

## REBEDDING FIXED PORTLIGHTS

Rick Lucas: *Ping*

Ping is 25 years old and she has leaks. Not below the waterline but above decks. The worst was in one of the large fixed portlights. When I'd hose down the boat after a good sail, a damp spot the size of a 45 RPM record would show up on the dinette seat cushion. Immediate attention was required. I tried to take the portlight out before, but a previous owner had poured enough silicone into the gap than you'd find on Rodeo Drive for a sale at Louis Vuitton. Although it didn't keep the water out, it held the portlight firmly in the boat.



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OK... this required some planning. I reviewed the emails I'd saved on the topic from the SailNet message boards. It was a good place to start but there were as many opinions as there were posters. Armed with all that good information I went to the boat with my tools. The most important being my Dremel. Others had problems getting their portlights out and the brute force they used could break the glass. The Dremel was my finesse. I used a small, triangular bit to rout the silicone out from between the portlight and the deckhouse and it did a great job without gouging either.

Once I had enough silicone out and could move the portlight slightly outward, I went on deck with a razor blade and cut away at the foam tape that was used by the factory to bed the light. Soon the portlight was free and in my hands. I have to say that foam tape is not what I'd choose to keep the water out of the cabin with an opening that big, but I don't build boats for a living. The foam tape didn't look as though it had deteriorated too badly, but it had lost a lot of its elasticity. I didn't really think it was the cause of the leak, but rather that the seal between the glass and aluminum frame had expired somehow, so I had to take that apart.



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The two halves of the aluminum frame are held together with a total of four screws and two metal tabs that I then undid. With a little muscle, the metal pulled away from the glass revealing a black rubber gasket circling the perimeter of the glass. There was also some factory applied silicone that I thought was a gasket sealing the inside of the frame to the glass to keep the water out. It looked like a gasket because the elements had oxidized the part of it that was exposed. Time had not been kind to this seal and I believed that I found the source of my leak.



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After scraping and cleaning all of the old sealant from the glass and frame I reassembled it, this time using white 3M 4200. Next I cleaned up the deckhouse opening and the outside of the frame and bedded it with black BoatLife sealer. Because the opening was larger than the

portlight, I shimmed the frame with some high-density closed-cell foam to get it into proper alignment then screwed on the interior bezel. Aside from cleaning up the overflow that oozed out between the frame and the deckhouse, that was it. All that was left was to let the sealers dry and trim the sealer between the frame and the glass.

I waited expectantly for El Niño to bring the next storm to see if my efforts to seal the leak had been successful. Two days later the southland was deluged with 3 inches of rain. I went to the boat after it was all over and was pleased to find that not a drop had come through the newly sealed orifice. Success!

**Things I'd do differently:** I would purchase some new vinyl channel material that goes between the glass and the inner aluminum frame from [Catalina Direct](#). It is virtually the same as the OEM Pearson material. With that, I wouldn't have to depend upon the polysulfide caulking alone to keep the water where it belongs.

Cost: About US\$15.00 for two tubes of sealer.

Time: 1 Day. It should be shorter to do the others now that I know how it all works.