

YACHT CORROSION CONSULTANTS

ZINC SAVER

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OWNERS MANUAL & INSTALLATION GUIDE

ZINC SAVER II - 30 AND 50 INSTALLATION GUIDE

The shore power electrical safety ground (green) should be connected to the boats A.C. ground and immersed metal bonding system (an ABYC recommended connection). Our ZINC SAVER maintains this safety connection while breaking the galvanic connection between your boat and the dock and other boats that share the same green wire. This will keep your zinc protecting only your boat instead of the dock and other boats and keep your valuable boat metal from protecting the dock and other boats after your zinc is gone.

INSTALLING YOUR ZINC SAVER

Mount the Zinc Saver between the shore power inlet and the A.C. panel green wire buss. There is no directional flow. It will stop galvanic current in both directions. It does not matter which stud goes towards the shore cord inlet or the green wire buss.

Before connecting the Zinc Saver in line on the A.C. green wire, check visually or with a continuity meter to make sure there are no other paths for the A.C. green wire to reach the bonding system on the shore side of the Zinc Saver. After installation to verify that there is no ground loop around the Zinc Saver. Disconnect one side of the Zinc Saver. With your VOM on OHMs, place one probe on the wires that were disconnected. Place the other on the side where the Zinc Saver is still connected. There should be no continuity.

TESTING YOUR ZINC SAVER

Disconnect shore power.

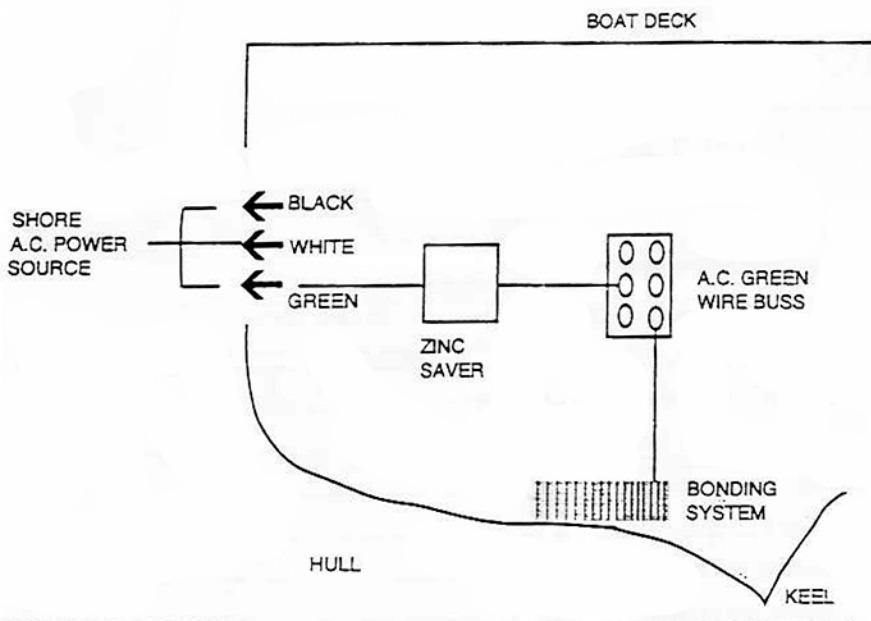
With your digital multi-meter on DIODE CHECK - read across inputs of your ZINC SAVER.

Readings will be in the 800/900 (depending on meter) range. Swap your hands and read the opposite way. Readings should be about the same (plus or minus 10%).

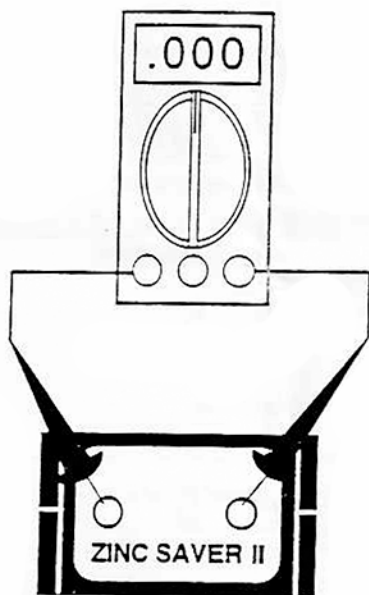
If you get full continuity - (000) - Disconnect one wire from the ZINC SAVER and read again. If it reads correctly your green wire ground is incorrectly wired by-passing your ZINC SAVER.

You must find the problem wiring or your zinc and your valuable boat metal will dissipate protecting other boat's metal and the dock metals tied to the green wire grounding system.

The Zinc Saver has been tested to pass all requirements by Yacht Corrosion Consultants, Inc., several major boat companies and TESTING LABS INTERNATIONAL, an independent testing facility.



METER SET ON DIODE
CHECK



CORROSION SURVEY

Knowledge in the Corrosion Workbook and a Portable Corrosion Test Meter necessary to use this form.

DATE: _____

Name of boat _____

Style and make of test equipment _____

Highest voltage metal in underwater system _____

(Metal voltage (in seawater) : -Aluminum 625, Steel 425, Bronze 200, SS Steel 50/450)

Read test zinc beside boat - voltage is _____

All immersed metal is electrically connected (bonded) and the voltage is _____

Disconnect batteries - bonding system voltage is _____

Pull shore cord - bonding system voltage is _____

Dock A.C. ground reading is _____

Connect shore cord - bonding system voltage is _____

All D.C. equipment operated and no voltage change _____

All A.C. equipment operated and no voltage change _____

ZINC SAVER TEST

Disconnect wires on one side of the installed unit:

Read continuity between wires still connected to disconnected wires. There should be no circuit.

Continuity: _____ : No continuity: _____

Read diode check across zinc saver. Change leads and read opposite direction. Both readings should be approximately the same both ways + or - 15%. Readings will vary between styles of meters.

Diode check - left to right _____ right to left _____

BONDING CONTINUITY TEST (OUT OF WATER)

Read from zinc to all protected metal parts in bonding system

All parts connected - no resistance _____

Read from zinc(s) to all bolted and associated metal parts of I/O or outboard motor

All parts connected - no resistance _____

Use digital or 50,000 Ohms sensitive analog continuity meter + or - 30 Ohms acceptable