

## WHEN THE WIND DROPS.....

**AND THE TIDE IS AGAINST YOU,  
AND IT'S GETTING DARK,  
AND THE PUB IS OPEN,  
AND THE KIDS ARE COLD AND  
HUNGRY,  
AND THE RED ARROWS ARE TUCKED  
UP IN BED.....**

Then an outboard motor mount for a Dart 15 might seem an attractive idea.

One person at last year's Nationals had one. So where was I when the fleet was becalmed between Fowey and Pentewan? Playing at tourists and driving round Cornwall to avoid a further day of sunstroke.

For many years we have taken our family holidays in Salcombe. Some of the most enjoyable trips require passage through strong tidal streams in the estuary, or along the coast to attractive coves and beaches. This is fine while the wind keeps blowing, but it often drops in an evening and paddling a Dart against the tide is not practical for any distance. On the coastal trips there are few landing places outside the harbour and the coastline is exposed and rocky. Up the estuary, towards Kingsbridge, offers an excellent sailing area at high water but much of this becomes mud at low water, with strong currents sweeping through moored boats in the navigable channels. Hence an alternative means of propulsion was attractive. I already owned an elderly 2hp outboard so all I needed was a means of attaching it, which did not interfere with sailing, for emergency use.

The mounting was made up from scrap lying around my garage and is somewhat of a prototype. It doubles as a mounting for the lighting board when the Dart is trailed and supports my son's Laser when that is piled on top, (with a Mirror dinghy on top of

that!). It has now carried the outboard for several sea miles under sail, fortunately I have not been forced to use it yet as I hate outboards. The motor tips up and locks in a horizontal position without interfering with the traveller, rudders or tiller bar. It stays clear of the water, until you overload the boat and go through waves, but you do have to sit further forward than normal to correct the trim. It would be sensible to wrap the motor in a plastic sack and douse it with WD40 to improve the chances of it starting. I also attach a safety line to it just in case it comes loose.

The diagram below shows the mark 2 version, i.e. a design that is not constrained by the scrap in the garage. I hope this is reasonably self-explanatory. The main members are shown made from 3"x2" hard wood but the ideal would be an aluminium box section.

The weakest points in the structure are the joints between the cross-member and the struts. Wrapping 16swg aluminium strip from at least 6" forward of the cross-member on top, round the member, and to at least 6" in front underneath and securing with 6mm stainless bolts, should be more than adequate. Two 4" screws fix the strap to the cross-member. The front ends of these struts need to be shaped to fit against the rear beam without interfering with the traveller carriage. The struts are tightly lashed, under the beam, to the trampoline tube. These struts transmit the thrust of the motor to the hull and prevent the cross-member from twisting.

The ends of the cross-member are shaped to fit the profile of the rear decks and to locate against the inside edges of the hulls. These faces carry the weight of the outboard and locate it laterally. This shaping needs to be done by trial and error with the rudders attached, to remove the

minimum wood while still making sure the rudders do not foul the cross-member. The upper rear edge of the member also has to be cut back sufficiently so that the locating straps do not foul, but don't weaken it any more than necessary.

The locating straps prevent the whole assembly from bouncing off in waves or falling off should you capsize ! The straps need a rectangular hole cutting through

them which fits against the transom and round the base of the upper rudder mounting brackets. The low tech. method of making these holes is an old wood-working chisel and a heavy hammer, finished off with a file; radius the corners of the holes to prevent splitting. Use "screw" headed bolts to minimise the clearance needed for the heads.

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