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Mise à jour : **01/01/2004**

INVERTER 5HF ON BOARD CHARGER IUU

BATTERY CHARGER

Battery chargers for lead acid battery with liquid or gel electrolyte PbSb, PbCa, Sealed SLA, OPTIMA, MaXXima)

INSTRUCTION MANUAL

Thank you for your choice! To get the best of your equipment, please read carefully following recommendations.

I / USE

This high-tech chargers was designed to be on board on vehicle. It resists to vibrations.

There is an alu case and it will perfectly resist to salt environment on a boat.

II / CHARGING MODE – I.U.U.

- ✓ This model benefit from an automatic charge regulated primarily (Inverter technology). The charging process will be done in 3 steps :
- <u>First step</u>: a charge with constant intensity (BOOST) (normal intensity indicates on the charger) until the voltage of the battery reaches 14,8 V. At the end of this first step, your battery is charged at around 80-85 %.
- <u>Second step</u>: a charge with constant voltage (ABSORPTION/EQUALISATION) at 14,8 V during which the charging current will decrease in proportion as the charging level increase until 95 %. This charge duration is fixed to 2 hours.
- <u>Third step</u>: Then the charger applicates a lower voltage to charge and maintain the battery charged to 100% (FLOATING at 13.8 V).

✓ This technology will fully recharge your battery without any risk and even with minor variations of the mains voltage supply. The charger can stay indefinitely and without any danger connected on your battery (by example winter ...).

III / PROTECTIONS

- ✓ The charger starts a charge as soon as the main is connected <u>and</u> as a battery is connected on its output, even if this one is completely discharged.
- ✓ In case of power failure of the mains, the charger, after recovering of the main power, start again its charge cycle.
- \checkmark In case of consumption on the battery during the charge, if the absorbed current overtakes the charger caliber (5A), the charger starts again the complete charge cycle, because the consumption partially discharges the battery.
- ✓ The charger is protected against reverse polarity connection by a fuse on the output cable, fuse type vehicle. In case of fuse replacement, respect imperatively the caliber: 10A.

✓ THERMAL PROTECTION

The charger is protected against overheats If it is used in a too confined environment, or at excessive temperature, it reduced automatically the charge current so that the surface temperature can be touched without any danger for the user. The battery recharging time could then be longer.

IV / DESCRIPTION

- ✓ Your charger is equipped of 2 led indicators.
- ✓ The first orange indicator switches on when the mains power is present.
- ✓ The second green indicator switches on during the last phase of floating.

V / SULPHATED BATTERIES

✓ A battery must not stayed fully discharged more than few hours. When it happens, it sulphates itself very quickly.

As long as the coating is not irreversible, this automatic charger allows to regenerate the battery automatically. For that, you have to leave the battery in charge during several days (about 36 hours).

VI / BATTERY CONNECTION

- ✓ Your charger is equipped with 2 means of connection for the battery :
- A cable with clamps allows to recharge batteries temporarily, with a simple and quick connection. You must respect polarities : red clamp on positive terminal, black clamp on negative terminal of the battery.
- A cable with plug is destinated to the permanent connection of the charger on a battery (use of on board charger). You must respect polarities: brown thread on positive terminal, blue thread on negative terminal of the battery.

VII / ADVISES AND WARNINGS

- Do not attempt to charge non-rechargeable batteries.
- In case of wear or damage to the mains cable, please return the charger to your dealer for repair.
- Use your charger in a well-ventilated area avoid flames or sparks.

Your charger complies with the EMC Directive (Decree 92-587) and can be used in domestic premises. The user remains liable to recognize the environment and avoid any use close to sensitive apparatus.