

The Perils of Fantastic Plastics

Durability suffers in the pursuit of new lightweight designs.

This month's Gear Graveyard called to mind the famous scene in the movie *The Graduate* when actor Dustin Hoffman is pulled aside at a dinner party and offered a word of advice: "I just want to say one word to you son . . . just one word . . . plastics."

There are a myriad of polymer combinations that make up the vast realm we call plastics, so to speak of them in a general sense can be misleading. Some plastics, like the glass-fiber reinforced acetal copolymers used in a variety of marine hardware are extremely strong. But even the strongest plastics can be weakened by environmental factors. Our online article "Plastics Versus the Weather: The Nature of a Losing Battle" found in the Tools and Techniques section of our website at www.practical-sailor.com, describes some of the common enemies of plastics. These include acids (from acid rain), water, sunlight, and ozone, which can occur when car exhaust mixes with sunlight.

This month's Gear Graveyard looks at two products that have fallen victim to one of plastic's most familiar shortcomings: poor tensile strength.

Johnson Inlet Strainer with Quick Release

Fitting: We received the Johnson Pump Protector Inlet Strainer along with some electric heads that we are testing for an upcoming article. The connector fitting used to join the barbed end fitting and the



*No-name
Outboard Bracket*

filter are relatively new to marine plumbing and have been gradually penetrating the market. Using O-ring seals and a sliding locking mechanism, they make it easy to connect and disconnect hoses. The plastic slide-lock component on the Johnson filter has an extremely thin section. One of the slides broke at this spot during a video shoot demonstrating how they functioned. Such quick-release fittings are a boon for installers and boatbuilders, but they should be designed to stand up to hard use. Until then, cruisers are better served with AISI-rated 316 grade all-stainless steel hose clamps.

No-Name Outboard Bracket: An anonymous reader bought this bracket at an anonymous website for a low price. He installed it on his boat, fired up his outboard, and watched it go into the drink. The bracket has no markings on it, and

it is not one of the brands we tested in September of 2007. We are still investigating the origins of this product. In the meantime, we warn readers to stick with one of our recommended brackets from Garhauer, Garelick, or Fulton. ▲



*Pump Protector
Inlet Strainer*