Catalina 350



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This issue finds its C350 technical content provided by Tim the Tech Ed and Ken the web forum moderator.

I have written a brief description of how to change over from energy consuming halogens to energy saving LED's.

Ken Krawford has submitted two articles, one on switching to golf cart batteries and the other for monitoring if all the essential breakers are shut off before you leave your boat.

I look forward to hearing from more of you as you report on some of the things you have done to make your C350 a nice boat to sail and live aboard.

Keep those cards and letters coming to tjr3c@verizon.net

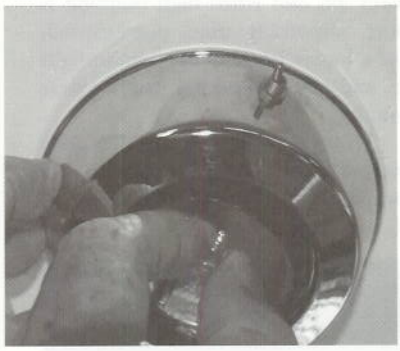
Replacing C350 Halogen Bulbs with Energy Saving LED Bulbs

This summer, I gradually replaced almost all of my ceiling lights and nearly all of my side-wall mounted reading lights with LED's. At first I was intimidated with lack of knowledge about the various kinds of LED's and what was available. I was also concerned about replacement costs. Both concerns were quickly relieved. You don't have to spend the $40 bucks some manufacturers are collecting for LED's. I found low cost LED's on Amazon from several different manufactures that were rated for marine use. I purchased LED's with clusters of 6 or 10 SMD LED's with warm white color. (See #1) It is best to purchase LED's that have side mounted G4 pins for the ceiling fixtures. The wall reading lights should be rear pin G4 10 SMD LED's for extra brightness.

You don't have to disassemble the entire ceiling fixture as some have said (although I did disassemble the first couple). It a simple matter of using your thumbnail to pry the retaining clip and be prepared to catch the retained and the lens or they will clash to the floor. (see #2) Then it is a simple matter to pull out the old halogen bulb. (See #3) Make sure the halogen has not be turned on recently as they burn very, very hot and will burn your fingers. I saved all the old halogens in one of the LED packages for future use in case of LED failure. Next, you insert the side mounted G4 pins into the waiting ceiling fixture. (See # 4) Make sure you are patient here and rock the LED back and forth to make sure it is completely seated. Lastly, reinstall the lens and the retainer by simply snapping them into place. (See #5) The side wall reading lights are even easier. Just pull out the old and push in the new LED. Again, make sure you order rear pins, not side mount, for the side wall reading lights. It's that simple. Hope your next summer lighting is greener than this past summer. *–Tim Ryan, C350 #332* Nora Clare











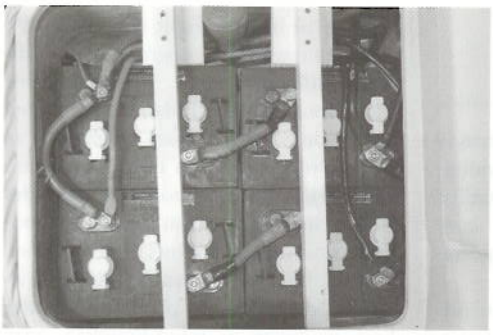
Article on Conversion to Golf cart Batteries

After 5 years of fairly heavy service, my pair of 4D batteries that came with my new boat had finally given up the ghost. I have long been an advocate of golf cart batteries and when it came time to lift the 4D's out of the battery box, I remembered why!

I decided on Trojan T-105 batteries due to their solid reputation, reasonable price and having a footprint that would fit in the existing battery compartment. It required a little bit of trimming to modify the existing hold down supports in order to accommodate the slightly taller T105's and the addition of a spacer block to prevent them from moving laterally. The only other modification needed is to supply a short jumper cable that runs from the positive terminal of each battery to the negative one. This turns the pair of 6 volt batteries into a 12 volt unit.

