

Dealer (No) Support

by Steve D'Antonio

While inspecting several vessels recently, I was reminded that information is best when you get it from the source. The flaws I found in the engine installations on those vessels were all clear violations of the engine manufacturers' installation instructions, and have become easier to spot and document since the advent of the Internet, PDF manuals, and digital photography.

Here are a few examples.

Case #1: The exhaust hose leaving an injection elbow aboard a new 30' (9.1m) trawler was U-shaped; it dropped down and then rose sharply back upward. I contacted the builder of the boat to share this information; however, the representative I spoke to was skeptical that this was incorrect. I sent photos and a scan of the installation-manual page where the continuous-drop requirements are detailed, in written and diagrammatic formats. The builder responded that the regional distributor that sold them the engine had approved the engine installation. End of story. Ultimately, I made the repair at the owner's expense.

Case #2: A client contacted me after one of the transmissions on his twin-engine boat failed for the third time in five years. I determined that the shaft was grossly misaligned, which caused the transmission's output-shaft bearing to overheat (the transmission case had turned from white to brown as a result of the bearing and oil overheating). Even though this was the third such failure, since the propulsion system was still under warranty, the transmission dealer simply replaced the transmission, twice. Later I found that this was the first vessel the builder had manufactured with diesel engines, yet it appeared that the stringers hadn't been reinforced to support the added weight, and the motor mount brackets were only partially engaging the undersized stringers, all of which contributed to "dynamic misalignment"; i.e., the shaft changed under load and was therefore impossible to align.

Although the vessel was long out of warranty, the owner presented all this data to the boatbuilder, which refused to acknowledge the error, saying that the installation had been approved by the engine manufacturer. Then the owner paid for an application engineer from the engine manufacturer to review the installation. The engineer roundly condemned it, but said, "This is between the boatbuilder and his engine supplier." Adding insult to injury, the wet-exhaust systems of both engines were also noncompliant. The client felt cheated by the marine industry. He has a boat he can neither use nor sell, and repairs will cost nearly as much as the vessel is worth.

Case #3: I inspected a new vessel under construction and noted that the downward angle of the exhaust, at the point where water is injected, was too shallow and therefore failed to meet the engine manufacturer's required 15° minimum. I explained the consequences, including seawater flooding the engine and catastrophic engine failure, which wouldn't be covered by the engine manufacturer (most exclude water ingestion under warranty coverage under any circumstance, their logic being that if their installation instructions are followed, water ingress is impossible), as well as the potential denial of issuing an extended warranty, which typically requires an inspection to confirm installation compliance by a dealer. The boatbuilder seemed perplexed, saying that the engine manufacturer approved the installation and that the installation's guidelines are simply that, guidelines for ideal scenarios, not requirements. For the client's sake I asked for a copy of this approval in writing. At the time of this writing, 30 days later, it had not been provided. The owner was justifiably concerned about the conflicting information and the vessel's short- and long-term reliability.

Another underlying aspect is equally troubling: the boatbuilder's insistence that the deviation from engine

manufacturer's requirements had been "approved" by the engine manufacturer. Here and in other cases, it turns out that the "engine manufacturer" is in fact a dealer. While many boatbuilders and owners perceive the two to be one and the same, they are not. Dealers are, or should be, tasked with following instructions, protocols, and standards established by the manufacturers they represent, and in almost no case should a dealer be authorized to make exceptions to these rules without the manufacturer's approval, *in writing*. If a dealer does so on its own, it is in effect agreeing to warrant the exception in perpetuity, and why would a dealer do that?

Here are two perspectives on the problem: One, the actions of the boatbuilders are understandable. After all, shouldn't they be able to trust implicitly the information provided to them by their dealers? In each of the three cases here, I think the boatbuilders genuinely believed their deviations from the installation requirements were approved, and in effect they were—by engine dealers. Two, boatbuilders have an obligation to fully understand the installation instructions for every piece of gear they install, from bilge pumps to engines, which means that while they should seek guidance from equipment dealers, in a case of "trust but verify," they should also be ready to question that guidance if it violates their understanding of the manufacturer's established protocols.

Clearly, the second position makes the most sense and offers the greatest protection to the boatbuilder and the buyer.

About the Author: *For many years a full-service yard manager, Steve now works with boat builders and owners and others in the industry as "Steve D'Antonio Marine Consulting." He is PBB's technical editor, and is writing a book on marine systems, to be published by McGraw-Hill/International Marine.*