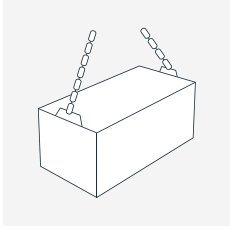


Care & Maintenance

Safety Precautions

Eternity Technologies' batteries are completely safe in the hands of trained personnel who follow the manufacturer's recommendations carefully. However, they can be hazardous when being handled, maintained or repaired, if the proper procedures are not followed.





Handling

Motive Power batteries are heavy, so adequate mechanical handling systems are to be used. Care is to be taken to ensure the sulphuric acid electrolyte is not spilled and the cells are not physically damaged.

Precautions

Keep batteries upright when lifting. Use the lifting points located in the sides of the battery tray (container).

Take care to ensure the lifting equipment does not short-circuit the cell terminals and connectors.

Ensure the battery is located in its correct position on the vehicle and secure any restraining devices.



Acid electrolyte

The electrolyte in lead-acid batteries is corrosive and poisonous. It will cause burns or irritation if it comes into contact with the skin or eyes.

Precautions

When working on batteries, always wear the appropriate protective clothing and goggles.

Handle batteries carefully and always keep them upright.

Top up battery cells to the correct level only, as recommended by the manufacturer - do not over fill.



Emergencies

If acid is spilled on the floor, neutralise as quickly as possible, using an alkali, such as soda ash, sodium carbonate or sodium bicarbonate. If acid is spilled on clothing, wash as soon as possible. If acid comes into contact with the skin, wash off with plenty of clean water. If acid splashes into the eye, immediately flood the eye with copious quantities of mains tap water, then immediately seek medical advice.



Explosions

When a lead-acid battery is on charge and the voltage rises above 2.30 VPC, hydrogen and oxygen gases are evolved. If the concentration of hydrogen exceeds 4%, the gases form an explosive mixture.

Precautions

To avoid the risk of igniting these explosive mixtures, never smoke or use a naked flame near a battery. For ventilation requirements in battery charging rooms, read Eternity Technologies Note ET/ON001-0911.



Electrical energy

A battery can be short-circuited by simultaneously touching two or more of the cell terminals or intercell connectors with a metal tool or other object capable of conducting electricity. If this happens, the conductive object will: (a) Become hot and cause burns, and/or, (b) Eject molten metal and sparks which could ignite any hydrogen present, resulting in an explosion.

Precautions

Before working with a battery, remove any metallic items from the hands, wrists and necks (such as rings, bracelets or watches and necklaces). Remove, also, anything which may fall from the pockets of clothing.

Always use insulated tools. Spanners used must be of the single-ended type only.

Do not place tools or any other objects capable of conducting electricity on battery tops.

Always wear eye protection.

Always ensure that the charger is switched off before connecting or disconnecting the battery.



Maintenance

Keep the top of the battery, trays and container dry and clean to prevent electrical leakage between cells. Should there be any corrosion of the metalwork, remove the products of corrosion and neutralise any remaining acid with a solution of an alkali, as suggested in Section 2. Protect from further corrosion by covering with acid-proof paint or petroleum jelly.

Lifting facilities on battery trays should be examined periodically for corrosion and/or other deterioration.

Do not lift damaged trays as there is a danger of collapse.

If excessive corrosion or other deterioration becomes evident in any part of the battery, it should be reported to the manufacturer.

Check bolted connections on the battery for tightness and ensure they are clean and efficient.

Inspect battery cable insulation and battery/charging connectors and cables for wear or damage to insulation and burning of contacts. Refurbish or replace as necessary.

Add nothing to the cells but distilled or deionised water. Never add acid.

Keep filling plugs and connections tight. Remove filling plugs only when topping up and taking specific gravity readings. Vent plugs on heat-sealed polypropylene cells need not be removed.



Disposal of old batteries

Careless disposal of a battery can harm the environment and can be dangerous to persons. Always dispose of batteries to an authorised dealer. Do not attempt to open or dismantle a battery or cell.

POWER FOR TOMORROW TODAY

The Eternity Technologies range is built using only the highest quality and most efficient production processes at our state-of-the-art manufacturing centre in the UAE.

It is this innovation, modern design criteria and industry-leading machinery that allows Eternity Technologies to not only meet the needs of the global industrial market with increased reliability but define it for the future.



Service



Accessories



Bloc Batteries



Chargers



Network Power



Motive Power



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