The SmartPlug features stainless-steel locking levers on both sides of the connector and a stainless-steel inlet cover.

SmartPlug: Safer Power

According to multiple reports, most AC electrical fires occur at the boat's shorepower inlet. To address this and other shortcomings of the standard twist-type boatside connection, SmartPlug Systems developed a new AC shorepower system that the company hopes will become the new marine standard.

Loose and corroded connections are most often the culprits when overheating occurs. Corrosion typically results when moisture gets in at the plug-inlet connection, while arcing—which in turn leads to pitting, scorching, and heat build-up—is partially due to the shape and small contact area of the connector pins.

SmartPlug engineers have devised a four-stage approach that addresses these issues and protects against overheating. The SmartPlug system can be retrofitted to an existing shorepower cord's boat end. The new sleeve design and multi-point plug-to-receptacle locking system ensures that the body of the plug rather than the pins bears the weight or tension of the cord, reducing movement and loosening. To alleviate arcing and corrosion, the pin contact area is increased by more than 20 times a standard plug, and it is protected by three weatherproof seals.

You can see the unique internal cord-strain relief clamp in the disassembled plug.

The SmartPlug inlet also features a built-in thermal overload sensor that automatically cuts power when the connector reaches 200 degrees. Power is restored when the temperature drops to 120 degrees.

The SmartPlug is a well-built unit that carries a limited seven-year warranty. All external metals are marine-grade 316 stainless steel, the electrical pins are nickel-plated brass, and the plastics are made of UV- and heat-resistant Valox 553U resins.

The company's 30-amp inlet and connector retrofit kit sells for $225—a bit expensive, in our opinion, but reasonable when compared to the $100-$200 cost of a standard outlet and plug, particularly considering the added safety and waterproofing features of the SmartPlug. The SmartPlug meets rigorous Underwriters Laboratory Marine requirements (as tested by IMANNA Labs) and the American Boat and Yacht Council's E-11 safety standard, according to the company. It also is Coast Guard compliant.

INSTALLATION

To retrofit an existing, standard shorepower cord, users can simply cut off the existing boatside plug and wire the new SmartPlug following the provided directions. The SmartPlug inlet is designed to fit the same opening and screw holes of the legacy twist-lock inlet with little or no modification required.

Testers found the directions clear and easy to follow, and the only tools needed for the project were a screwdriver and a knife or wirestrippers. Installing the adaptor kit was a relatively quick and painless job.

The company's website also offers a comprehensive installation video: *www.smartplug.com/learn.html*.

PROS AND CONS

Having to line up the pins on a standard twist-lock connector can be a pain—it's a minor pain, but a pain nonetheless—particularly at night when the boat is docked in some unlit portion of a marina. The straight-pin design of the SmartPlug eliminates this annoyance. All you have to do is push in the plug (which only goes in one way) until the side levers sound an audible "click," and then snap the locking cap down to lock it in place.

The most obvious drawback of the SmartPlug is that a twist-type plug (or adaptor) is still required to connect to shorepower at the shore side. Although the SmartPlug isn't a clean break from the twist-type connections, it does provide some benefits, including thermal protection and increased weatherproofing at the boat end of the setup.

From a design standpoint, testers liked the clever internal cord-strain relief clamp, but we had a minor issue with the poor grip provided by the SmartPlug when unplugging. The length of the plug body and placement of the release tabs means that hands, particularly wet ones, tend to slide down to the cable when pulling unless care is used.

BOTTOM LINE

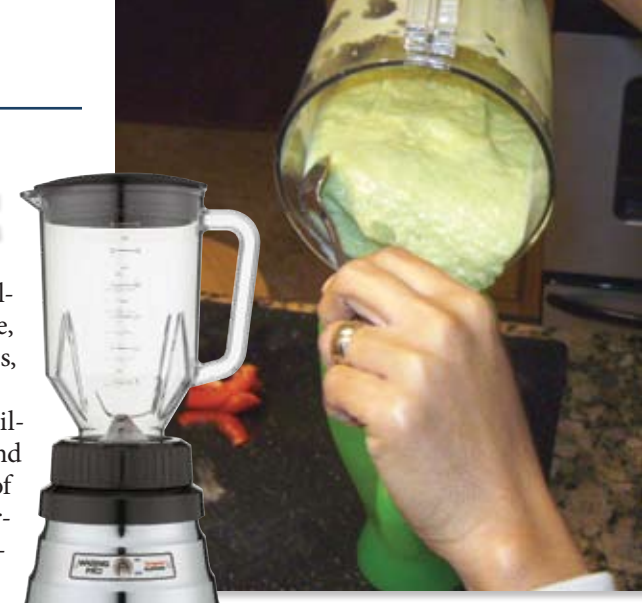
The SmartPlug is well-made and offers several improvements over the standard twist-type AC plug; however, attempting to replace a system so firmly entrenched in the industry is a tall order for any company. The additional safety features and increased weatherproofing alone will likely provide many sailors enough incentive to upgrade, but it's too early in the game to predict how well it will ultimately be embraced by the boating and marina community.

