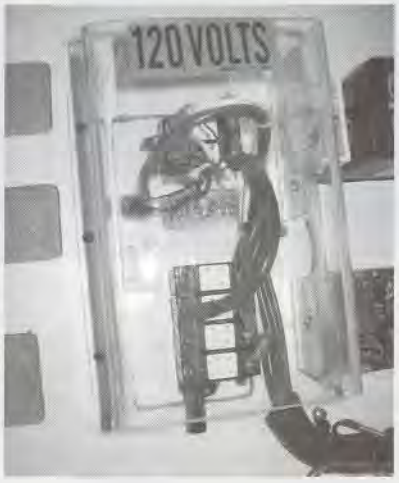
C375 Tech Notes

A.C. Panel Insulation Addition

For the last 13 years, I have been working in a nuclear plant as part of the Field Engineering group. From day one, one thing has always been at the forefront of every project we have been involved with: safety. One might wonder why I bring this up. Well, when we took delivery of our new C375 in 2009, one of the first things I noticed was a potential for electrical shock behind the electrical panel. The 120Vac electrical panel on our boat has one master circuit breaker and four separate load circuit breakers with one spare space, most likely for AC systems. These four breakers are tied together using a copper bar. On our boat, this bar actually extended past the plexiglass guard. To eliminate this shock hazard, I simply installed a short shrink tubing on the end of the bar. Quick and simple. *–Francois Desrochers*



Catalina 350



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The C350IA would like to thank its contributing members for so readily stepping up to the plate with articles for this issue. Unbeknownst to this months contributors, the C350IA has decided to reward those who make contributions to *Mainsheet* as an incentive. So I am happy to say, that those of you who are chosen by *Mainsheet* for inclusion in this issue, will be receiving a nice gift from the C350IA. Thank you to all. This month we have an article submitted by the Conways on installing a "Tankette" to help keep the head smelling fresh.

Mike Dwyer sends us his article on repairing/replacing the coolant fill hose to eliminate that mysterious puddle of antifreeze that many of us find under the engine with no apparent source.

If you have ever banged your shins at the top of the companionway on your C350, Alan Lohman provides another method to protect those shins from damage when making speedy exits from down below.

Finally, Richard and Jan Massey have sent us a "Tech Tip" as well as an article and photos on how to change out the raw water pump on our Universal/ Westerbeke/Kubota engines.

Thanks and congratulations again to all who submitted to this issue. I hope to hear from the rest of you for the February issue. Simply contact me at tjr3c@verizon.net. Enjoy your reading.

Heads UP

Eliminate odor from your thru hull intake line to the head for less than $70 by installing the Tankette (www.tankette.com) and using a slow dissolving household chlorine toilet bowl tablet. The intake water passes through the Tankette and comes in contact with the chlorine tablet on its way to the head. Installation takes less than 30 minutes to solve the "head-ache" of sea water fermenting from marine life trapped inside the intake hose. Simply install the Tankette unit as close to the thru hull as possible. (Fig. 1) We placed it in the port side thru hull opening in the forward berth about 6 " downstream from the thru hull intake valve. (Fig. 2)


Fig. 2

- Before installing, close the thru hull and run the head to pump out any water in the line.
- Cut the plastic hose with a plastic pipe cutter.


Fig. 1







- Slide a clamp onto each section of the newly cut hose.
- Insert the tankette between the newly cut hose and reattach the intake hose onto both ends of the tankette. Be sure to position the unit so water will not spill out when the cap is unscrewed for a refill tab.
- Tighten hose clamps.
- Unscrew cap on Tankette, insert chlorine tablet and screw cap back on.
- Open thru hull

Two blue tabs are supplied with the unit. Quite frankly, the blue tab doesn't really eliminate odors and they are quite expensive. The solution is to replace the little blue tab with a slow dissolving household chlorine toilet bowl tablet. The tablet has to be cut in half to fit into the Tankette compartment. (Fig. 3) One-half a tablet lasts ~6 months. The "nose" knows when to insert another half tablet! We have heard that the chlorine in the toilet bowl cleaner tablets might corrode head parts, but a fellow sailor and chemist who recommended the Tankette says chlorine can't corrode plastic (they have used the Tankette on their C400 with the chlorine tabs for 6 seasons with no issues). As for metal parts and fittings, empirical evidence would suggest that the release of chlorine from a very dense slowly dissolving tablet is insufficient to corrode hardware.

This is truly one of the cheapest and most noticeable improvement we made to our 350.

Tankette: ~$50., plastic hose cutter $15. chlorine tabs $2.

Note: If your tankette comes with a 90 degree quick connect hose barb, you can purchase a straight quick connect hose barb at any home improvement store for less than $5. *–Wally & Connie Conway, S/V* Arkeoo #467, *Orange Beach AL*

Coolant Overflow Failure

I have noticed each time I change my oil that the coolant overflow hose that runs from the heat exchanger to the bulkhead mounted reserve tank was kind of flimsy. This spring, when I was putting the boat into service, I noticed a puddle of engine antifreeze under the engine. Where did that come from?

