

## Telstar 28 Centerboard Replacement

I am going to describe what I suggest to be your activities and concerns from the time you remove the remainder of the board from the boat.

1. The video is good for removal, but remember that they had a clean board. Yours probably has living creatures in and around it. It also probably has sharp parts. Caution advised.
2. As you remove the board, ensure that you capture all the pieces, as there are several small parts that would be difficult to replace.
3. DO NOT remove the roller and line until you have taken several good pictures from different angles WITH THE SMALL RODS IN. How the lines go over the main roller and the small one with the pin through it between the main roller and the board is critical. Count the line wraps.
4. If you have time, clean and inspect the casing for the board to ensure that there is no damage and to remove any barnacles or growth.
5. If you have the long board, see template that I will add to the end, then you do not need to send it to Chesapeake Light Craft (CLC), as they have the computerized image already. If you have the older, shorter board, then ask them if they need it.
6. When they complete the board, it will have epoxy infused with carbon. It will be black. You will want to put bottom paint on it. I am trying a new one called Eco-Clad. I will update the group on how well it works. You may as well get the whole board done. Be sure to use a paint that will work if it is often out of the water, as most of your board is most of the time.
7. There is a guy in Annapolis that used to work for Tony Smith who helped put my board back together and took notes and pictures. His name is Kurt and I have his phone number. He could do your board also. I do not know how much he charges or how good he is.
8. Tony assembled my board on a special table that had the indents for the white side boards that hold the centerboard in position in its case. It makes it easier to assemble. I believe that Kurt will have access to it, but I am not sure. You do not have to have it, but it does make the job easier.
9. I bought about 10 ft of the best line I could get. You may want 12 ft. 10 ft was enough, but by only a little. Remember to replace the screw holding the line in the right position fore and aft. This is critical. When the board is vertical, the line roller should be at the top. Use your old line as a guide, if it has survived in tact. Make sure that the line is wound the right way with the right number of turns. See 11. It is important to have the lines going the right

directions around the small roller (two parts, small cylinder of metal with a nonmetal hollow cylinder through which the metal one goes) between the main roller and the top of the board.

10. Once you have the board back together, you will want to put a wood or metal (Tony gave me a metal) pin to go through the main roller and side boards, but does not stick out beyond the side boards more than about 1/8<sup>th</sup> of an inch. If you can, check to see that it spans the centerboard case where the side board indentations are. This is the pin that the video shows you knocking out. You want it to fit perfectly.
11. Test the board to ensure that winding it clockwise from the starboard side raises the board. THIS IS VERY IMPORTANT! You do want your board to kick up, don't you?
12. Marking the board for the angle where you can find the pin holes in the main roller is a good idea, but not absolutely necessary. You can still find them by having your friends under the boat raise and lower the board while you search for the holes under the line.
13. The best way to install the board is with the boat on stands high enough for the board to drop to its vertical. The older boards you can probably do on the trailer, but you cannot test that it will go to the vertical. The larger board will have to go in vertically. On place offered me a survey hoist, where the boat stays in the lift while you install the board. They gave me an hour to get it in, which would have been just about right, but close! They were going to charge me \$6 a foot for the hoist.
14. I installed mine with the boat on a lift and a guy in the water in a dry suit that wasn't! Really a dumb idea. If any of the pins had dropped in the water, we would have been out of luck. If the boat is in the water, remember that wood floats. It may be hard to handle.
15. Make sure all holes are clean where the pins go in the roller and through the pipe that goes through the roller.
16. The video shows the shims, but does not make a big deal of them. They are a big deal! Your friend's arms will get tired holding the board in place, otherwise.
17. Again clean out the centerboard case, including where they pumped in 5200 just below the roller. Otherwise, your hole to know out the pin will be covered by the rubbery 5200. I LEARNED THIS BY EXPERIENCE!
18. Have someone in the boat looking down to help line up the side boards in their indents. These make good guides. When they push up the board into the slot and the pin is visible,

have them put in the shims and then knock out the pin. Insert the permanent cylinder and ensure it goes all the way in. Mine did not fit in the port sideboard, so I had to have them tap the board underneath to get it lined up. It took a while to figure out how to make that work.

19. The video makes it seem that lining up the holes in the two rollers is easy. It is not. Even the slightest misalignment will prevent the pin from dropping through. I used a two-step process. I used a smaller diameter long bolt to get the lineup approximately correct. Then, as shown in the video, I use a drill with a  $3/8^{\text{th}}$  bit to get them aligned. I only barely spun the drill, just enough to get the alignment. I then inserted the pins and countersunk them with that same small-diameter bolt.
  
20. Test the crank to ensure that the board goes full up and down. If it does,  
CONGRATULATIONS!
  
21. The video is probably OK for the rest. I have not put in the 5200 yet, as I wanted to make sure it was done correctly. I still have a few doubts!