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Marine Batteries – Spring Health Inspection

What to Look For When Checking Your Batteries

READING ELECTRIC, a leading supplier of electro-mechanical equipment, services, and problem solver for Industrial and Commercial customers for over 45 years provides technical information to the Region's Residential, Commercial and Industrial Community. This Bulletin provides information on the warning symptoms that indicate your Marine Batteries (starting and house batteries) are nearing the end of their useful life.

When examining or accomplishing any operations with batteries follow safety precautions and always WEAR PROPER EYE PROTECTION.

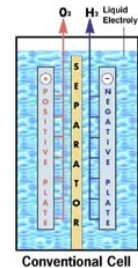
There are several easy to spot signs that provide early warning your battery is failing, and acting upon these signs can easily prevent you from being 'caught' with dead batteries.



Things to look for:

Flooded Wet Cell, Gel, and AGM Batteries

- 1) If a battery post has a powder residue, this may indicate that the Battery Post seal has been compromised and is leaking. This situation cannot be repaired and the battery should be replaced. Some lower quality batteries may experience 'wicking' at the post that the manufacturer considers normal.
- 2) After fully re-charging your battery or battery bank to 12.6 volts (no load applied; battery charger disconnected); the voltage drops below 12.4 volts (no load applied; battery charger disconnected) after 3 or 4 days without being used; the self discharge rate of the battery indicates there are internal problems with the battery and it is beginning to fail.
- 3) During charging, if the battery feels hot to the touch or is gassing violently; immediately stop charging. This indicates there are internal problems with the battery and should be replaced.
- 4) Any leaks detected any where on the battery indicate the battery is in failure mode and should be replaced. Most common are leaks between the battery case and cover. If there is liquid in the bottom of the battery box, this could be an indication of a leaking battery.
- 5) If you smell Hydrogen Gas during charging, this may indicate a battery problem and/or an overcharging condition. Stop charging and begin tests with the appropriate equipment to determine the problem.



Gel and AGM Batteries

- 1) If the battery sides 'bulge' on charging this may indicate internal problems with the battery and the battery should be tested with a Load Tester.
- 2) If the battery sides appear to be 'sucked-in' when discharged and do not return to normal after charging, this may indicate internal problems and the battery should be tested with a Load Tester.

Flooded Wet Cell Batteries

- 1) If the plates are not covered with electrolyte, it is likely that an over-charging situation is occurring and the plates may have been damaged. Re-fill cells to proper level and fully re-charge. It is best to perform a Load Test or a Conductance Test to determine if plates have been damaged.

READING ELECTRIC is a leading **Authorized Full Service Distributor** and offers a complete line of Deka Batteries. For assistance and additional information on Battery Power Systems, contact Russ Yerger at READING ELECTRIC. Phone: 610-929-5777; Fax: 610-929-1670; Visit our Website at www.readingelectric.com or email us for additional information at info@readingelectric.com