



Forklift Battery Use and Maintenance

Every time you operate a forklift or other powered industrial truck, inspect it to ensure that it is operating properly. Ongoing battery maintenance is critical so that the forklift is always safe and ready to get your work done. First and foremost, the forklift must be checked for enough battery charge to get the job task done.

Forklift batteries are generally lead acid or nickel iron. They are charged by plugging the forklift into a fixed station or an "on-board" charger may be brought to the forklift itself. Because the batteries contain corrosive chemicals that can burn eyes and skin, wear personal protective equipment to prevent contact and splashes and should include:

- Rubber gloves
- Safety goggles and face shield
- An apron
- Steel toe boots to protect your feet from crush hazards

During battery charging, potentially flammable oxygen and hydrogen gases may be emitted. Choose and maintain the battery charging station location carefully to avoid injury.

- Choose a well-ventilated area to prevent the buildup of gases
- Label the area with signage and floor striping that outlines and separates the battery charging station area
- Have emergency eyewash and shower stations near the charging area in case of acid splashes and exposures
- Place the location near a spill kit with acid neutralization materials and posted instructions and firefighting and/or suppression equipment

Get training in battery inspection, maintenance, and recharging procedures. Battery inspection checkpoints include:

- Proper fluid levels
- Cables and are intact, insulated, and connected
- Contact posts are clean and don't show signs of crystallization or corrosion
- Cracks in the casing

Other general safety battery maintenance tips include:

- Make sure the forklift is off with the emergency brake engaged before charging
- Make sure the charger is OFF before connecting or disconnecting it from the battery
- Add acid slowly to water; never add water to acid solutions
- Keep the battery vent caps securely in place so emitted gas is vented out of the forklift
- Avoid open flames, arcs, and sparks near the forklift battery
- Never smoke near the battery charging station
- To avoid electric shock and burns, remove metal jewelry and keep metal objects away from the battery, including funnels and containers

Batteries provide power and counterweight to the forklift. They can weigh as much as 2,000 pounds so use best practices and precautions to prevent crushing accidents when moving, changing, and maneuvering them and remember:

- Move the battery only if you have a properly rated and rigged battery cart or forklift
- Securely strap the battery into the moving equipment and the destination forklift

Charging a forklift battery isn't a difficult procedure; however, it should be done with great care. Following safe work practices to properly charge and maintain forklift batteries can prolong the battery life and ensure there is always enough power to complete the job task.

Instructor: _____
Date: _____
Location: _____