

Shrimper 19: Modification to Centreplate Sheave Mounting

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I have had my Shrimper 19 for six months and it has been going well for me with the single exception of the keel lifting mechanism.

The previous owner had already substituted 3 mm Dyneema for the stainless steel wire but the top of the keel box was in poor condition making it impossible to mount the sheave securely (Fig 1). The 3mm rope kept jumping the sheave and partly sawing its way through the keel box before breaking.



Fig 1 Original Sheave Mounting

To solve the problem I decided to cut off the top of the keel box and make a new housing from hard wood.



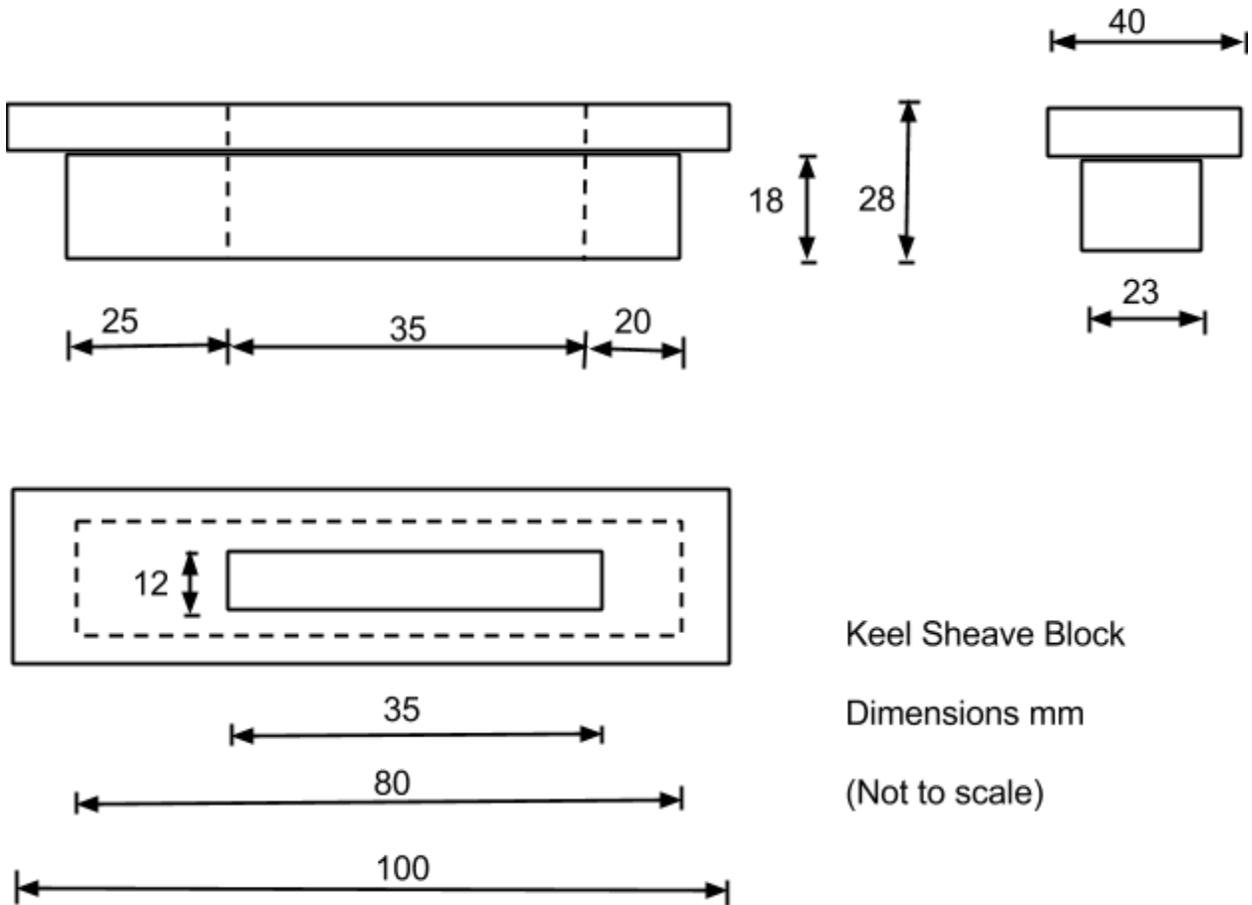
Fig 2 Keel box with top removed



Fig 3

Figures 2 and 3 show the keel box with the top piece sawn off. I subsequently faired the cut surface flat using a wood rasp..

The new sheave housing dimensions were mostly dictated by the size of the opening in the keel box. The drawing is shown below with photos in Figures 4-7. I assembled it using waterproof “Gorilla Glue” (Figure 8) and added an eye and a groove to keep the rope in the sheave.



