

Basic Battery Maintenance for an Electric Forklift

Step 1. Safety

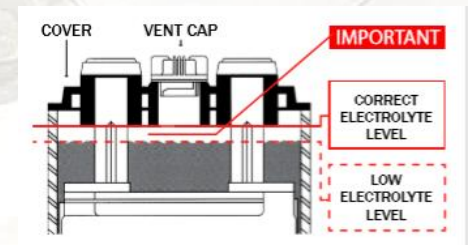
- Ensure appropriate Personal Protective Equipment (PPE)
- Consult Safety Data Sheets before handling
- Be sure to remove any metal jewelry
- Ensure any workplace training on the operation, charging and maintenance of the battery has been completed.

Step 2. Properly Charge the Battery

- The charging area should be clear of debris and have adequate ventilation. When a battery is on charge, hydrogen gas is generated and it should have sufficient ability to disperse
- Before placing the battery on charge, ensure the electrolyte (water) is at a satisfactory level and the plates are just submerged
- If required add only distilled or deionized water. Note: Overwatering before charging can cause acid overflow (see note in step 3)
- Ensure appropriate amperage/voltage of the charger
- The charger must be in the "off" position when connecting and disconnecting cables
- Any battery with a steel cover should only be placed on a charge with covers in the open position

Step 3. Check the Battery Electrolyte (water) level weekly

- The plates within a battery must always be fully submerged
- After charging review/add the electrolyte. The electrolyte (water) should be $\frac{1}{4}$ " below the vent well. If it is not at this level, you must add more electrolyte (see diagram). Note: that fully watering a battery before a charge can cause acid overflow.
- Any loss of acid from the battery will result in power reduction and its life expectancy
- Any acid that overflows will deteriorate the external components of the battery and should be abated immediately



Step 4. Ensure vent caps and battery tops are clean and dry

- Vent caps should be left on the battery while in use, on charge or when cleaning. Vent caps prevent acid splash and foreign matter from entering and damaging the battery cells
- Removal of the vent caps should be limited to inspecting or adding electrolytes (water)
- For minor spills or overflow of electrolyte fluids an acid neutralizer should be applied and then dried with a rag or towel and dispose of appropriately
- If any corrosion has occurred, a corrosion removing solution should be applied and then dried with a rag or towel and dispose of appropriately
- A battery cleaning product should be used regularly to ensure a clean and dry surface