

This is the procedure we followed when re-packing our own stuffing box some years ago:

- 1) Unthread the large gland nut and move it as far forward as possible.
- 2) Reach into the fixed (aft) part of the stuffing box with an ice pick, cork screw, or needle-nosed pliers, to remove the old packing material. I was surprised to learn that the material is cut into short lengths, which wrap around the shaft one time, and meet at the top of the shaft. On our boat, there were three of these rings of packing material, which I was told by local marina experts, is pretty standard. I now know that some boats have as many as 5 separate packing rings. If you're careful, you'll be able to remove the old rings more or less intact, and measure them for determining the thickness and length of the new packing.

Note: There are several packing materials to choose from. Flax packing still seems to be preferred by most old timers, and is in fact what we opted for in our stuffing box. If you want to pursue a more modern material, you might check in with West Marine customer service for recommendations. If you're forced to buy your packing material before removing the original material, the most common size seems to be 3/16". If your boat is hours away and you want to be sure you're covered, you could purchase a minimum order of 1/8", 3/16" and 1/4" for a total of \$20 to \$25 depending on the type you choose.

- 3) Before moving ahead with the repacking operation, it's a good idea to check the condition of the rubber hose between the shaft log in the hull and the stuffing box assembly. If the hose is old and stiff (brittle), it should be replaced, and if the prop shaft is noticeably grooved in the location where the old packing rings rubbed, it is recommended that the length of the new hose be adjusted so that the new packing rubs on a new section of the shaft. I would also polish the shaft with fine sand paper (possibly a 200 grit). Be sure to ask for stuffing box hose and not exhaust hose.
- 4) After checking and/or replacing the hose, cut the new packing material to length, forming three separate rings, and install them into the female part of the stuffing box.
- 5) It's recommended to stagger the joints of the packing rings, and "scarf" the ends of each ring so that the ends sort of mesh together, giving the best seal. It worked best for me if I tightened the gland nut on each new ring of stuffing material individually, until all three are installed. Tightening the gland nut on each ring kept them compressing on each other until all three were in place. I used a Teflon based grease to lubricate the rings of stuffing material and prop shaft, although I was told later that this was not necessary.
- 6) Snug down the large gland nut gently over your new packing, but not so tightly that the prop shaft becomes noticeably hard to turn. After getting back in the water, adjust the packing gland so that you observe approximately one drip every 15 seconds.

It's my understanding that this drippage should continue with the engine running and the prop shaft turning, or with the engine shut down. This is obviously not as precision an adjustment as one drip in 15 seconds might indicate. The point is that if there is no

dripage from the stuffing box, the adjustment on the gland nut is very likely too tight, and the result will be premature grooving of the prop shaft. On our own boat, I was surprised how loose I had to make the gland nut before I was able to get any dripage at all. You'll want to check the stuffing box frequently for the first 10 hours or so to be sure that the new rings have "settled in" your adjustment is holding.