

Laser Vago Mods suitable for Single Handed sailing.

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Self Tacking Jib

Purpose:

To allow the helm to concentrate on the mainsail, gennaker and tiller, making single handed control of the boat safer and easier.

Advantages:

1. While tacking in windy conditions, this mod allows the single handed helmsman to get onto the trapeze and take control of the boat more quickly. On busy start lines and mark roundings, this allows the helmsman to manoeuvre more safely.
2. Downwind in heavy weather, the single handed helmsman doesn't have to move his weight forward to pre-gybe the jib. This mod makes gybing in a force 5 more attainable without a crew.
3. When racing with an inexperienced crew, it's one less thing to worry about.

Disadvantages:

This is not a true self tacking jib system.

The jib clew can never move across to its intended position, resulting in a mainsail/jib slot, which is never creating an efficient airflow. Watch the jib telltales of anyone using this mod and you'll notice corrupted airflow.

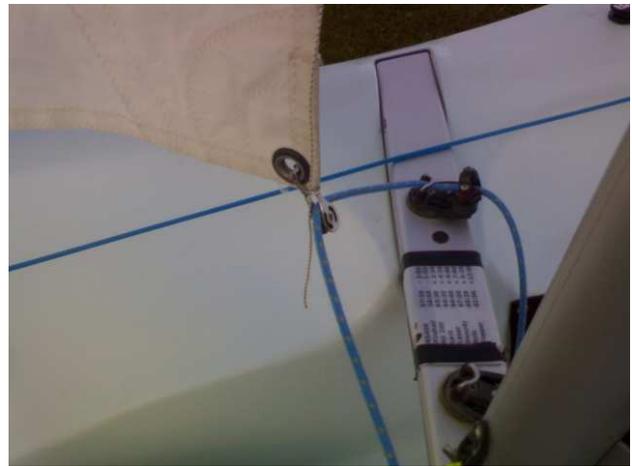
Implementation:

This modification is carried out by allowing the jib clew to move freely along the jib sheet, which is cleated at both sides of the boat. When the boat tacks or gybes, the wind blows the jib along the jib sheet and stops at the opposite side. To adjust the jib, the jib sheet can be loosened or tightened from either side of the boat.

Note:

The jib can be attached to the jib sheet by either of 2 methods:

1. The removal of 1 knot from the rigging diagram. The knot in the jib sheet at the jib clew eyelet is untied and the jib sheet is fed directly through the eyelet.
2. The addition of a pulley attached with a shackle to the jib clew eyelet. The jib sheet runs through the pulley. This system has less friction than the option above but requires an additional component.



Gennaker Rear Hoist Cleat.

Background:

The currently approved rear extension of the gennaker up/downhaul has one major drawback. If you capsize to starboard, the only way to uncleat the gennaker in order to drop it is for someone to go into the boat and release the cleat by the starboard side of the mast. Not a problem if you have a crew, but likely to turtle the boat if you're single handed. If you do turtle, someone has to go under the inverted hull and into the rigging to drop the kite.

Purpose:

To allow the gennaker to be dropped from either side of the boat when on its side or turtled. Hoisting remains identical to the existing rear extension.

Disadvantages:

Laserperformance suggest that this mod will invalidate the boats warranty because the kite up/downhaul is designed to be run through the securely mounted cleat next to the mast which is attached via rivets.

Advantages:

The gennaker can be dropped from either side of the boat from a position on the centreboard by doing the following:

1. Lean into the boat.
2. Take hold of the up/downhaul at the side of the boat you're on.
3. Pull it in the hoist direction to uncleat.
4. Pull it in the drop direction to drop it.

This system also allows the gennaker to be dropped when turtled WITHOUT going under the boat as follows:

1. Swim to the rear of the hull.
2. Reach into the gap between the hull (above water) and transom bar (at water level).
3. Pull out the rear pulley halyard and take hold of the up/downhaul.
4. Pull it in the hoist direction to uncleat.
5. Pull it in the drop direction to drop it.

Notes:

1. This mod doesn't give the single hander an advantage in raising or lowering the kite but does improve the safety and reduce the time of capsize recovery.
2. The helm can stay further back in the boat and avoid nose dives in strong winds.
3. During a drop, the rudder to be controlled between the legs of the helm, reducing chances of capsize.

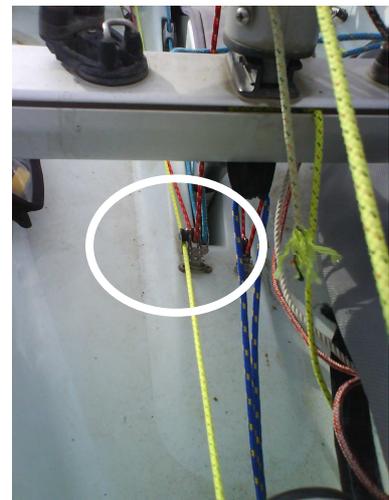
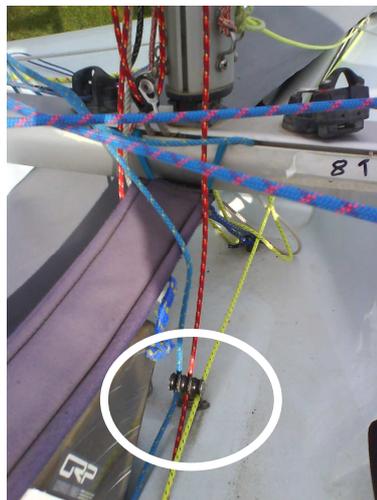
Implementation:

In addition to the 17m gennaker up/downhaul currently used for the existing rear hoist and drop, the following changes are required:

