



LectraSan - Preventive Maintenance vs Repair

LectraSan is a common sewage treatment system in leisure boats. This product is not a holding tank. It is designed with just enough space for the sewage treatment process to occur.

Its working principle is based on the generation of chlorine as a disinfectant with an electrode submerged in seawater inside a sealed container. It has a built-in macerator which physically breaks down large particles to maximise their surface area in contact with chlorine, and a mixer which ensures that fine particles remain in suspension so that they can be discharged easily.

Repair work on a LectraSan can sometimes be expensive. This can be prevented by an annual service to avoid or mitigate the consequences of failure of this unit. The main reasons that annual service is recommended are,

Scaling - Sewage, effluent and seawater by nature have a massive cocktail of salt content. These cause scale and biofilm to form over any surface area easily and quickly. Over time, it clogs up fluid passage and covers up the electrode which leads to its failure.

Foreign matter - Foreign objects that are flushed into the toilet will end up inside the unit. These may cause the mixer and macerator impellers to seize which in turn result in blown fuses, electrical damage or motor burnout. The motor shaft seals may also be

damaged causing leakage which exposes sewage and eventually corrodes the motor. Picture below shows a unit with leaking sewage due to a damaged shaft seal.



Electrical fault - The ElectraSan is normally installed in a moist environment and hence its electrical components are exposed to corrosion risk. The blue plastic cover does protect the electrical components but not adequate enough to safely shield them.

Common tell tale signs of a LectraSan that needs serious attention are,

Visible salt crystals around bottom of motors - Shaft seals are damaged and salt is in the process of corroding the motors. Sewage is leaking to the surrounding. Rust would form and motor would eventually fail.

Red LED of control panel permanently on - A fuse may have blown or there is a serious electrical fault.

Amber or Red LED of control panel blinks every second - While this could be due to low water salinity after a flood or rain, the electrode may need to be cleaned or replaced.

Amber or Red LED of control panel blinks twice every second - Voltage is too low for the unit to operate effectively.

All Marine Solutions has an equipped testing and servicing

facility to allow you to adopt a preventive maintenance approach on your LectraScan. This ensure that the unit is in good operational condition. Service your LectraSan annually and avoid costly repairs.

Call **07 5665 8166** or email info@allmarinesolutions.com.au to book in a job with **All Marine Solutions**.