



Routine Maintenance

Maintaining your **Tides Marine** Sure Seal® is a basic component of standard boating responsibility. This simple, easy to follow procedure will keep your bilges dry and your products functioning well for years, and should take no more than a few minutes, every few months.

First, a visual inspection of the shaft seal is a good idea. Look for obvious signs of water leaking. A clean white cloth beneath the seal will identify any sediment from a poorly seated seal. If water is leaking, the spare seal carrier mounted on the shaft (if so equipped) contains the simple solution. Follow the procedure printed in your owner's literature and replace the worn seal. Be sure to arrange a replacement seal during your next haul-out to be returned to your carrier for future use.

Second, and most importantly, is that the flow of pressurized water to the shaft seal is maintained. The place most susceptible to blockage is the fitting on the engine, transmission, or other engine structure, that connects to the water lubrication line coming from the shaft seal housing. If this fitting is a threaded-in hose barb, it should be checked for blockage by removing the lubrication hose from the fitting, then removing the fitting itself. Inspect for debris or scale. If this fitting is a tee fitting spliced into a hose, these tee fittings rarely become blocked, and do not need to be removed from the hose. If your assembly has any shut off valves or site gages installed in the lubrication line, be sure to inspect these as well.

With engines running and in neutral, remove the water feed line, cap the seal fitting, and capture the flow in a bucket or jug. Flow should be about 1 gallon per minute at engine idle. Increase your throttle to insure flow at all engine speeds, and repeat the procedure for the other engine, if applicable. Dress hose and secure. Complete one test before removing another line. Test cross over line as well, if so equipped.

***** NOTE *****

IT IS IMPORTANT TO PERFORM THIS WATER FLOW CHECK TWICE A YEAR. ALSO CHECK ALL FITTINGS INVOLVED FOR SCALE, DEBRIS OR BLOCKAGE AT THE ENGINE AND AT THE SHAFT SEAL.