



# SAVE MARINE - H240 HYDROGENERATOR



## LIMITS AND CONDITIONS FOR USING

Related to warranty - Please read carefully before installation and use

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## 1 The H240 hydrogenerator

#### 1.1 Field of application

The Save Marine H240 hydrogenerator converts the mechanical energy of a fluid like water into electrical energy. It works thanks to a clean and renewable energy: the wind.

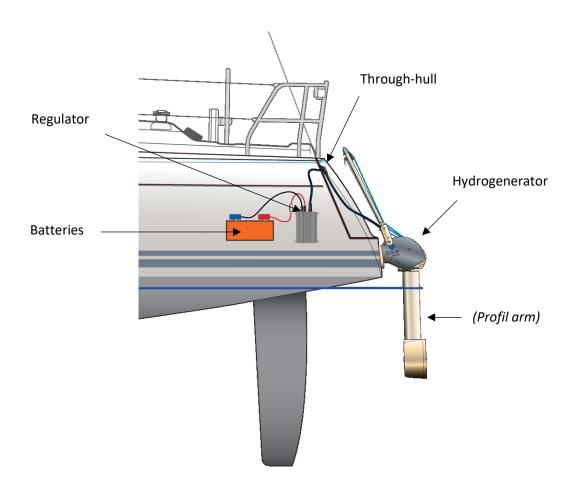
The H240 hydrogenerator is specifically designed for sail boats.

It recharges the batteries of your boat and procures electric autonomy, ensuring security and comfort on board.

#### 1.2 The equipment at a glance

The mechanical energy is converted into electrical energy thanks to a turbine equipped with blades and high efficiency alternator.

The electricity is transmitted to the batteries through a regulator whose main function is to regulate the electrical power produced by the hydrogenerator and have an optimal recharge process of the batteries.



## 2 Safety instructions

#### 2.1 Mechanical hazards

The rotation speed of the blades can be high and represents a potential danger.



Do not touch the blades when rotating

The hydrogenerator is equipped with an articulated mechanism for a quick and easy positioning into the water.



Do not insert your fingers into the articulated mechanism



When bathing, avoid leaning on the hydrogenerator to get on board.

#### 2.2 Electrical hazards

The use of electrical equipment facilities requires to take precautions. The flow of electricity on a boat is a potential danger.



If the material is prematurely deteriorated (bare wiring ...), please stop immediately the use of the hydrogenerator.



- The regulator provided with hydrogenerator has a heat sink in order to dissipate the heat:
- Do not touch the electronic box in operation.
- Avoid direct contact with materials that can be affected by heat (as tissues for example).

## 3 Conditions and limits of using

#### 3.1 Transom robustness and flatness

Check the robustness of the transom. The transom must accept the forces generated by the hydrogenerator. In case of doubt we strongly recommend to strengthen it. Seek the advice of a marine professional.

The location on the transom for the home plate should be flat to avoid any torsion which can cause a breakage of the home plate.

#### 3.2 Batteries compatibility

The hydrogenerator is designed for recharging the service batteries of the sailboat. Do not connect it to any other device.

The system is compatible with the vast majority of batteries.

#### 3.3 Maximum speed allowed

The force exerted on the hydrogenerator when cruising increases as the square of the boat speed. The hydrogenerator is designed for a speed range from 0 to 10 knots. A higher speed even during a short period may cause permanent damages to the hydrogenator.



Do not use at a cruising speed exceeding 10 knots

The regulator continuously records the H240 data, including the speed

#### 3.4 Bad weather



Do not use the hydrogenerator in bad weather, in particular with strong waves. In that case, remove it from its home plate.

For crosswind-tailwind, care should be taken not to have the hydrogenerator going above the water due to the heel of the boat. The hydrogenator could be damaged when reentering into the water (severe impact).

#### 3.5 Setting up and raising of the hydrogenerator

Place the hydrogenerator in lower operating position ideally when the boat is at rest. Do not place the H240 into the water (operating position) when the boat speed is above 2 knots. The H240 must be placed into the water, at its operating position, only with arm strength and thanks to the hydrogenator rope provided for that purpose.

The profile arm of the hydrogenerator should be on the line of the boat prior to raise it.

#### 3.6 Use in conjunction with a motor

The strong thrust and the turbulences due to the use of a motor and applied to the hydrogenerator may deteriorate the hydrogenerator.



The hydrogenerator must not be placed in operating position (in the water) when using a motor during navigation. \*

\* except in a case of extreme urgency - man overboard

#### 3.7 Reverse gear

The hydrogenerator can be damaged when the boat is reversing.



Do not reverse when the hydrogeneratot is in operating position (placed in the water).

#### 3.8 Port operations

To avoid any impact during port operations, please remove the hydrogenerator from its home plate prior to accessing the port.

#### 3.9 Anchoring

Do not leave unnecessarily the hydrogenerator into the water while anchoring in order to prevent fouling. Remove the hydrogenerator from its home plate and store it.

#### 3.10 Maintenance

Rinse with fresh water before storing for a long period.

Check all bolted connections of the hydrogenerator and the home plate on a regular basis.

The product warranty does not cover damages resulting from:

- the nonobservance of the "limits and conditions for using" instructions,
- difficult sea conditions and/or type of shipping outside the recreational sailing course,
- shocks in collisions with UFOs (unidentified floating objects) or sea creatures.