

Beginners Guide to Fitting a New Winch

Version 1 – 12th August 2024

There will be many ways to skin this particular cat. If you have any suggestions for improvements or alternatives to consider, please send them in to the email address on the Contact page of our website www.drsailing.org

In the event that you find yourself having to fit a new winch, take a few moments to read the hints and tips here. I take it you may have read our “Beginners Guide to diagnosing Under The_Deck Problems”, and feel pretty certain it’s the expensive winch that needs replacing.

The new winch I fitted for this was a Stinger Winch. It came with very clear and good manufacturer instructions, but even so I was tempted to fit the winch twice and try to improve on things.

The stinger is a lovely product – weight, speed, power etc – plus it has no software aboard, ...I don’t think – so is not a “smart winch” in the sense that an RMG winch will be. I have an RMG winch on my One Metre.

So, the Stinger may be a little simpler to set up.

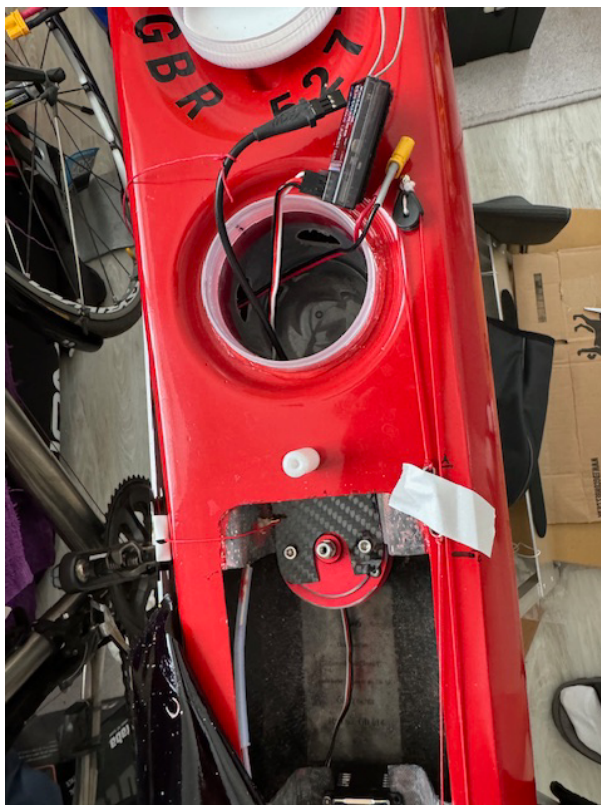
The example here in this document is on an F6 Marblehead – useful learning as you have to set the mainsheet so that it can accommodate two rig types – swing and conventional. One learns a lot more !!



Remove your deck patch. If you do it carefully, it may even go back on with a spot of soapy water!!

TIP: Set your mainsheet fully out (your rig mainsheet lengths maybe different, so choose the one that moves your hook “out” furthest). NOW TAPE IT TO THE DECK SO YOU KNOW EXACTLY WHERE YOU ARE.

The mounting screws for the winch are beneath the drum, so the drum is going to have to come off. You simply remove the screw and washer, set it aside safely, and the drum will simply lift straight off the drum capstan.



TIP : Before you lift the drum off the winch capstan, prepare two small pieces of sticky tape. The carefully lift the drum off the winch being careful to preserve the sheet position on the drum. Now apply the two pieces of tape, one just ahead of the sheet and one just behind so that you preserve the exact position that the mainsheet was in, at the fully out position, when you put the drum aside. In the photo above, follow the line of the mainsheet over the port side – you might just be able to see the drum lying there preserved with two narrow strips of white tape.

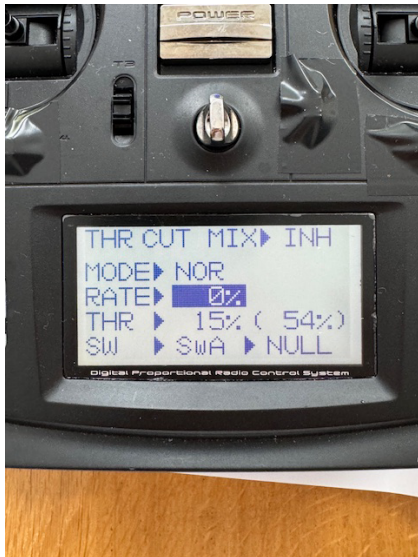
You can see two screws securing the winch in place. You are going to remove those and pop the new winch in its place.

TIP : Before you remove the winch from the boat, check out the cables into other parts of the boat – they probably simply lead into the Pot. Tie a thin retrieval line to any cable end from the winch so that when you remove the old winch, it becomes very easy to thread to new cable/s back to the pot. If you look at the photo above very carefully you can see a fine red line tied to the end of the black winch cable at the pot.



Unscrew the two retaining screws and lift the old winch out. Have a good look around to make sure the mainsheet and drum are still secure, plus the cable rethreading string/s are neatly available. Have a thorough inspection to make sure you understand everything down there before we load up again.

The Stinger winch instructions say to check the transmitter idle setting is “off”. On the Futaba this is easy to check – by default both my transmitters seem to be set up that way. Can you see in the photo that on the throttle cut menu it says MIX=INH (inhibit)? I think that’s the setting right there.



The winch instructions say that once the winch is responding outside the boat, you want to check that full-in to full-out on the joystick gives you six turns on the winch.



TIP : In order to count the rotations while the winch is on the bench, simply stick a piece of tape on and mark it with a pen.(see photo above)

The idea in the Stinger instructions is that if you get less than six rotations, adjust your end limits until you do get six. Bear in mind that this winch will be suitable for Ten Raters as well, and you may see the challenge.

Anyway, I ended up at limits of 140 (the maximum at both ends) and still only reached about 5.8 rotations. Nevertheless, I went ahead blindly instead of thinking the whole

thing out and as a result had to do the whole set up twice. More of this later. Basically at 140, half the fine adjustments you want, don't work as 140 is a maximum.

Now we are ready to reverse the procedure and get the new winch in. Tie the cable rethreading line/s to the cable ends and ease the new winch into the boat. Lead the cable end/s back into the pot now while you still have finger room.

Get the winch on to the mount, and put the two retaining screws back in.

The instructions for the Stinger suggest you cable up the winch outside the boat into the receiver and battery so you can test the function.



Now set the joystick fully out, secure the winch into the boat, make final checks of the winch turns, the cables the screws and re-mount the new winch to the bracket as shown above.

The instructions now have you start at fully sheeted in or out to set the winch back to the boat. I chose fully sheeted out as my sheets were taped here.



TIP : carefully remount the drum and cable up. My suggestion is don't put the securing screw back on the drum.... Just yet.

Summary

You may be good to go now. Get your rig set, transmitter on and gently(remember that the drum retaining screw is not in yet) give it a try.

If all is great, put your drum retaining screw back in, slide your deck patch on – and go sailing!!

As I was doing a like-for-like winch replacement, and using a new but same brand of transmitter, I thought I'd be lucky at this point. It might be fine for you, but it wasn't a clean plug-and-play for me.

With echoes of a conversation with GH, I decided to start dialling the new transmitter on to the boat using GH's idea of "understand where your centres are". It was only about 20 minutes more work – I am properly delighted now, plus at last you get to properly understand what is going on. We shall document all that in another Beginners Guide – this time to "Setting a New Transmitter to the Winch". This is already available as a download on the Datchet Radio Sailing website.