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Congratulations on your purchase of GLM's Performance Enhanced Aluminum Manifolds and Risers!

With proper care and winterizing GLM aluminum manifolds and risers will perform as well as any other aluminum manifold or riser on the market.

GLM Aluminum Manifolds and Risers offer the user several benefits

All GLM manifolds are fully tuned for performance. It is similar to putting a set of automotive headers on your engine. Weight reduction, achieved with aluminum manifolds, will enhance the performance of your boat. In many cases, one cast iron manifold weighs as much as two aluminum manifolds and two aluminum risers combined. But with GLM aluminum manifolds, it will take off approximately 90 pounds of weight per engine. Plus, the outside surfaces of GLM manifolds are powdercoated for premium appearance and corrosion protection.

Care and Maintenance of your GLM Aluminum Manifolds

Care for your GLM aluminum manifolds should follow the same winterizing and periodic maintenance requirements as any cast iron manifold and riser product with a few added considerations. Performing proper maintenance on any manifold or riser will increase its life and performance.

1. Using new gasket (No. 30240) mount exhaust elbow (No. 51145) to manifold (see Fig.1). Tighten bolts to specifications using an X pattern. After all bolts are torqued, tighten all hose clamps securely.
2. Pencil Anode and Drain Plugs are provided with every GLM aluminum manifold (see Fig. 2). **Do not fail to install these in the bottom drain holes of each manifold before using.**
3. **To install the Pencil Anode Kit**: First, screw together in a clockwise rotation the Pencil Anode into the Brassplug (see Fig. 3). Then, remove the drain plug from the bottom of manifold and insert the Pencil Anode into the manifold drain hole (see Fig. 4). Tighten with a clockwise rotation (see Fig. 5).

   To install the Drain Plug Kit: Use a clockwise rotation to tighten the Drain Plug into the center drain hole on the bottom of the manifold (see Fig. 5).
4. Periodic examination of the pencil anodes and replacement if neccessary should be performed throughout the boating season. Pencil anodes are sacrificial and protect the manifold from corrosion. Some areas and types of water are more corrosive than others. We recommend that after the first thirty days of use the pencil anodes be inspected. After the inspection you will need to adjust the periodic inspections of the pencil anodes to fit your particular conditions. Failure to maintain the pencil anodes will result in premature product failure and voiding of the warranty.
5. All raw water-cooled manifolds and risers, aluminum or cast iron, used in a saltwater environment should be flushed with freshwater after each use.
6. Insure that your boat is properly grounded and preventive systems are operating to eliminate electrolysis.
7. Never mix a cast iron manifold or riser with an aluminum manifold or riser. The different heat expansion characteristics of these two metals will cause riser gasket failure and possible water ingestion into your engine. This can result in catastophic engine failure.

The Riser to Manifold bolts or nuts MUST BE TORQUED to the following specification: 20-25 lb. ft. / 27-34 N. m.

Thank you for your support in GLM Products!

Fig. 1

Fig. 2

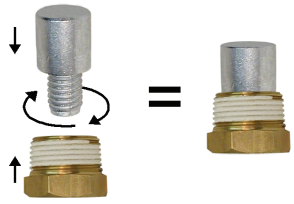
Fig. 3

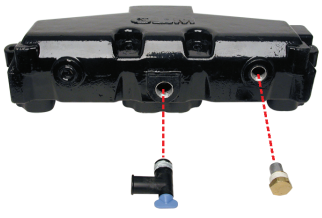
Fig. 4


Fig. 5