

BATTERY: 12V 20AH Lithium Iron Phosphate (LiFePO4).

Tips for Prolonging Battery life

Battery Care and Maintenance Guide

Congratulations on your purchase of the 12V 20AH Lithium Iron Phosphate (LiFePO4) battery. To ensure optimal performance and maximize the lifespan of your battery, it is important to follow the care and maintenance instructions outlined below.

1. **Initial Charging:** Before first use, it is essential to fully charge the battery. To do so, follow these steps:
 - Connect the charger to the recharge point on the console of the machine.
 - Plug the charger into a mains electricity outlet.
 - Switch on the charger.
 - Allow the battery to charge uninterrupted for a minimum of 12 – 24 continuous hours.
 - After charging, switch off and disconnect the charger.
2. **Regular Charging:** After each use, it is crucial to recharge the battery to maintain its capacity and performance. Follow these steps:
 - Connect the charger to the recharge point on the console of the machine.
 - Plug the charger into a mains electricity outlet.
 - Switch on the charger.
 - Allow the battery to charge until it reaches full capacity. A minimum of 12 – 24 hours continuous charge.
 - After charging, switch off and disconnect the charger.
 - For safety reasons, it is recommended not to leave a battery unattended during a continuous charging cycle.
3. **Charging Frequency:** It is recommended to recharge the battery at least once every two weeks, even if the machine is not in use. This practice helps to keep the battery in optimum condition and prevents it from discharging completely. Never leave the battery in a discharged state for an extended period.
4. **Minimum Battery Capacity:** To ensure optimal performance and longevity, it is advised to maintain the battery capacity above 20% of its total capacity. Discharging the battery below this level can lead to irreversible damage and reduce its lifespan. Do not fully discharge the battery.

5. **Long-Term Storage:** If the battery will not be used for an extended period (more than 3 months), follow these guidelines:

- Charge the battery to its full capacity before storage.
- Disconnect the battery from the machine.
- Store the battery in a cool, dry place away from direct sunlight and extreme temperatures.
- Check the battery charge level every three months and recharge it if necessary to maintain the recommended minimum capacity.
- **Important Note:** The battery is covered for 12 months under the machine guarantee. Any warranty claims should be addressed in accordance with the terms and conditions provided with the machine.
- By following these battery care and maintenance instructions, you can ensure optimal performance, maximize the lifespan of your battery, and enjoy reliable operation from your machine.

Advantages of Lithium Iron Phosphate (LiFePO4) Batteries over Sealed Lead Acid.

	<u>Lead Acid</u>	<u>Lithium Iron</u>	<u>Difference</u>
CAPACITY:	12v 18 AH	12v 20 AH	+10%
DIMENSIONS:	181mm (L) x 77mm (W) x 167mm (H)	181mm (L) x 76mm (W) x 170mm (H)	
WEIGHT (g):	4800	2750	-42%
DEPTH OF DISCHARGE (DoD): (How low the battery can be discharged without damaging it)	50%	80%	+30%
LIFE CYCLE (Estimated):	1000	3000	+300%
GUARANTEE:	0 Years.	1 Year.	
BATTERY MANAGEMENT SYSTEM (BMS):	No.	Yes.	Prevents damage to battery
CHARGING: (No change to charger or charging system)	No change.	No change.	