

# The Deep Freeze

**Just because** the temperature is dropping and it's time to park your bike until spring doesn't mean that you should ignore some biker basics. If you live in the colder parts of the country, read on if you want a healthy and functional battery when the new riding season arrives. If you live in a climate that allows you to ride year-round, well... you should still read this article because you may pick up some pointers to extend the life of your juice box when your bike is stored for short or extended periods. Either way, if you don't take care of your battery, you may pay the price (at the parts counter) when it's time to ride.

All batteries stored in a discharged state are susceptible to freezing and sulfating of the plates, which reduces the battery life. It takes a subfreezing

the battery and compartment with plenty of clean water and then dry them thoroughly. Closely inspect the battery for any signs of damage or acid leaks. If there are any cracks or leaks, it's best to safely discard the battery and get a new one.

There are basically two types of motorcycle batteries, sealed and conventional. Sealed batteries, also known as maintenance-free batteries, should never be opened and do not require refilling electrolyte levels.

Conventional batteries have filler caps on top. You should check the electrolyte levels in each cell. They should be maintained between the minimum and maximum level lines marked on the side of the battery. If low, carefully add distilled water in the filler holes to the maximum level line, making sure not to overfill. Then charge the battery.

Okay, so the battery is out of the bike, clean and properly filled. Ideally, you should store the battery



**Use a mixture of baking soda and water to clean the battery terminals and compartment, as well as any other areas exposed to battery acid or vapors. It helps neutralize any electrolytes that may have oozed out and halts damage to painted or plated surfaces. Don't forget to rinse with clean water and dry thoroughly.**



80 F below zero to freeze a fully charged battery but only 32 F when discharged. Other than running dry, a battery's greatest enemy is lack of regular use, especially a motorcycle battery, which is designed to be recharged regularly by an alternator. Unused batteries will naturally discharge over time, so it is our job to maintain properly charged batteries.

The rate of discharge depends on the type of battery and temperature. Sorry, forget the bad advice that letting your bike idle will charge the battery. It won't. To fully recharge a battery with your alternator, the vehicle must be driven — often and for a good distance. Prolonged highway driving provides the best

charge. It is a good idea to occasionally use a battery charger, instead of relying on your bike's charging system, to maintain a fully charged battery.

Here's how: Start by disconnecting the leads and removing the battery from its compartment. Make sure the battery filler caps are on tight and that they stay sealed. You might consider marking the wires to make reassembly easier and safer. Clean the battery

and terminals using a mild solution of baking soda and water. You should also clean the battery compartment with the solution at this time. Rinse

in a dry, cool, well-ventilated area inaccessible to children and animals. Keep it away from a furnace or other heat source, as cooler is better for battery storage, down to 32 F. Plan on charging the battery every 45-60 days, or leave it plugged into a "smart" trickle charge with overload protection. It's also a good idea to check the electrolyte levels periodically and add distilled water if necessary.

The life of your motorcycle battery is determined by several factors. Most important are proper maintenance, amount and frequency of use, proper charging, and climate. Treat your battery well, and it'll pay you back with a long life.

## Sources

**EXIDE**  
678/566-9000  
www.exide.com

**INTERSTATE BATTERIES**  
888/772-3600  
www.interstatebatteries.com

**YUASA**  
610/929-5781  
www.yuasa-batteries.com



**Check the electrolyte levels on conventional batteries. If low, add only distilled water to the correct level. Some batteries are sealed so you cannot check or refill them.**



**Store in a cool, dry place away from children and animals and connect to a smart or trickle charger. RB**