



Motorcycle Battery Tips - Steve Warmath, Safety Officer

Late model motorcycles have moved toward the sealed, maintenance-free type batteries. There are still those older bikes that use the kind that require maintenance and servicing. Here are some tips for caring for both types that will give you confidence that when you throw a leg over and hit the starter, something actually happens.

Taking care of our own battery is one of those simple things that even non-mechanics should take a greater interest in, since it's easy, will prolong battery life, and save money that would be spent on frequently replacing batteries.

You already know that your battery provides the juice that runs the starter motor, lights, and ignition system. And those are pretty critical to our motorcycle enjoyment. Dead batteries are problematic, especially if they pass on before their time. Motorcycle batteries are supposed to last 3-5 years, IF we take **good** care of it.

But there are riders who don't pay their battery the attention it needs. And they may need to replace their batteries every time spring rolls around. So, let's visit the three main points of good battery care.

BASIC BATTERY MAINTENANCE POINT #1- Point #1 about maintaining bike batteries is that they need to have their fluid level (electrolyte) periodically refilled. Since car batteries have been sealed and maintenance-free for so long, the idea of doing anything to a bike battery may not be on the radar screen of a rider who is a non-mechanic.



The good news is that it is a relatively easy task to check battery electrolyte levels in each of its cells. Most (but not all) bike manufacturers make their batteries simple to get at, to facilitate maintenance. Your battery may be under your seat, or easily accessed from the side of your bike, perhaps behind one of your side panels. (Your owner's manual will point this out, if you don't already know).

Proper battery maintenance means ensuring the electrical juice is at the right level, as indicated by the maximum and minimum "fill" lines for each cell. These levels are etched into the side of your battery. All that's required is to top-off that electrolyte by adding distilled water. It's worth emphasizing that you won't be adding battery acid to fill up your battery. You'll be adding **distilled water**. (Not tap water).

Having said that, the electrolyte *inside* your battery isn't friendly stuff. You don't want to get the existing battery acid (electrolyte) on yourself. So, a true safety advocate would wear protective gloves and safety glasses.

How often should you check the battery electrolyte levels? Every month, or 3000 miles (whichever comes first), is a conservative battery maintenance routine.

MAIN REASON MOTORCYCLE BATTERIES FAIL- The main reason motorbike batteries will not last their expected lifetime is because they are left in a motorcycle that has not been used for a long time. Have YOU ever left your bike sitting, unused, for a long time, like, say an entire winter? Every springtime bikes are brought in to the shop that won't start because their batteries are dead. (This, by the way, is very good for new battery sales at the dealership.)

Batteries are automatically recharged when the motorcycle is in operation. So, not only do batteries lose their needed recharging when a bike is not being used, but when they are left unused in the *cold*, that just accelerates their demise.

So, the 2nd point of proper battery maintenance is removing it from your bike for the winter, or any multi-month period the engine will not be operated, and properly storing it.

2nd POINT OF MOTORCYCLE BATTERY MAINTENANCE – STORAGE- As part of battery maintenance point #2, not only should it be removed from your bike in the winter, it should be stored in a location that is warmer than 32 degrees. This keeps your battery from freezing and/or cracking. (In other words, storing a battery

in a cold garage is not good maintenance).

But we're not quite done with our battery storage maintenance yet!

Batteries can be finicky about where they rest. They're sort of like that "Princess And The Pea" fairytale, whereby a "true" Princess was revealed because she could not sleep comfortably on a pile of mattresses as a result of a pea lodged somewhere amongst all that padding. Well, maybe a motorbike battery is not quite like that, but be kind to your battery and **do not** store it on a concrete or metal surface. This isn't just a result of royal lineage, it's because this will accelerate the discharging of the battery over time.

Your Princess battery should not be stored on concrete, and especially a cold, concrete floor, such as what might be typical for a garage.

Instead, place your battery to rest on a wooden, plastic, or thick cardboard surface. It doesn't need a mattress; any non-conductive surface will do.

POINT #3 AND BATTERY TRICKLE CHARGERS- Point #3 of proper motorcycle battery maintenance is charging the battery while it is in storage. That battery is somewhat of a restless Princess. It just doesn't like things staying the same. It mainly spends its time either charging or discharging. Which means that when a battery is not in use on a running motorcycle – which is how it gets charged – it is discharging. That darn thing loses charge every day when it's not used! The good news is that the solution is simple: regular charging ensures a long life for your battery, even when it's stored.

Which brings up the subject of motorcycle battery chargers. The last point about taking care of your battery is connecting it up to a charger to maintain the battery in optimum condition and to help get the full life out of your battery. Some rudimentary advice would be to never use a "car battery charger" to charge your motorcycle battery. On the other hand, there are some chargers that can handle both, and it's just a matter of setting the charger switch correctly. Otherwise, if you use the wrong charger, you'll supply more current than your motorcycle battery can handle, which makes for an unhappy battery.

Furthermore, a "smart" or "intelligent" motorcycle battery charger will continuously monitor your stored battery's condition, and activate the charging mode when it is needed so that it doesn't get overcharged, even if it's supplying the correct current. Other motorbike battery chargers need to be connected and disconnected so as to not fry your battery.

BATTERY MAINTENANCE CONCLUSION- In review, the three parts of proper motorcycle battery maintenance are:

1) Keep the individual cells in your battery filled to the indicated electrolyte levels with distilled water. This kind of maintenance is done throughout the riding year. The more you ride, the more frequently it should be checked.

2) Remove your battery from the bike and store it on a wooden, plastic or other non-conductive surface, in a location that does not get below 32 degrees. This would be a long-term maintenance item, such as for winter storage. However, if for some reason you know you won't be riding the bike for quite a while (for example, if you're in the service and won't see your bike for some time), this would be for ANY long-term storage.

3) Finally, connect up your battery to a motorcycle battery charger, to keep it at an optimum level of charge. This would be part of winter maintenance, but, could be used during the riding months, even while the battery is installed on the motorcycle, when the bike is not used regularly.

The benefit of good battery maintenance is not only saving money by not replacing your battery before it's 3-5 year life expectancy, but it can keep your battery from failing you on when you are out on a ride....

"Be careful out there....it's a jungle." *Steve*