## **Trimming the 2.4mR**

By: Tom Björndahl (1999 World Champion, 5 time Finnish National Champion, 2 time European Champion, and former builder of the Norlin Mk III)

Before you launch your boat, make sure that the hull has no damage. If there are damaged spots in the gelcoat these must be repaired, the reparation sanded and the spot (or the entire boat) waxed. Be sure you do not use wax containing silicon!

## **Mast Trim**

I have a general rule for stepping the mast: the distance between the front edge of the floor plate and the aft pin for the mast foot should be 16.5 cm. The next step is tensioning the shrouds. Take out all the slack in the upper shrouds as a rough trim. Then, fine tune one side at a time until the shrouds are as tense as the thick string in a guitar. Many people are sailing without lower shrouds. My opinion is that this kind of boat should have the lower shrouds, but this is only my opinion. The 1997 World Champion, Marko Dahlberg, is sailing with main shrouds only and is going fast, especially in strong winds. The lower shrouds (if you use any) are tightened so that they are a bit slack to allow the mast to bend forward. The rake of the mast is very important for the balance of the boat. The rake is checked by attaching a ruler to the main hoist shackle and measuring the distance between the black band, on the top of the mast, to the stern of the boat. I started with 555 cm for my present sails, but have more recently changed it to 562 cm. Both the main and jib have to be hoisted when doing the check!

## Sail Trim

The first thing to do is to check the balance of the boat in the wind. Take your feet off the pedals (or hands off the tiller) and let the boat luff up into wind. If the boat luffs very rapidly, move the rake forward and, continue adjusting the rake until the weather helm is moderate. Conversely, if the boat tends to bear away, move the rake more aft. My way of trimming the boat speed upwind is as follows. In light to moderate winds, I pull the backstay a little until the luff of the jib is straight with a minimum amount of sag. The middle part of the

mainsail will be flattened by this procedure. If there are "old sea" or crossing waves I pull the mast backwards at the deck level to make the main more powerful. In stronger winds, the main is flattened by tensioning the cunningham, outhaul, and by using the vang and backstay. The forestay should be kept as straight as possible except in light winds and "old sea" when you need power to go through the waves. In light and moderate winds, the leach of the jib is kept fairly tight and, as the wind increases, ease the barberhaulers to loosen it. I hoist the jib so that the foot just barely touches the deck. The jib cunningham is more important than many sailors believe. By pulling it too hard you will get a jib that is too flat with the draft too much forward.

And now the only thing remaining is to start at full speed and be ahead of the crowd at all times.

Tom Björndahl