

**RONSTAN**

**RONSTAN  
RA6502 Two  
Speed Self  
Railing Winch  
with Quick Trim**



## RONSTAN RA6502 Two Speed Self Railing Winch with Quick Trim User Guide

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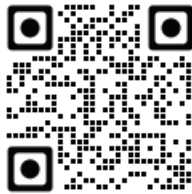
**RONSTAN RA6502 Two Speed Self Railing Winch with Quick Trim**



## Specifications

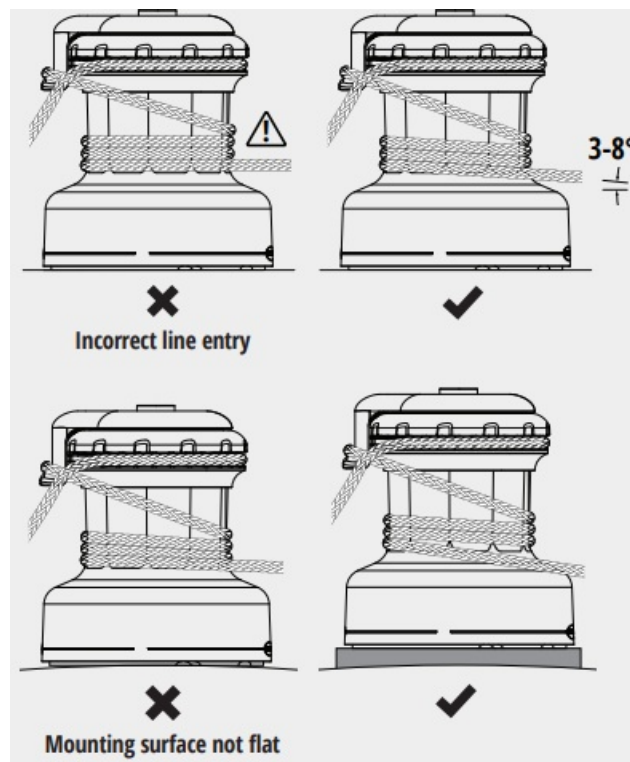
- **Model:** RA6502
- **Power Ratio RA6502:**
  - 1st speed: 13.4:1,
  - 2nd speed: 49.3:1
- **Line Diameter:** 8-14mm (5/16 – 9/16)
- **Weight RA6502:** 5.4 kg (11.9 lb)
- **Maximum Working Load (MWL):** 1350 kg (2980 lb)

Download the complete Product Manual for this winch from [ronstan.com/orbitwinch](http://ronstan.com/orbitwinch) for detailed instructions regarding installation, operation, service and maintenance.

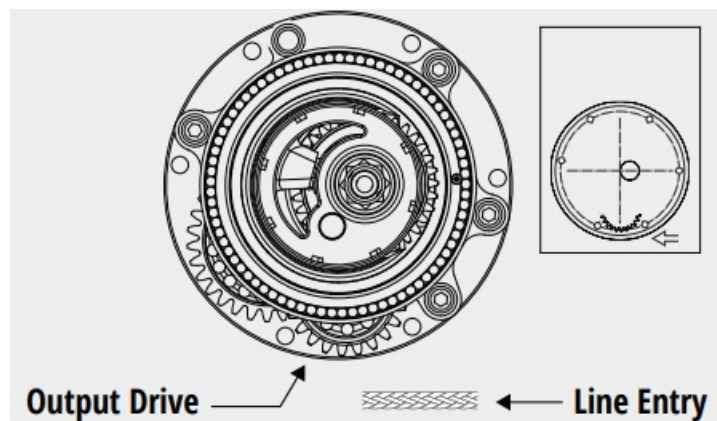


## DETERMINE WINCH MOUNTING POSITION

Position the winch in the desired location. Ensure the surface is flat and the line entry angle is acceptable (3-8° as shown below).



Ensure the Drive gear is aligned to the line entry as per the orientation on the template.



