

Michael Y

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ago)

to Baba-L@Google

Thank you to everyone who replied for all the helpful information and good suggestions for the new main sheet blocks.

I went with Garhauer. The quality looks good (time will tell), the price was significantly less than Harken and other brands (2x to 4x less!!). And, I happened to catch a Garhauer product-wide sale of 10% which helped a bit more.

Using Harken's online mainsheet load calculator: <https://www.harken.com/en/calculators/mainsheet-loading-calculator/> and modeling a full main at 25 knots of wind shows approximately 2,000 Lbs of force. In most circumstances I'd seek to already have a reef or two in the main at 25 knots of wind speed. The modeling was for expected circumstances and to "bake in" additional safety margin when spec'ing the new blocks.

For the new 11mm mainsheet, I went with the following Garhauer blocks:

- 6 x Single Block with Shackle 50-13 US
 - Rated for a safe working load (SWL) of 3,000 Lbs of force. As there are three blocks on the boom at the traveler I'm expecting at least 2x margin of safety with these blocks. And possibly 4x or 5x in most conditions.
 - The 3" diameter sheaves allow a smooth run for the 11 mm mainsheet.
 - Lighter than the prior wood cheek, bronze sheave, stainless strap blocks.
 - An inch or two shorter in the vertical dimension including the shackle.



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- <https://www.garhauermarine.com/shop/blocks-mast-boom-blocks-hardware/single-blocks-blocks-mast-boom-blocks-hardware/single-blocks-with-shackle-single-blocks-blocks-mast-boom-blocks-hardware/single-block-with-shackle-50-13-us/>
- 1 x Fiddle Block with Becket and Shackle 50-02 US
 - Rated for a safe working load (SWL) of 3,000 Lbs of force.
 - Using the model of 25 knots and full main aka 2,000 Lbs of mainsheet force the fiddle block provides a margin of safety of 50% from the rated SWL and 3x or more in expected general sailing conditions.



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- https://www.garhauermarine.com/shop/blocks-mast-boom-blocks-hardware/fiddle-blocks-blocks-mast-boom-blocks-hardware/fiddle-blocks-with-becket-and-shackle/fiddle-block-with-becket-50-02-us/goog_1366424806

Below are pictures of the new mainsheet and blocks that were installed. I still need to whip the end of the mainsheet. There are three blocks at the gooseneck / mast and a hidden fairlead mounted on the forward side of the winch stand on the mast. Then, block #7 routes the mainsheet around the butterfly hatch to the mainsheet winch in the cockpit.

The new smaller diameter (HMPE core) is stronger than the previous mainsheet and operates with much less friction in the mainsheet system overall.





