The Right Stuff BY STEVE ZIMMERMAN



The engine room on this Krogen Express illustrates a number of best practices.

Both Racor filters have been installed in an easily accessible location and they have the proper metal heat shields installed to comply with ABYC guidelines. The valves at the bottom of the assembly are critical—if spring loaded, they might develop leaks and if plastic they might melt in a fire. The valves shown do not rely upon plastic or springs, and the 90-degree rotation allows you quickly to see if they are open or closed.

In addition, a drain plug has been fitted below the valve, eliminating the possibility of an accidental leak. The vacuum gauge installed between the filters has a tracer needle. The tracer needle remains at the highest vacuum reading since last reset, enabling the boat owner to easily identify developing problems developing in the filtration system.

This boat has been equipped with an AquaDrive® antivibration system. On most boats the force of the propeller transfers to the shaft, to the engine, and then onto the engine mounts. The mounts must be robust to withstand this force, and the stiffer the mount, the more vibration transmits to the stringers and then throughout the vessel. This AquaDrive® system transfers the load directly to the stringers, keeping the forward force off of the engines. A heavy aluminum fabrication can be seen above and below the fuel filters (the filter assembly has been mounted onto the aluminum frame). This component receives the load from the prop and shaft and transfers it to the stringer, isolating the engine. The engine mounts no longer take the load and they can be much softer, allowing the engine to float, thereby greatly reducing vibration transmission. For added protection, the setscrews on the shaft coupling have been "moused," or safety-wired to prevent them from turning loose.

The clean, bright white bilges will quickly expose any fluid leaks, and ample inspection port on the inboard face of the fuel tank provides good access for cleaning a fouled tank. The two raw-water strainers have been installed vertically, enabling the boat owner to clean them without dumping fouled water into that clean bilge, and the seacocks are conveniently close. A properly sized (#8 AWG) bonding wire has been well secured with ring terminals and a machine screw, ensuring a reliable low-resistance connection for the bonding system.

This engine room shows a nice balance of access and convenience—components are close together yet easy-to-reach. All in all, many examples of the right stuff. ■

Boat owners, builders, and tinkerers, send photos of the right stuff on your boat to stevez@zimmermanmarine.com, and we will consider them for future publication.

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