Fitting a Bowthruster in a Konsort Duo

(– or any other boat for that matter).

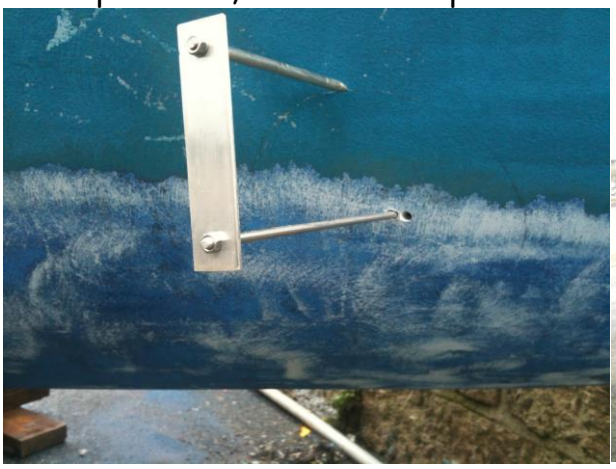
Why did I fit a bow thruster? I got it for a good price, and…..no other reason! But it is useful in some situations. It is a novelty – a big boys toy!!

Westerly Konsort Duo 29, "Oyster" *

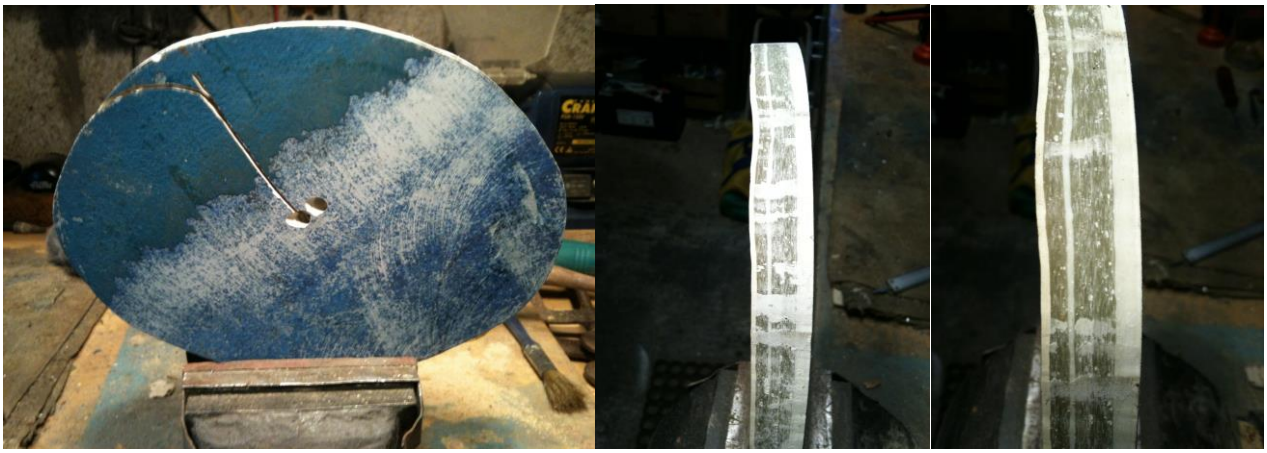
I first had to find out where I could install the tube and motor. This was just in front of a bulkhead, just back from the chain locker bulkhead. This bulkhead was opened up to allow better access to the area where the motor and tube were to be fitted. The cut-out was re-glassed in when all was finalised.

I had a template to show me where the centre of the tube would be – both vertically and horizontally – I then placed a strong magnet on this spot, and had a minute compass on the outside to show where the tube would go. Next step was to tentatively drill a minute (1mm) hole through the hull to show exactly where it would be on the outside. Satisfied, I opened up the hole to 6mm.

Next step was to mark out the hole on the curve hull. I made a scriber from a long length of 6mm SS and pushed the rod through both port and starboard holes. Scribing on a curved hull gives a most strange "round" hole. (The second hole was to allow me to see the hole in the port side, to be able to push the rod through).



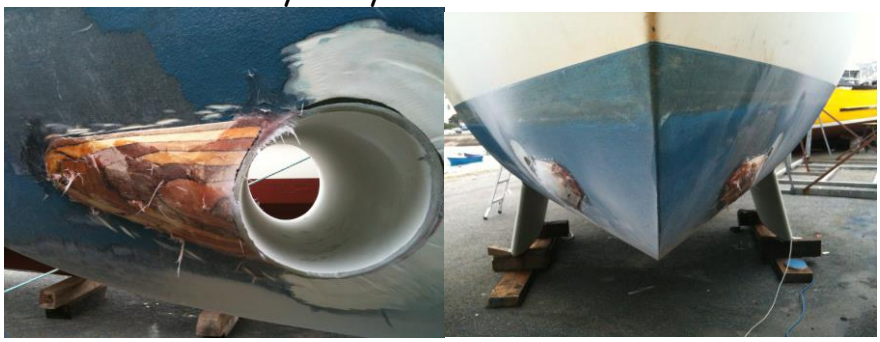
Cutting out the hole shape was by a jigsaw with the ability to cut to an angle. This allowed me to cut horizontally at the top and sides of the hole. Even then, I had to open it out a bit to allow the tube to go through. Note the shape of the section removed, and the difference in thickness of both sides of the hull.



