

Rigid Vang Installation

The optimum angle for the vang is approximately 30° to the horizontal. If the distance of the boom tang aft of the mast is 1.75 times the distance from the mast tang to the top of the boom, this is about the correct angle. At this angle, the overall length of the uncompressed vang should be approximately 2.1 times the distance from the mast tang to the top of the boom.

The mast attachment is best located as close to the deck as possible. We suggest 80mm from the deck to underside of the bracket.

Initial Setup

1. Fix the mast bracket on the mast.
2. Slide the boom bracket onto the underside track on the boom, but do not fit it permanently. (Note: the forward boom end fitting must be removed to insert the boom bracket in the track). Temporarily locate the boom bracket aft of the mast at 1.75 x the distance from the mast bracket to the top of boom; hold it in place by, for example, tying a piece of line around the mast and onto the bracket.
3. With a boom topping lift used to raise the boom, attach the vang to the two brackets. The vang should be installed with the larger tube uppermost – otherwise water will accumulate around the stainless spring and corrosion of the alloy tube will result.
4. With the mainsail installed on the boom, release the topping lift. With no tension on the vang rope, check the boom angle: it should be a little above horizontal. You can adjust the boom bracket fore and aft to increase or decrease the 'lift' of the boom. If the boom bracket needs to move more than 200mm forward, then the vang is too short – get a longer vang from Z Spars. If the bracket needs to move more than 200mm aft, then the vang is too long – shorten the vang as described below.
5. Once you are happy that the vang is supporting the boom plus mainsail above horizontal, pull the boom down with the mainsheet as far as it will go. The vang is now fully compressed, and the boom should be about 4 degrees below horizontal (i.e., outboard end of boom about 70mm below horizontal for every 1 metre of boom length). If the vang is fully compressed before this angle is reached, then move the boom bracket aft a little, and go back to step 4. If the boom is then below horizontal, the movement range of the vang is inadequate: get an additional half spring from Z Spars and install it in the vang. This will provide additional power and range of movement in the vang.
6. Once you have achieved the required vang length and angle, fix the boom fitting permanently (or you may wish to go sailing with the bracket fixed temporarily before final positioning).
7. The vang comes with a built-in 5:1 purchase: the rope must exit the final sheave at the boom end and run back to a block at the mast base, then go back to the cockpit. Fitting a 2:1 purchase on the rope tail (e.g., by fitting a single block on the vang rope tail, and a single and becket block at the mast base) will double the final purchase to 10:1.

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8. When the vessel is at moorings, then the vang rope can be released, and the boom topping lift can be used to raise the boom well above horizontal (but not so far that the vang tubes disengage!)
9. If you have any questions regarding the installation of your Z Spars vang, please contact us – details below.

To Shorten the Vang Length

Shorten the smaller tube ONLY. Remove the rope tackle and pull apart the two tubes. Remove the plastic bush from the end of the smaller tube (push fit) and cut the smaller tube to the required length. Reassemble.

Maintenance

Rinse occasionally with fresh water (e.g., at end of season).