

Care and Maintenance of Volvo Penta Sail Drives

Volvo Penta sail drives are designed to provide the sail boat owner with many years of trouble free boating enjoyment. Listed below are some ideas and answers to frequently asked owner questions. Following the maintenance suggestions found here and in the owner's manual is the perfect start to a long and happy relationship with your propulsion package.

Sail Drive Paint Systems- The sail drive is delivered from Volvo Penta with a high solids primer and paint system. This paint system constitutes the first line of defense against corrosion and it should be carefully maintained. Scratches and dings should be repaired with Volvo Penta primer and surface coat. If the original paint system is unavailable, damage should be repaired with a quality two part epoxy sealer/paint.

Anti-Fouling Paint Systems: Most boats that are not dry sailed require some type of anti-fouling paint system to prevent the buildup of marine plant and animal growth. You should never use an anti-fouling paint that contains copper oxide on the sail drive. Specific anti-fouling paints designed for outboard engines and inboard /outboard drive units should be used instead. These paints typically contain other active ingredients which will not create galvanic issues with the sail drive. One such readily available paint is Interlux "Micron 33". It can be purchased in handy spray cans.

Galvanic Protection: There are two main components to the galvanic protection system on your Volvo Penta sail drive. First off, the entire sail drive is electrically isolated from the engine and engine grounding system. This isolation is accomplished by the use of plastic bushings, gaskets and washers in the sail drive mounting hardware. Never compromise this protection by placing any type of ship's ground wire on the sail drive housing or mounting bolts. Don't use wire wound hose in the water pickup system, and don't use the sail drive as an SSB ground plane.

The second part of the galvanic protection system is the use of sacrificial anodes on the sail drive leg and Volvo Penta folding propellers. The sail drive and Volvo Penta folding propellers are delivered from the factory with zinc anodes. Whether you have the older one piece sail drive anode, or the newer two piece type, you should use zinc anodes if you keep your boat in salt water. If you do your boating in fresh water, zinc is not active enough to provide good galvanic protection, and you need to replace the zinc anodes with anodes made of magnesium. These are available from your Volvo Penta or Tartan/C&C dealer. Remember; replace the protective anode if it is more than 50% eroded. Also, when you replace the anode, clean the underlying metal to ensure good electrical contact and don't paint the anode. If you paint it, it won't work!

Volvo Penta folding propellers are designed to be electrically isolated from the propeller shaft of the sail drive, and they have their own anodes. These anodes protect the propeller, and do not place a load on the sail drive anode. Sometimes owners may install other brands of folding propellers on their sail drive. Not all other propellers are electrically isolated, or they may not have their own anodes. If this is the case, the propeller will place a load on the sail drive anode and may cause more rapid loss of the anode.

Occasionally a boat may be kept somewhere where the anodes seem to disappear way too fast. This might be caused by peculiar water conditions, stray current from old docks or a

neighboring boat. If this is your situation, sometimes it can be helpful to add additional zinc to the sail drive, and the typical way to do this is with a clip on zinc “guppy” or zinc “fish”. This is not harmful, but you have to remember that the sail drive is electrically isolated from the engine and the rest of the grounding system in the boat. It doesn’t protect the sail drive if you clip your fish to the rigging shrouds or backstay, or even the engine itself. You need to go directly to the sail drive, and the sail drive only! A good connection point is to use one of the four fasteners for the shift lever plate on the top of the saildrive. Use one of the 8mm fasteners that are not used to attach the shift cable support clip. Don’t clip multiple fish all over the boat and then tie them together, it defeats the electrical isolation that is built into your system. If even an additional guppy doesn’t help, it may be a good idea to have an electrical expert access the situation. Just remember, a key part of the term “sacrificial anode” is “sacrificial”, and that means the anode is designed to erode away!