## INSTALLATION

### • STEP 1

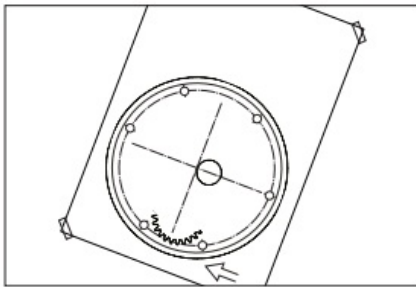
Clean the mounting surface and tape the drilling template in position so that it matches the desired winch mounting position and orientation.

### • STEP 2

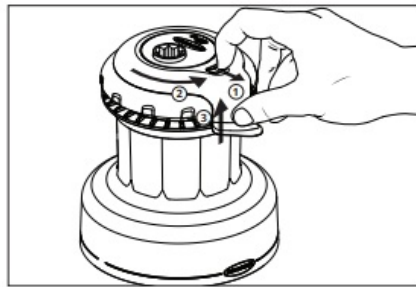
Pull back the spring-loaded release latch on the self-tailing arm with a fingertip (1), then rotate the arm slightly in an anti-clockwise direction (2) until it can be lifted clear of the winch (3).

### • STEP 3

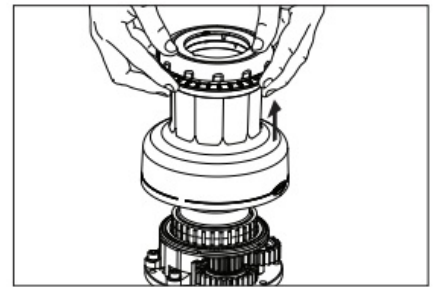
Pull upward on the drum to remove it from the centre stem. Place the centre stem on the template with mounting hole positions aligned, to check that orientation of rope entry in relation to Output Drive Gear is correct.



STEP 1



STEP 2



STEP 3

#### • STEP 4

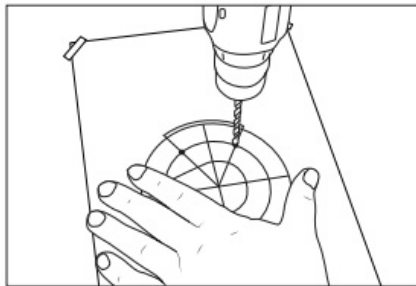
With the template in place, drill the Ø8.5mm holes for the M8 mounting bolts (or 11/32" holes for 5/16" bolts). Remove the template, clean away any debris from the holes, and clean the deck thoroughly to ensure deck sealant can adhere properly.

#### • STEP 5

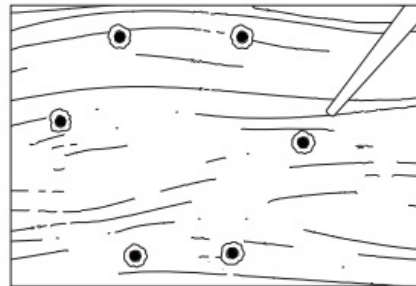
Apply sealant under the base of the centre stem around the mounting holes, ensuring that the drainage channels remain clean and free of sealant. For mounting on carbon fibre or metal surfaces, the base must also be completely isolated from the mounting surface to prevent galvanic corrosion.

#### • STEP 6

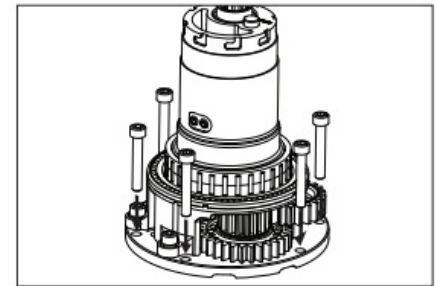
Fit the winch to the deck using large washers (or backing plate) and locking nuts below deck. Apply Tef-Gel™ under the head of each mounting fastener to isolate it from the aluminium base plate. To avoid wearing the anodised surface of the base plate, use a hex key to prevent the fastener from turning and use a spanner to tighten the nuts from below.\*



