

March 8, 2012

RE: MANIFOLD AND RISER ANNOUNCEMENT

Dear HGE customer:

It has come to our attention that among the many thousand HGE manifolds and risers that have been sold around the world to date, electrolysis issues resulting in premature failure within the exhaust system has been reported in a few isolated instances. These instances appear to have resulted when the subject boat was moored in close proximity with other boats in an area experiencing excessive stray current, and/or possibly when the subject boat's engine was not properly grounded and/or equipped with sufficient anode protection.

HGE exhaust products are manufactured using industry proven casting methods while using industry proven marine grades of cast aluminum or cast iron. Therefore the HGE products are expected to perform as designed and will be reliable under all normal operating circumstances. However, the performance of all cast marine exhaust systems will be limited by its resistance to corrosion which is largely effected by electrolysis. Realizing this we would like to offer several tips for the owner of any cast marine exhaust system in order to better maintain your vessel, especially once you have experienced an electrolysis problem:

- A. Ensure proper grounding of the engine through the main vessel grounding system. This will substantially extend the life expectancy of any marine exhaust system by controlling galvanic corrosion.
- B. Ensure that all grounding straps on the engine and boat are properly in place. Replace corroded anodes and maintain a well-grounded electric system.
- C. Monitor the entire propulsion system for any signs of excessive corrosion regardless of where it appears. Also monitor the manifold and riser regularly for signs of premature corrosion.
- D. Consider replacing aluminum parts with a new cast iron parts if problems persist;
- E. Check engine oil prior start the engine to see if there is any moisture in the oil

Please contact support@hgemarine.com if you have any questions.