

Runner Sharpening Tips - by Bob Gray, US4654

Sailors today are paying upwards of \$1,000 for a pair of runners. It makes sense to take the time to make sure they are properly sharpened. Below are the steps I take to sharpen runners. Some of the steps are my own, and others are borrowed from such notables as Evert Vanderberg, Ron Sherry and Greg Smith.

1. Decide on the profile and crown you want. Just to insure we are on the same page, crown is the portion of the runner edge that is less than .008 inches off a true bar. It is found by placing the runner on a true bar, pressing down on it with your hand over the bolt hole, sliding a .008 inch spacer in from both ends, and measuring the distance between these two points. That distance is the crown.
2. Look at the existing profile and crown on your true bar so you can see where it has to be changed.
3. Work the edge on your belt sander from end to end, emphasizing those spots that need the most attention.
4. Try to make only 10 or 12 passes on each side. This prevents the runner from overheating.
5. After each run on the sharpener, place the runner in an ice water bath. You can line your runner box with plastic and fill it with ice water. Leave it in the water for at least 5 minutes.
6. After the runner cools down, recheck the crown and profile and repeat steps 3 through 5. Do this until you get the result you want. Be patient. Sometimes it takes me over an hour to get a runner the way I want it.
7. Once you have the desired result, take a 180-320 grit stone or equivalent and make several passes front to back, down each side of the edge (each side of the 'V'). This will debur the edge- after you do this, recheck the runner on your true bar to make sure you haven't messed up the profile.
8. The following are some fine points that will help you get that really nice edge.
 - a. Ideally you should use a belt sander with an 80-90 inch belt. A smaller sander could be used, but it would be difficult. I've found an 80-grit belt works well.
 - b. Here are some suggestions for the runner's crown:

Standard Platen	11" - 13"
Bull Nose and 30" inserts	14" - 16"
36" inserts	17" - 19"
 - c. Most runners should be sharpened to a 90° angle.
 - d. When checking the profile, rock the runner forward and backward to see if there are any high spots. If there are, work them out on your sander.
 - e. If a portion of the profile is being stubborn and won't change, take a fine stone and very carefully shape the edge the way you want it. This will dull that portion of the blade. You will have to evenly reshape the whole runner.
 - f. Avoid too much true flat in the center of the crown. Try for a nice continuous curve. One of the problems you'll run into with too much true flat is that as the edge wears this flat section may become concave. Runners with concave edges are slow.
 - g. Ideally you should balance the crown so you have 60% forward of the bolt hole (i.e., with a 15" crown, the crown should start 9" forward of the bolt hole).
 - h. There are many theories about dulling the back edge after sharpening. Dulling back is using an abrasive to remove the sharpness from the edge. I dull back from the ends to the beginning of the crown. I use 320 grit wet/dry, sandpaper. I take the sharpness off at the start of the crown and increase the dulling until I get a little rounding of the edge near the runner's end. I also make sure the back of the runner's edge is very dull and rounded-up a bit. This keeps the back end from acting like a brake when the runner rides over bumps.
 - i. The final item some feel is overkill. I always sharpen runners in an open garage when the temperature is below 40°F. If you sharpen runners in a 70° room and then take them outside, the profile will change, generally **getting flatter**. I always leave my runners out in the garage overnight before sharpening. After I sharpen them, I leave them outside overnight in my truck to stabilize the metal and recheck them in the morning. It's not uncommon to have to do some touch-up.

No matter how much your runners cost, you want them to perform as best they can. I constantly hear guys saying that they can't get a set of runners to go and that they are no good. The runners aren't bad; they just need to be properly sharpened. If the runner is bent, then that's a different story. Follow the steps above and get that nice profile. You will like the results!