STEP 4



STEP 5



STEP 6

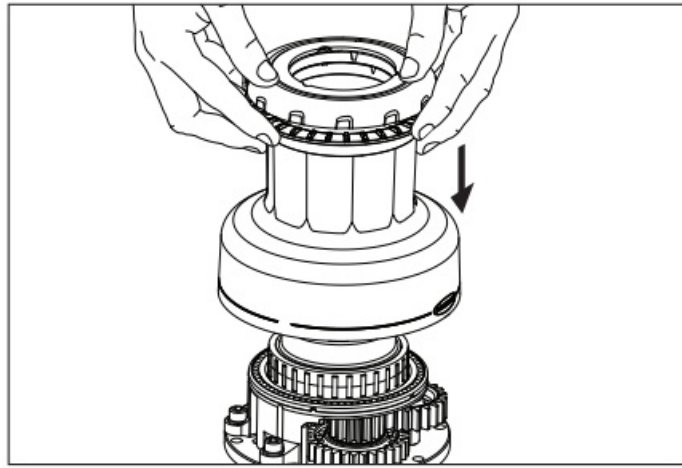
5x M8 or 5/16" Grade 316 stainless steel fasteners. Use of A4-70 DIN912 hex socket cylinder head screws is recommended, installed at a torque setting of no more than 17.1Nm as per industry standards.

Tef-Gel™ is a trademark of Ultra Safety Systems, Inc.

## REASSEMBLING THE WINCH

#### • STEP 1

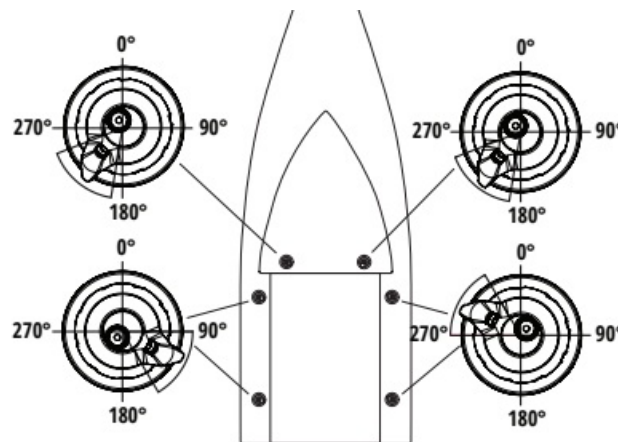
Lift the drum assembly over the centre stem, then slide it fully down into position.



### STEP 1

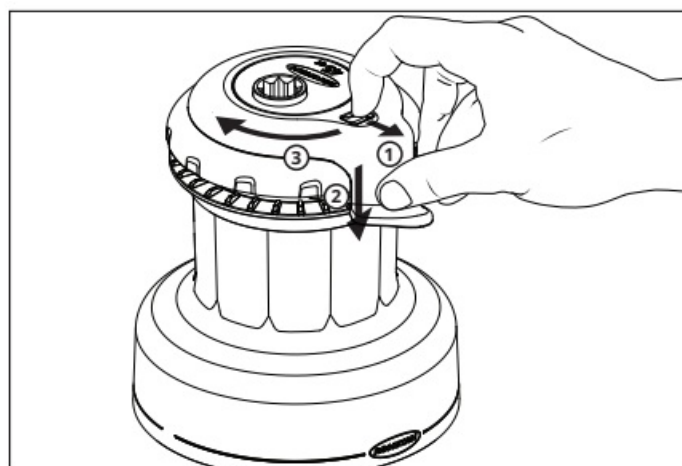
#### • ARM ORIENTATION

The image above can be used as a guide to the orientation of the self-tailing arm in typical locations on the deck.



#### • STEP 2

Rotate the self-tailing arm to its desired position, ensuring that the rope splitter is in position. Pull back the spring-loaded release latch on the self-tailing arm with a fingertip (1), then rotate the arm slightly in a clockwise direction (3), and listen for the audible “click” indicating it is locked in position (2).



