

**SWING RIG: RIG TUNING - MAST POSITION.** © Graham Bawtree Jan '88.

AFTER ASSEMBLY THE RIG WILL NEED SOME INITIAL ADJUSTMENT TO ACHIEVE A GOOD SAIL/RIG ARRANGEMENT.

- 1/ TIGHTEN THE FORESTAY, ADJUST THE JIB SHEET SO THAT THE BOOM END IS ABOUT 40mm OFF THE MAST (i). ADJUST THE CAMBER IN THE JIB FOOT (10mm) BY MOVING THE CLEW BACKWARDS OR FORWARDS ALONG THE BOOM (ii). WITH THE RIG 'HEELED OVER' ADJUST THE TENSION IN THE JIB LEECH LINE (CORRECTLY THE TOPPING LIFT) UNTIL THE LEECH OF THE JIB REMAINS APPROXIMATELY PARALLEL TO THE MAST FOR ABOUT 75% OF ITS LENGTH (iii).
- 2/ ADJUST THE MAINSAIL CAMBER TO 20-30mm BY MOVING THE CLEW ALONG THE YARD (iv). ADJUST MAINSAIL CLEW POSITION UNTIL THE MAIN LEECH IS 40-50mm MAXIMUM FROM THE LINE AT ITS MID HEIGHT (v). THE MAINSAIL SHOULD HAVE AN EVEN CAMBER FROM ITS FOOT UP TO ITS HEAD. HOWEVER IT MAY HAVE ONE OF THE FOLLOWING FAULTS:

(A)



HERE THE CENTRE OF THE SAIL IS TOO FULL AND THE MAXIMUM CAMBER IS LIKELY TO BE TOO NEAR THE MAST.

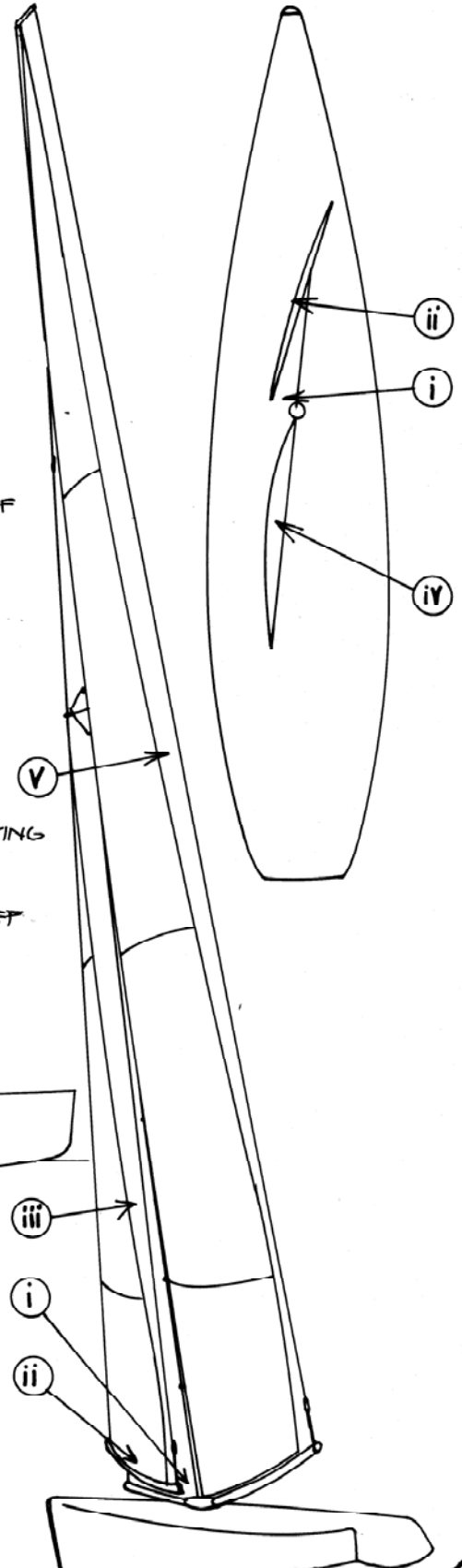
THE MAST NEEDS TO BE BENT MORE (TO FLATTEN THE SAIL & MOVE CAMBER AFT) WITHOUT TWISTING OFF THE LEECH ANY MORE. DO THIS BY TIGHTENING THE BACKSTAY TO BEND THE MAST AND THE MAINSAIL CLEW HEIGHT ADJUSTMENT (TO KEEP THE TWIST THE SAME). DO THIS PROGRESSIVELY UNTIL AN EVEN CAMBER AND TWIST IS ACHIEVED.

(B)

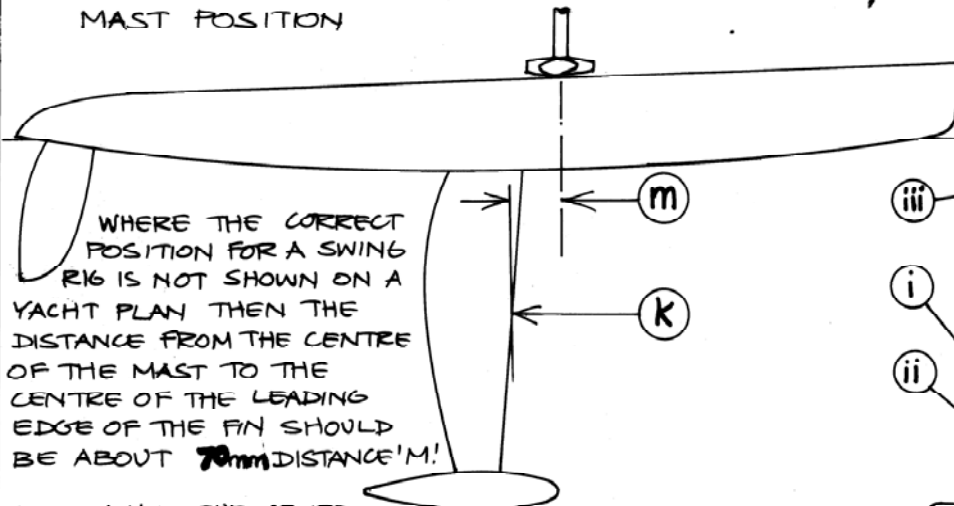


HERE THE CENTRE OF THE SAIL IS TOO FLAT AND THE LEECH IS SLACK ESPECIALLY AT THE HEAD.

THE MAST NEEDS TO BE BENT LESS BY SUPPLYING LESS TENSION IN THE BACKSTAY - BUT WITHOUT TIGHTENING THE LEECH. THEREFORE SLACKEN THE BACKSTAY AND THE CLEW HEIGHT ADJUSTMENT (TO KEEP THE TWIST THE SAME).



**MAST POSITION**



WHERE THE CORRECT POSITION FOR A SWING RIG IS NOT SHOWN ON A YACHT PLAN THEN THE DISTANCE FROM THE CENTRE OF THE MAST TO THE CENTRE OF THE LEADING EDGE OF THE FIN SHOULD BE ABOUT 70mm DISTANCE 'M'!

POINT 'K' IS THE CENTRE OF THE LEADING EDGE.