Marine Batteries: What's Inside the Box
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Not all batteries are created equal so knowing what to look for can increase your on the water experience. With today's advanced boats and accessories selecting the right batteries is like selecting the correct lure to use with the right rod, reel and line. Batteries come in many shapes and size and many different ratings can be found on the battery. Battery size is not a direct relationship to the ratings. Most battery manufacturers offer a variety of ratings in each group or size class of battery. Selecting the correct battery will reduce the chances of not starting the engine or running out of power while using the trolling motor.

TERMINOLOGY

MCA (Marine Cranking Amps): Marine Cranking Amps is a measurement that states how many amps a battery can deliver for 30 seconds at 32 degrees Fahrenheit and not fall below 7.2 Volts. (Used for Marine Products since they are rarely used at 0 Degrees Fahrenheit)

CCA (Cold Cranking Amps): Cold Cranking Amps is a measurement that states how many amps a battery can deliver for 30 seconds at 0 degrees Fahrenheit and not fall below 7.2 Volts. (Used more for Automotive and Industrial Applications)

RC (Reserve Capacity): Reserve Capacity is the number of minutes a battery can supply 25 amps at 80 degrees Fahrenheit and not fall below 10.5 Volts.

AH (Amp Hour): Amp Hour rating how many hours the battery can deliver 1 amp. For example: A 100AH Battery can supply 1 amp for 100 Hours, or 5 amps for 20 Hours, or 10 Amps for 10 Hours.

There are three main types of Marine Batteries: Starting, Deep Cycle and Dual Purpose. Marine Starting Batteries are designed just for what they are named to use to start the motor. Deep Cycle batteries are specially designed batteries that can take numerous discharges and charges and are great for electrical use items that do not supply input to the battery like trolling motors, electronic fish finders, VHF radios and more. A Dual Purpose Battery is a combination battery that can do either job.

Starting Batteries: Are constructed to provide quick bursts of energy, thus they are designed with many thin plates in the battery to perform this function. Starting Batteries are designed to start your engine; there are several things that need to be considered and to check before purchasing the right product. The first thing that you need to find out is the required minimum cranking amps for you motor. Today's modern Direct Injection motors require higher MCA than earlier carburetor motors. This is due to the motors requirement to build fuel pressure prior to starting. The next factor to research is the Reserve Capacity (RC). The higher the reserve capacity the longer the battery can crank the motor or the longer or more electronic equipment it can power. Remember that most all boats the starting battery is used to not only power the engine but also all lights, bilge pumps, livewell aerators, fish finders and any other accessories. For that reason it is better to purchase a more than ample battery to support your entire vessel's requirements.

Deep-Cycle Batteries: Are designed to be discharged many times and recharged. They work excellent for powering electrical devices like trolling motors that use many amps of energy throughout the day. With this in mind there are less but thicker plates in the battery to provided extended amp draw. When looking to find the best deep cycle battery the requirements are different. You're looking

for a battery that will provide enough power to run your trolling motor for a given amount of time. So cranking amps are not a necessary component for selecting the deep cycle battery since you are not looking for a rating to supply quick bursts of energy; thus the reason you need to rely more on Reserve Capacity (RC) and Amp Hour (AH) ratings. What you need to review is the maximum amp draw of your trolling motor and the length of time you will be using it. The higher the reserve capacity or amp hours the longer your battery will supply the needed power to provide enough power all day long.

Dual Purpose: Is a compromise between the above two types. They are neither a full starting battery nor a full deep cycle battery. These batteries work better for starting batteries with lots of accessories that discharge the battery often. They usually do not provide as long of a reserve capacity nor are designed for direct replacement of deep cycle batteries. If you decide to select a dual purpose battery I would use it more for starting than for a true deep cycle battery if long life is your goal.

Many issues with poor trolling motor life, or questions about on-board chargers, or motor starting issues can be directly related to the improper battery for the application you need. When selecting the right battery make sure you are getting the Type of battery you need to work for the job at task, make sure it has enough MCA for starting and running all your electronics or enough reserve to run your trolling motor at the speed you operate and the conditions you operate. Why you buy the best boat to fit your needs, the correct trolling motor to fulfill your fishing requirements and an on-board charger to maintain your batteries then skimp on the quality of your batteries. Many time the better the battery the higher the price. There's more to a battery than a size and cost. Consult your local marine dealer or battery supplier to help select the correct battery for your fishing needs.