Sealing Leaks in Lewmar "Old Standard" Portlights

By: Tim Porter C-380 #199 "Serendipity"

If you have an older Catalina, generally between (year references needed from Gerry D), your Lewmar portlights are likely what are known as the "Old Standard" portlight. (note: these are NOT the overhead hatches, which are "Ocean" series hatches) These portlights can be identified by a more rectangular shape than Bomar units which have rounded ends, and by the split in the upper and lower frames on each side. If you have these portlights, you have probably been battling hard-to-find leaks.

Most of these leaks are not from the seal or the latches, but rather from those splits in the frame I noted above. The frame itself is a hollow extrusion and the two halves are joined with a plastic insert that is pressed into them which is then staked into place by dimpling the backside of the frame. Over time, the sun and age takes its toll on this plastic piece and it no longer keeps a seal between the frames. Eventually, water will seep into the hollow of the extrusion and run down inside the frame. This water will seep out of the screw holes for the inner frame and latches, or come out any unused hole drilled in the bottom frame. Many times it appears to be the seal leaking, or the hole for the latch (it has an o-ring that rarely leaks) because the leak appears near the latch since that's where the holes in the frame are.

There is an easy fix for this without having to remove the portlight, which is to stop the water from entering the frame at the joint. Rather than spreading a sealant on the outside of the frame on the joint, I found success by 'injecting" silicon into the hollow of the frame, just below the joint, effectively sealing the bottom side of the plastic piece. If you just try to fill the unused holes or seal up the screw holes for the latches and inner frame, it will usually develop a leak later on because water will pool inside the extrusion. And if you live where winter temps reach freezing, any water inside will freeze and expand, pushing out any sealant through open holes, or worse. If your boat has experienced freezing temps, take a look at the outside of the lower half of the fixed (non-opening) portlights on the hull; they are likely bulged-out from trapped water that froze inside the extrusion. The trick is to prevent any water from getting inside the frame at all.

The following should be done on a dry day and after any water has had a chance to drain and dry out on the inside of the extrusion. Remove the plastic trim from the inside of the portlight, exposing the inner frame. Remove all the screws from the inner frame and the frame will come off (some of these screws are different lengths to accommodate different thickness in the fiberglass, so it's a good idea to mark them or lay them out in a pattern so they can be installed back into the same position). The portlight is bedded-in so it won't move when the inner frame is removed. Now is a good time to check the perimeter of the inside of the hole cut in the coachroof, where the outside frame is bedded down. I found a few spots where the bedding was thin or even had a pinhole in it. Lay some silicon on any thin spots and work it in to take care of any leaks there. Next, using a tube of silicon with the cone-tip cut at its smallest point (you can whittle the tip down as well), inject some silicon into the screw hole just below the split in the frame. Watch inside the next lower hole and stop when you see the silicon just starting to appear. Reinstall the inner

frame, leaving out the two screws where you injected the silicon and the next lower ones (4 total). This will allow air in to cure the silicon. After a few days, reinstall the remaining screws. If you can't put the screw(s) back in the hole(s) below the joint due to cured silicon blocking it, just leave it out as it won't matter since the portlight is mostly held in by bedding. Now enjoy your dry cabin on those rainy days or wet passages!