



Chesapeake Tartan 30 Association

CLEANING & CAULKING DECK FITTINGS

Brad Armendt, T-30 #282, *Emprise*, September 1998*

Note: Part of the following on caulks and polish is redundant with information presented in my separate article on port window replacement, but it's repeated in a somewhat different context.

Q: I've just removed all my deck hardware. What should I use to rebed everything? I've already gotten one recommendation to use 3M 5200 on the ports. What do you think? Do you have any idea how much caulk was used? And please tell me about what you polished, how you polished it, and how you plan to keep it polished on *Emprise*. (From Internet email, edited)

A: During the '97-'98 winter we had an all-over (above waterline) paint job done with AwlGrip on our T-30. Everything but the teak toe rails had to be removed before painting, then replaced afterward. All teak replaced was new. The boatyard let us remove some of the hardware and then replace it after the paint job was done. Part of the hardware was replaced with new; the rest we took home & spent days cleaning & polishing while the painting proceeded.

Caulk. The type of caulk needs to be fitted to the application. Some things, like cleats for example, you install "permanently," not planning to ever remove them unless you do a major overhaul/repair/paint job on the boat. The yard has 3M 5200 and uses it for some things, like attaching an external keel, but they didn't use it for anything on deck. Instead, for long-term installations they used either Sikaflex 241 fast-cure (1 hr) or Sikaflex 240 slow-cure (>3 hrs). These are all-purpose adhesives/sealants, with good adhesion and flexibility. If you have to remove something installed with them, you have a semi-tough job. It's possible, but you probably will damage painted surfaces, or scratch gelcoat. If you have a piece of teak stuck on with these, you'll probably break it up while trying to remove it.

Other things, like ports and some teak trim need to be installed leak-proof, but you can be certain that you'll have to remove them before many years, for one reason or another. For these the yard used GE SilPruf. SilPruf also has the advantage that it's recommended by GE for installation of acrylic (e.g., Lucite) ports, because it will not cause the acrylic to craze as most silicone caulks do. As pointed out in a separate article on port window replacement, you should *never* use any caulk that is catalyzed by acetic acid (i.e., smells like vinegar) on acrylic; it will cause crazing. SilPruf makes an excellent seal, but things caulked with it can be removed without too much trouble or damage. For example, after removing the screws, you can usually force a putty knife into the SilPruf joint to help pry off a piece of teak, and then you can pull off the teak without breaking it. As previously reported, I replaced the acrylic in my ports in 1991, and used SilPruf to caulk them. We had experienced no port leaks for seven years when we decided to have the boat painted. The yard used SilPruf again when it reinstalled my ports after the paint job. It's good stuff, and is really easy to use.

How much caulk was used? All of the Sikaflex and GE Silpruf caulks come only in 10 oz. cartridges, for use in a caulking gun. I bought one cartridge of Silpruf, and didn't use it all. The yard had cartridges of the Sikaflexs and Silpruf, and probably used a couple, mainly because it takes a lot of caulk under things like the teak winch pads. But altogether, the caulk was a trivial part of the material costs.

By the way, some caulks (notably Silpruf, but some others, too) have expiration dates somewhere on the cartridge. It's *very important* to get fresh caulk — i.e., before it expires. For example, out-of-date Silpruf *probably will not cure!* Wherever you buy any of these caulks, insist on finding out the expiration date, otherwise go someplace else. Some people in stores that sell caulk are unaware of the expiration problem. When I bought Silpruf in earlier years, I got it from a plastics store (Read Plastics in Rockville, MD). Check in the yellow pages for one near you.

Polishing. After we got the boat to the yard, we took off most of the hardware; later, the yard removed the lifeline stanchions, pulpits, Bomar mid-cabin hatch, genoa tracks, mooring cleats, and all the teak (except toerails). We carried *all* the metal items home (except the black-anodized genoa tracks) and spent several weeks cleaning and polishing them, while the yard proceeded with preparation and then painting of the hull, deck and cabin exterior.

After starting the clean/polish operation, I realized how much work I had taken on, and decided I needed more horsepower, or the job would take more time than we had. So I bought a small Delta bench

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grinder (\$40) and equipped it with a fine wire brush wheel and a buffing wheel. The wire brush was a *big* help.