I then had to grind off all gel-coat from inside and outside to about 3 or 4 inches from the hole, or as far as I could when coming against the bulkhead. What an absolute mess I made of the fore-cabin – and me! Gel-coat dust was blowing out of the tube holes and top hatch like smoke!

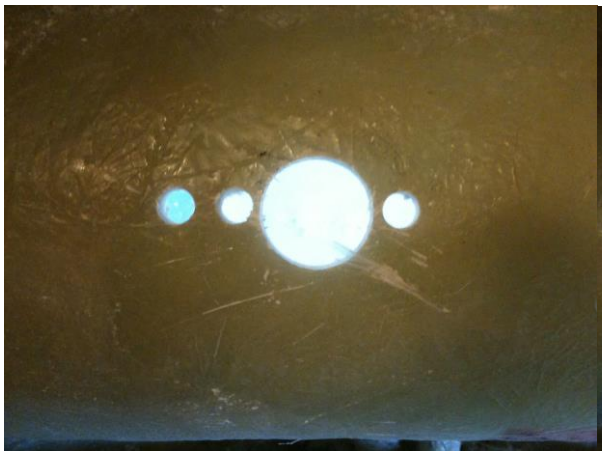
Once the tube was in position, it was cut to rough length, then glassed into position with about 6 or more layers of matting, to equate to the thickness of the hull and tube. There was plenty of ventilation while glassing, with the cabin door and all hatches wide open.

Outside, the leading edge of the hole was built up using a plywood filler, and then glassed over to allow the hole to be more hydrodynamic.

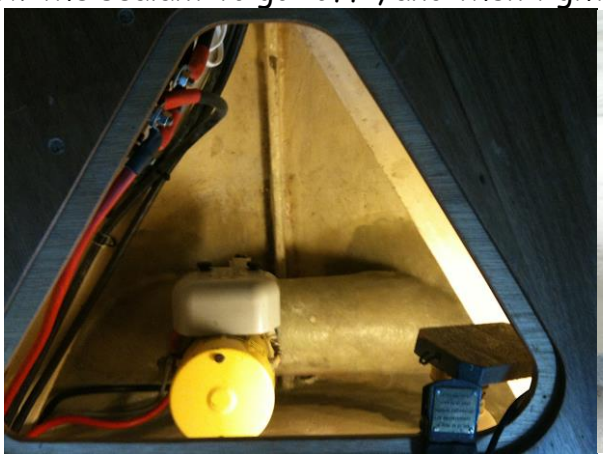
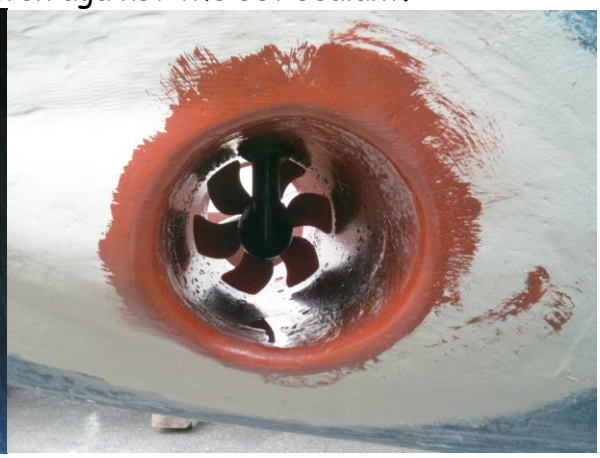


Before fitting the motor/leg unit, the tube was primed and anti-fouled using normal hard (i.e. not self ablating) A/F. (It might look a bit rough in the photo, but this was faired, once the irregularities were seen).


Marking the position of the thruster motor was by template, to show where to drill the bolt and drive holes.




Liberal use of sealant was given to all the sealing components – bottom leg, seating flange and gaskets. The leg and motor were then bolted together – not tightly until the next day to allow the sealant to go "off", and then tighten against the set sealant.

I fitted the thruster controller into the inside helm position, next to the engine start panel, and ran 3-core 1.5mm cable to the thruster connections.


12volt power for the thruster is shared from the windlass power supply, supplemented with a 12v 85Ah battery close-by. The reason for this was to allow the original windlass breaker to be of use for the windlass and thruster, but was not big enough for the thruster on its own. The battery then supplements the supply. Another breaker protects the thruster. It all works as I hoped it would.

I did all the cutting, drilling, sanding and fairing, but I had an expert do all the glassing work.

Getting used to the thruster took a little practice. Two out of the first three goes worked – one was an embarrassment!

One advantage is coming away from a side pontoon berth or quay berth. Instead of pushing off, and relying on current flow (where this is apparent) to crab away from the berth, use of the engine/rudder and thruster will give a forward motion with a sideways push to the boat. It also helps my wife to keep the bow onto the buoy when mooring with any appreciable wind, instead of the bow shearing away when steerage-way is lost.

* The pulpit is missing, as it was being faired after the Penzance harbour launch, while moving the boat within the dock the winter before, managed to ram a small coaster with the pulpit. Oyster's pulpit came off worst!!
Removing the pulpit securing bolts was yet another "Westerly" problem.