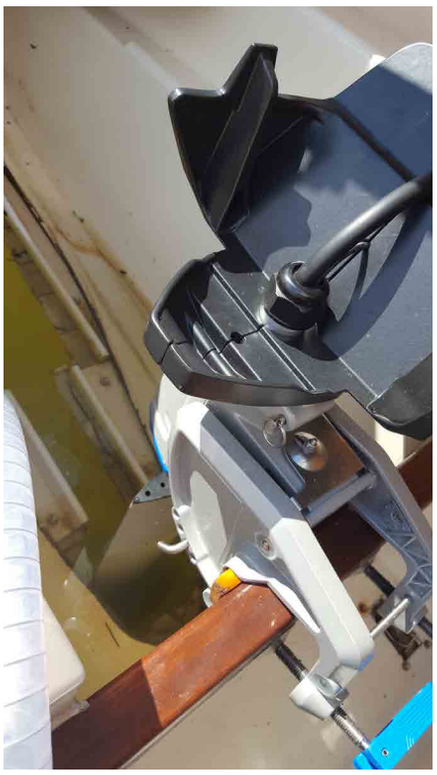
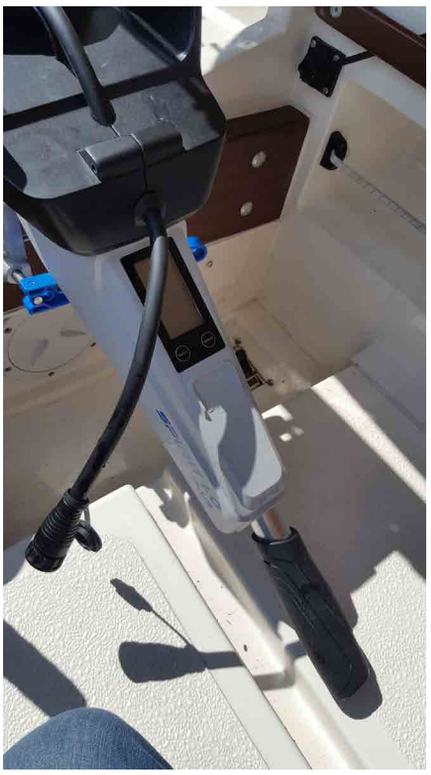
ACHIEVING FULL MOBILITY OF THE TILLER ARM

On the first couple of tests the engine was mounted directly onto the engine mount. When the prop was brought out of the water to its 75 deg 'up' position the tiller arm has to come up to clear the cockpit floor. The tiller arm can lift by 38 degrees but that isn't quite enough to clear the floor if it is wished to allow rotation of the arm into the fender bay. Instead the end of the tiller arm was trapped in the drainage run of the BRe's floor.

To fix this a 20mm high x 10mm thick wedge which tapered down to 3mm or so was placed behind the engine mount with the engine clamped around this. This leaves the prop shaft pointing slightly forward and not able to steer around to 90 degrees because it is too near the front of the engine well cut-out. This was fixed by adjusting the prop-shaft angle back one notch - there are 4 positions - the first notch moves the shaft back 7 degrees to compensate for the wedge. The engine still has to sit centrally to allow the prop to steer plus and minus 90 degrees with 2-3mm clearance each side of the engine well.

With the wedge, the prop shaft can now easily be raised up in the straight ahead position to allow the prop through the floor and then rotated sideways out of the way if wished- with the twist grip control located in a fender bay.

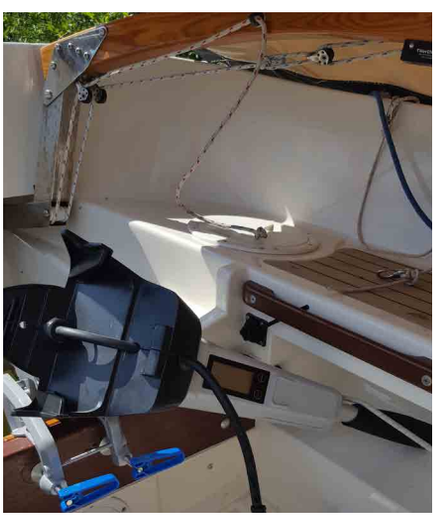




Above: Showing the small wedge in position, the prop angle pin in its second position, and the snug fit of the prop shaft in the engine well when rotated 90 degrees.

Top right: The tiller arm now clears the cockpit floor when engine raised.

Right: The tiller arm rotated into the fender bay.



A NOTE ON PROPELLERS

Since my tests, others have reported on the forum that a smaller diameter three bladed Tohatsu 3.5hp propeller could used to replace the EProp's large 280mm (11") diameter, two blade propeller and therefore obviate any problems with the narrower well width and the lamellae. The smaller propeller might be less vulnerable to damage on beaching.

However, the standard Eprop prop is fine for me - I don't tend go up beaches all 'guns ablaze'. But I do keep a spare on board. A small toolkit is therefore required if the replacement has to be made afloat - a 10mm socket spanner for the prop and an Allen Key for the M5 bolt to remove the anode which is located behind the prop. If an engine lock is fitted it might also be a good idea to have a spare key in the spares kit! The toolkit is also a handy place to keep the spare magnetic kill cord.

So far, the standard prop has held up well and the performance is great. It would be good to do some benchmark speed v power v duration tests in due course.

TRICKLE CHARGING WHILE AFLOAT?

The Epropulsion Spirit XS Plus has, via an optional cable with step up electronics, the possibilty of receiving a 12v trickle charge either directly from a solar panel or from the ship's main battery, even while the engine is running. It will be interesting to evaluate the benefits of this.