PRECAUTIONS PLEASE READ

First - please note batteries can be dangerous, care should be always taken in their use and handing!

The most dangerous aspect of handling batteries is the charging stage, as mains voltage and heat are involved.

NEVER LEAVE A BATTERY UNATTENDED WHILE CHARGING!

A malfunctioning charger or battery has the risk of overcharging the cells. This can cause the cells to swell, leak, vent gas or even explode.

As a precaution, DO NOT charge on carpet or inflammable surfaces - a concrete floor is more suitable.

Monitor the battery while using and charging. If there is any sign of excessive heat - or smoke or fire - stop / turn off the charger immediately!

If a fault occurs with a battery supplied by us, do not attempt to dismantle the battery or recharge again. Contact us for advice. Our batteries have a 12-month warranty. Please leave the investigation and repair to us.

Another potential risk is from short circuiting the battery. Do not short out the positive and negative contacts. Do not disassemble, or use the battery in a way it was not design for - this will invalidate the warranty.

After servicing many thousands of batteries, we have seen real examples of the above! So please be careful and exercise common sense.

This leaflet has been produced to help our customers most effectively maintain their current and newly refurbished batteries.

The information is drawn from our years of experience and research with rechargeable battery systems. Please contact us if you feel there are points to add, for advice or with any questions.



Severe injury from explosion, electrical shock, hot surfaces, or fluid leakage could result if you ignore any of the following:

- Read the Owner's Manual and all labels carefully before using.
- Charge the battery only with its specified charger.
- Do not use the battery to power equipment other than specified.
- Do not expose the battery to flame or high heat, or dispose of the battery by incineration.
- Do not directly connect the negative (-) and positive (+) terminals with wire or metal object.
- Do not attempt to open, disassemble, modify or solder the battery pack assembly.
- Keep battery dry.
- Do not drop, hit, or subject to strong physical shock.
- If fluid leaks from the battery, do not use. Wash fluid from skin or clothes immediately. If battery fluid gets in to eyes, flush with water and seek immediate medical attention.



Battery Usage Advice and Handling Guide



Tel: 020 8099 6030 www.recellyourbattery.com info@recellyourbattery.com

Instructions: Using Your New Cells

Your battery with brand new cells have arrived! Here are some instructions on how to get the best from them.

After refurbishment your battery was fully charged and tested. As a result there may be some remaining charge when it arrives.

To help ensure the longevity of the battery and the new cells inside, please follow these steps:

- Do not charge the battery initially when it arrives.
- Use the battery as normal until the stored charge dissipates - this may not take long.
- Once the battery is empty*, please charge it fully following the manufacturer's guidelines.
- Begin to use your tool/equipment as normal.

(*Note: the battery is empty when for example, a drill <u>first</u> stops spinning; do not over-discharge cells by continuing to use your tools/equipment after this point.)

Please note: Your newly refurbished battery will take a few of charge / discharge cycles to reach its maximum capacity



Battery Handling Advice

Battery Memory Effect

If a Nickel Cadmium (NI-CD) battery is recharged from part-charged state, it may continue to only retain part of its charge thereafter. Referred to as the memory effect.

Nickel Cadmium (NI-CD) cells can suffer a memory effect if not fully discharged before recharging. To prolong the lifetime of the battery always try to use until fully discharged before recharging. But be careful not to over discharge.

Nickel Metal Hydride (NI-MH) cells do not have the same issues of memory effects. They <u>can</u> be topped up on the charger. But they do perform best with a full discharge and recharge cycle every month or so.

Sealed Lead Acid (SLA) cells should be charged after every use and prior to storage and do not suffer a memory effect.

Lithium Ion (Li-ion) cells do not suffer a memory effect. These <u>can</u> be charged at any point. Li-ion cells maintain stored charge for longer than other types, they should still be fully charged after use and before storage.



Longevity

Batteries are particularly sensitive to temperature - excessive heat or cold can seriously damage the cells.

Batteries are best kept in a cool place below room temperature. They will also hold charge for longer when stored for extended periods if kept cool.

Try not to let you batteries freeze in a cold shed or garage over winter. This can damage the cells internally and they may not recover.

The cells and charger will get warm during charging. This is normal and most packs will have thermal sensors to regulate them.

Never use a hot battery straight from the charger, allow it to cool at least 15 minutes first. Similarly, never charge a battery when it is warm following use.

<u>Do not overcharge</u>. Follow the manufacturer's guidelines. If a battery is not taking charge, charging it for extended periods will not solve this problem but may damage the cells.

<u>Do not charge batteries overnight</u> - see the precautions section for some of the dangers of overcharging.

Battery Storage

When storing a battery for periods of over a month, you will want to avoid deep discharge. Charge fully before storage. Cells lose their charge slowly while stored. If a battery is stored from discharged state it can lose charge to the point of deep discharging, from which it may not recover. Storage in a cool place will maintain the battery charge for longer, cells lose around 10% charge per month at room temperature.