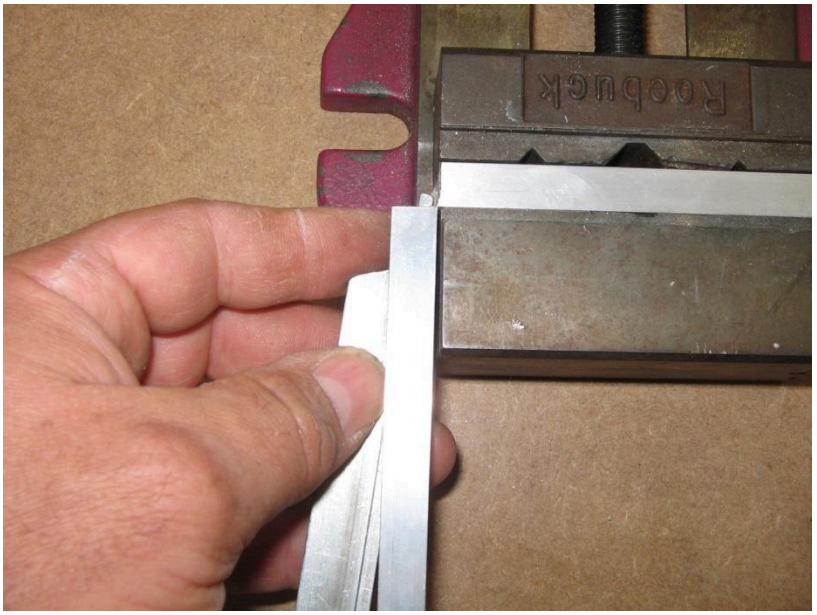
1.2 Assuming that you are going to bend the angle to shape, you will need to mark the angle for both the cut which will allow the angle to bend and also the bend itself. Note that you will be cutting the shorter, 10mm side and bending the longer, 15mm side.

1.3 I generally plan for the join to be at the rear of the hatch opening and half way along. (see pic 2). Measure and cut the shorter side of the angle appropriately.

1.4 A tip…you will probably make your mark for the cut in the inside of the angle but make your mark for the bend on the outside of the angle. Note that the angle is 1mm thick and you will need to allow for this as the outside of the angle will become the inside of the finished rectangle and in

theory at least, the inside of the rectangle should measure 2mm less than the outside allowing for the thickness of the material!

1.5 I make the 90 degree bend using a vice and a stronger piece of aluminium/steel to drive the material to be bent into a sharp bend. (see pic 1).



1.6 Your finished shape should look like pic 2. Some final fettling will required to ensure that all the bends are at 90 degrees. If you are not happy with your first attempt, the aluminium angle is readily available from B&Q and is not expensive!

1.7 When complete you can debur the cuts and trial fit over the hatch opening. It is unlikely that it will be a perfect fit but it should be reasonably close. I tend to use a couple of small brass screws to

locate the angle and to ensure that the shape sits centrally over the hatch opening. If you leave the screws in, you should countersink to ensure that the deck fits flat.

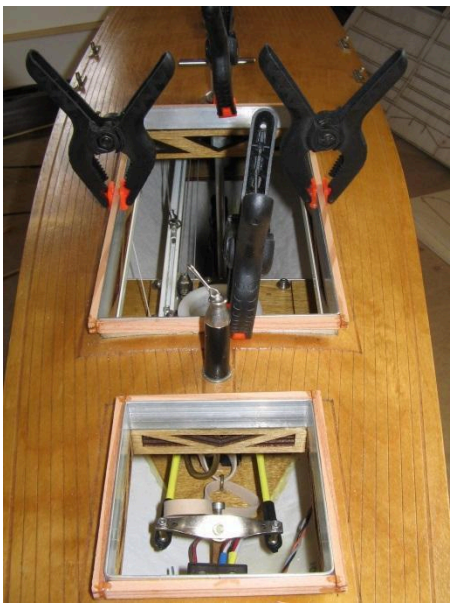
1.8 In theory…the join between the woodwork and the angle shouldn't see any water in use so there is no need to glue or otherwise seal the join, but I tend to use a very thin skim of silicone sealer at the join, just in case!

1.9 You are now ready to fit the deck. The aperture on the deck will likely need some final trimming to get the fit as close as possible. Before fitting the deck I use a bead of silicone, or waterproof sealer over the horizontal edge of the aluminium to ensure that the edge of the aperture on the deck remains watertight against the aluminium frame.

Section 2. The Hatch Cover.