For polish we found that 3M Marine Aluminum Restorer and Polish worked really well on both aluminum and stainless steel. We got it at a West Marine store, an 18 oz. tub for about \$15, I think. 3M also sells marine *stainless steel*/restorer and polish at a higher price/oz., but we read the labels and found they both contained the same ingredients. *Practical Sailor* said the 3M stainless polish was the best on the market. We think the aluminum polish is wonderful, too.

We replaced a few hardware items with new ones (e.g., original Perko chromed bronze hatch hinges), and added a few new items (e.g., two additional 9 inch mooring cleats at the bow), but all the rest was cleaned and polished before reinstallation. The original aluminum alloy items such as cleats and chocks were made of Marinium by Wilcox Crittenden (WC). We like Marinium hardware, because while it does corrode a bit, it still looks good after 23 years. Stainless steel, on the other hand, will rust in a saltwater environment. It doesn't rust away, but if you don't keep it polished it gets pretty crummy-looking.

Tartan Marine used a lot of Wilcox Crittenden hardware on Tartan 30s. WC used to belong to a company named North & Judd, and apparently had gotten into some financial difficulty. But in mid-November 1997 WC was sold to a new group from Rhode Island, who are making a strong effort to get WC back in the forefront of the marine industry. I discovered this while trying to get some WC hardware to match that originally installed on my boat by Tartan. I wanted cleats and deck fill plates of Marinium to match the old parts. Local chandleries didn't have anything in stock and got nowhere trying to special-order items from WC. Finally I called WC direct (1-800-447-1077) and talked to Don Allen (who I think is one of the new owners). He was very helpful, and eventually I got what I needed, just in time for the yard to install them, but it took several follow-up calls to make this happen. WC won't sell to you *directly*, but will work through a marine store that will place special orders.

I used the wire wheel on the grinder to clean the old caulk off the old fasteners (most of which were reused), and the bottoms of hardware that had been mounted with caulk. I wire-brushed some of the stainless steel and Marinium hardware, before polishing with the 3M aluminum polish. But in many cases I found that wire-brushing wasn't needed; the aluminum polish did it all. Similarly, I found that the buffing wheel was seldom needed. The more we used the aluminum polish, the less we needed to buff anything, so I finally took it off the grinder.

The aluminum port frames on our T-30 are solid alloy, not painted or anodized, so they could be polished up safely. After removing all the old caulk, I wet-sanded them (in a laundry tub in the basement) using 400-grit wet-or-dry sandpaper. That got all the corrosion off. Then we polished them with the 3M aluminum polish and they came out looking very nice. This is the second time I've done that to the port frames.

How do we plan to *keep* stuff polished? Well, we'd rather sail than polish. Except for occasional major renovation efforts like this past winter's, we usually polish the outside metal once a year, whether it needs it or not. But from now on, when we do polish it, we'll use the 3M aluminum polish.

Bomar Hatches. If you have a Bomar *cast* hatch like we do, you might like to know that Bomar will sell you (direct) a kit of new Lexan with special glazing caulk and a new gasket for ~\$100. The yard removed our hatch from the boat; we took it home and completely disassembled it, then took the frames back to the yard to be repainted to match the boat. Then we took the frames back home, installed the new Lexan, gasket, hinge pins, etc. and took it back to the yard for reinstallation on the boat. Looks great, and was *much* cheaper than buying a new hatch.

Cleanup. Something we learned by watching boatyard craftsmen: After mounting a piece of hardware and scraping up as much of the excess caulk as possible, the best way to clean up the remaining caulk is to wet a rag or paper towel with 3M General Purpose Adhesive Cleaner (Part No. 051135-08984) and wipe it up. This stuff works on all the caulks and glues we tried it on, and it's safe to use on gelcoat, new AwlGrip, and Lucite, among others. Saves a bunch of time and leaves a neat job. We got it in a quart can (about \$10) from our boatyard, but later I noticed it's in the Boat/US master catalog. Haven't seen it in the boat stores I go to. Goes a long way — we still haven't used up our first quart. After using it to clean up caulk, it's advisable to wash the area down with water and a little detergent as soon as the caulk is well-cured. This removes residue that may become an unsightly stain later.

Disclaimer: We have no financial interest in any manufacturer, vendor or boatyard. We're just reporting what seems to work best for us.