Photo Essay: Starter Post

Text and Photos by Steve D’Antonio

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With one exception, every wire leaving every battery positive post must, in order to remain ABYC compliant, be equipped with a fuse or circuit breaker within seven inches of the battery post. The distance may be extended to seventy-two inches if the wire is supplementally sheathed or contained within a conduit.

The reason for this requirement is clear enough; in the event of a short circuit, and in the absence of a fuse or circuit breaker the wire will overheat. If it’s near combustible materials, fiberglass, wood or insulation, a fire becomes a very real possibility.

The one exception to this rule is wiring that is used to supply, or can be used to supply, engine and generator starters. In this case fuses and circuit breakers are optional; in my experience they are present in perhaps 1% of the vessels I inspect. The reason for the exemption is sound, if potentially risky. It’s believed that if fuses or circuit breakers were used on these circuits they would trip or blow on a nuisance basis, particularly when a battery is in a weakened state, potentially leaving the vessel stranded.

Because this circuit lacks over-current protection, special attention must be paid to the manner in which it’s installed. Among other things, positive starter cables must not make contact with engine blocks, and all otherwise exposed energized components such as starter posts, must be fully insulated. In the accompanying example the post is exposed. Additionally, the ring terminals, of which there are at least four (four is the maximum number of ring terminals that may be installed on any single electrical stud), are installed in the

incorrect order, they should be installed beginning with the largest and progressing to the smallest. Finally, the outermost ring terminal is impinging on the insulation of the ring terminals beneath it.

Inspect your starter cable and post, make certain they are properly routed and insulated.

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