

HVL and PVL Series Vented Loops

Installation and Operation Instructions

The Concept: In boats, liquids are generally pumped from one location to another location at a higher or lower level. When the pump stops there will likely be a pressure difference from one side of the system to the other, and natural siphoning (similar to the action of an aquarium pump and filter system) will cause the liquid in the system to equalize its level and pressure.

To prevent siphoning utilize a "Vented Loop" at the highest point in the system over which the liquid is pumped. Air is introduced by the Vented Loop allowing the pressure and level of the liquid in the system to equalize without unwanted "backflow".

With a Vented Loop, when the pump stops running, the liquid on each side of the Vented Loop stays where it is. Without a Vented Loop system level would try to equalize (the ocean would try to flow into your boat).

Installation Location: The installation drawing shows two possible locations. The solid lines show the best method by locating the Vented Loops near the vessel centerline to minimize the effects of side to side boat movement. The broken lines show the least desirable location. Particularly with sailboats note that the waterline

changes with vessel movement and that the Vented Loops could actually be below the outside waterline and unable to break a siphon.

Installation: Use the three (3) plastic standoffs to mount the Vented Loop securely in the desired location with the threaded cap at the highest point.

Maintenance: It is essential, particularly when used in waste systems, that the cap be removed periodically and the inside of the loop inspected for obstructions. Ensure that the flapper is not sticking. A sticking flapper will not allow the vacuum to be broken and may result in back-filling of the toilet or waste treatment system. Rinse the flapper vigorously with clean water.

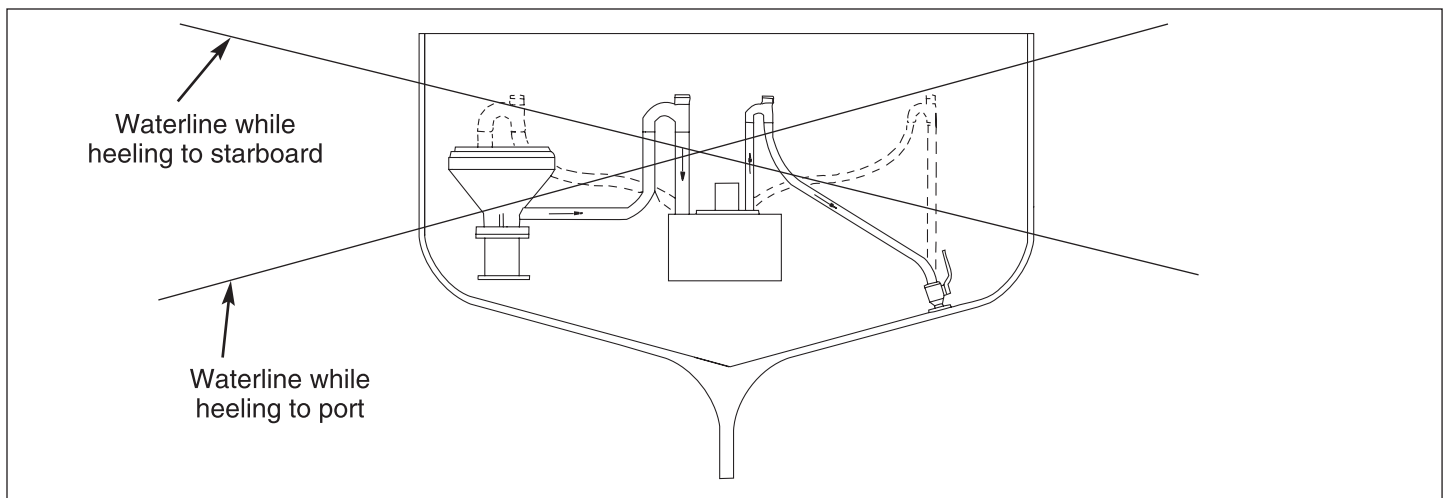
Service Note: An unavoidable dimensional change during early production has current replacement check gasket #VL-1504 slightly smaller in diameter than the gasket you may be replacing. In this case, in order to prevent the gasket from falling out during reassembly, apply a drop or two of marine caulk to the outer rubber ring only to hold it to the bronze cap while the parts are being screwed together. (The concave side of the check gasket faces the liquid).



HVL Series is for Hose Connections



PVL Series is for Pipe Connections



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