

USER'S GUIDE

BACKPACK ELECTROFISHER

BATTERY



Instructions for the care, charging and maintenance of 24 volt lead-acid batteries for Smith-Root, Inc. backpack electrofishers.



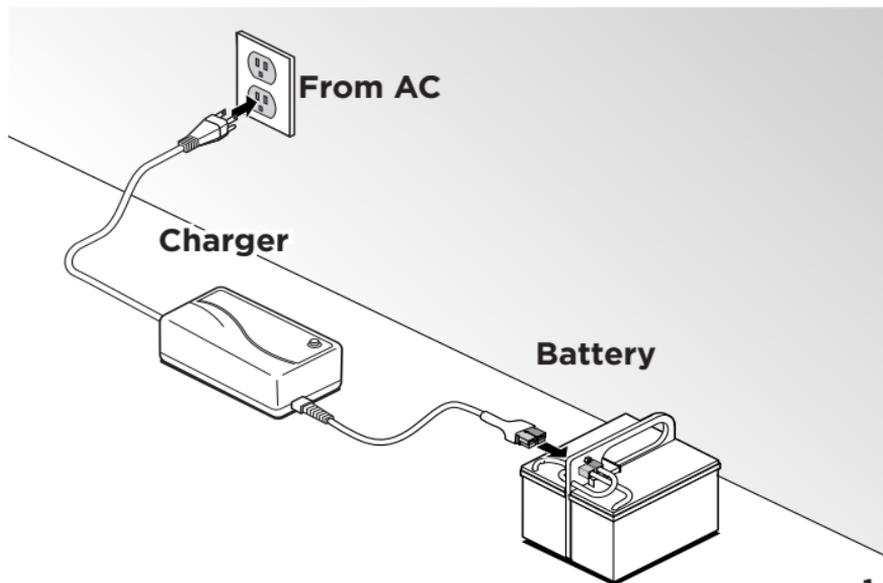
www.smith-root.com

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RECHARGING

Batteries should never be allowed to remain in a discharged state. Recharge as soon as possible after use.

Always recharge the battery after each use even if the battery is only slightly discharged (These batteries do not have a memory). Total number of charge/discharge cycles possible varies inversely with the depth of discharge on each cycle. Over-discharging or completely discharging the battery will greatly reduce the cycles possible and a battery left in a discharged condition may be ruined.



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Recharging with the battery charger is automatic and consists of three stages:

STAGE 1 - *Constant Current Mode.* The charger starts with maximum current until the battery reaches a preset voltage.

STAGE 2 - *Timed Constant Voltage Mode.* The charge is electronically controlled with a fixed voltage ceiling which prevents excess battery gas emission and over-charging.

STAGE 3 - *Float/Standby Mode.* Final stage to complete charge. Remove battery from charger once green light illuminates.

Full electronic protection is provided against short circuit and reverse battery connection.

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Time to recharge will vary depending on state of charge, condition of the battery, and battery size. Rules of thumb are 3 to 6 hours for 7Ah batteries and 8 to 10 hours for 12Ah batteries. These charge times are for batteries recently discharged to the low battery cutout. A fully charged battery placed on a battery charger may not indicate that it is fully charged for as long as 2.5 hours due to the timed charge feature.

Storage

Fully charge batteries before storing them. These batteries will self-discharge, therefore we recommend that they be recharged every 3 or 4 months. Batteries should be recharged prior to being placed back in service. Always store batteries in a climate-controlled environment without being exposed to extreme heat or cold.

Service Life

Batteries that have been properly maintained should last 3 to 5 years depending on ambient temperature, depth of discharge (D.O.D) and number of cycles. For batteries to maintain at least 80% of original

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capacity, they are rated 230 cycles for 100% D.O.D. or 470 cycles of 50% of D.O.D., and 1100 cycles for 30% D.O.D. Batteries which have reached the end of their life-cycle should be properly recycled.

Shipping

These batteries conform to the UN2800 classification as “Batteries, wet, non-spillable, electric storage.” They conform to the International Air Transport Association (I.A.T.A.) Special Provision A67, classifying them as non-dangerous goods and are therefore exempt from the subject regulations of dangerous goods and are acceptable for transport on both cargo and passenger aircraft.

Reference, I.A.T.A. Dangerous Goods Regulations, 35th Edition, Jan 1, 1994, Section 4.4, Special Provisions: A67) Non-spillable batteries are considered to be non dangerous if at a temperature of 55 degrees C (131 degrees F) the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow and if, when packaged for transport, the terminals are protected from short circuit and movement that can cause short circuit.

Tips and Precautions

1. Keep the battery charged! The most frequent cause of battery failure is not recharging after every use. More than one charger may be required if you have multiple batteries.
2. Remove battery from charger once fully charged. Prolonged time on the charger after full charge may damage the battery.
3. Heat kills batteries. Avoid storage in exceedingly warm areas. Recommended operating temperatures are between 5 or 35 degrees C (maximum -15 to 50 degrees C). The energy available on a given discharge cycle decreases at low temperatures and increases at higher-than-normal temperatures. Increased temperatures increase the gradual process of very slow corrosion, which normally occur in all lead acid batteries.
4. Avoid heavy vibration or shock application, which may cause internal damage. Some foam packing is cheap insurance.
5. Avoid contact with oils and solvents which may attack the battery case (ABS plastic resin). Clean with soap and water only.
6. Do not crush, incinerate, or dismantle the battery. The electrolyte contains sulfuric acid, which can cause serious damage to eyes and skin. Dispose of old batteries at a battery recycler.

Also Available

LITHIUM BATTERY



FEATURES

- Ultra-light: Half the weight of our 7Ah lead-acid battery
- Increased service life over lead-acid batteries
- Compatible with all 24V Smith-Root electrofishers
- Improved safety: Lower center-of-gravity for person wearing electrofisher
- Environmentally friendly
- Low maintenance: No periodic discharge is needed; there is no memory



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CAPACITY

We currently offer two lead-acid batteries for SRI Backpack Electrofishers. Both are 24 volt, sealed deep discharge-rated, lead acid batteries.



12Ah 24V

The 12 Amp-hour battery provides extended electrofishing time as compared to a standard 7Ah battery.

Part #06682



7Ah 24V

Our 7 Amp-hour battery comes standard with all Smith-Root Backpack electrofisher combos and provides a good balance between weight and power.

Part #06681