

batteries

KEEP YOUR CHARGE STRONG

BATTERY MAINTENANCE

Batteries are the most important part in your golf cart. Batteries should be carefully inspected on a regular basis in order to detect and correct potential problems before they can do harm. It is a great idea to start this routine when you first receive the batteries. If you take good care of your batteries, they will last you 4-7 years on personal use. Treat battery maintenance as important as oil changes in your car.

Flooded batteries need water.

More importantly, watering must be done at the right time and in the right amount or the battery's performance and longevity suffers.

Water should always be *added after fully charging the battery*.

Prior to charging, there should be enough water to cover the plates. If the battery has been discharged (partially or fully), the water level should also be above the plates. Keeping the water at the correct level after a full charge will prevent having to worry about the water level at a different state of charge. Depending on the local climate, charging methods, application, etc., Trojan recommends that batteries be checked once a month until you get a feel for how often your batteries are need watering.

LITHIUM BATTERIES

If lithium cells are overcharged, it will shorten their lifespan or perhaps permanently damage them. So with a LiFePO4 (Lithium Iron Phosphate) battery whose nominal voltage is 3.2 volts you should never charge them above 3.65 volts and it is best to have something in the system that will shut the charger off when they reach a maximum charge voltage of 3.65 volts.

Similarly, with a LiNCM or LiMn2O4 (Lithium Polymer) battery whose nominal voltage is 3.7 volts you should never charge them above 4.2 volts and it is best to have something in the system that will shut the charger off when they reach a maximum charge voltage of 4.2 volts.



[step by step instructions ---->](#)

BATTERY MAINTENANCE

Step-By-Step Watering Procedure

1. Open the vent caps and look inside the fill wells.
2. Check electrolyte level; the minimum level is at the top of the plates.
3. If necessary add just enough water to cover the plates at this time.
4. Put batteries on a complete charge before adding any additional water (refer to the Charging section).
5. Once charging is completed, open the vent caps and look inside the fill wells.
6. Add water until the electrolyte level is 1/8" below the bottom of the fill well.
7. A piece of rubber can be used safely as a dipstick to help determine this level.
8. Clean, replace, and tighten all vent caps.

• MATERIALS NEEDED:

- Gloves
- Distilled water
- Turkey baster (2)
- Funnel
- Rag
- Safety Glasses

Important Things to Remember

Do not let the plates get exposed to air. This will damage (corrode) the plates.
Do not fill the water level in the filling well to the cap. This most likely will cause the battery to overflow acid, consequently losing capacity and causing a corrosive mess.

Do not use water with a high mineral content. Use distilled or deionized water only

CAUTION: The electrolyte is a solution of acid and water so skin contact should be avoided.

WARNING: Never add acid to a battery.

MUST WEAR SAFETY GLASSES DURING MAINTENANCE

PERFORM MAINTENANCE
AT YOUR OWN RISK. IN
DOUBT, PLEASE CALL A
PROFESSIONAL.