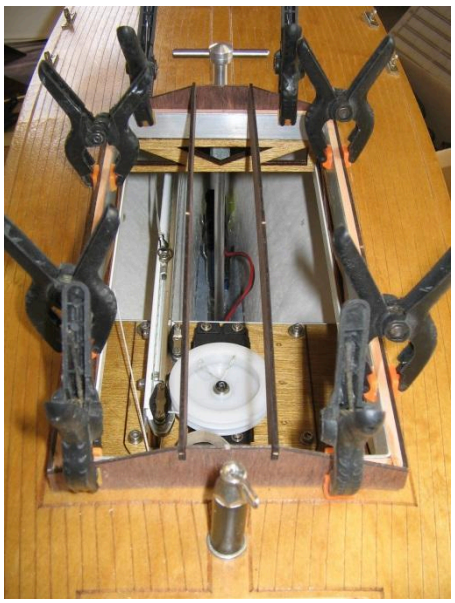
2.1 When the deck is fitted, the aluminium frame is used as a former around which the hatch cover is built. This ensures that the hatch cover fits as closely as possible to improve the watertightness.

2.2 using the top edge of the aluminium frame, measure, cut and glue the 3mm strip wood into a rectangle. To stop any glue sticking to the aluminium frame I wax the frame before gluing. Note that once the wood frame is constructed that it will only fit one way so it would be prudent to mark the frame accordingly.

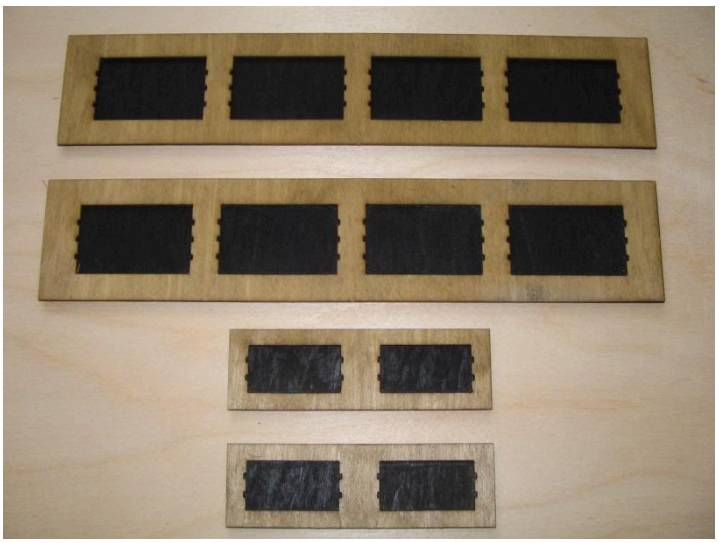


2.3 I use a stain to colour the hatch cover and then oil the cover when it's finished. Note that the ply forming the backing to the windows is has a more pleasing finish if painted black. I tend to stain/paint the parts while they are still fitted to the sheet as it makes handling easier. I also use different colours of stain which gives the cover better definition when fitted to the finished model.

2.4 Ensuring that the wood frame sits at the top edge of the aluminium frame, I then build the hatch up. The outer parts numbered…….are glued first with the parts numbered ……used to brace them. Before the glue dries it is good to use a small set square to ensure that these parts are vertical to the deck. This will simplify the fitting of the roof parts later.



2.5 The outer frame of the windows now needs to be glued to the black painted backing. There is a danger that the wood will warp as the glue dries so I apply weight to the parts as they dry.



2.5 When the glue on both the outer frame and the roof panels has dried, the outer frame can be removed from the yacht and the roof panels glued on applying the glue from the inside. I use a continuous run of epoxy along all the joins which makes the hatch covers stronger, and more watertight. I also fit the hatch covers back over the aluminium frame while the glue dries to avoid any warping at this stage.

2.6 It's now time to fit the brass rod. Measure and cut the rods accordingly, trying to keep the lengths the same on the respective hatches. I use a small dab of superglue at each end of the rod however the rod will become more securely fixed when the hatch is oiled and the oil has dried.

2.7 Cut the neoprene seal to size and fix to the inner part of the hatch cover, below the wood frame. With the seal fitted the hatch cover should be a snug fit to the aluminium frame but if it is a bit tight, use a light smear of Vaseline or similar which will both help against the ingress of water and ease the removal of the hatch cover.

2.8 I use elastic bands to retain the hatch cover….not very sophisticated but it works! The inside of the hatch cover will need to be supported with some 6mm scrap into which I fit a brass hook. The trick here is to ensure that the elastic band is under tension when the hatch cover is on. On the 48 I attach a hook to the servo tray, and a hook slightly forward of the middle of the hatch cover. The hatch cover then needs to be pulled forward, against the tension of the elastic band, for it to fit but as the elastic band is at the centre of the hatch cover, the pressure at each end of the hatch cover is the same so there is no tendency for the cover to flip off.