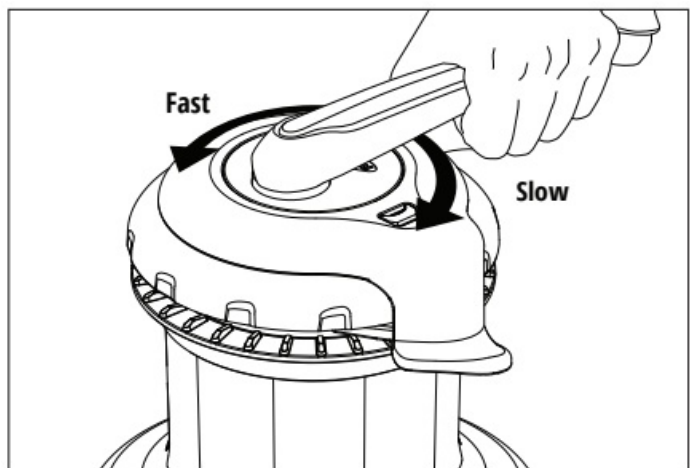
### STEP 2

#### • STEP 3

Two speed operation, overdrive button (RA6503 only) not engaged.

Check that the drum turns smoothly when rotated by hand in a clockwise direction, and is not able to turn in an anti-clockwise direction. Insert a winch handle in the socket of the central drive shaft. Turning the handle in an clockwise direction should drive the drum in it's slowest speed; turning the handle in an anti-clockwise direction

should drive it in the faster speed. For a three-speed winch, after pushing the button on top of the winch turning the handle clockwise should drive the winch in the fastest (overdrive) gear.



**STEP 3**

### **QUICKTRIM™**

A patented innovation in self-tailing winches that allows rapid easing of line tension without having to remove the line from the self-tailer. Orbit Winches™ are delivered with the self-tailer locked, operating as a traditional two-speed self-tailing winch.

### **ENABLING QUICKTRIM™ FUNCTION**

- **STEP 1**

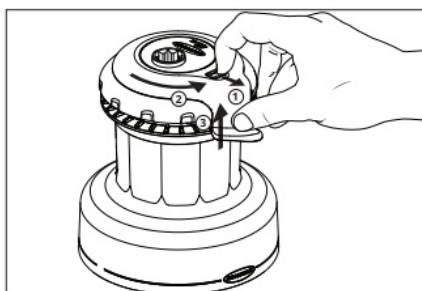
Remove the self-tailer arm and the closing washer and set aside for now.

- **STEP 2**

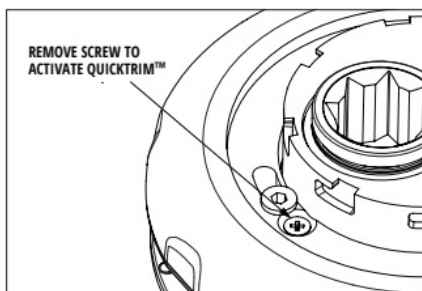
Locate and remove the countersunk cross-head screw.

- **STEP 3**

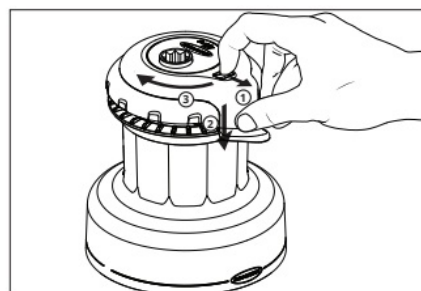
Reassemble the winch as per instructions above.



**STEP 1**



**STEP 2**

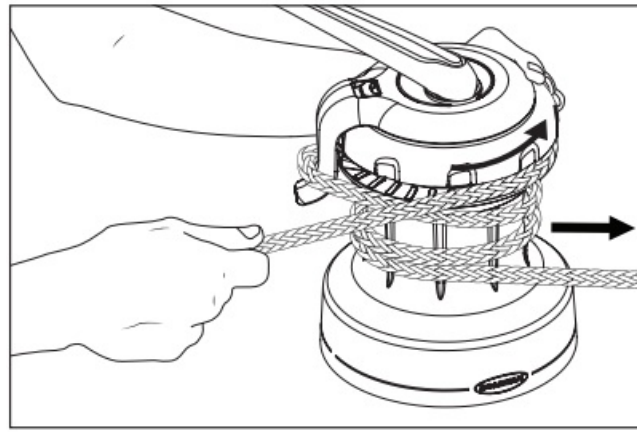


**STEP 3**

### **USING QUICKTRIM™**

To release line tension, first hold the tail of the rope in one hand whilst placing your other hand on the top cover of the self-tailer. Use the palm of your hand to grip and rotate the top cover anti-clockwise against the spring pressure and maintain it in that position. The self-tailer is now able to turn beneath the cover, allowing the line to be eased off the drum in a controlled manner.

