



## How To Get The Most Out of Your Shorai Battery Warranty

*S.Higbee - June 2014*

To qualify for warranty coverage customers must verify that they have purchased the correct battery for their vehicle. This is accomplished by visiting the shorai product finder guide @ [www.shoraipower.com/display](http://www.shoraipower.com/display) . If your LFX battery is not recommended for your vehicle, contact your seller to exchange it for the proper battery.

All Shorai LFX batteries have a 3 year pro rated warranty. If there is an issue with the battery within the 1<sup>st</sup> year period from the date of purchase a free replacement is available. A 50% discount from the MSRP price is available on a new replacement throughout the 13<sup>th</sup> -24<sup>th</sup> month period. From the 25<sup>th</sup> - 36<sup>th</sup> month period a 25% discount is available.

Using the Shorai battery in applications that are not specifically listed in the product finder guide will void the warranty coverage. If you do not find your application listed be sure to call Shorai customer service (ph. 888-477-4848) for further assistance before using the battery. Some of the common customer applications that are not recommend include: custom motorcycles with large displacement V-twin engines (over 110Ci), vehicles with total loss systems, automobiles, electric scooters/bicycles, or any type of application that the battery is used to power electrical devices.

It is important to use the battery for the application that it was design for which is a **Powersports Starter Battery**. The LFX battery is a very powerful, light weight and small capacity battery with about ~1/3 of Ah rating of the lead acid equivalent (PbEq). The LFX is not intended as a power source and relies on a properly functioning charging system with an output level of ~ 13.6-14.4V to properly maintain the battery.

For the ideal LFX battery performance and longest life span three main factors should be considered. First, the battery should be sized such that the vehicle starting current measures about 25-50% of the batteries CCA rating. For example an LFX14L2 has a CCA rating of 210Amps so the recommended starting current is 52-105Amps. Second, to reduce the risk of over discharging the battery it is suggested to maintaining the battery voltage above 13.1V between uses. If the battery resting voltage drops below 12.86V it will shorten lifespan and could lead to accumulative cell damage. Third, use the Shorai BMS01 charger to properly maintain the battery by using "store" mode for the non-riding season or periods of non-use and follow up with the "charge" mode to fully charge to 14.4V and balance the cells before use. An alternative method is to verify the battery has sufficient charge 13.3-14.4V and then disconnect the battery from the vehicle. As long as there is no electrical draw on the LFX battery it can sit for up to 1 year before charging. In most cases the battery will have enough charge to put into service after sitting on the shelf but fully charging to 14.4V before use will provide easier starting and less wear on the battery.