Turns out the vinyl hose connecting the heat exchanger to the overflow tank failed under the cable tie. It took a while to find it but – Duh! – of course that originally clear, now brown hose was it. I looked around Home Depot but could only find another vinyl clear tube. It is 5/16 inch inside diameter and you need about 3 feet. I put a spare piece of water hose around the vinyl overflow hose for some abrasion resistance until I can find a better one. *–Mike Dwyer, Catalina 350, hull 149,* Nautilus, *Sodus Point, NY (Lake Ontario*

Replacing the Raw Water Pump on the Universal M35B

I replaced our Sherwood raw water pump in May 2008 after 370 engine hours. So, when we changed our oil this past spring, I was not exactly happy to see that the new pump was leaking

Shin Protection

This is a pretty simple modification, but one we like. Coming up the companionway into the cockpit often results in cuts on the shins. I'm sure this happens on many boats, but the 350 is particularly prevalent to this. A simple fix that takes just minutes is to install some tubular vinyl weather stripping. The weather stripping costs only $3.79 at Home Depot for 17 feet -- even though you only need 17 inches. Cut the weather stripping. Loosen the three screws on the trim piece at the base of the companions. Push the flat part of the weather stripping under the trim. Re-tighten the screws. That's it! The 1/4 inch tube provides a nice cushion, and doesn't protruded enough to be a trip hazard. If you see *Rhiannon* on the Chesapeake Bay, hail me and I'll give you the weather stripping. Better hurry. I only have enough for eleven more boats. *–Allan Lohman, C350* # - Rhiannon





water through the weep holes after only 96 engine hours.

In 2008, since re-building the pump would have cost just over $200, I decided to purchase a new pump for $242 from a marine supplier. I did save the original pump as a spare. When I researched replacing the pump this past spring, I was astonished to find that a new pump now costs about $440! I understand there is a proprietary arrangement between Westerbeke and Sherwood, which means that you can only purchase the pump through a Westerbeke distributor. I was also told that you couldn't buy a new shaft if needed when you have your pump re-built. This lack of competition has obviously resulted in the exorbitant price increase, and it is the main reason that I wanted to submit this technical article. There has not been very much discussion on the C350 sites but there has been quite a bit on the Catalina 34 and 36 sites.

I opted to have the old pump re-built at Depco. My cost was $135 for seals, impeller, gasket and polishing the shaft. Removing the pump (Fig. 1) is pretty straightforward. I disconnected



the two hoses, removed the two bolts, and took the pump to a friend's shop to use his vice clamps to loosen the brass elbows.

Installing the new pump is a little easier with the right tools. I re-installed the hose elbows to the pump using Teflon plumber's tape. I used my friend's vice to hold the pump and to secure the elbows securely in the same position for the hose connections. I placed the paper gasket on the pump, aligned the shaft for proper fit into the engine, and tightened the two bolts holding the pump to the engine. (Fig. 2 shows where the pump shaft fits into the engine.) I hand-tightened the bolts with a 10mm box-end wrench and then used a small



ball peen hammer on the shank of the wrench to tighten them a little more. A lot of force is not necessary.

The re-built pump is working fine, and we hope it lasts for many hours. *–Richard and Jan Massey, C350 #193-* R Boat

Tech Tip

We use an adjustable shower curtain rod (25" to 40") to hold the shower door in position while underway. The rod can also be re-positioned to better enable the shower to serve as a wet locker. *–Richard and Jan Massey, C350 #193-* R Boat

Catalina 34



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Thank You, from Mike Vaccaro

It's been a pleasure to be your technical editor for the past few years, but we've recently sold our boat and it's time to move on. It's been a privilege to serve as part of the organization; I've learned a tremendous amount, and, most importantly, my family has enjoyed our C34 experience. The Tech Notes section is now in the capable hands of John Nixon, who brings the perfect blend of boat experience and mechanical know-how to the position. There is no doubt that he'll serve the Association well.

Our C34 is the second Catalina that we've refit, and I still remain impressed with the basic quality of the design and construction, but even more so with the level of product support. I'm firmly convinced that any Catalina represents a tremendous value and is more than capable of handling the conditions in which we sail. When was the last time you read about a C34 foundering or being abandoned?

When we bought our 1988 boat, she had a sound hull, rig, and a great engine— but not much else. The good news is that a sound hull and rig are the most important parts of the boat; everything else can be dealt with through seamanship, patience, and a collection of good tools. Catalina's product support is second to none, and the basic design of the boat means that accessibility to components is outstanding.

The C34 Association is the single best resource available for C34 owners and sailors. The *Mainsheet* and our website provide all of the information required to safely operate and maintain these great boats. I'm consistently impressed with the quality and timeliness of advice available, as well as the civility and humor of all the good folks who participate in the on-line forums.

The best nugget of maintenance advice I can give is "fix it before it's too broke." Don't wait until you know that you've got a problem; it won't get better. Every dollar spent on preventative maintenance will save money in the long run. Conversely, every leak you ignore will cost triple! Owning a boat is expensive, and a good rule of thumb for a C34-class sailboat is to plan about $100/foot per year in basic upkeep costs — perhaps more if you hire all of your work out. But as much as I've focused on technical aspects of C34 ownership, the most important element of a good boating experience is seamanship. Make the boat go, keep water out of the boat, and HAVE FUN. Thanks for the opportunity! *–Mike Vaccaro*

Welcome To Our New Tech Editor

Greetings, fellow C34 sailors. I have been sailing for 21 years. During that time I have owned a Hunter 25.5, a 1991 MK 1.5 Catalina 34, a Stamas 44 ketch rig ocean worthy cruiser, a Catalina 22 that I still co-own with one of my son-in-laws, and our current 1988 Catalina 34, which we renamed *Otra Vez*, which loosely translates to "Again" from Spanish. While I dearly love the actual sailing process and experience, my greatest relaxation is derived from being somewhere quiet and pretty, hanging out on the hook and being completely self-sufficient. My wife Rita and I have made a number of bare boat trips in the BVI, and I have sailed long week-