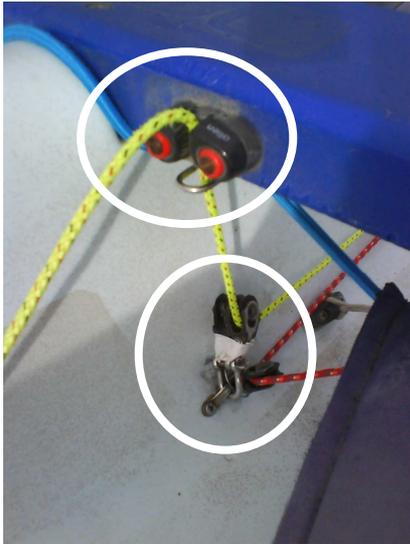
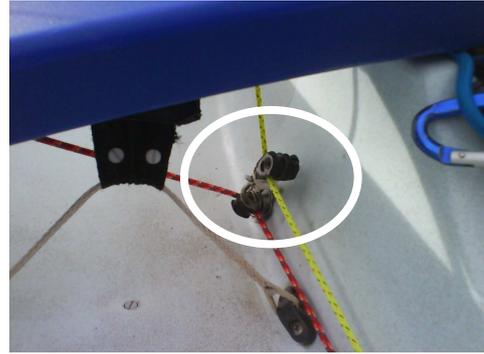
1. Replace the double block which currently carries the kicker and cunningham at the starboard side of the centreboard with a triple block.



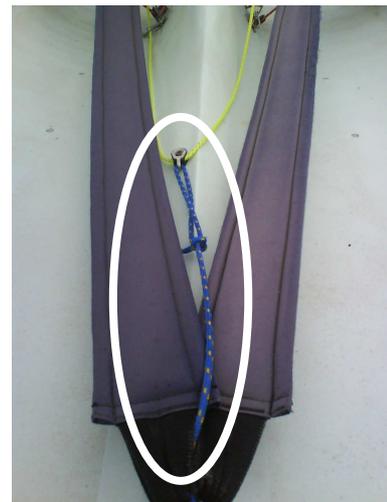
2. Bypass the existing up/downhaul cleat and take the rope through the extra pulley on the newly added triple block.



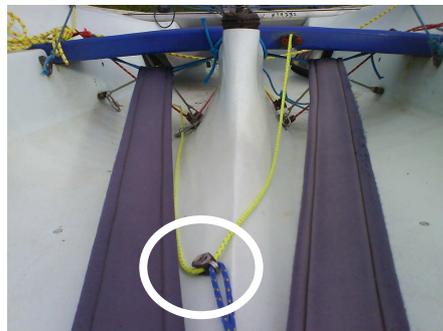
3. Attach the double block (previously attached by the centreboard) to the deck fixing under the thwart (leave the existing pulley for the kicker attached) with a twisted shackle and run the gennaker up/downhaul through it, entering from the bow horizontally and leaving vertically towards the back of the thwart.



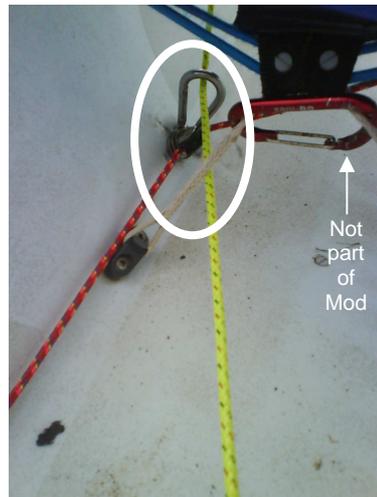
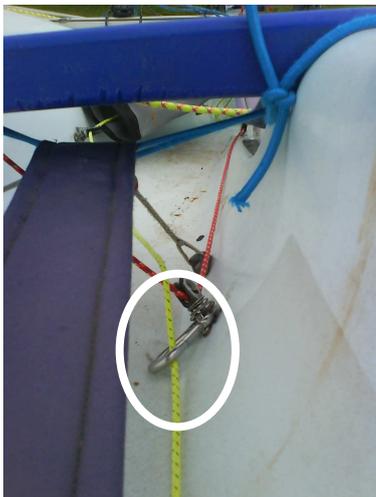
4. On the back of the thwart, attach a small clam cleat and fairlead (with the fairlead at the bottom) using 2 self tapping screws into the plastic and bring the gennaker up/downhaul through the fairlead.



5. Tie a 30cm halyard from the rear toe strap mount to a single block and run the gennaker up/downhaul through the block to reverse its direction back towards the port side of the centreboard.



6. Take the gennaker up/downhaul through a karabine attached to the deck fixing for the kicker under the port side of the thwart and return it to its normal route through the block by the gennaker sock.



Sailboats.co.uk stock code	Description	Unit price	Quantity
58090/4L JB0006	Marlow 8 Plait Pre Stretch 4mm	£0.84	17
342503 HA4250P	Allen Single 20mm Plain Bearing	£4.56	3
320240 HA2024	Allen 20mm Dynamic Treble Block	£26.97	1
707710 R7710	Bar Shackle L=20mm W=10mm	£3.57	4
701907 R1901	RWO Rope Stoppers 4mm	£0.87	1
701902 R1901	RWO Rope Stoppers 4mm	£0.87	1
300770 HA..77	Allen Alloy Cam Cleat Ball Bearing Small	£18.63	1
58150/4R PP-4	Sailboats Shock Chord/Elastic 4mm	£0.85	1
704153 R4153	RWO Stainless Ring Id=30mm	£2.54	1
346650 HA4665	Allen Small Cleat Front/Rear Fairlead	£2.81	1
60120 A4268	Sailboats Self Tapping Screws 8 x 1 1/2" Pan (10)	£2.50	2

30cm of rope for the rear block.

END OF MOD DOCUMENT
D Baxter 10/11/2010