

# Battery Terminology

## BCI Group Number

The BCI number on a battery is a universal code that indicates the physical characteristics of a battery. i.e. dimensions & polarity. It does not however have any bearing on the current ratings of the battery, therefore you can have two batteries with the identical BCI number but different current ratings. This number is used mainly on batteries manufactured or distributed in the USA.

## Cranking Amps

The Cranking Amp rating on a battery represents the amount of amperage that a battery at 0°C can deliver for 30 seconds while maintaining a voltage of at least 7.2volts (for a 12V battery).

## Ampere-Hour (AH)

The Ampere- Hour on a battery is determined by multiplying the current flow in amperes by the time of discharge, in hours, until it drops to a voltage of 10.5V. The ampere-hour rating of a battery is usually based on a 20-hr discharge @80°F. So if a 12V battery @ 80°F delivers 4 amps for 20 hours before its voltage drops below 10.5 volts, its ampere-hour rating will be 4amps x 20hrs = 80 Ampere-Hour battery.

## Reserve Capacity (RC)

Reserve Capacity is similar to Ampere-Hour except that it is rated in minutes and is based on a specific current draw. The reserve capacity rating on a battery is determined by the amount of time (in minutes) a battery at 80°F can deliver 25 amps before its voltage drops below 10.5 Volts.

## Deep Cycle

Deep cycle batteries used in marine applications are called upon to deliver many various depths of discharge, in some cases a battery may be drained to zero capacity before it is recharged whereas an automotive battery provides short bursts of power before the alternator of the vehicle takes over. Deep cycle batteries are designed to withstand these repetitive cycles and continue to provide their rated capacity after hundreds of cycles.



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# Battery Terminology (Cont'd)

## Maintenance Free Battery:

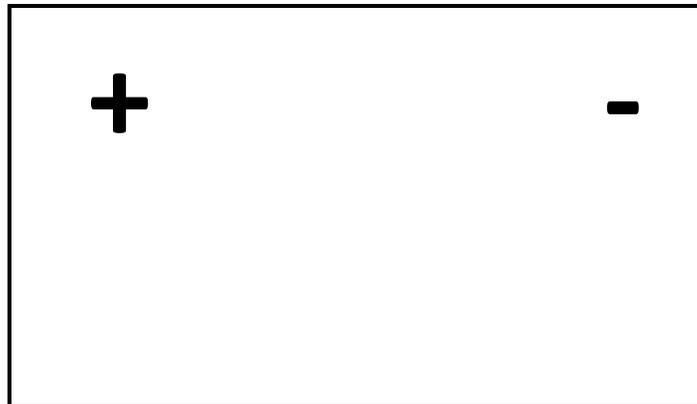
A maintenance free battery (or low water loss battery) is a wet cell lead acid battery that does not require any form of maintenance during its regular service life under normal working conditions. Because of the reduced evaporation of electrolyte, corrosion levels are also drastically reduced or non-existent, making the battery truly maintenance free.

## Why Do I Need To Validate My Warranty:

A battery operates within your equipment's electrical systems, and at times a battery may "die" or fail due to problems within the equipment's systems which if left unchecked, can result in premature failure of your new battery. By having your electrical systems checked during warranty validation, you may avoid further battery problems which may not be covered by your warranty.

## Determining The Polarity Of A Battery:

With the battery poles on the side of the battery that is furthest away from you, the polarity of the battery is determined by the position of the positive battery pole. The example in the diagram below is of a left hand battery:



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