## **Season Battery Startup**



When it's time to inspect the vehicles that you've stored during the off-season please make sure that the battery is high on your checklist. Just charging a battery is no indication of its' overall health. Unless you've maintained the battery during the storage period, it may not be able to deliver its peak performance and service life for the upcoming season. To insure that you get the best performance your battery can deliver you need to perform a few simple checks.

Before performing any inspection on your battery, make sure that there are no open flames or possibility of sparks around the battery and absolutely no smoking. Always wear eye protection, protective gloves and clothing.

For a conventional style battery (those with the liquid electrolyte) you should visually inspect the battery for any apparent problems. These can include dirty or corroded terminal connections, low fluid levels, physical damage such as broken or missing filler caps or dirt and moisture on the battery. If you need to service the battery, it's best to remove it from the vehicle. First insure that the electrolyte levels are properly adjusted. Using distilled water; fill each cell until the level is above the minimum level line on the battery case and at or below the maximum line. Never overfill the battery or leakage will occur. If you discover that the electrolyte levels have fallen below the minimum level lines, there is a possibility that permanent damage may have been done to the internal lead plates in the battery and a new replacement may be required. After adjusting the levels, make sure the filler plugs are secured and the battery is free of dirt and corrosion.

If you need to clean the battery, use a mixture of baking soda and water to neutralize any electrolyte that may be on the outside of the battery. Simply brush this on the battery and terminals using an old paintbrush or tooth brush and rinse it off with clean water. Dry the battery using an old soft rag or paper towel and make sure the terminals are clean and free of corrosion. You can clean the terminals with a small wire brush, if the corrosion is significant, or just brighten them up by using a piece of emery cloth.

When your battery is clean, it's time to check the state of charge. When using a voltmeter, the battery terminal voltage should read at least **12.6 volts.** If your voltage is below this or you've

adjusted the electrolyte levels, a boost charge is required. Charge the battery in a well ventilated area away from kids and pets. The variety of chargers you can use to endless but it is recommended that you use an automatic taper type charger specifically designed for Powersport batteries. Do not use a high current or fast charger for the boost charge unless you are familiar with their operation or permanent damage can occur to the battery.

When servicing a Sealed Maintenance Free battery, you do not need to inspect the electrolyte levels since the battery is permanently sealed. The cleaning method and charging methods are the same as for the conventional style batteries. Sealed Maintenance Free Batteries have a slightly different electrolyte, which influences the terminal voltage. The full charge voltage should read about 12.8 volts.

After you've performed this maintenance, you still may require additional help with your battery. While the battery may exhibit good terminal voltage, it may not be in the best state of health. The battery could be seriously short on capacity if it had deteriorated due to corrosion or sulphation. To check this condition you may choose to reinstall the battery in your vehicle and perform a very fundamental start test or you could take the battery to a service centre and have a capacity test performed. Most battery dealers will perform a simple electronic or electrical resistance test on the battery and be able to tell you the state of health. By knowing the state of health, you can determine the useful life expectancy of you battery. With this information you can decide if you should replace the battery with a new one or reinstall the existing one in the vehicle.

To insure maximum performance and service life for your battery, we recommend that you use nothing greater than a **1.5 Amp** or **900mA** Automatic Battery Charger or Float Type Charger for battery maintenance. Please refer to the manufacturer's instructions for additional battery charging information.

Even with the proper care and maintenance your battery will eventually wear out. It is usually easier, more convenient and in some "mission critical" situations safer, to replace them before they fail unexpectedly. With this in mind, you may want to simply replace the battery every few years with a new one.

## **How our Published CCA Ratings are Determined**



Power Sonic does not test CCA Ratings by using a hand held tester as do some of our competitors.

We only perform the standard testing procedure for CCA ratings, which consists of measuring the output of a battery for 30 seconds of crank at 0 degrees with the ending voltage of the battery being 7.2 volts. These test results are what we print in our application and specification guide, and publish on our website.

We have chosen this type of testing because we feel that we receive more accurate results. Although we feel this type of analysis to be more consistent and precise, the outcome in some cases (specifically for AGM Types), is a lower CCA Rating.

Please be assured that although in some cases our printed CCA Rating may be lower than what some of our competitors publish, this does not affect the overall performance of our batteries. Our in house QA Lab closely monitors all incoming inventory, and a percentage of all sealed product is tested before being released into our stock.

It is Power Sonic's goal to continually provide our customers with one of the highest quality Powersport Batteries available on the market today.

## **Keeping Your Battery Charged**

Just "riding" your vehicle isn't always enough to keep your battery fully charged.

#### Did rou know that rou should:

- Never use a charger that has an output of over 1.5 Amps
- Always use a charger that has an automatic shut off and/or float mechanism
- Make sure you use the correct charger designed for the size, chemistry and voltage of your battery
- Always follow all the instructions provided with your charging unit

Unless your vehicle is used daily, there is a very good chance that your battery is still going to need to be charged on a regular basis.

# It is important that your battery be maintained correctly to avoid over charging which will do damage to and shorten the life of your battery.

Consider a multi-function unit such as the Battery Sitter®, which has the capability to charge, maintain, test and desulfate batteries. This unit only charges at 600mH, and is designed to specifically charge Powersport Batteries. Using a charger of this type will help avoid damage which in most cases, will extend the life of your battery. The majority of premature battery failures are caused by incorrect charging, or a faulty electrical system. If you have followed the procedures listed above, and your battery is still not maintaining a charge, please see the section titled Powersport Battery Testing, or please take your vehicle to an experienced Powersport mechanic for further evaluation.

# **Technical**



We have always prided ourselves on the quality of our technical support. We maintain laboratory and testing facilities containing the latest state-of-the-art equipment. All our batteries are subject to stringent quality controls throughout every step of manufacturing and through to their final dispatch.

Our technical department is staffed with highly qualified and well trained engineers, who are always available for technical advice and application expertise. Helping you find the right battery solution for your specific application is of the utmost importance to us.

We are proud that all business divisions across the Power Sonic group are certified to ISO9001:2015. ISO's management system standards are international standards to help improve the efficiency and effectiveness of a company's operations and covers all manufacturing and distribution processes. We maintain a Quality Assurance Department dedicated to implementing and maintaining all aspects of this high benchmark.