

#### RECHARGEABLE SEALED LEAD ACID BATTERY

To obtain maximum operating efficiency, life and to maintain the warranty of the CAREFREE battery, the following should be observed:

# **OPERATING INSTRUCTIONS**

All CAREFREE batteries are carefully assembled and with proper charging will provide excellent service. When placing the battery into service it must be inspected to make sure that the battery has not been damaged by rough handling. If the unit has been damaged, there is a possibility of a loss of a small amount of sulfuric acid electrolyte and possible corrosion of adjacent components. Any sulfuric acid can cause severe burns to the skin and eyes. If contact is made with a damaged battery, immediately wash the contact area with water for at least 5 minutes. If battery is damaged in shipment, file claim with freight carrier.

Receiving the CAREFREE battery - CAREFREE batteries are shipped in a fully charged condition. Before placing in service after storage, batteries should be charged for 18 to 20 hours.

Charging the CAREFREE battery - A constant potential - current limited charger is required to boost charge or recharge the maintenance free battery. The charger should be set at the equivalent of 2.50 to 2.55 volts per cell with current limited to ten percent of rated capacity. Generally 18-24 hours is adequate to return battery to full charge. Should decay in performance be observed, improvement may result by periodically extending the charge time to 48 hours. For stand-by applications the CAREFREE battery is to be charged at a constant potential of 2.28-2.32 volts per cell and will, without maintenance, sustain continuous float charging for periods measured in years. Charging in the inverted position is not recommended

Storing the CAREFREE battery - Lead-acid batteries must not be allowed to remain in a discharged state and should be recharged as soon as possible after each use. Batteries stored at 65° F or less shall be charged every six months. Unites stored at room temperature or above shall be charged every four months. Batteries should not be stored above 100° F.

Operational Temperatures - Lead-acid batteries will deliver energy at temperatures as low as -70° F, but cannot be efficiently recharged and discharged over a prolonged period below an ambient temperature of 32° F.

## **OPERATING AND HANDLING CAUTIONS**

- DO NOT SHORT CIRCUIT BATTERY TERMINALS. SHORT CIRCUIT PRODUCES EXCESSIVE HEATING AND COULD CAUSE A FIRE OR EXPLOSION. 1
- 2. DO NOT CHARGE IN GAS TIGHT ENCLOSURES. THE BATTERY ENCLOSURE MUST BE ADEQUATELY VENTILATED AND SHOULD BE FREE OF IGNITION SOURCES SUCH AS ELECTRICAL CONTACTS, MOTORS, OPEN FLAME OR SMOKING PRODUCTS. GASES LIBERATED DURING OVER CHARGE, HYDROGEN AND OXYGEN CAN CAUSE AN EXPLOSION IF IGNITED.
- DO NOT PUNCTURE, INCINERATE OR IN ANY WAY ATTEMPT TO DISASSEMBLE THE BATTERY. THE BATTERY CONTAINS TOXIC LEAD 3. ELECTRODES AND CORROSIVE SULFURIC ACID. SULFURIC ACID CAN CAUSE MATERIAL DAMAGE AND PERSONAL INJURY. IF CONTACT IS MADE WITH THE ACID, IMMEDIATELY FLUSH THE AREA WITH WATER. SHOULD THE EYES BE AFFECTED, FLUSH LIBERALLY WITH WATER AND SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE. A GOOD NEUTRALIZING SOLUTION FOR SULFURIC ACID IS HOUSEHOLD BAKING SODA IN WATER. A MATERIAL SAFETY DATA SHEET IS AVAILABLE UPON REQUEST.
- 4 KEEP BATTERIES AND CHARGERS AWAY FROM CHILDREN.
- 5 IT IS UNLAWFUL TO DISPOSE OF THIS BATTERY IN NORMAL SOLID WASTE. THIS BATTERY IS CLASSIFIED AS A NONSPILLABLE, SEALED LEAD BATTERY AND MUST BE RECYCLED OR DISPOSED OF PROPERLY AND IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS. IF NO DISPOSAL SYSTEM IS AVAILABLE IN YOUR STATE, YOU MAY SHIP THE BATTERY FREIGHT PREPAID TO: EAGLE PICHER TECHNOLOGIES, LLC

3220 Industrial Road

Joplin, MO 64801

ATTN: BATTERY DISPOSAL DEPARTMENT

A HANDLING FEE OF \$2.00 (USD) PER BATTERY MUST BE INCLUDED WITH SHIPMENT. A RETURN MATERIAL AUTHORIZATION NUMBER (R.M.A.) MUST BE OBTAINED PRIOR TO SHIPPING. THIS R.M.A. NUMBER MAY BE OBTAINED BY CALLING 417-659-9635 AND ASKING FOR CUSTOMER SERVICE.

## **IMPORTANT**

REMEMBER ALL LEAD ACID BATTERIES ARE RECYCLABLE. PROPER DISPOSAL OF BATTERIES IS VERY IMPORTANT TO PROTECTING THE ENVIRONMENT. PLEASE DO YOUR PART BY DISPOSING OF LEAD-ACID BATTERIES WITH AN E.P.A. CERTIFIED BATTERY RECYCLER. THANK YOU.

## Limited Warranty

Every CAREFREE battery has been carefully inspected and tested before shipment. Accordingly, we warrant each CAREFREE battery, which is sold, against defects in workmanship and material under normal use and recommended charging methods for a period of 18 months after date of manufacture or 12 months from date of shipment. Our obligation under this warranty shall be limited to the repair or replacement, FOB Joplin, of any CAREFREE battery which is returned as a complete unit to the factory within the 18 month from date of manufacture or 12 month from date of shipment warranty period, transportation charges prepaid, and which proves to our satisfaction, upon examination, to be defective. This warranty shall not extend to, and we shall have no responsibility with respect to, products which have been abused, misused or altered, or as to which repair has been made or attempted by others. BATTERIES THAT HAVE BEEN SEVERELY OVERCHARGED OR DISCHARGED (INCLUDING LONG OR EXTENDED STORAGE), ARE NOT COVERED UNDER WARRANTY. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES WITH RESPECT TO THE PRODUCT COVERED HEREBY AND THERE ARE NO OTHER WARRANTIES, WHETHER EXPRESSED, OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, EXCEPT THE WARRANTY EXPRESSLY STATED HEREIN. THE REMEDY SET FORTH HEREIN SHALL BE THE SOLE EXCLUSIVE REMEDY OF ANY PURCHASER WITH RESPECT TO ANY DEFECTIVE PRODUCT. Under no circumstances shall we be liable for any loss, including but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss suffered or incurred with respect to any defective product.

## Eagle Picher Technologies, LLC

Commercial Power Business 3220 Industrial Drive Joplin, MO 64801 Ph: 417-659-9635 Fax: 417-626-2078