It is a well documented fact that a set of deep cycle batteries will last longer if they are rarely if ever discharged past 50% of capacity. In order to minimize the likelihood of doing this, I wired my batteries in parallel to form 1 large battery bank. I then installed a dedicated starting battery that can be used in the unlikely event that the house bank will not crank the engine. I placed the



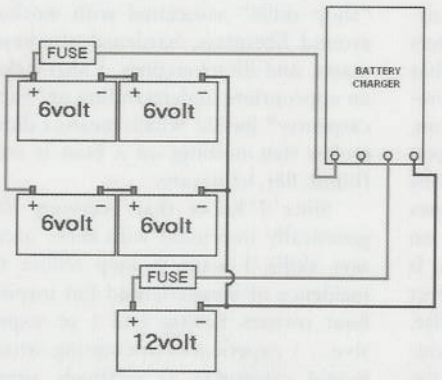


starting battery under the settee just forward of the battery compartment. I was able to run one positive cable to the house bank and the other positive cable to the starting battery. By using this approach with the battery selector switch in position # 1, I was using the house batteries and position # 2 was for the starting battery. I can also combine both banks by switching to ALL.

If you wish to keep your batteries wired as they came from the factory, simply eliminate the jumper cable running between the positive terminals of each battery bank. *–Ken Krawford C350 # 351,* Gail Force Too

Quick Reminder for Shutting Off Breakers

Whenever I leave my boat, I always have to go through a mental check list of things to do before locking up. When checking the electrical panel, I would invariably miss turning something off. It was then that I decided to mark breakers that should always be off when no one is aboard. I found a simple, cheap and quick solution with adhesive labels and a paper punch. I simply punched out a "dot" and applied it to the left of each circuit that should be left off. A quick scan of the panel shows breakers that are on. When switched off, the white dot is barely visible. *–Ken Krawford C350 # 351,* Gail Force Too



Heads Up

Correction to installation for better service of product

It has been brought to my attention that a Catalina owner purchased one of our Tank-ettes and was pleased enough to have put a write-up about it into the *Catalina Mainsheet* for others to consider.

He liked the Tank-ette but was not too happy with the chemical Tablets. His concerns were, they were not strong enough and did not last very long.

Allow us as the USA manufacturer of the Tank-ette to respond:

In reading his write up, I observed a couple of interested things that if he would have read the instructions fully, he might have installed the tank-ette differently.

First, He was not happy with the way the tablet eliminated the odor and second, he was not happy with the staying power of the tablets

ANSWERS – since the 2 pack system, discontinued some years ago, we have had 2 formula updates on the tablets and they are now 2X stronger, water soluble wrapped and now come in a handy 6 pack package.

The Head-O-Matic Tankette Tablet active ingredient, Bronopol, was doubled in strength and is now a convenient water soluble wrapped unit, sold in a total season 6 pack container. This Tablet also has a blue dye to allow boaters to easily determine the Tank-ette adjustment that suits their boating needs.

Families that boat may wish to open the adjustable venturi effect to allow more head chemical per flush into the holding tank. Usually one Bullet will last a cruising live aboard couple up to a month.

The Tablet chemistry has been used for decades and will not affect "o" rings and other rubber components found in most toilets.

Chlorine tablets being recommended by some can have detrimental effects on internal toilet rubber components over time. Dollar and grocery store pucks are simply detergent, dye and perfume and will not provide any reduction in sulphur odour build up in their intake line or anti bacterial protection in the holding tank. Chlorine can also be detrimental to the life of aluminum holding tanks.

There is also some lubrication qualities built in to the Bullet, but we always recommend boaters add a light # 5 white oil to the bowl and to the pump handle slide at regular intervals.

I also notice in the picture that was included in the *Mainsheet* the Tank-ette was installed in an area close to the thru hull fitting with no check valve and where one could not easily see into the Tank-ette to adjust the sliders to prevent an over use of the chemical tablet. Both of these issues can cause loss of chemical as noted in the instructions. As stated in the instructions: If installing the Tank-ette closer than 1Ft to the thru hull fitting, you should install a one way check valve between the Tank-ette and the thru hull fitting to prevent venturi action of moving craft drawing the chemical back into the sea . One of the unique features of this Tank-ette system is that the intake line can now be a boat length long and the line is always being protected.

Hope this helps clear up some of the customers concerns.

Fred Prue (Tank-ette Patent Holder) and active long term sailor !
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