CONTACT

SMARTPLUG SYSTEMS,
206/285.2990, www.smartplug.com

Photos by Frank Lanier

Tailgating Afloat



PS *testers give the DC-powered Waring Tailgater Blender a whirl during "Margarita Marathon."*

Photos by Frank Lanier

Always on the lookout for gizmos that bring aboard some small luxury and help reduce the "roughing it" factor too often associated with cruising, our testers immediately recognized the potential of the DC-powered Tailgater Blender by Waring Products of Connecticut.

A classic Waring blender with a heavy-duty chrome-plated metal base, the Tailgater is a full-sized blender with the look and heft of a household unit. Features include a fuse-protected 15-foot cord that plugs into any standard 12-volt cigarette lighter outlet, a removable stainless-steel blade assembly for easy cleaning, a large 48-ounce, shatter-resistant plastic carafe, and a handy "shot glass" measuring cup built into the lid.

Powered by a 7-amp motor, the Tailgater utilizes a metal-reinforced neoprene drive-coupling for long motor life. The motor actually has a five-year limited warranty, while the blender itself comes with only a one-year limited appliance warranty.

The portability of the DC-power plugs enables users to get their drink or snack on most anywhere. The Tailgater can crush ice, grind coffee, blend mixed beverages and shakes, or even make fresh salsa or dips.

Practical Sailor tested the Tailgater while making smoothies, and then put it through a final round of testing during an arduous "Margarita Marathon" aboard an anchored Union 36.

While it wasn't as powerful as a comparably sized AC-powered blender, the Tailgater did manage to blend ice cubes into a decent beverage. Testers found that the key was adding the liquid being blended first (immersing the blades) then feeding the ice cubes slowly through removable lid insert. They also found using pre-crushed ice produced drinks with a much smoother consistency.

Although available at some of the major marine retailers for an extremely pricey $150, we found our test unit online at *www.amazon.com* for a more reasonable $65.

Bottom line: It's not as strong as a similar-sized AC blender, but the Tailgater does provide a good alternative to some of the battery-powered blenders available for galley use. The ability to use a good quality blender at anchor or at sea—without the need for an inverter—is an attractive option.

CONTACT

WARING PRODUCTS, 800/492-7464
www.waringproducts.com

PS Tests Paint Preservers

We've touched up our varnish, slapped antifouling on the hull and, brightened that bootstripe. Now what to do with those half-full coatings cans? Its not too late to save some bucks next season by making sure the cans won't skin over or go clumpy. The trick is to chase out the oxygen.

We could dump marbles into the can to fill up the remaining air space or transfer the contents to a smaller can from the local paint supplier. Instead, following a suggestion from several readers, this year, we pumped our half-empty cans of finish with Bloxygen.

Bloxygen contains pure argon, a naturally occurring gas used for welding, as well as in packaging bagged foods like potato chips. A 0.40-ounce can sells for $10 on the Internet. When ours came in the mail, it was so light, we were certain we'd been sold an empty can of "Florida sunshine." However, according to the maker, each can is good for 75 quarts. Pumping the stuff into the coating's can requires no fancy handwork, but you want to make sure the can's rim and lid are clean and still seal tightly.

We've heard reports from woodworkers who have used Bloxygen for a while with good results, so we're fairly optimistic about its performance.

Paintgard

Another paint-preserver we're testing has not yet hit the market: Paintgards, plastic floating "lids" that can be placed over the top of unused paint. Made from recycled plastic bottles, the lids act to seal the remaining paint. Raised areas in the lid trap air so that it "floats" on top. Noting the not-so-snug fit inside a gallon can of latex, we had laying around, we suspect its not a failsafe solution, but it is too early in testing to know. The suggested retail price is 85 cents per lid—a little pricey for what it is in our view, but if it works, it will be worth every penny.

CONTACTS

BLOXYGEN, 805/542-9219, www.bloxygen.com
PAINTGARD, 877/598-2599, www.paintgards.com