Keel Sheave Block

Dimensions mm

(Not to scale)

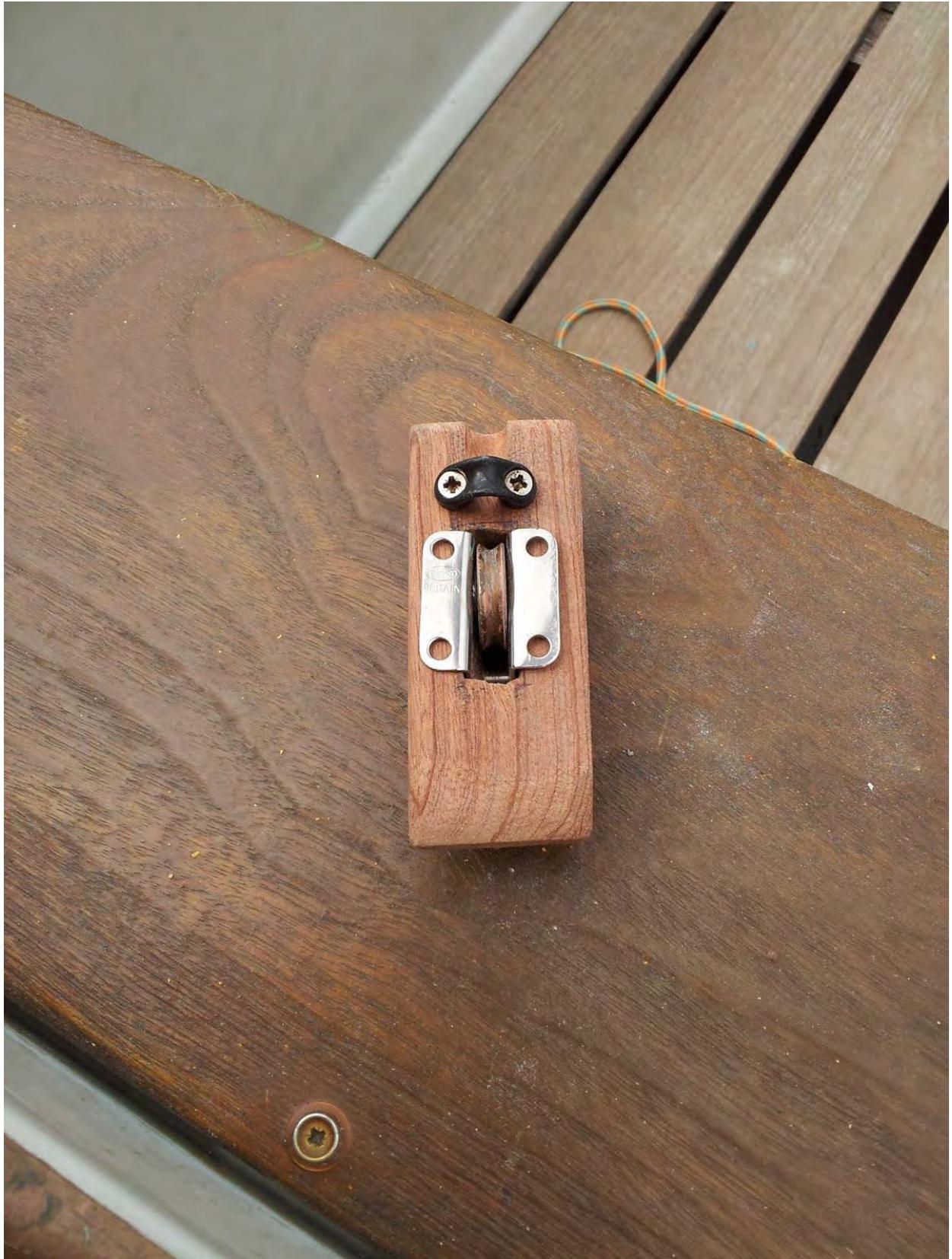


Fig 4 Top View



Fig 5 Bottom View



Fig 6 Side View showing mounting screw hole.



Fig 7 Block in position



Figure 8

I ran the boat up on to a beach to complete the job. One bonus was being able to access the top of the plate and using a cobalt drill bit held in a small vice grips, I was able to open the hole up enough to take 4 mm Dyneema instead of 3 mm (Fig 9). A round needle file would have been more suitable still.

Figure 10 shows the completed job.



Figure 9 4 mm Dyneema threaded through



Figure 10 Close up of sheave mounting (painted)