









YACHT SAILING HI TECH PARTS WWW.AA-PARTS.COM

DRUM ASSEMBLY INSTRUCTIONS



#### YACHT SAILING HI TECH PARTS

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### 2 Setting the Drum

The winch is sold as standard with the special Double System Drum™: a special drum which allows its use both as Self Tensioning Drum (drum which allows to tighten the winch pull sheet without compensation spring) and as Standard Drum (drum without self-tensioning springs).

# 2.1 Self Tensioning Drum

Take from the box the bottom drum, the top drum and the self-tensioning spring for right-or left-handed, depending on the assembly needs (see section "Setting up the Drum" to choose the right- or left-handed spring ).

Lubricate with silicone grease the internal part and the hub of the lower drum. Place the spring stem in the hole provided in the bottom drum and insert the top drum, making sure that the other spring stem fits into the top drum hole.

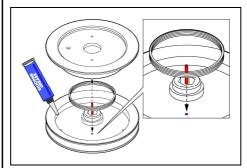


Fig. 01

Attach the Self Tensioning Drum with the washer and the screw supplied, following figure 02.

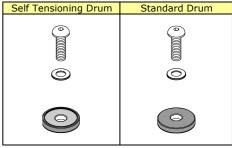


Fig. 02

#### 2.2 Standard Drum

Remove the bottom drum the top drum and the three small mounting pins from packaging. Insert the mounting pins in the bottom drum holes and insert the top drum in the three spines coming out from the lower drum.

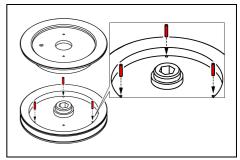


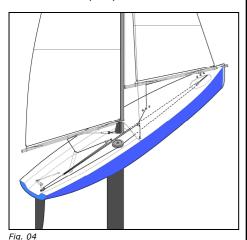
Fig. 03



Fix the Standard Drum with the supplied washer and screw as shown in Figure 03.

# 2.3 Connection to compensation spring

To the winch drum (Standard Drum type) - Figure 08, is connected a sheet, which, after going along a pulley fixed to the stern deck, goes back to the winch through another pulley located below the bridge ahead, forming the closed circuit return sheet. The correct sheet tension is supplied by a compensation spring fixed to the bow pulley.

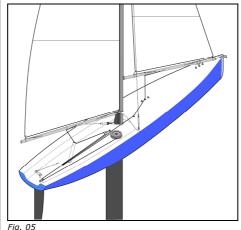


2.4 Connection to Self Tensioning Drum

The Self Tensioning Drum is a drum with an inside calibrated torsion spring to provide the necessary pull for the sheet tension - Figure 06.

It allows to remove the bow pulley and the spring under the deck and to carefully calibrate the sheets tension. It must be used carefully since the sliding of all parts is of the utmost importance.

Always check that the top of the drum slides well within the lower part with no jamming. If necessary take apart the Self Tensioning Drum, thoroughly clean and lubricate it with silicone grease.



The Self Tensioning Drum should be used as follows:

- the internal compensation spring must be selected according to the winch rotation as shown in the following paragraph;
- or clockwise rotation: the bottom throat of the drum must be used to pull the sheet (red sheet - Fig 06);

- for clockwise rotation: the upper throat of the drum should only be used for the sheet tensioning, and not to pull it (blue sheet - Fig 06);
- d) for anti-clockwise rotation: reverse what explained above.

e)

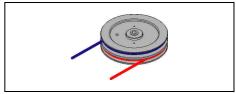


Fig. 06

### 2.4.1 Drum tuning

The Self Tensioning Drum system must be adjusted to allow an adequate compensation the pull of the winch return sheet.

#### 2.4.2 Spring Choice

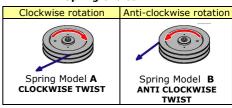


Fig. 07

The compensation spring (Model A, right handed or Model B, left handed, included) must be chosen according to the direction of rotation of the winch when viewed from above - Fig 07.



# 2.4.3 Use of Self Tensioning Drum

In Fig. 08 an example of installation and use of the Self Tensioning Drum with clockwise rotation of the winch. Note that the pull sheet (red) comes out of the bottom of the drum and the return sheet (blue) enters the upper part of the drum.

The top of the drum (moving part) shall be loaded to allow the inner torsion spring to offset the pull of the sheet.

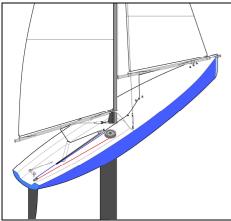


Fig. 08

### Proceed as follows:

- insert the sheet in the lower drum and lock it;
- b) turn the winch as required to haul the sheet (the Ø 32 drum retrieves 100 mm of sheet on each revolution, the Ø 42 drum about 130 mm);

- c) load the upper drum of the revolutions deemed necessary for tension (we recommend to load from 0.2 to 0.5 revolutions according to desired tension);
- d) put the return sheet in the top drum and lock it



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