

FLYING FIFTEEN

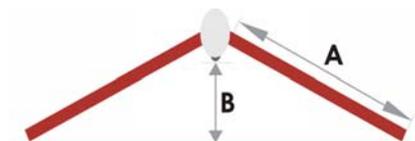
Mast Stepping

The mast heel position is 93mm from the centreline of 1st set of keel bolts to aft mast bolt in mast step. The mast must be a tight fit sideways at deck level, and ought not lean out to one side. Although masts are rigged with shrouds the same length, the majority of Fifteens need to have the shrouds in different holes on the rigging adjusters. We do this by eye, put the mast in the boat, put rig tension on, look up the mast and if it is leaning one way then let off one shroud and pull down on the other.

Spreaders

Spreader Length = A Spreader Angle = B

MAST TYPE	A		B
M2	422mm		175mm
Epsilon	422mm	21stone	210mm
		25stone	200mm
		28stone	185mm



Spreader length will vary from boat to boat, the 422mm is for Mould 9 boats where the shrouds attach to 'U' bolts outside the sheer-line. On older boats such as Wyche & Coppock, the shrouds are closer in, therefore shorten spreader by 15-20mm.

The Keel

Below the hull there are a number of developments, which can influence boat speed. The keel must be maximum profile, but minimum weight. Check your certificate or measurement form. Keel positions have changed a little, from 3939mm (transom to forward edge) for the Windebank Mk 4 hull, to the successful Mould 9 hull, which is positioned at 3921mm, 3936mm for the smooth 9 or 2920mm for Mould 10.

The Rudder

The rudder angle is, however, critical to performance. It is important to use the measurement tolerances to angle the rudder as far forward as possible. Reduce the top forward corner of the rudder by 13mm tolerance, and this allows the rudder to be swung significantly forward. Add a further 5mm tolerance for the gap between hull at the rear end, and the improvement is even more marked. The rudder can be better balanced by ensuring that the rudderpost - fixed through the rudder - is fitted further aft. The profile can be updated by using template tolerances to create a more uniformly shaped trailing edge, rather than the "Trowel" shaped original. The rudder thickness should be near maximum and with a blunt entry, to reduce stall, and naturally down to minimum weight.

Headsail luff meets deck from foreside of mast 1676mm, maximum as permitted by Class Rules.