

User guide

Charging Guidelines

- Only Original Equipment Manufacturer specified charger, using the 'Discover Algorithm' can be used to charge your Discover batteries.
- Extend the life of your batteries by discharging to a maximum depth of discharge of 75%.
- Provided that (1) allowances are made to fully recharge* the battery at least once during a 24 hour period or prior to the next shift, AND (2) the batteries are not more than 50% discharged, it is possible to Opportunity Charge your Discover EV Traction Battery. Short Opportunity Charges are NOT recommended once the battery is more than 50% discharged.
(* "To fully recharge" means allowing a design optimized charger with the suggested charge regime, algorithm or charge curve to run a complete cycle without interruption to fully recharge and condition the battery.)
- Discover Batteries are sealed and non-gassing with a high charge retention rate inherent of sealed gas recombinant technology, and can be charged anywhere.
- When equipment is not in use, plug in charger.

Charging Instructions

When to charge using an off-board charger

- Once the machine has been operated for an entire shift, connect the battery pack to the specified charger and unplug once the charging cycle is completed.

When to charge using an on-board charger

- Once the machine has been operated for a full or partial shift, with the battery pack unplugged from the machine, couple the connector from the charger and the batteries together. The automatic charger will activate indicating that the charging process has started.

Opportunity Charging is only recommended

- No more than 50% discharged. "Short Charging" (charging that occurs when the battery is more than 50% discharged) is NOT recommended.

General Battery Care

- With proper hand and face protection, wipe down the top and side of the batteries.
- Do not rinse or spray battery pack with water hose.
- Regularly inspect cables and retorquer terminals.
- Do not leave battery in discharged state as this will shorten the life.

Temperature Effects on Performance and Life

Run times will vary as temperatures change
Batteries are significantly less efficient under heavy discharges at lower temperatures:

- Increasing as the temp. rises above 25°C/77°F
- Decreasing as the temp. drops below 25°C/77°F

Charge times will vary as temperatures change
Batteries are significantly less efficient when being charged at lower temperature

- Increasing as the temp. drops below 25°C/77°F
- Decreasing as the temp. rises above 25°C/77°F

Continued operation at higher temperatures will shorten battery life.

Storing your battery in extreme temperatures (high or low) will shorten the life.

Important Handling Symbols



Do not add water. Do not add electrolyte. Discover® products have a recognized gas recombination efficiency of greater than 99.9% and are sealed, non-spillable and maintenance-free.



Do not tamper with product labeling, container or vents. Warranty is VOID if product is tampered with.



Do not throw in the garbage. Discover® is a 98% recyclable product and must be processed via a recognized recycling agency.



High voltage. Risk of shock. Do not touch uninsulated terminals or connectors.



More detailed specifications and service instructions are located at: www.discover-energy.com.



This product must be recycled and is made of recycled products. Contact a Discover® representative for collection and recycling.



Contains lead.

California Proposition 65 Warning: Battery posts, terminals, and related accessories contain lead and lead components, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.