For more information and a demonstration on using QuickTrim™ visit: [ronstan.com/winches](https://ronstan.com/winches)

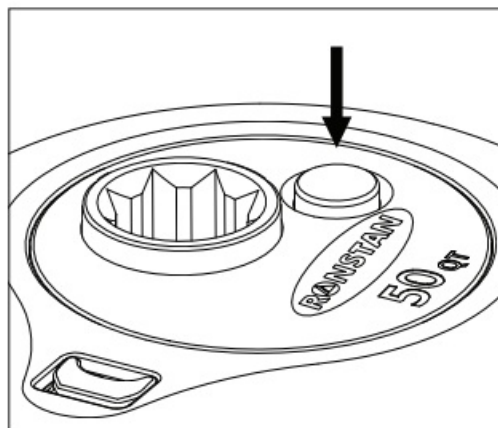


Using QuickTrim™.

### USING THREE-SPEED MODE (RA6503 ONLY)

To engage the first gear with a fast 1.4:1 gear ratio, push down the button on the top of the winch and turn the winch handle clockwise. When the load becomes too heavy, turn the handle anti-clockwise to switch to the second gear. The winch will now operate as a two-speed winch, shifting between second and third gear with changes in handle direction. To return to the first gear for fast speed, simply push the button again. Avoid activating fast speed when the winch is already under high load, as significant effort may be required in the second gear for disengagement. In this event, ease the rope to reduce the load to facilitate disengagement.

**WANT FASTER LINE SPEED?** Three-speed upgrade is available for the two-speed 50QT.



Using three speed mode.

## SAFETY NOTICES

### Read All Safety Notices and Product Manuals

Do not install or operate this winch before reading and fully understanding the contents of the Product Manual.

### Stay Alert When Operating

Winches are very powerful and have the potential to cause significant damage and/or serious injury if used improperly or without due caution and vigilance.

### Operators Must Be Trained

Help prevent significant damage and/or serious injury by ensuring any person operating a winch has a thorough understanding of its proper operation and is aware of the potential hazards involved. As a minimum, all winch operators

must read and understand the Safety Notices included in this Quick Installation Guide and the Product Manual.

**Particular attention is drawn to the following points:**



- Children and others not qualified to operate a winch must be kept at a safe distance from the winch and any rigging or fittings that are under load.
- Long hair and/or loose clothing must be tied back to avoid being caught in the winch.
- In the event of a line override or other fault with an electric winch, stop the winch and turn off power before attempting to resolve the problem.

### **Avoid Accidental Operation**

Remove winch handles when not in use, and turn off power to electric winches to help avoid unsupervised or unintentional operation. Failure to do so could result in significant damage and/or serious injury.

### **Maintenance**

Turn off power to an electric winch before performing any maintenance or service tasks. Failure to do so could result in significant damage and/or serious injury.

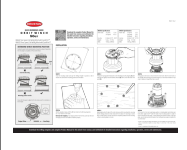
Download the complete Product Manual for this winch from [ronstan.com/orbitwinch](https://ronstan.com/orbitwinch) for detailed instructions regarding installation, operation, service and maintenance.

## **FAQ**

### **Q: Where can I find the complete Product Manual for this winch?**

A: You can download the manual from [ronstan.com/orbitwinch](https://ronstan.com/orbitwinch) for detailed instructions on installation, operation, service, and maintenance.

## **Documents / Resources**

	<p><b><a href="#">RONSTAN RA6502 Two Speed Self Railing Winch with Quick Trim</a></b> [pdf] User Guide  RA6502, RA6503, RA6502 Two Speed Self Railing Winch with Quick Trim, RA6502, Two Speed Self Railing Winch with Quick Trim, Self Railing Winch with Quick Trim, Winch with Quick Trim, with Quick Trim, Quick Trim</p>
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## **References**

- [Orbit Winches | Ronstan Sailboat Hardware | Ronstan Sailboat Hardware](#)
- [Products | Ronstan Sailboat Hardware | Ronstan Sailboat Hardware](#)
- [User Manual](#)

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