# Exide Training Graphic Assets Module 08 | Battery Handling/Storage/Recycling

Edition 2 Revised 05.2021



#### Introduction

#### Module 08 | Battery Handling, Storage & Recycling

#### Exide Lead-Acid Batteries Training Modules

Module 01   Lead-Acid Battery Basics
Module 02   Battery Evolution and the Environment
Module 03   (LV) Light Vehicle Batteries
Module 04   (CV) Commercial Vehicle Batteries
Module 05   (MC) Motorcycle Batteries
Module 06   (ML) Marine Leisure Batteries
Module 07   Battery Testing and Installation
Module 08   Battery Handling, Storage and Recycling
Module 09   Battery Aftermarket

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#### FIFO (First In - First Out) stock cycle

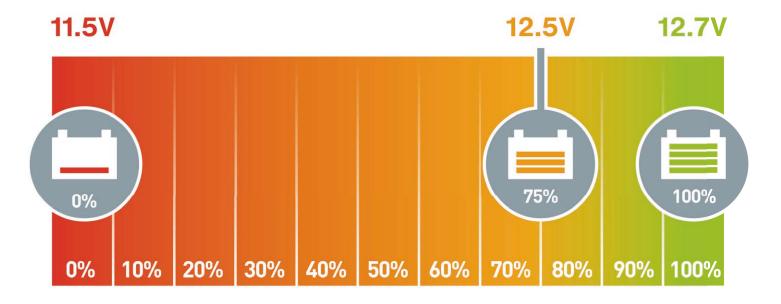
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Develop an effective stock management system to ensure FIFO principles are always maintained **New stock** Older stock to back used first



## **Check State-of-Charge (SoC) in storage**

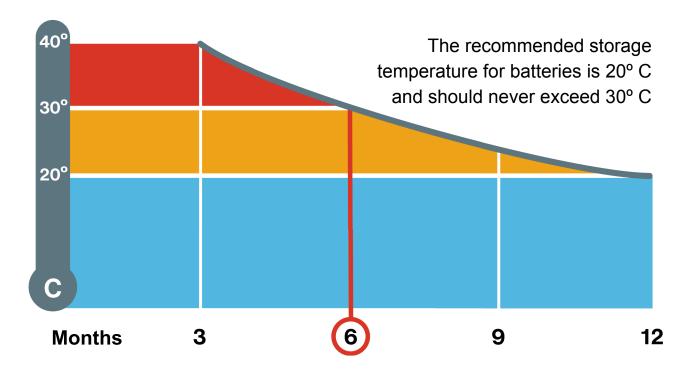
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The voltage indicates the state of charge. Recharge all batteries at 12.5V or below!



#### Batteries discharge faster at higher temperatures



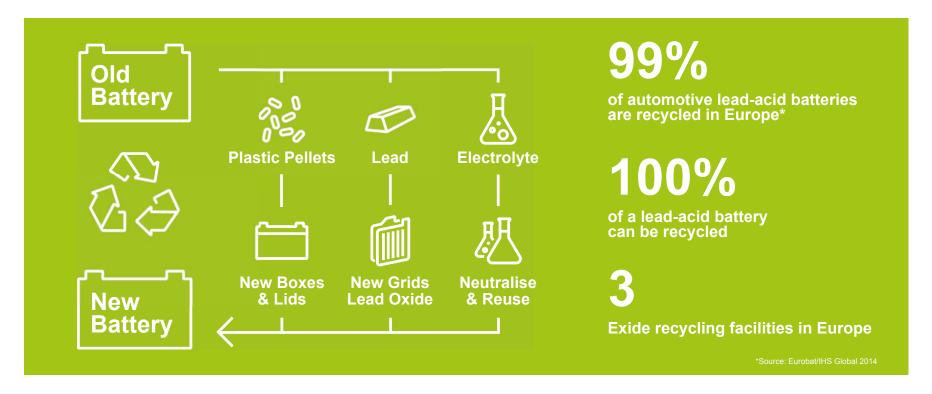


## Lead-acid battery is the most successful recycled product





## The end is just the beginning – the recycling process





## **Lead recycling facts**

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- Since elimination of lead in fuels during the 1980's, 84% of all EU lead consumption is used in the manufacture of lead-acid batteries.
- The majority of the remaining lead is used for radiation shielding (healthcare/nuclear industry), roofing (construction industry), cable sheathing, alloys and solders.
- Lead is a unique material that can be re-melted and recycled indefinitely without reduction in quality, making it the perfect material for the circular economy.
- 75% of lead produced in Europe comes from recycled stock.



Source: EU Critical Raw Materials (2020)



#### Premium box & lid redesigned for environmental benefit







#### **Lithium-Ion Batteries – important safety notice**

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DO NOT send lithium batteries to lead recyclers

**RISK OF FIRE & EXPLOSION** 

Only send to specialist and approved facility for treatment and recycling





#### Solar panel installation at Exide battery production facility

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Exide Technologies Castanheira do Ribatejo Portugal

One of Europe's largest self-generation installations backed by a BESS (battery energy storage system).

23% reduction in the manufacturing plant's carbon emissions.





## Exide Technical Guide Lead-Acid Batteries

Exide Technologies has been at the forefront of Lead-Acid battery innovation since 1880 to the current day. The company was the inventor of the world's first starter battery in 1912 and more recently the first manufacturer to introduce AGM and EFB battery technology into the European aftermarket.

Exide's expertise and knowledge enabled the publication of the easy-to-understand Exide Technical Guide. The latest edition is available to view and download as a PDF at:

www.exidegroup.media/techguide



